

April 2020

# The Influence of Housing in a Content-Based Residential College and Selected Demographic Characteristics on the Retention of Students Enrolled in a College of Business at a Research University (RU/VH) in the Southern Region of the United States

Reuben Twijukye

Follow this and additional works at: [https://digitalcommons.lsu.edu/gradschool\\_dissertations](https://digitalcommons.lsu.edu/gradschool_dissertations)



Part of the [Higher Education Commons](#)

---

## Recommended Citation

Twijukye, Reuben, "The Influence of Housing in a Content-Based Residential College and Selected Demographic Characteristics on the Retention of Students Enrolled in a College of Business at a Research University (RU/VH) in the Southern Region of the United States" (2020). *LSU Doctoral Dissertations*. 5241. [https://digitalcommons.lsu.edu/gradschool\\_dissertations/5241](https://digitalcommons.lsu.edu/gradschool_dissertations/5241)

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Doctoral Dissertations by an authorized graduate school editor of LSU Digital Commons. For more information, please contact [gradetd@lsu.edu](mailto:gradetd@lsu.edu).

**THE INFLUENCE OF HOUSING IN A CONTENT-BASED  
RESIDENTIAL COLLEGE AND SELECTED DEMOGRAPHIC  
CHARACTERISTICS ON THE RETENTION OF STUDENTS  
ENROLLED IN A COLLEGE OF BUSINESS AT A RESEARCH  
UNIVERSITY (RU/VH) IN THE SOUTHERN REGION OF THE  
UNITED STATES**

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and Agricultural and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

in

The School of Human Resource Education  
and Workforce Development

by  
Reuben Twijukye  
A.S. South Plains College, 2006  
B.A. Louisiana State University, 2008  
M.S. Louisiana State University, 2015  
May 2020

©Copyright 2020  
Reuben Twijukye

This work is dedicated to my dear mother, Miss. Medias Kinarembire, who taught me the reward of hard work, persistence, respect for others, authenticity and setting goals that could make me stretch. Her words of encouragement propelled me to persist especially during hard time while working on my dissertation. The moral values that she has instilled in me have made me a man of integrity with strong values. Her support and sacrifices encouraged me to work extra hard in order to achieve my goals in life and I am forever thankful. Living in a society where education is a key to success, my mother's commitment to education was the key to prepare her children for the future. I love you!!

This dissertation is also dedicated to my beloved father, the late Mr. James Kabitsyki, who strongly believed in education; he demonstrated this by serving as a teacher at home. He scarified most his time to teach children the values of a family, love for neighbors, relatives, siblings and the whole community. He believed that it takes a village to raise a child. His struggles to pay school fees, to provide school supplies, shelter and medical care showed his love and dedication for his family. I am forever thankful. Rest in Peace Dad... I miss you.

I am also dedicating this dissertation to my American parents Mr. and Mrs. Breitling. Thank you for accepting me as your son. You have showed me the principles of hard work, support and education throughout my educational journey and life as well. You have been by my side through both tough and joyful times. There is utterly no way this educational achievement would have been possible without your support. You provided inspiration, support and encouragement especially during the times when things were difficult. I am forever thankful. I Love you!!

## ACKNOWLEDGMENTS

This academic journey and all the vital academic achievements would not have been achieved without very significant people who offered their support, courage and guidance. I have been blessed to be surrounded by a team of mentors who believed in me and were always available whenever I needed help.

Dr. Burnett, I will forever be thankful for all the tremendous dedication, patience, hardworking, mentorship, confidence, courage, and guidance you have displayed to me throughout my academic journey. I learned so much in all your research methods classes and gained expertise that has prepared me to be a great researcher. I affirm that the love you have for your student's success is exceptional, you are the only professor I know in this world, that would sacrifice time from his family in order to help a student. Thank you so much for your sacrifice. On different occasions, we stayed late during our weekly meetings. Dr. Burnett, without you, it would not have been possible to finish this dissertation. You are a great cartographer!

My committee members, Dr. Satish Verma, Dr. Earl Johnson and the Dean's representative Dr. Pamela Monroe. I am forever thankful for your time and willingness to guide me throughout my academic journey. All of you provided vital knowledge that was significant, which I am thankful for.

Dr. Satish Verma, your higher understanding of literature review provided me with a great knowledge about research. Thank you very much for your comments and expertise you provided me with my literature review section. Thank you for your words of encouragement.

Dr. Earl Johnson, your comments and feedback propelled and strengthened me to learn more as a prospective educator, researcher and a citizen. Forever, I am inspired by your courage, knowledge, and passion for education.

To my Dean's Representative Dr. Pamela Monroe, it was a wonderful privilege to have you on my dissertation committee and I deeply appreciate your support and time. I am forever thankful.

I have sincerely learned a lot from these marvelous professional mentors, colleagues and friends from the first day I started this journey of perusing all my graduate work.

Dr. Leon Prieto. I deeply appreciate your mentorship, guidance, knowledge and support that you have generously given to me. You inspired me to think beyond my limits and to believe that dreams can be true if you work hard and believe.

Dr. Kenneth Kungu. You are a hero throughout the whole journey. Your inspiration to apply to graduate school, was the foundation of all my graduate work. I am forever thankful for the advice, mentorship, guidance and friendship.

Dr. Erastus Ndinguri. A special thank you for being a professional colleague and friend. Your encouraging words and expertise gave the confidence to believe in my self that I could accomplish this goal.

Dr. Jeanyl Norze. I would not have made it through this rigorous program without you as a friend, brother, professional colleague and a mentor. You saw what I could not see in myself, you believed in me, showed me the value of persistence, hard work, quality work and more especially to take one step at a time as a learning process. I am forever grateful.

Dr. Joseph Ben Omonuk. I deeply appreciate your guidance, support, and wise words of encouragement. The words of wisdom you shared with me throughout my entire educational journey always reminded me where I came from, why I am here, the purpose of education and how I can inspire other young people who look up to me as a role model.

Dr. Loren S. McIntyre. I sincerely appreciate your help and the tremendous expertise and guidance that you provided me throughout this journey.

Dr. Raymond Doe. Thank you so much for your mentorship, friendship, words of courage and all the assistance that you offered me from the beginning of my graduate studies. I will always be grateful.

A special thanks to Ann Harrington, who provided the expertise and assistance in formatting this document. Your tremendous effort, hard work, flexibility and reliability is highly appreciated.

Coach Mark Elliot. Thank you so much for your outstanding professionalism as a coach, a mentor as well as your roles as a parent. From the first day, you offered me a track scholarship to join Louisiana State University. You advised me to put academics first before athletics, which led me to pursue a doctoral degree.

I want to express my deepest appreciation to Mr./ Miss Moore. Without your support, your kind words of encouragement from the first day I enrolled in graduate school, it would have been impossible to attain my educational goals.

To Dr. Cobbins. A special appreciation for all your wise Christian encouraging words, appreciation and value for education, mentorship and the weekly sports and rehab treatments. I will forever be grateful.

Special thanks to Dr. Norze's family his wife Edeline, Skylie and Urlenzza. Your emotional support, friendship, family values, love for Christ, being there for me, selflessness and persistence. I am forever grateful.

There are absolutely no ways to express my deepest appreciation to my brother Mr. Jackson Twinomuhangi. I will be forever indebted to him for his courage, support, and unparalleled window of opportunities to set higher educational goals.

A special note to Skyliie Norze. You are my hero. Thank you for making me smile when I was going through this stringent program of study. I will always remember you teaching me ABC words and Johny Johny Yes Papa song, when I was tired after school and athletics training.

“Love you Skye”

It would have been impossible to make it through a stringent program of study like this without wonderful fellow classmates. These individuals provided a firm source of support, words of encouragement and we developed genuine friendship through a shared experience. A special thanks to Dr. Jeantyl Norze, Dr. Edward Gibbons, Dr. Adriana Alfro, Dr. Loren McIntyre, and Calvin Marshall soon to be called Dr.

Sincerely, I could not have accomplished this educational milestone without the support and love of my families from two different countries (USA & UGANDA). Their courage, patience and support helped me to persist and finished this program. Thank you, God, for your protection over my mother Miss. Medias Kinarebire and my siblings. Their love assisted me. My sincere appreciation to my American family Mr/Mrs Blettling, Mr. Conner J. Breitling, Mr. Jeff Janecek, his wife Meredith Breitling, their daughters Anna, Emelyn and Ella. A special thanks to Mr. Luke Gallegos, his wife Kristen Gallegos and their son Mathew Gallegos. Because of your support, and the confidence you had in me, you fundamentally made my educational achievement (PhD) a reality.



## TABLE OF CONTENTS

ACKNOWLEDGMENTS .....	iv
ABSTRACT.....	ix
CHAPTER 1. INTRODUCTION .....	1
Rationale .....	1
Purpose and Objectives.....	8
Significance of the study.....	13
CHAPTER 2. LITERATURE REVIEW .....	15
Importance of Business.....	15
Importance of Education to Business .....	18
Factors Influencing Student Enrollment in Higher Education.....	20
Factors Specific to Enrollment in Business Programs in Higher Education: Recruitment and Retention .....	21
Residential Colleges in Higher Education and Their Influence on Student Retention.....	25
CHAPTER 3. METHODOLOGY .....	28
Objectives .....	28
Population and Sample .....	32
Instrumentation .....	32
Data Analysis .....	33
CHAPTER 4. FINDINGS.....	39
Objective One Results .....	39
Objective Two Results.....	48
Objective Three Results.....	58
Objective Four Results.....	64
Objective Five Results .....	71
CHAPTER 5. SUMMARY, CONCLUSIONS, IMPLICATIONS, & RECOMMENDATIONS	81
Summary .....	81
Objectives .....	81
Methodology .....	85
Data Collection .....	86
Summary of Findings.....	86
Conclusions, Implications and Recommendations .....	99
REFERENCES .....	110
APPENDIX. INSTITUTIONAL REVIEW BOARD APPROVAL .....	113
VITA .....	114

## ABSTRACT

“Statistics indicate that more than 40 percent of all college entrants leave higher education without earning a degree, 75 percent of these students drop out in the first two years of college, and institutions can expect that 56 percent of a typical entering class cohort will not graduate from that college ”(DeShields , Kara, , & Kaynak, P.129). Therefore, the primary purpose of this study was to determine the influence of housing in the College of Business content-based residential college (CBRC) and selected demographics on the retention in the fifth semester of students in the College of Business.

The population of the study was students enrolled in programs in a College of Business. The instrument used was a computerized recording form designed to collect data from the Office of Undergraduate Admission and Student Aid.

When comparing students who lived in a CBRC with those who did not, a higher percentage in the CRBC were male and classified as out-of-state students. Additionally, Race was significantly related to whether or not the student was retained in the fifth semester of enrollment with African American students retained at a lower rate (64.4%) than all other racial groups (78%-82%). However, when African-American (AA) student retention was examined separately for the CBRC, no differences were found between AA students and other races.

Multiple discriminant analysis was used to determine if a model exists that correctly classifies students on retention in their fifth semester. The variables that entered the discriminant model were overall first year GPA, the number of times the student changed major, the number of earned hours in the second semester, and whether or not the student was a resident of the state.

The researcher recommends that research be conducted to determine the reasons that AA students who left the university did so. This research might take the form of a qualitative study

in which AA students who were not retained are interviewed in efforts to determine the reason they chose to leave. The researcher further recommends that the results of these interviews be utilized to assess and revise policies where appropriate.

# CHAPTER 1. INTRODUCTION

## **Rationale**

### Business Is The Backbone Of The American Economy

Businesses are extremely important in the American economy. They represent the primary economic engine of the country. Businesses offer employment opportunities through creation of jobs, which increases the government's revenues in terms of taxes collected from business ventures, properties, and employment. The government can use these revenues to invest in infrastructure such as roads, schools, development of human capital, and improvement of public services. Businesses also create values such as goods and services to fulfil human needs and wants. The more is the investment in businesses, the larger is the productive capacity of the country's economy.

Additionally, businesses permit the economy to perform more efficiently. Competition pressures businesses to improve their efficiency which assists the economy to grow. Competition is also significant for consumers as it puts companies under pressure to provide or offer the top possible choice of goods and services at the best possible price. This is good for customers because they can get better quality products at a lower price

Businesses also help the American economy grow through different types of innovations. Businesses have created many technological innovations that have brought about efficient solutions to many modern problems. For instance, Information Communication Technology (ICT) has created numerous new jobs and contributed to GDP growth. In the US, computer and information technology will create 758,800 new jobs by the 2020 (Vochko,2013). The introduction of cellphones has allowed individuals to communicate, shop, navigate, listen, text, video record for professional purposes and much more. More people in the world have a

cellphone than a bank account, which makes it the most impactful technological innovation in the world (Kou,2013). Globally, the use of 3-G connections increase GDP per capita rate by 0.5% (Deloitte, 2012).

Since businesses are the backbone of the economy, it is critical to understand how to grow businesses successfully. The literature has documented a number of factors that can help businesses thrive. For example, individuals who have previously owned businesses or interned at other's industries possess certain skills that may help them improve the success of their current business. As individuals spend time working in other's industries before running their own business, they gain hands-on experiences and compare their own strengths with other individuals working in the same industry. By gaining this important information, individuals are able to identify what works and what doesn't. Through past internship experiences, individuals understand how different systems perform such as customer services. They can transfer their prior experiences into a new business since they know the inner workings, which are great avenues for the growth of the business.

Additionally, life experiences play a significant role in improving the success of a business. Many individuals have encountered different types of businesses as they have experienced life. They can apply what they learned from failures and successes to their business plan. Life experiences help individuals to deal with stressful situations (Rea & Carswell, 2000).

Education in business is another factor for successful business ventures. According to Seth (2008), education is a successful strategy for innovation. It equips entrepreneurs with knowledge to expand their companies into larger organizations, and into new markets for their companies (Phan, Wong, & Wang, 2002). In addition, individuals with direct education in business possess a better knowledge of content in areas of marketing and management, and they

are more likely to succeed especially with large companies (Phan et al., 2002). The authors further state that educated individuals in business are more capable of assessing risks, dealing with complex business decisions, and making better decisions. Studies on business startups suggest that an individual's level of education as a distinctive aggressive idea plays a significant role towards the success of a new business (Phan, Wong, & Wang, 2002). These authors also claim that college educated individuals in business are more likely to be connected with longer surviving firms.

College graduates who enter a workforce bring competences such as improved oral communication skills, problem-solving skills, willingness to learn, positive attitudes, and cultural diversity skills as well as technological skills which are significant for the growth and production of business organizations (Hodge & Burchell, 2003). Individuals who have a higher level of education may have a greater chance of business success and satisfaction of their individual objectives or goals both as the owners of business ventures and as employees (Jiménez et al., 2015). The authors further state that individuals with a higher level of education are more capable of discovering and exploiting opportunities since they possess cognitive skills that contributes to a larger possibility for both efficiency and productivity.

Today, people can acquire business education through different avenues such as high schools and colleges that offer business courses. High schools provide business and technical classes and students can complete high school while concurrently earning certificates and licenses in business. High school students who attend such classes have a strong appearance in the job market. Whereas, those who attend business colleges gain knowledge in areas such as marketing, finance, operations, business strategy policy, information technology, leadership and

communication. These individuals may use their broad knowledge of business to start, operate, and/or manage their own business ventures.

“In today's economy, college completion is an essential part of getting the knowledge and skills students need to succeed in their careers and lives” (U.S Department of Education, 2016, p.1). For students to complete their college degree they need to be academically successful throughout their academic career. Otherwise, they might have to dropout, which, ultimately, impacts their ability to succeed in their careers and lives. Without a college degree, they may not have the requisite skills, knowledge, and attitudes to successfully grow a business.

Students cannot complete their degree unless they persist. There are several strategies for improving persistence of college student such as cognitive factors, social factors, institutional factors, and residential colleges. Additionally, Swail (2004) developed the Geometric Model of persisting and achievement to explain more deeply how cognitive, social and institutional factors affect students to persist in an educational program.



Figure 1. The Geometric Model of persisting and achievement (Swail, 2004)

Cognitive factors. According to Swail (2004), “cognitive factors relate to the intelligence, knowledge, and academic ability a student brings with him or her to the college environment” (p.14). The author states that a student’s decision-making and problem-solving ability is the most significant element of the cognitive factors in relation to student’s persistence and achievement.

Social factors. There are several social factors that affect a student’s persistence and achievement such as parental support, peer support, career goals, ability to cope in social circumstances and educational legacy (Swail, 2004). In addition, the author argues that social factors are very significant for student retention and persistence since they assist students to integrate into campus life.

Institutional factors. This refers to the capability of institutions offering suitable assistance to students including academic and social support (Swail, 2004). The author states that “issues related to course availability, content, and instruction affect a student’s ability to persist, as do support mechanisms such as tutoring, mentoring, and career counseling” (Swail, 2004 p.15)

Residential college. Living in a “Residential College” is another factor that contributes to students’ persistence. Residential colleges are “living learning communities” (McIntyre, 2017). When the English colonized North America, they brought with them the traditions and concepts of education learned in England” (Blimling, 2003 p.24). According to Blimling Harvard was founded by Colonial rationalists using the model they knew as students at Oxford and Cambridge in 1636. In addition, the establishment of nine original colonial colleges such as Harvard University, Yale, New Jersey College of William and Mary, King’s College, Philadelphia Academy, College of Rhode Island, Queens College, and Dartmouth College had a big influence



on the establishment of residential colleges in the U.S due to the strong background of prerevolutionary college organizers (Blimling, 2003). Most American students who attended institutions were as young as 13 and 14 years of age, and they had to travel a long distance to attend classes (Blimling, 2003). The author continues by pointing out that traveling was difficult, unsafe, and took a tremendous amount of time. It was required, therefore, for students to board at the college. In the early twentieth century, the collegiate system of residential colleges was not easily defeated as they sustained ideas of English colleges such as the philosophy that colleges should educate both the intellect and the character (Blimling, 2003). In addition, the author states that the rebirth and interest of student housing started at Yale University after realizing the importance of the college experience.

The quadrangle plan. This plan was introduced in 1907 by Woodrow Wilson the president of Princeton University emphasizing that resident halls should be joined to form quadrangles (Blimling, 2003). The author suggested that unmarried faculty should be housed together with students. The quadrangle plan later failed due to opposing forces from social clubs and influential alumni (Blimling, 2003). However, there was a big debate about the residential system of colleges in the U.S. which inspired the expansion of college-owned residential halls at Harvard University (Blimling, 2003).

The residential hall experience of students today has a significant impact towards their success in college. (Blimling, 2014). The author stresses that “Residence halls are the source of college friendships, informal orientation, role modeling, socializing, and emotional support” (p.15). In addition, the author states that students call residential halls their campus home since it is the first place they arrive at the beginning of their college experience and the last place they depart from for the summer. Within residential halls, peer relationships are formed which are

significant for students to acquire informal knowledge about college culture that assist them to define themselves as students (Blimling, 2014). In addition, the author states that “Students who fail to connect with others in their living units often feel isolated and are at increased risk of leaving college” (Blimling, 2003 p. 222). Furthermore, “student persistence and student retention refer to the continued enrollment of students, usually fall to fall re-enrollment” (Braxton & McClendon, 2001, p. 378).

Residential halls provide students with a great opportunity to connect with the academic community through involvement with other students, faculty and staff and gain all the required information for retention (Blimling, 2014). When students integrate and engage in the college experience it increases their chances to persist and complete their degree (Schudde, 2011). Additionally, the author states that the (residential hall) assists students to feel a sense of connection to the university or college, and it increases their chances of graduating from college. “Students who have a strong sense of community are more likely to persist in college, develop trusting relationships with other people, become more involved in college activities, and develop lifelong friendships while in college” (Blimling, 2014 p. 222).

Many universities today have formed residential halls that are designed to provide students with environments that enhance their engagement with the university. These residential halls are typically referred to as content based residential colleges. At the study institution (which is a research university with very high research focus – RU/VH), these “Residential colleges” are promoted as providing first year students with on-campus living experiences that are founded on the formation of small communities based on collective/common majors (LSU department of residential life, 2018). The university’s department of residential life purports that students who participate in residential colleges have a higher grade-point average (GPA), higher

persistence rates, a higher graduation rate, and are more likely to move to the next academic year of college in contrast to students who reside in other types of residential halls or off campus (LSU Department of Residential Life, 2018). Additionally, content-based residential colleges are advertised as possessing an environment that fosters students' collaboration on projects, formation of discussion groups, and provides students with a great interaction experience with faculty members outside the classroom through participation in social residential, and academic activities (LSU Department of Residential Life, 2018).

One of the academic colleges on this university campus that provides students with the opportunity to participate in a content-based residential college is the College of Business. The Business Residential College is a living-learning environment specifically for students majoring in business, and it is designed with the experiences that assist students in adapting to the culture of the College of Business. With the availability of an on-site business academic advisor, tutoring and mentoring in specific required courses such as accounting, economics and economics, this living/learning environment has the potential to increase student's persistence in business school which is advantageous to the university, the college, the respective departments in the College, and the individual student (LSU department of residential life, 2018). An important question is whether or not the investment in this content based resident college is actually producing the outcomes that it is designed and proposed to produce.

### **Purpose and Objectives**

The primary purpose of this study was to determine the influence of the housing in the College of Business content-based residential college and selected demographic characteristics on the retention in the fifth semester of enrollment of students Enrolled in the College of Business at a Research University (RU/VH) in the southern region of the United States.

The following specific objectives were developed by the researcher to guide the study:

To describe College of Business students who resided in the College of Business

Content-Based Residential College (CBRC) at a research university in the southern region of the United States on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;
- j. Whether or not the student was retained in the fifth semester of college enrollment;
- k. Whether or not the student changed major, and if so, the number of times changed.

To describe College of Business students who did not reside in the College of Business

Content-Based Residential College, on the following selected demographic and academic characteristics:

- a. Gender;

- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;
- j. Whether or not the student was retained in the fifth semester of college enrollment;
- k. Whether or not the student changed major, and if so, the number of times changed.

To compare College of Business students who resided in the College of Business Content-Based Residential College (CBRC) with College of Business students who did not reside in the College of Business CBRC, on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;

- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;
- j. Whether or not the student was retained in the fifth semester of college enrollment;
- k. Whether or not the student changed major, and if so, the number of times changed.

To determine if relationships exist between whether or not the students was retained in their fifth semester of college enrollment and the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The semester GPA achieved in each of the first two semesters of college enrollment;

i. Whether or not the student changed major, and if so, the number of times changed; and

j. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

To determine if a model exists that significantly increases the researcher's ability to correctly classify College of Business students at a research university (RU/VH) in the Southern region of the United States based on whether or not they are retained into their fifth semester of enrollment from the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The semester GPA achieved in each of the first two semesters of college enrollment;
- i. Whether or not the student changed major, and if so, the number of times changed; and
- j. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

### **Significance of the study**

If the research shows that the Business Residential Colleges is effective in improving retention, then this evidence could be used to justify expansion of the Residential College to include more students and potentially more than just the freshman year. Studying the influence of business residential colleges on retention and persistence of college business students is very significant for numerous reasons.

Individuals with a college degree bring competence to a working environment such oral communication skills, problem-solving skills, willingness to learn, positive attitude, cultural and diversity skills as well as technological skills which are essential for the maturation and efficiency of a business organization. (Hodge & Burchell, 2003). In addition, research shows that, increased retention of students raises the university's revenues collected from tuition and fees (Kara, & DeShields, 2004). These revenues are very significant for the running of colleges and institutions.

“Statistics indicate that more than 40 percent of all college entrants leave higher education without earning a degree, 75 percent of these students drop out in the first two years of college, and institutions can expect that 56 percent of a typical entering class cohort will not graduate from that college more recent statistics indicate that 26.4 percent of freshmen do not return for the following fall semester and 46.2 percent of these students do not graduate from college”(DeShields , Kara, , & Kaynak, P.129).

In addition, commuter students are the majority with the highest dropout rate, Students who live in college residential housing or dormitories have lower dropout rates (DeShields et al., 2005). The loss of students signifies the loss of revenues to the universities and colleges.



Trying to understand what causes the students to drop out of colleges of business and predicting the persistence until graduation and retention is very significant for the students, the colleges, and the country in general as they impact the growth of the economy.

## CHAPTER 2. LITERATURE REVIEW

### **Importance of Business**

Societies need more businesses. If successful, they can change the way people work and live in their respective communities. Businesses bring innovations that improve the standard of living. In addition, businesses create wealth as new jobs start to emerge. Entrepreneurs create new businesses that offer new employment opportunities. This adds to national income in terms of tax revenue collected from entrepreneurial ventures. The government can collect the revenue to invest in other areas that are struggling or in human capital. Businesses also create social changes. Through creation of unique goods and services, businesses allow entrepreneurs to move away from a traditional and indirect support system by reducing dependence on traditional systems; subsequently businesses improve lives in societies as well as create financial freedom. Moreover, businesses often participate in community development. They provide financial support to local charities in communities, and they are involved in local projects in communities, which is critical to community development activities such as education and health.

As can be seen, businesses are important for multiple reasons. However, for the purpose of this study, the discussion will focus on the roles businesses play in such activities as creating job opportunities, increasing corporate competition, encouraging technological innovation, tackling social issues, improving economic growth (improve the economy), and creating personal wealth.

When new and young businesses emerge in societies, they provide new employment opportunities especially for individuals who are not employed. These paid employments come with health care benefits that are beneficial to families and households in case of medical

expenses. Through employment opportunities provided by local business communities, individuals are able to earn income that is sufficient to cover living expenses like food, rent, water, house mortgages, transportation, etc.

Economic wealth generated from business ventures can be very significant especially if it generates a substantial amount of money. The latter makes life much easier and better as it enables individuals to provide well for the loved ones, spend more quality time with the family, participate in physical exercises to maintain or improve overall wealth and wellness, and even take great vacations.

Businesses offer employment opportunities through creation of jobs. This increases the government's revenues in terms of taxes collected from business ventures, properties, and employment. The government can collect the revenue to invest in infrastructures such as roads, schools, and development of human capital, and improved public services. Businesses permit people to support each other, build communities as they employ members of the communities, and pay taxes. For instance, businesses provide financial support to local charities in communities, and they are often involved in local projects like education and health projects, which are critical to community development. For example, the Bill Gates and Melinda Foundation was launched in 2000 to enhance health care and reduce extreme poverty, expand education, and provide access to information technology globally. Their non-profit organization has played a significant role in improving individuals' health and wellbeing. It focuses on assisting individuals to lift themselves out of hunger and poverty, and provision of health care services to individuals who need it the most especially in developing countries. Additionally, the Gates Foundation ensures that individuals in the U.S. with the least resources are able to access the opportunities they require to be successful in school and life in general.

Expansion of businesses creates competition. Competition between businesses is significant for consumers as it puts companies under pressure to provide or offer the top possible choice of goods and services at the best possible price. This is great for customers because they can get better quality products at a lower price.

Additionally, businesses promote innovations. For example, businesses have created numerous technological innovations that have brought about efficient solutions to modern problems. The introduction of cellphones has allowed individuals to communicate, shop, navigate, listen, text, video record for professional purposes and much more. More people in the world have a cellphone than a bank account, which makes it the most impactful technological innovation in the world. The followings are the most modern technological innovations and their impacts on individual's lives are discussed.

The World Wide Web/Internet is one of the technological innovations that occurs because of business initiatives. It has changed the knowledge of people around the world. Individuals can attend class online without going to the actual physical location. Information/education is increasingly accessible to the world population.

Email is another technological innovation. This is one of the easiest ways to send and receive correspondences without waiting for days, weeks or even months for it to be delivered by the post office.

Google search is additional technological innovation that has made it simple for individuals to locate information online. It has various features depending on what an individual is searching for such as, videos, news, websites, and images. This has made it easier for students and researchers to get access to significant information at major research universities.

WiFi is also a technological innovation that has played various roles. Multiple family members may access internet at the same time without paying an ISP for different accounts, as this can assist the household to save money. Family members can also send their files or documents to the printer from any computer or smart phone without plugging their laptop directly into the printer.

Facebook, founded by Mark Zuckerberg in 2004, is another innovation that has forever changed how families, friends, and acquaintances stay in contact with one another, even old friends. Facebook as an amazing innovative website has made it easier for old friends to communicate and keep in touch with each other than ever before.

Finally, YouTube is another technological innovation that was developed in 2005. It permits individuals to upload videos to the internet. Today, information can be accessed on YouTube by pressing a button. This can include current events such as YouTube homepage that contains different helpful links.

Most businesses started as a result of someone's desire to be an entrepreneur. This is almost always as a small business, and many companies that are even multinational corporations today started as an entrepreneurial intention of a single person (e.g. Sam Walton).

### **Importance of Education to Business**

Education entrepreneurship is defined as a process of launching a business venture, which offers goods and services, creates job opportunities and adds to the national income as well as all aspects of economic development (Seth, 2008).

Seth claims that education is viewed as a successful strategy regarding more innovation. In addition, the first entrepreneurship course was taught by Myles at the Harvard School of Business more than 50 years ago, and since then, it has been added to the curricula in educational

institutions in North America (Katz, 2003). Today a number of universities and colleges within the United States and across the world offer entrepreneurial courses due to students' demand for and eagerness to learn about entrepreneurship and business ventures/ activities (Bilić, Prka, & Vidović, 2011). Education has a significant effect on entrepreneurial activities (Phan, Wong, and Wang, 2002). It equips entrepreneurs with knowledge to expand their companies into larger organizations, and into new markets for their companies (Phan et al., 2002). In addition, entrepreneurs with direct education in entrepreneurship possess a better knowledge of content in areas of marketing and management, and they are more likely to succeed especially with large companies (Phan et al., 2002). The authors further state that educated entrepreneurs are capable of assessing risks, dealing with complex business decisions, and making better decisions. Furthermore, studies on business startups suggest that an entrepreneur's level of education as a distinctive aggressive idea plays a significant role towards the success of a new business (Phan, Wong, & Wang, 2002). Additionally, the authors found a positive relationship between the educational level of entrepreneurs and the longevity of the firms in which they were employed. In addition, Hodge and Burchell (2003), claim that college graduates who enter a workforce bring competence such as great oral communication skills, problem-solving skills, willingness to learn, positive attitude, cultural and diversity skills as well as technological skills which are significant for the growth and production of business organizations.

Furthermore, individuals who have a higher level of education could have a greater chance of business success and satisfaction of their individual objectives or goals both as the owners of business ventures as well as employees (Jiménez et al., 2015). The authors further state that certain individuals with a higher level of education are more capable of discovering and

exploiting opportunities since they possess cognitive skills that contributes to a larger possibility for both efficiency and productivity

### **Factors Influencing Student Enrollment in Higher Education**

Higher education is very important for students. Spearman, Rahim, Ghanayem and Ljepava, (2016) asserted that “University affects students’ daily activities, their overall perception and contribution to long-term knowledge, and instills career values that their university experiences and academic performance can reflect upon” (p.1). Recruitment is very significant for attracting students to enroll in higher education. According to Spearman et al. (2016) the university or a higher education institution invest heavily by specifying all dimensions it offers to students such as education, available research facilities, extracurricular activities, the university’s good name, and knowledgeable professors through their recruitment strategies. Higher education institution websites are very significant in assisting students to choose the university or institution in which they will enroll (Spearman et al., 2016). The authors further argue that most students who enroll in a higher education institution, prefer to search information online such as academic programs, and courses offered by the university. Furthermore, word of mouth influences a student’s enrolment decision to the university since it provides them information pertaining to available scholarships, university rankings and reputation, and fees (Spearman et al., 2016).

An article by Spearman et al. (2016) has addressed recruitment in higher education institutions by suggesting that “moreover, recent research showed that colleges and universities websites play the key role of creating students’ perceptions and decisions about the place they will study in” (p.2). Additionally, Spearman et al. (2016) indicated, “two studies were conducted in 2013 and 2014, and prospective university students were asked to choose if they would rather

look for university-related information on website or the brochures when searching for the university” (p.2). “Results of these studies indicated that participants preferred to search for information online (68% in 2014) compared to 38% that preferred reviewing university brochures (2014 E-recruiting practices report)” (Spearman et al., 2016, p.2). Spearman et al., (2016) further state, “moreover, according to the same report, more than 50% of both senior and junior students stated that they extensively used both web and social media for educational purposes” (p.2). “According to E-recruiting practices report, when asked about importance of website for the overall perception of the higher education institution, almost 80% of students responded that the college website plays an important role in establishing the perception of an educational institution” (Spearman et al., 2016, p.2). Moreover, Spearman et al., (2016) highlighted that “when searching for the university, potential students stated that they are mostly focusing on academic programs and courses that a university has to offer” (p.2). “In addition, participants considered university ranking and reputation (mostly based on word-of-mouth) along with fees, cost and available scholarships to be an important factor for their university enrolment decision, while location of the university was the least important” (Spearman et al., 2016, p.2).

### **Factors Specific to Enrollment in Business Programs in Higher Education: Recruitment and Retention**

Business schools across the country are having problems of student’s enrollment, budget reduction and retention of business students (Bush et al., 1998). In addition, the authors mention that business school may become more market oriented to overcome this trend. Today, many of colleges and universities spend a tremendous amount of time, money and other valuable resources on programs for drawing or attracting students instead of handling enrollments (Zemke, 2000).



In addition, institutions should treat admitted students as customers to ensure that they are satisfied with the services in order to keep them for making profit (Anderson & Sullivan, 1993).

Statistics indicate that more than 40 percent of all college entrants leave higher education without earning a degree, 75 percent of these students drop out in the first two years of college, and institutions can expect that 56 percent of a typical entering class cohort will not graduate from that college” (DeShields et al., 2005 p. 129). The authors further state “more recent statistics indicate that 26.4 percent of freshmen do not return for the following fall semester and 46.2 percent of these students do not graduate from college, (p.129).

In addition, commuter students are the majority with the highest dropout out rate, how students who live on college residential housing or dormitories have lower dropout rates (DeShields et al., 2005 p. 129)

For universities to retain students, their needs and expectations should be identified (Elliott, & Healy, 2001). The author continue to argue that student’s educational experience in very significant in promoting students satisfaction such as student centeredness, campus climate and instructional effeteness. However, when universities lays down their ideas of recruiting and enrolling students, factors that are significant and attractive to students should be identified, therefore provide the quality education to retain them (Elliott, & Healy, 2001). The authors also mention that word of mouth from the current contented students is the most fruitful way to recruit students. However, increased retention of students raises the university’s revenues collected in the form of tuition and fees (Kara, & DeShields, 2004).

Higher educational institutions exist and continue to function due to the successful completion and enrichment of students’ education (DeShields et al., 2005). These authors further argue that most institutions and colleges mainly invest more time on programs to attract and admit students than they do on managing enrollment. Arderson and Sullivan (1993) state that managing and retaining students is the same as the significance of pleasing customers to

keep them for making profits in organizations. The authors continue to argue that satisfaction of admitted student is very significant for student retention.

Business schools have received criticism for preparing student with a paucity of transferable skills that would enable them to work as generalist. (Chanko & Roberts, 1996). In addition, some students entering programs in colleges and schools of business may lack clarity regarding what is actually involved in having a career in businesses. Courses that are taught in the first-year of enrollment with the help of practical experience can assist students with little or no experience in an organization to construct knowledge within themselves and the business (Lamb, Lee, & Vinton, 1997).

While developing this first-year experience may require considerable work and resources, it is a very justifiable investment if it prepares the students the discipline knowledge and the business skills that are necessary for students to be prepared to face the difficulties/challenges of they will encounter in their management and/or other business program (Cox, et al.,2005). The authors further argue that the creation of a freshman management course at their institution was to respond to the call for adjustment in the First-year business course of studies. Furthermore, creating freshman courses may help students to gain skills that are essential to succeed in business school by assisting them to transition smoothly from high school to college (Cox, et al.,2005). In addition, the formation of freshmen courses creates a sense of community and belonging for first year students with the university and the business school (Cox, et al.,2005).

There are several factors that are associated with low retention rates of college students. According to a report published by the ACT (ACT, 2000) and results reported by Tinto (2002), universities and colleges that are public with an open admissions policy tend to have higher retention rates than private colleges and universities. In addition, universities that are more

selective in their admission standards tend to have a high retention rate (ACT, 2000). Research results indicate that elements such as lower SAT scores, high school grade point averages, and household income as well as unfulfilled financial needs put students at a high risk of dropping out of college (Reason, 2003; Tinto, 2002).

According to Hoyt & Winn (2004), the financial concern is the main factor in explaining why students fail to go back to college, and students that have high financial problems have the biggest risk of failure to be retained. Tinto (2002) suggests that female students are more likely to persevere than male students, and institutions/universities with a low percentage of female students face a high attrition rate. In addition, retention can be enhanced by providing opportunities that involve other students (Cox, et al., 2005). With the availability of support programs that involve other students (e.g. advanced students in mentoring roles, etc.) students are more likely to persist until they attain their degree requirements (Tinto, 2002).

Another technique for improving student retention is getting them involved in collaborative learning activities. Collaborative learning produces greater achievement and improved communication skills. (Johnson, Johnson, & Smith, 1991).

However, for student to effectively transition into colleges and universities, they should be offered proper tools and support to handle the academics and social college environments (Frost, 1993; Noel, Levitz, & Salur, 1985; Pascarella & Terenzini, 1991). According to the writings of Tinto (1997, 1987), The increase of participation with peers and faculty supports students academically, socially, personally and emotionally all of which are significant components to student persistence. Several studies have demonstrated the value of initiating a mentoring program through which entering students are assigned to upper class students as mentors. Not only do these mentors provide advice, help, and direction, but they also can serve

as role models to new students in a program (Miller, 1991; Robert & Thomson, 1994; Wagener & Nettles, 1998).

In addition, living on campus seems to be a significant factor in constructing a concrete foundation for success in colleges and beyond (Hernández, 2011). Hernández further states that living on campus is not only convenient for students, but it is essential for networking/making connections, building community, and it helps them to find the place for both academics and social activities.

Residential students are invested and involved in campus life and are more likely to be satisfied with their university experience, develop a strong affinity to the institution and persist and progress at a higher rate than those who have never lived on campus, (Hernández, 2011 p.2).

The author continues to argue that the life skill acquired living in a content-based residential college will stay with the students beyond graduation.

### **Residential Colleges in Higher Education and Their Influence on Student Retention**

The history of residential halls. “When the English colonized North America, they brought with them the traditions and concepts of education learned in England” (Blimling, 2003 p.24). The author further states that Harvard was founded by Colonial rationalists using the model they knew as students at Oxford and Cambridge in 1636. In addition, the establishment of nine original colonial colleges such as Harvard University, Yale, New Jersey College of William and Mary, King’s College, Philadelphia Academy, College of Rhode Island, Queens College, and Dartmouth College had a big influence in the establishment of residential college in the U.S due to the strong background of prerevolutionary collage organizers (Blimling, 2003). Most American students who attended institutions were as young as 13 and 14 years old and they have to travel a long distance to attend classes (Blimling, 2003). The author continue to argue that traveling was, difficult, not safe and it took a tremendous amount of time therefore, it was

required for student to board at the college. In early twentieth century, the collegiate system of residential colleges was not easily defeated as they sustained ideas of English colleges such as colleges should educate both the character and intellect (Blimling, 2003). In addition, the author states that the rebirth and interest of student housing started at Yale University after realizing the importance of the college experience.

The quadrangle plan. This plan was introduced in 1907 by Woodrow Wilson the president of Princeton University emphasizing that resident halls should be joined to form quadrangles (Blimling, 2003). The author further mentions that unmarried faculty should be housed together with students. Furthermore, the quadrangle plan later failed due to the opposing forces from social clubs and the influential alumni (Blimling, 2003). However, there was a big debate about the residential system of colleges in the U.S. which inspired the expansion of college-owned residential halls at Harvard University (Blimling, 2003).

However, today student's residential halls experience has a significant impact towards their success in college. (Blimling, 2014). The author further stresses that "Residence halls are the source of college friendships, informal orientation, role modeling, socializing, and emotional support" (p.15). In addition, the author further states that students call residential halls campus home since it is the first place they arrive at the beginning of their college and the last place they depart for the summer. However, within residential college/ hall peer relationships are formed which are significant for students to acquire informal knowledge about university/ college culture that assist them to define themselves as students (Blimling, 2014). In addition, the author states that "Students who fail to connect with others in their living units often feel isolated and are at increased risk of leaving college" (Blimling, 2003 p. 222).

Residential halls provide students with a great opportunity to connect with academic community through involvement with other students, faculty and staff and gain all the required information for retention (Blimling, 2014). Furthermore, when students integrate and engage in the collage experience it increases chances to complete their degree (Schudde, 2011).

Additionally, the author states that the latter assists students to feel a sense of connection to the university or collage, and rises their chances of graduating from college. Additionally,

Students who have strong senses of community are more likely to remain in college, to develop trusting relationships with other people, to become more involved in college activities, and to develop lifelong friendships while in college, Blimling, 2014 p.222.

Furthermore “student persistence and student retention refer to the continued enrollment of students, usually fall to fall re-enrollment” (Braxton ,Brier& Steele, 2007, p. 378).

## CHAPTER 3. METHODOLOGY

The primary purpose of this study was to determine the influence of housing in the College of Business content-based residential college and selected demographic characteristics on the retention in the fifth semester of enrollment of students Enrolled in the College of Business at a Research University (RU/VH) in the southern region of the United States.

### Objectives

The following specific objectives were developed by the researcher to guide this study:  
To describe College of Business students who resided in the College of Business Content-Based Residential College (CBRC) at a research university in the southern region of the United States on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;
- j. Whether or not the student was retained in the fifth semester of college enrollment;

k. Whether or not the student changed major, and if so, the number of times changed.

To describe College of Business students who did not reside in the College of Business Content-Based Residential College, on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;
- j. Whether or not the student was retained in the fifth semester of college enrollment;
- k. Whether or not the student changed major, and if so, the number of times changed.

To compare College of Business students who resided in the College of Business Content-Based Residential College (CBRC) with College of Business students who did not



reside in the College of Business CBRC, on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;
- j. Whether or not the student was retained in the fifth semester of college enrollment;
- k. Whether or not the student changed major, and if so, the number of times changed.

To determine if relationships exist between whether or not the students was retained in their fifth semester of college enrollment and the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);

- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The semester GPA achieved in each of the first two semesters of college enrollment;
- i. Whether or not the student changed major, and if so, the number of times changed; and
- j. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

To determine if a model exists that significantly increases the researcher's ability to correctly classify College of Business students at a research university (RU/VH) in the Southern region of the United States based on whether or not they are retained into their fifth semester of enrollment from the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;

- h. The semester GPA achieved in each of the first two semesters of college enrollment;
- i. Whether or not the student changed major, and if so, the number of times changed; and
- j. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

### **Population and Sample**

The target population of the study was students enrolled in the programs housed in a College of Business in research universities located in the southern region of the United States. The accessible population was the first time college freshman students enrolled in programs housed in the College of Business at one selected research university in the southern region of the United States during 2014-2015 academic year. This accessible population was divided into two groups of students: Those who resided on campus in the College of Business content-based residential college and those who did not reside in the College of Business content-based residential college. The study sample consisted of 100% of the defined accessible population of the study.

### **Instrumentation**

After approval was received to conduct this study by the Institutional Review Board (IRB) and the student's doctoral advisory committee, a computerized recording form was designed to collect and store data from the Office of Undergraduate Admission and Student Aid. The variables included in this study were selected according to:

- The review of literature conducted by the researcher,
- The Residential College Annual Report,

- The University's Office of the Registrar, and
- The study institution's Office of Undergraduate Admissions.

The following are the variables that were retrieved:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;
- j. Whether or not the student changed major, and if so, the number of times changed;
- k. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment; and
- l. Whether or not the student is retained in their fifth semester of college enrollment.

### **Data Analysis**

The data analysis was organized by individual research objectives. Objectives one and two are descriptive in nature and were, therefore, analyzed using descriptive statistics. The goal for objectives one and two was to describe incoming undergraduate students residing in

one of two sub-groups: students that resided in the College of Business content-based residential college, and students that did not reside in the College of Business content-based residential college at a research university in the southern region of the United States. Frequencies and percentages were used for categorical (nominal and ordinal) variables. The specified variables included:

- a. Gender;
- b. Race;
- c. Whether or not the student was a resident of the state in which the study institution was located;
- d. Whether or not the student changed major;
- e. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment; and
- f. Whether or not the student is retained in their fifth semester of college enrollment.

Means and standard deviations were used to analyze variables measured on interval or higher scales. The specific variables in this category were:

- a. High school grade point average (GPA);
- b. College entrance examination (ACT/SAT) composite scores;
- c. Credit hours the student earned each of their first four semesters of enrollment;
- d. The overall GPA achieved at the end of the first year of college enrollment;

- e. The overall GPA achieved at the end of the second year of college enrollment;
- f. The semester GPA achieved in each of the first four semesters of college enrollment;
- g. The number of times the student changed major during their first two years (if they changed major).

Objective three was to compare incoming college freshmen who lived in the Business Content Based Residential College with the incoming freshman students who did not live in the Business Content Based Residential College. The following variables are continuous in nature and the t-test procedure was the most appropriate statistical technique to compare two groups:

- a. High school grade point average (GPA);
- b. College entrance examination (ACT/SAT) composite scores;
- c. Credit hours the student earned each of their first four semesters of enrollment;
- d. The overall GPA achieved at the end of the first year of college enrollment;
- e. The overall GPA achieved at the end of the second year of college enrollment;
- f. The semester GPA achieved in each of the first four semesters of college enrollment;
- g. The number of times the student changed major during their first two years (if they changed major).

For the variables that were measured on a categorical scale of measurement (nominal or ordinal), the Chi-square test of independence was used to determine if each of the measures were

independent of the variable whether or not the students were retained in their fifth semester of enrollment at the research institution for the study. The specific variables in this category were:

- a. Gender;
- b. Race;
- c. Whether or not the student was a resident of the state in which the study institution was located;
- d. Whether or not the student changed major;
- e. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment; and
- f. Whether or not the student is retained in their fifth semester of college enrollment.

The fifth objective of this study will be to determine if a model exists that significantly increases the researcher's ability to correctly classify students on their retention in their fifth semester of enrollment (from second to third year) among undergraduate students at a research university in the Southern region of the United States from the following measures:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned in each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;

- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The semester GPA achieved in each of the first two semesters of college enrollment;
- i. Whether or not the student changed major, and if so, the number of times changed; and
- j. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

To accomplish this objective, multiple discriminant analysis statistical technique was used. The multiple discriminant analysis procedure requires that all independent variables entered into the model must be on a continuous scale of measurement (interval or ratio) or must be coded as a dichotomous variable. The dependent variable of this study was whether or not the student was retained in their fifth semester of enrollment at the research institution of study. The independent variables for the study were entered into the model as either continuous variables or as binary-coded (dichotomous) variables. The independent variables in this category were coded for the analysis as outlined below:

- a. Gender: This was coded as female = 1; male = 2;
- b. Race: Each of the race categories was coded as a binary variable and each subject was categorized as either possessing the trait or not possessing the trait. For example, a variable was created for the Caucasian race in which the subjects were classified as either possessing the trait of being Caucasian (coded as 1), or not possessing the trait of Caucasian (coded as 0). This was repeated for each of the other race categories,
- c. High school grade point average (GPA): This was measured as a continuous



variable;

d. College entrance examination (ACT/SAT) composite scores: This was measured as a continuous variable;

e. Credit hours the student earned in each of their first two semesters of enrollment, these were measured as continuous variables;

f. Whether or not the student was a resident of the state: If the student was a resident of the state, the variable was coded as 1 and if the student was not a resident of the state, it was coded as 0;

g. The overall grade point average (GPA) at the end of their first year of college enrollment: This was measured as a continuous variable;

h. The semester GPA achieved in each of their first two semesters of college enrollment: These were measured as continuous variables;

i. Whether or not the student changed major (measured as a categorical variable and coded “1” if changed major and “0” if did not change major), and if so, the number of times changed (measured as a continuous variable);

j. Type of freshman housing (College of Business content-based residential college (coded as “1”) or not College of Business content-based residential college (coded as “0.”).

## CHAPTER 4: FINDINGS

The findings of this study are presented in this chapter organized by objective.

### **Objective One Results**

The first objective of the study was to describe College of Business students who resided in the College of Business Content-Based Residential College (CBRC) at a research university in the southern region of the United States on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;
- j. Whether or not the student was retained in the fifth semester of college enrollment;
- k. Whether or not the student changed major, and if so, the number of times changed.

There were 174 students who resided in the College of Business Content-Based Residential College (CBRC). The following are results of each of the variables investigated.

#### Gender

Gender was the first variable on which the students were described. Of the 174 students who resided in the College of Business Content-Based Residential College (CBRC), 45 (25.9%) were identified as female and 129 (74.1 %) were identified as male.

#### Race

Race was the second variable on which the students were described. Of the 174 students who resided in the College of Business Content-Based Residential College (CBRC), Caucasian was the largest group of students ( $n = 124$ , 71.7%). Black or African American was identified as the second largest group of students ( $n = 29$ , 16.8%) residing in the CBRC (see Table 4.1).

Table 4.1. Race of Students Who Lived in a College of Business Content-Based Residential College at a Research University-Very High Research (RU/VH) in the Southern Region of the United States

Race	Frequency <sup>a</sup>	Percent
Caucasian	124	71.7
Black or African American	29	16.8
Hispanic	12	6.9
Multi-Racial	4	2.3
Asian	3	1.7
American Indian or Alaskan Native	1	.6
Native Hawaiian or Other Pacific Islander	0	.0
Total	173	100

<sup>a</sup> One individual did not report their race.

#### High School Grade Point Average (GPA)

The high school grade point average (GPA) was another variable that was used to describe the students who resided in the College of Business Content-Based Residential College

(CBRC). The mean GPA for these students was 3.32 ( $SD = .352$ ). Students' GPAs ranged from a low of 2.42 to a high of 4.00.

When the high school GPAs were examined in ranges of measurements, the range of scores that had the largest number of students was the 3.00—3.249 category ( $n = 53$ , 30.5%).

The distribution of these ranges is presented in Table 4.2.

Table 4.2. High School Grade Point Average (GPA) for Students Who Lived in the College of Business Content-Based Residential College at a Research University-Very High Research (RU/VH) in the Southern Region of the United States

GPA Range	Frequency	Percent
4.00	3	1.7
3.75—3.99	23	13.2
3.50—3.749	27	15.5
3.25—3.49	41	23.6
3.00—3.249	53	30.5
2.75—2.99	19	10.9
2.50—2.749	7	4.0
Less than 2.50	1	.6
Total	174	100.0

*Note.* Mean GPA = 3.32 ( $SD = .352$ ), Range: 2.42—4.0.

#### College Entrance Examination (ACT/SAT) Composite Scores

Another variable on which the study subjects were described was their college entrance examination score. Most enrolled students completed the ACT to satisfy this requirement.

However, some students completed the SAT, and these SAT scores were converted to the ACT equivalent to facilitate reporting of the data. The mean composite score on the ACT/SAT for students who resided in the College of Business Content-Based Residential College (CBRC) was 25.21 ( $SD = 3.336$ ). The scores ranged from a low of 19 to a high of 34.

#### Credit Hours The Student Earned Each Of Their First Four Semesters

Credit hours earned each semester was another variable on which the students were described. In the first semester, there were 174 students who resided in the College of Business Content-Based Residential College (CBRC), the mean number of credit hours earned was 12.90

(SD = 2.882), with the lowest number of credit hours earned being 0 and the highest number of credit hours earned being 16. In the second semester, there were 164 of the students who resided in the College of Business Content-Based Residential College (CBRC) during their freshman year still enrolled. These students earned 12.74 hours on average (SD = 2.999), with the lowest number of credit hours earned being 0 and the highest number of credit hours earned being 18. In the third semester, there were 148 of the students who lived in the College of Business Content-Based Residential College (CBRC) during their freshman year who were still enrolled. These students earned a mean number of credit hours of 13.10 (SD = 3.288). The lowest number of credit hours earned was 0 and the highest number of credit hours earned was 18. In the fourth semester of enrollment, for the 142 students who had lived in the College of Business Content-Based Residential College (CBRC) during their freshman year and were still enrolled, the mean number of credit hours earned was 12.98 (SD = 3.188.), with the lowest number of credit hours earned being 0 and the highest number of credit hours earned being 19 (see Table 4.3).

Table 4.3. Credit Hours Earned Each of the First Four Semester for Students Living in a College of Business Content-Based Residential College at a Research University-Very High Research (RU/VH) in the Southern Region of the United States

Credit Hours Earned	First Semester <sup>a</sup>		Second Semester <sup>b</sup>		Third Semester <sup>c</sup>		Fourth Semester <sup>d</sup>	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
18 or more	0	.0	2	1.2	3	2.0	6	4.2
15-17	85	48.9	74	45.1	84	56.8	62	43.7
12-14	65	37.4	55	33.5	36	24.3	52	36.6
9-11	14	8.0	23	14.0	15	10.1	13	9.2
6-8	7	4.0	7	4.3	5	3.4	5	3.5
3-5	1	.6	2	1.2	3	2.0	2	1.4
1-2	0	.0	0	.0	0	.0	0	.0
0	2	1.1	1	.6	2	1.4	2	1.4
TOTAL	174	100.0	164	100.0	148	100.0	142	100.0

<sup>a</sup>During the first semester semester, the mean hours earned was 12.90 (SD = 2.882) and the range range was 0—16; 13.8% (n = 24) dropped below full time status.

<sup>b</sup>During the second Semester, the mean number of credit hours earned was 12.74 (SD = 2.999) and the range was 0—18; 20.1% (n = 33) dropped below full time status.  
(table cont'd.)

<sup>c</sup>During the third semester, the mean number of credit hours earned was 13.10 (SD = 3.288) and the range was 0—18; 16.9% (*n* = 25) dropped below full time status.

<sup>d</sup>During the fourth semester, the mean number of credit hours earned was 12.98 (SD = 3.188) and the range was 0—19; 15.5% (*n* = 22) dropped below full time status.

Students that carried less than 12 credit hours each semester were not considered full-time students. In the first semester, 13.8% (*n* = 24) of the students dropped below full-time status. Subsequent semesters yielded somewhat higher frequencies: in the second semester, 20.1% (*n* = 33) of students dropped below full-time status, in the third semester, 16.9% (*n* = 25) of students dropped below full-time status, and in the fourth semester, 15.5% (*n* = 22) of students dropped below full-time status. These data are presented in Table 4.3.

#### Overall Grade Point Average (GPA) at the End of the First Year

At the study institution, during the students' first year of study, Grades of "A," "B," and "C" were assigned for satisfactory work. A grade of "D" indicated minimally acceptable achievement for credit, and in some colleges, a grade of "D" in certain courses did not allow that credit to be applied to a degree. A grade of "F" was failing. An undergraduate student's grade point average (GPA) was determined by the ratio of quality points earned to semester hours attempted and were assigned to letter grades using the following scale:

"A" = 4 quality points;

"B" = 3 quality points;

"C" = 2 quality points;

"D" = 1 quality point;

"F" = 0 quality points.

For students who resided in the College of Business Content-Based Residential College (CBRC) at a research university-very high research (RU/VH) in the southern portion of the United States, the overall GPA at the end of their first year of study was another measured

variable. Of the 174 students who resided in the College of Business Content-Based Residential College (CBRC), the mean GPA was 2.83 ( $SD = .716$ ). The lowest GPA was .375 and the highest GPA was 4.0.

When the data were examined in categories of GPA, the category with the highest frequency of occurrence was the range of GPAs from 2.75—2.99 ( $n = 25$ , 14.4%). The frequency of occurrence for each category of GPA is presented in Table 4.4.

Table 4.4. Overall Grade Point Average (GPA) for Students Living in a College of Business Content-Based Residential College at the End of Their First Year and Second Year of Study

Overall GPA Range	First Year <sup>a</sup>		Second Year <sup>b</sup>	
	Frequency	Percent	Frequency	Percent
4.00 and above	6	6.3	4	2.6
3.75 – 3.99	9	4.6	9	5.9
3.50 – 3.74	21	7.5	13	8.6
3.25 – 3.49	18	10.3	24	15.8
3.00 – 3.24	24	12.1	28	18.4
2.75—2.99	25	14.4	17	11.2
2.50—2.74	21	13.8	19	12.5
2.25—2.49	18	10.3	20	13.2
2.0—2.24	13	12.1	5	3.3
1.75—1.99	8	5.2	7	4.6
1.74 and below	11	3.4	6	3.9
Total	174	100.0	152 <sup>c</sup>	100.0

<sup>a</sup>For the first year the mean GPA was 2.83 ( $SD = .716$ ) and the range was .375—4.00. (table cont'd.)

<sup>b</sup>For the second year the mean GPA was 2.92 ( $SD = .639$ ) and the range was .77—4.07.

<sup>c</sup>No second year GPA data were available for 22 students

#### Overall College Grade Point Average (GPA) at the End of Their Second Year

During the Fall 2015 semester, plus/minus grading was introduced at the study institution. Letter grades of “A,” “B,” and “C” were assigned for satisfactory work. A grade of “D” indicated minimally acceptable achievement for credit, and in some colleges, a grade of “D” in certain courses did not allow that credit to count to be applied to a degree. Letter grades A, B, C, and D had the suffix plus (+) or minus (-) to distinguish higher and lower performances within each of the letter grades. A grade of “F” was failing and did not include the plus (+) or minus (-)

distinction. An undergraduate student's grade point average (GPA) is determined by the ratio of quality points earned to semester hours attempted and are assigned to letter grades using the following scale:

"A+" = 4.3 quality points;

"A" = 4 quality points;

"A-" = 3.7 quality points;

"B+" = 3.3 quality points;

"B" = 3 quality points;

"B-" = 2.7 quality points;

"C+" = 2.3 quality points;

"C" = 2 quality points;

"C-" = 1.7 quality points;

"D+" = 1.3 quality points;

"D" = 1 quality point;

"D-" = 0.7 quality point;

"F" = 0 quality points.

For students that lived in a content-based residential college at a research university-very high research (RU/VH) in the southern portion of the United States, the overall grade point average earned at the end of their second year of study was another measured variable. Of the 174 students who lived in a content-based residential college in their first year, 152 were observed at the completion of the following year. The mean GPA was 2.92 (SD = .639). The lowest GPA was .77 and highest GPA was 4.07. The category within which the most students



fell was the 3.00—3.24 GPA category ( $n = 28$ , 18.4%). The frequency of occurrences of GPAs in ranges of scores can be found in Table 4.4.

#### GPA Earned Each Semester

Student's GPA earned each of the first four semesters of enrollment was another variable on which the students were described. In their first semester, among the 174 students who resided in the College of Business Content-Based Residential College (CBRC) the mean GPA was 2.840 ( $SD = .789$ ), with the lowest GPA of .000 and the highest GPA of 4.00. In the second semester, for the 164 students who resided in the College of Business Content-Based Residential College (CBRC) and were still enrolled, the mean GPA was 2.722 ( $SD = .819$ ), with the lowest GPA of .000 and the highest GPA of 4.00. For the third semester, the 148 students who had resided in the College of Business Content-Based Residential College (CBRC) during their freshman year and were still enrolled, the mean GPA was 2.845 ( $SD = .927$ ). The lowest GPA was .000 and the highest GPA was 4.225. In the fourth semester of enrollment, for the 142 students who had resided in the College of Business Content-Based Residential College (CBRC) during their freshman year and were still enrolled in the university, the mean GPA was 2.854 ( $SD = .833$ ), with the lowest GPA of .000 and the highest GPA of 4.240. The frequency of occurrences of semester GPAs in ranges of scores is presented in Table 4.5.

#### Whether or not the Student was Retained in College in the Fifth Semester of College

Whether or not the student was retained in the fifth semester of college was another variable used to describe students who resided in the College of Business Content-Based Residential College (CBRC). Of the 174 students who resided in the College of Business Content-Based Residential College (CBRC) in their freshman year, 132 (75.9%) were retained in

their fifth semester of enrollment. The remainder (n=42, 24.1%) were not retained in their fifth semester.

Table 4.5. GPA Earned Each if the First Four Semesters for Students Living in a Content-Based Residential College at a Research University-Very High Research (RU/VH) in the Southern Region of the United States

GPA Earned Each Semester	First Semester <sup>a</sup>		Second Semester <sup>b</sup>		Third Semester <sup>c</sup>		Fourth Semester <sup>d</sup>	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
4.00 and above	11	6.3	11	6.7	11	7.4	8	5.6
3.75 – 3.99	8	4.6	8	4.9	12	8.1	8	5.6
3.50 – 3.74	23	13.2	9	5.5	21	14.2	18	12.7
3.25 – 3.49	15	8.6	22	13.4	15	10.1	17	12.0
3.00 – 3.24	33	19.0	27	16.5	19	12.8	21	14.8
2.75—2.99	23	13.2	15	9.1	13	8.8	15	10.6
2.50—2.74	17	9.8	13	7.9	9	6.1	18	12.7
2.49—2.25	16	9.2	17	10.4	12	8.1	10	7.0
2.25—2.0	10	5.7	14	8.5	10	6.8	9	6.3
1.9—1.75	4	2.3	12	7.3	8	5.4	4	2.8
1.74 and below	14	8.0	16	9.8	18	12.2	14	9.9
Total	174	100.0	164	100.0	148	100.0	142	100.0

<sup>a</sup> During the Fall 2014 semester, the mean GPA earned was 2.840 (SD = .789) and the range was 0.00—4.00.

<sup>b</sup> For the Spring 2015 semester, the mean GPA earned was 2.722 (SD = .819) and the range was 0.00—4.00. There were 10 missing cases.

<sup>c</sup> During the Fall 2015 semester, the mean GPA earned was 2.845 (SD = .927) and the range was 0—4.225. There were 26 missing cases. Plus/minus grading was introduced in this semester.

<sup>d</sup> During the Spring 2016 semester, the GPA earned was 2.854 (SD = .833) and the range was 0.00—4.240. There were 32 missing cases.

#### Whether or not the Student Changed Major, and if so, the Number of Times Changed

Another factor that is sometimes associated with retention is changing majors. Students residing in the CBRC were also described on this measure. Of 174 students that lived in the College of Business Content-Based Residential College (CBRC) at a research university-very high research (RU/VH) in the southern portion of the United States, 121 (72.5%) changed their major at least once, and 46 (27.5%) did not change his/her major. Information about major change was unavailable for seven of the students.

For the 121 students who did change their major, the mean number of times they changed was 1.66 (SD=.613). The majority of these students (n = 62, 51.2%) had changed major two times. The next largest group was those who had changed major one time (n = 50, 41.3%). The remainder of the 121 students who had changed major had changed three times (n = 9, 7.4%).

Whether or not the Student was a Resident of the State

The final variable included in the description of the students who had resided in the CBRC was whether or not the students were classified as in-state resident by the study institution. The majority (n = 126, 72.4%) were classified as residents of the state and 48 students (27.6%) were classified as nonresidents.

### **Objective Two Results**

The second objective of the study was to describe College of Business students who did not reside in the College of Business Content-Based Residential College (CBRC), on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college

enrollment (First Semester, Second Semester, Third Semester, Fourth Semester);

j. Whether or not the student was retained in the fifth semester of college enrollment;

k. Whether or not the student changed major, and if so, the number of times changed.

There were 612 College of Business students who did not reside in the College of Business Content-Based Residential College (CBRC) during their freshman year. The following are results for each of the variables investigated.

#### Gender

Gender was the first variable on which the students were described. Of the 612 students who did not reside in the College of Business Content-Based Residential College (CBRC), 275 (44.9%) were identified as female and 337 (55.1%) were identified as male.

#### Race

Race was the second variable on which the students were described. Of the 612 students who did not reside in the College of Business Content-Based Residential College (CBRC), Caucasian was the largest group of students ( $n = 463$ , 75.7%). Black or African American was identified as the second largest group of students ( $n = 72$ , 11.8%) among those who did not reside in the CBRC (see Table 4.6).

Table 4.6. Race of College of Business Students Who Did not Live in the College of Business Content-Based Residential College at a Research University-Very High Research (RU/VH) in the Southern Region of the United States

Race	Frequency <sup>a</sup>	Percent
Caucasian	463	75.9
Black or African American	72	11.8
Hispanic	40	6.6
Asian	23	3.8

(table cont'd.)

Race	Frequency <sup>a</sup>	Percent
Multi-Racial	10	1.6
American Indian or Alaskan Native	2	.3
Native Hawaiian or Other Pacific Islander	0	.0
Total	610	100

<sup>a</sup> Two individuals did not report their race.

#### High School Grade Point Average (GPA)

High school grade point average (GPA) was another variable that was used to describe the students who did not reside in the College of Business Content-Based Residential College (CBRC). The mean GPA for these students was 3.36 ( $SD = .380$ ). Students' GPAs ranged from a low of 2.08 to a high of 4.00.

When the high school GPAs were examined in ranges of measurements, the range of scores that had the largest number of students was the 3.00—3.249 category ( $n = 137$ , 22.4%). The second largest group of students were in the category 3.50 – 3.749 ( $n = 136$ , 22.2%). The complete list of these response categories is presented in Table 4.7.

Table 4.7. High School Grade Point Average (GPA) for Students Who Did not Live in the College of Business Content-Based Residential College at a Research University-Very High Research (RU/VH) in the Southern Region of the United States

GPA Range	Frequency	Percent
4.00	20	3.3
3.75—3.99	87	14.2
3.50—3.749	136	22.2
3.25—3.49	124	20.3
3.00—3.249	137	22.4
2.75—2.99	76	12.4
2.50—2.749	28	4.6
Less than 2.50	4	.7
Total	612	100.0

*Note.* Mean GPA = 3.36 ( $SD = .380$ ), Range: 2.08 - 4.00

### College Entrance Examination (ACT/SAT) Composite Scores

Another variable on which the study subjects were described was their college entrance examination score. Most enrolled students completed the ACT to satisfy this requirement. However, some students completed the SAT, and these SAT scores were converted to the ACT equivalent to facilitate reporting of the data. The mean composite score on the ACT/SAT for students who did not reside in the College of Business Content-Based Residential College (CBRC) was 25.13 ( $SD = 3.232$ ). The scores ranged from a low of 16 to a high of 35. The ACT/SAT score was not available for one student in the study.

### Credit Hours the Student Earned each of the First Four Semesters

Credit hours earned each semester was another variable on which the students were described. In the first semester of enrollment, there were 612 students enrolled in the College of Business who did not reside in the College of Business Content-Based Residential College (CBRC). The mean number of credit hours earned was 12.61 ( $SD = 3.157$ ), with the lowest number of credit hours earned being 0 and the highest number of credit hours earned being 19. In the second semester, there were 590 students who did not reside in the CBRC who were still enrolled. These students earned 12.74 credit hours on average ( $SD = 3.229$ ), with the lowest number of credit hours earned being 0 and the highest number of credit hours earned being 19. In the third semester, there were 530 students who entered the College in the specified fall semester and did not reside in the CBRC who were still enrolled. The mean number of credit hours earned by these students was 13.17 ( $SD = 3.015$ ). The lowest number of credit hours earned was 0 and the highest number of credit hours earned was 18. In the fourth semester, for the 509 students of the 612 who entered the College of Business in the specified fall semester and did not reside in the CBRC were still enrolled. The mean number of credit hours earned by these

students was 13.41 ( $SD = 3.155$ .) with the lowest number of credit hours earned being 0 and the highest number of credit hours earned being 20.

Students that carried less than 12 credit hours each semester were not considered full-time students. In the first semester, 19.1% ( $n = 117$ ) of the students dropped below full-time status. Subsequent semesters (especially those in the second year of enrollment) yielded a declining trend: in the second semester, 18.3% ( $n = 108$ ) of students dropped below full-time status; in the third semester, 13.8% ( $n = 73$ ) of students dropped below full-time status; and in the fourth semester, 4.3% ( $n = 22$ ) of students dropped below full-time status. This data is presented in Table 4.8.

Table 4.8. Credit Hours Earned Each of the First Four Semester for Students Who did not Live in a College of Business Content-Based Residential College at a Research University-Very High Research (RU/VH) in the Southern Region of the United States

Credit Hours Earned	First Semester <sup>a</sup>		Second Semester <sup>b</sup>		Third Semester <sup>c</sup>		Fourth Semester <sup>d</sup>	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
18 or more	6	1.0	15	2.5	15	2.8	19	3.7
15-17	265	43.3	269	45.6	269	50.8	277	54.4
12-14	224	36.6	198	33.6	173	32.6	162	31.8
9-11	67	10.9	67	11.4	47	8.9	29	5.7
6-8	28	4.6	24	4.1	13	2.5	6	1.2
3-5	19	3.1	9	1.5	5	.9	3	.6
1-2	0	0.0	0	0.0	1	.2	0	0.0
0	3	.5	8	1.3	7	1.3	13	2.6
TOTAL	612	100.0	590	100.0	530	100.0	509	100.0

<sup>a</sup>During the first semester, the mean hours earned was 12.61 ( $SD = 3.157$ ) and the range was 0—19; 19.1% ( $n = 117$ ) dropped below full time status

<sup>b</sup>For the Second semester, the mean number of credit hours earned was 12.74 ( $SD = 3.229$ ) and the range was 1—8; 18.3% ( $n = 108$ ) dropped below full time status

<sup>c</sup>During the Third semester, the mean number of credit hours earned was 13.17 ( $SD = 3.015$ ) and the range was 0—18; 13.8% ( $n = 73$ ) dropped below full time status

<sup>d</sup>During the Fourth semester, the mean number of credit hours earned was 13.41 ( $SD = 3.155$ ) and the range was 0—20; 4.3% ( $n = 22$ ) dropped below full time status

## Overall Grade Point Average (GPA) at the End of the First Year

For students who did not reside in the College of Business Content-Based Residential College (CBRC) at a research university-very high research (RU/VH) during their freshman year, the overall GPA at the end of their first year of study was another measured variable. Of the 612 students who did not reside in the College of Business CBRC the mean GPA was 2.89 (SD = .796). The lowest GPA was 0 and highest GPA was 4.0.

At the study institution, for the end of their first year of study Grades of “A,” “B,” and “C” were assigned for satisfactory work. A grade of “D” indicated minimally acceptable achievement for credit, and in some colleges, a grade of “D” in certain courses did not allow that credit to count to be applied to a degree. A grade of “F” was failing. An undergraduate student’s grade point average (GPA) was determined by the ratio of quality points earned to semester hours attempted and were assigned to letter grades using the following scale:

“A” = 4 quality points;

“B” = 3 quality points;

“C” = 2 quality points;

“D” = 1 quality point;

“F” = 0 quality points.

When the data were examined in categories of GPA, for students that did not live in the College of Business CBRC, the category in which the largest group of respondents were classified was the range of GPAs from 3.0—3.24 ( $n = 102$ ). These data are presented in Table 4.9.



## Overall College Grade Point Average (GPA) at the End of Their Second Year

During the second year of enrollment for the students included in this study, plus/minus grading was introduced at the study institution. Letter grades of “A,” “B,” and “C” were assigned for satisfactory work. A grade of “D” indicated minimally acceptable achievement for credit, and in some colleges, a grade of “D” in certain courses did not allow that credit to count to be applied to a degree. Letter grades A, B, C, and D had the suffix plus (+) or minus (-) to distinguish higher and lower performances within each of the letter grades. A grade of “F” was failing and did not include the plus (+) or minus (-) distinction. An undergraduate student’s grade point average (GPA) is determined by the ratio of quality points earned to semester hours attempted and are assigned to letter grades using the following scale:

“A+” = 4.3 quality points;

“A” = 4 quality points;

“A-” = 3.7 quality points;

“B+” = 3.3 quality points;

“B” = 3 quality points;

“B-” = 2.7 quality points;

“C+” = 2.3 quality points;

“C” = 2 quality points;

“C-” = 1.7 quality points;

“D+” = 1.3 quality points;

“D” = 1 quality point;

“D-” = 0.7 quality point;

“F” = 0 quality points.

For students that did not live in the College of Business CBRC, the overall grade point average earned at the end of their second year of study was another measured variable. Of the 612 students who did not live in the CBRC during their freshman year 535 had data for the second year of enrollment. The mean GPA was 3.04 ( $SD = .610$ ). The lowest GPA was 1.05 and highest GPA was 4.123. The category into which the largest number of students was classified was the 2.75-2.99 GPA category ( $n = 88$ , 16.4%). The number of students in each of the GPA categories is presented in Table 4.9.

Table 4.9. Overall Grade Point Average (GPA) for Students Who Did not Live in the College of Business Content-Based Residential College at the End of Their First Year and Second Year of Study

Overall GPA Range	First Year <sup>a</sup>		Second Year <sup>b</sup>	
	Frequency	Percent	Frequency	Percent
4.00 and above	33	5.4	21	3.9
3.75 – 3.99	58	9.5	61	11.4
3.50 – 3.74	55	9.0	55	10.3
3.25 – 3.49	64	10.5	67	12.5
3.00 – 3.24	102	16.7	81	15.1
2.75—2.99	79	12.9	88	16.4
2.50—2.74	79	12.9	69	12.9
2.25—2.49	36	5.9	40	7.5
2.0—2.24	33	5.4	20	3.7
1.75—1.99	13	2.1	18	3.4
1.74 and below	60	9.8	15	2.8
Total	612	100.0	535	100.0

<sup>a</sup>For the first year the mean GPA was 2.89 ( $SD = .769$ ) and the range was 0.00—4.00.

<sup>b</sup>For the second year the mean GPA was 3.04 ( $SD = .6091$ ) and the range was 1.053—4.12.

#### GPA Earned Each Semester

GPA earned each semester was another variable on which the students were described. In their first semester, among the 612 students who did not reside in the College of Business Content-Based Residential College (CBRC) the mean GPA was 2.829 ( $SD = .897$ ), with the lowest GPA of .000 and the highest GPA of 4.00. In the second semester, for the 590 students who did not reside in the College of Business Content-Based Residential College (CBRC) and

were still enrolled, the mean GPA was 2.841 ( $SD = .880$ ), with the lowest GPA of .000 and the highest GPA of 4.00. For the third semester, the 530 College of Business students who did not reside in the CBRC during their freshman year and were still enrolled, the mean GPA was 2.954 ( $SD = .829$ ). The lowest GPA was .000 and the highest GPA was 4.30. In the fourth semester, for the 509 students who had not resided in the CBRC and were still enrolled in the university, the mean GPA was 3.006 ( $SD = .873$ ), with the lowest GPA of .000 and the highest GPA of 4.30. The frequency of occurrences of semester GPAs in ranges of scores is presented in Table 4.10.

Table 4.10. GPA Earned Each in the First Four Semesters for College of Business Students Who Did not Live in the Content-Based Residential College at a Research University-Very High Research (RU/VH) in the Southern Region of the United States

GPA Earned Each Semester	First Semester <sup>a</sup>		Second Semester <sup>b</sup>		Third Semester <sup>c</sup>		Fourth Semester <sup>d</sup>	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
4.00 and above	66	10.8	56	9.5	40	7.5	36	7.1
3.75 – 3.99	54	8.8	39	6.6	49	9.2	54	10.6
3.50 – 3.74	49	8.0	58	9.8	59	11.1	72	14.1
3.25 – 3.49	50	8.2	64	10.8	67	12.6	74	14.5
3.00 – 3.24	100	16.3	112	19.0	69	13.0	78	15.3
2.75—2.99	63	10.3	60	10.2	67	12.6	48	9.4
2.50—2.74	61	10.0	45	7.6	56	10.6	42	8.3
2.49—2.25	43	7.0	41	6.9	40	7.5	32	6.3
2.25—2.0	45	7.4	33	5.6	26	4.9	24	4.7
1.9—1.75	15	2.5	19	3.2	15	2.8	10	2.0
1.74 and below	66	10.8	63	10.7	42	7.9	39	7.7
Total	612	100.0	590	100.0	530	100.0	509	100.0

<sup>a</sup> During the Fall 2014 semester, the mean GPA earned was 2.829 ( $SD = .897$ ) and the range was 0.00—4.00.

<sup>b</sup> For the Spring 2015 semester, the mean GPA earned was 2.841 ( $SD = .880$ ) and the range was 0.00—4.00. There were 22 missing cases.

<sup>c</sup> During the Fall 2015 semester, the mean GPA earned was 2.954 ( $SD = .829$ ) and the range was 0—4.30. There were 82 missing cases. Plus/minus grading was introduced in this semester.

<sup>d</sup> During the Spring 2016 semester, the GPA earned was 3.006 ( $SD = .873$ ) and the range was 0.00—4.300. There were 103 missing cases.

#### Whether or not the Student is Retained in College in the Fifth Semester of College

Whether or not the student was retained in the fifth semester of college was another variable used to describe College of Business students who did not reside in the College of Business Content-Based Residential College (CBRC) during their freshman year. Of these 612 students, 485 (79.2%) were retained in their fifth semester of enrollment. The remainder (n=127, 20.8%) were not retained in their fifth semester.

#### Whether or not the Student Changed Major, and if so, the Number of Times Changed

Another factor that is sometimes associated with retention is changing majors. Students who did not reside in the CBRC were also described on this measure. Of 612 College of Business students that did not live in the College of Business CBRC, 433 (73.5%) changed their major at least once, and 156 (26.5%) did not change his/her major. Information about major change was unavailable for 23 of the students.

For the 433 students who did change their major, the mean number of times they changed was 1.66 (SD=.613). The majority of these students had changed their major either one time (n = 191, 44.1%) or twice (n = 191, 44.1%). The next largest group was those who had changed major three times (n = 48, 11.1%). The remainder of the 433 students who had changed major had changed four times (n = 3, .7%).

#### Whether or not the Student was a Resident of the State

The final variable included in the description of the students who had resided in the CBRC was whether or not the students were classified as in-state resident by the study institution. The majority (n = 530, 86.6%) were classified as residents of the state and 82 students (13.4%) were classified as nonresidents.

### **Objective Three Results**

Objective three was to compare College of Business students who resided in the College of Business Content-Based Residential College (CBRC) during their freshman year with College of Business students who did not reside in the College of Business CBRC, on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;
- j. Whether or not the student was retained in the fifth semester of college enrollment;
- k. Whether or not the student changed major, and if so, the number of times changed.

The following variables were measured on a categorical scale of measurement (nominal or ordinal); and, therefore, the Chi-square test of independence was used to determine if each of

the measures were independent of the variable whether or not the students resided in the CBRC during their freshman year in college. The specific variables in this category include:

- a. Gender;
- b. Race;
- c. Whether or not the student was a resident of the state in which the study institution was located;
- d. Whether or not the student changed major;
- e. Whether or not the student was retained in their fifth semester of college enrollment.

The other variables were measured as continuous data, and the independent t-test procedure was determined to be the most appropriate statistical technique to compare those students who resided in the CBRC during their freshman year and those who did not.

- a. High school grade point average (GPA);
- b. College entrance examination (ACT/SAT) composite scores;
- c. Credit hours the student earned each of their first four semesters of enrollment;
- d. The overall GPA achieved at the end of the first year of college enrollment;
- e. The overall GPA achieved at the end of the second year of college enrollment;
- f. The semester GPA achieved in each of the first four semesters of college enrollment;
- g. The number of times the student changed major during their first two years (if they changed major).

For the variables measured on a categorical scale, the researcher used the chi-square test of independence to determine if each of the variables were independent of the variable, whether or not students lived in the Business Content Based Residential College. Using an a' priori significance level of .05, two of the variables were not independent of the variable, whether or not students lived in the College of Business Content Based Residential College. These variables were: (1) Gender (of student) and (2) Whether or not the student was a resident of the state. The results of the chi-square test of independence for the other variables; Race, Retention in the fifth semester of enrollment, and Whether or not the student changed major were not significant, indicating that these variables were independent of the variable, whether or not students lived in the College of Business CBRC (see Table 4.11). Each of the variables that were found to be associated (not independent) with whether or not students lived in the College of Business CBRC are further examined to identify the nature of the association.

Table 4.11. Comparison of Selected Personal and Academic Demographics Characteristics by Whether or Not Students Resided in the College of Business Content-Based Residential College during their Freshman Year at a Research University-Very High Research (RU/VH)

Variable	df	$\chi^2$	p
Gender	1	20.418	<.001
Whether or not the student was a resident of the state	1	19.756	<.001
Race	4	4.951	.292
Fall 2016 Retention	1	0.920	.337
Whether or not the Student Changed Major	1	0.075	.785

#### Gender

When the variable, Gender, was tested for independence from the variable, whether or not the student participated in a content-based residential college during her or his freshman year, a statistically significant chi-square result ( $\chi^2_{(1)}=20.418$ ,  $p = < .001$ ) was yielded. This means that the variables were not independent. The nature of the association between the

variables was such that a higher percentage of students that lived in the College of Business Content Based Residential College during their freshman year were Male (74.1%) than those that did not live the College of Business CBRC (55.1%). This data is presented in Table 4.12.

Table 4.12. Comparison of Gender of College of Business Students at a Research University-Very High Research (RU/VH) by Whether or not they Lived in the College of Business Content-Based Residential College During Their Freshman Year

Gender	Residential College	
	No $\frac{n}{\%}$	Yes $\frac{n}{\%}$
Female	275 44.9	45 25.9
Male	337 55.1	129 74.1
Total	612 100.0	174 100.0

Note.  $\chi^2_{(1)}=20.418$ ,  $p < .001$

#### Whether or Not the Student Was a Resident of the State

When the variable, whether or not the student was a resident of the state in which the study institution was located, was tested for independence from the variable, whether or not the student lived in the College of Business CBRC during her or his freshman year, a statistically significant chi-square result ( $\chi^2_{(1)}=19.756$ ,  $p = < .001$ ) was yielded. This means that the variables were not independent. The nature of the association between the variables was such that a higher percentage of students that lived in the Business College CBRC during their freshman year were not residents of the state (classified as out-of-state students) (27.6%) in which the study institution was located than those that did not participate in a content-based residential college (13.4%). This data is presented in Table 4.13.

The independent t-test procedure was used to compare the College of Business students who lived in the Business Content-Based Residential College (CBRC) during their freshman



year with the College of Business students who did not live in the CBRC during their freshman year. Students in these two groups (CBRC and non-CBRC) were compared on a total of 13 variables that were measured on a continuous scale of measurement.

Table 4.13. Comparison of Whether or not College of Business Students at a Research University-Very High Research (RU/VH) Were a Resident of the State by Whether or not the Student Lived in the College of Business Content-Based Residential College during their Freshman Year

Student Was a Resident of the State	Residential College	
	No <u>n</u> %	Yes <u>n</u> %
No	82 13.4	48 27.6
Yes	530 86.6	126 72.4
Total	612 100.0	174 100.0

Note.  $\chi^2_{(1)}=19.756$ ,  $p < .001$

The groups were found to be significantly different on only one of these 13 variables. Students who did not participate in the CBRC during their freshman year were found to have a significantly higher GPA at the end of their second year of enrollment than those who did participate in the CBRC ( $t_{df=685} = 2.246$ ,  $p = .025$ ). Students who did not participate in the CBRC had a mean GPA at the end of their second year of enrollment of 3.045 ( $SD = .610$ ), and the students who did participate in the CBRC had a mean GPA at the end of their second year of enrollment of 2.918 ( $SD = .635$ ).

No other variables examined were found to be different by whether or not the students lived in the College of Business CBRC (see Table 4.14).

Table 4.14. Comparison of Selected Academic Characteristics by Whether or Not Students at a Research University-Very High Research (RU/VH) Resided in the College of Business Content-Based Residential College during Their Freshman Year

Variable	Residential College <u>n</u> <u>m</u> <u>SD</u>	Non-Residential College <u>n</u> <u>m</u> <u>SD</u>	<u>t</u>	<u>Sig.</u>
Second Year End of Year GPA	152 2.969 .607	535 3.045 .610	2.246	.025
Fourth Semester GPA	142 2.854 .833	509 3.006 .873	1.851	.065
Second Semester GPA	164 2.722 .819	590 2.841 .880	1.553	.121
High School GPA	174 3.32 .352	612 3.36 .380	1.497	.136
Fourth Semester Earned Hours	142 12.98 3.188	509 13.41 3.155	1.439	.151
Third Semester GPA	148 2.845 .927	530 2.954 .829	1.299	.195
First Semester Earned Hours	174 12.90 2.88	612 12.61 3.157	1.094	.274
First Year End of Year GPA	174 2.83 .716	612 2.89 .797	0.812	.417
Number of Changes in Curricula	167 1.20 .909	589 1.24 .952	0.413	.680
ACT Score	174 25.21 3.336	611 25.13 3.232	0.292	.770
Third Semester Earned Hours	148 13.10 3.288	530 13.17 3.015	0.246	.806
First Semester GPA	174 2.84 .788	612 2.83 .897	0.152	.879
Second Semester Earned Hours	164 12.74 2.999	590 12.74 3.229	0.008	.994

### **Objective Four Results**

Objective four of the study was to determine if relationships exist between whether or not the students were retained in their fifth semester of college enrollment and the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The semester GPA achieved in each of the first two semesters of college enrollment;
- i. Whether or not the student changed major, and if so, the number of times changed; and
- j. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

The following variables were measured on a categorical scale of measurement (nominal or ordinal); and, therefore, the Chi-square test of independence was used to determine if each of the measures were independent of the variable whether or not the students were retained in their fifth semester of enrollment in college. The specific variables in this category include:

- a. Gender;

- b. Race;
- c. Whether or not the student was a resident of the state in which the study institution was located;
- d. Whether or not the student changed major;
- e. Whether or not the student was resided in the College of Business Content-Based Resident College during their freshman year.

The other variables were measured as continuous data, and the independent t-test procedure was determined to be the most appropriate statistical technique to compare those students who were retained in their fifth semester of enrollment in college and those who were not.

- a. High school grade point average (GPA);
- b. College entrance examination (ACT/SAT) composite scores;
- c. Credit hours the student earned each of their first four semesters of enrollment;
- d. The overall GPA achieved at the end of the first year of college enrollment;
- e. The overall GPA achieved at the end of the second year of college enrollment;
- f. The semester GPA achieved in each of the first four semesters of college enrollment;
- g. The number of times the student changed major during their first two years (if they changed major).

For the variables measured on a categorical scale, the researcher used the chi-square test of independence to determine if each of the variables were independent of the variable, whether or not students were retained in their fifth semester of enrollment in college. Using an a priori significance level of .05, three of the variables were not independent of the variable, whether or not students were retained in their fifth semester of enrollment in college. These variables were: (1) Whether or not the student changed major; (2) Whether or not the student was a resident of the state; and (3) Race (of student). The results of the chi-square test of independence for the other variables: Gender and Whether or not the student resided in the Business Content-Based Residential College during their freshman year in college were not significant, indicating that these variables were independent of the variable, whether or not students were retained in their fifth semester of enrollment in college. (Table 4.15). Each of the variables that were found to be associated (not independent) with whether or not students were retained in their fifth semester of enrollment in college are further examined to identify the nature of the association.

Table 4.15. Comparison of Selected Personal and Academic Demographics Characteristics by Whether or Not Students Resided in the College of Business Content-Based Residential College during their Freshman Year at a Research University-Very High Research (RU/VH)

Variable	df	$\chi^2$	p
Whether or not the Student Changed Major	1	42.874	<.001
Whether or not the student was a resident of the state	1	17.788	<.001
Race	4	15.253	.004
Gender	1	1.902	.168
Resided in Business Content-Based Residential College	1	0.920	.337

### Whether or Not the Student Changed Major

When the variable, whether or not the student changed major, was tested for independence from the variable, whether or not the student was retained in their fifth semester of enrollment, a statistically significant chi-square result ( $\chi^2_{(1)}=42.874$ ,  $p < .001$ ) was yielded. This means that the variables were not independent. The nature of the association between the variables was such that a higher percentage of students (87.2%) that changed major (one or more times) were retained in their fifth semester of enrollment in college than those that did not change major (66.3%). This data is presented in Table 4.16.

Table 4.16. Comparison of Whether or not College of Business Students at a Research University-Very High Research (RU/VH) Were Retained in Their Fifth Semester by Whether or not the Student Changed Major

Retained in Fifth Semester	Changed Major	
	No $\frac{n}{\%}$	Yes $\frac{n}{\%}$
No	68 33.7	71 12.8
Yes	134 66.3	483 87.2
Total	202 100.0	554 100.0

Note.  $\chi^2_{(1)}=42.874$ ,  $p < .001$

### Whether or Not the Student was a State Resident

When the variable, whether or not the student was classified by the university as an in-state resident, was tested for independence from the variable, whether or not the student was retained in their fifth semester of enrollment, a statistically significant chi-square result ( $\chi^2_{(1)}=17.788$ ,  $p < .001$ ) was yielded. This means that the variables were not independent. The nature of the association between the variables was such that a higher percentage of students who were classified by the university as in-state residents (81.3%) were retained in their fifth

semester of enrollment in college than those that were classified as out-of-state residents (64.6%). This data is presented in Table 4.17.

Table 4.17. Comparison of Whether or not College of Business Students at a Research University-Very High Research (RU/VH) Were Retained in Their Fifth Semester by Whether or not the Student Was Classified as an In-State Resident

Retained in Fifth Semester	In-State Resident	
	No <u>n</u> %	Yes <u>n</u> %
No	46 35.4	123 18.8
Yes	84 64.6	533 81.3
Total	130 100.0	656 100.0

Note.  $\chi^2_{(1)}=17.788$ ,  $p < .001$

#### Race

When the variable, race of student, was tested for independence from the variable, whether or not the student was retained in their fifth semester of enrollment, a statistically significant chi-square result ( $\chi^2_{(1)} = 15.253$ ,  $p = .004$ ) was yielded. This means that the variables were not independent. The nature of the association between the variables was such that a lower percentage of African American students (64.4%) were retained than any of the other races represented in the data (see Table 18). All of the other racial groups in the study had more than 80% retention rates with the exception of Multi-Racial which was 78.6%. The complete data on this comparison is presented in Table 4.18.

The independent t-test procedure was used to compare the College of Business students who were retained in their fifth semester of enrollment with the College of Business students who were not retained in their fifth semester of enrollment.

Table 4.18. Comparison of Retention in Fifth Semester of College Enrollment by Race among students Enrolled in the College of Business at a Research University-Very High Research (RU/VH)

Student Was Retained in the Fifth Semester	Race					Total
	Asian $\frac{n}{\%}$	Black $\frac{n}{\%}$	Hispanic $\frac{n}{\%}$	Multi-Racial $\frac{n}{\%}$	White $\frac{n}{\%}$	
No	3 11.5	36 35.6	10 19.2	3 21.4	114 19.4	166 21.3
Yes	23 88.5%	65 64.4%	42 80.8%	11 78.6%	473 80.6%	614 78.7%
Total	26 100.0%	101 100.0%	52 100.0%	14 100.0%	587 100.0%	780 100.0%

Note.  $\chi^2_{(1)}=15.253$ ,  $p = .004$

Students in these two groups were compared on a total of 13 variables that were measured on a continuous scale of measurement. The groups were found to be significantly different on all 13 of these variables (see Table 19). The greatest differences tended to be in GPA's earned in the students' periods of enrollment in college. In fact, the four variables with the highest degree of difference and five of the highest six differences were all college GPA measures. It should be noted that the students not enrolled in a specific semester or year were not included in the comparisons; therefore, a student's lack of academic GPA performance did not impact the differences found. It should also be mentioned that in all GPA comparisons, the retained students had significantly higher GPA's than the not retained students.

On the four measures of earned hours in each of the semesters studied, the retained students had significantly higher numbers of earned hours than the not retained students. The semesters that seemed to have the highest degree of significant difference between the retained and not retained groups of students were their first two semesters, with the first semester of enrollment found to have the most significant degree of difference among these measures ( $t_{df=784} = 9.142$ ,  $p < .001$ ). Students who were retained in their fifth semester of enrollment were also



found to have higher pre-college academic measures (specifically high school GPA and ACT/SAT composite score) (see Table 4.19). Finally, retained students and not retained students were compared on the number of changes in their academic major. The retained students were found to have a significantly higher number of changes in their major (mean = 1.75, SD = .674) than the not retained students (mean = 1.21, SD = .476) ( $t_{df=116} = 8.346, p < .001$ ) (see Table 4.19).

Table 4.19. Comparison of Selected Academic Characteristics by Whether or Not Students at a Research University-Very High Research (RU/VH) Were Retained in Their Fifth Semester of Enrollment in College

Variable	Retained <u>n</u> <u>m</u> <u>SD</u>	Not Retained <u>n</u> <u>m</u> <u>SD</u>	<u>t</u>	<u>Sig.</u>
2014-2015 End of Year GPA	617 3.090 .580	169 2.097 .910	13.456	<.001
First Semester GPA	617 3.047 .687	169 2.046 1.023	11.997	<.001
Second Semester GPA	614 3.013 .691	140 1.946 1.019	11.784	<.001
Second Year End of Year GPA	616 3.110 .542	71 2.210 .650	11.221	<.001
Number of Changes in Curricula <sup>a</sup>	483 1.75 .674	71 1.21 .476	8.346	<.001
Third Semester GPA	612 3.055 .733	66 1.779 1.011	9.975	<.001
First Semester Earned Hours	617 13.32 2.415	169 10.33 4.054	9.142	<.001
Second Semester Earned Hours	614 13.35 2.499	140 10.06 4.285	8.727	<.001

(table cont'd)

Variable	Retained <u>n</u> <u>m</u> <u>SD</u>	Not Retained <u>n</u> <u>m</u> <u>SD</u>	<u>t</u>	<u>Sig.</u>
Number of Changes in Curricula <sup>a</sup>	483 1.75 .674	71 1.21 .476	8.346	<.001
High School GPA	617 3.402 .367	169 3.171 .348	7.321	<.001
Third Semester Earned Hours	612 13.56 2.497	66 9.38 4.873	6.880	<.001
Fourth Semester GPA	610 3.044 .797	41 1.918 1.143	6.209	<.001
Third Semester Earned Hours	610 13.55 2.898	41 9.88 4.681	4.956	<.001
ACT Score	616 25.43 3.223	169 24.12 3.162	4.712	<.001

<sup>a</sup>Included only those who had changed major at least once

### Objective Five Results

Objective five of the study was to determine if a model exists that significantly increases the researcher's ability to correctly classify College of Business students at a research university (RU/VH) in the Southern region of the United States based on whether or not they are retained into their fifth semester of enrollment from the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;

- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The semester GPA achieved in each of the first two semesters of college enrollment;
- i. Whether or not the student changed major, and if so, the number of times changed; and
- j. Whether or not the student resided in the Business Content-Based Residential College During Their First Year of Enrollment.

To accomplish this objective, the multiple discriminant analysis statistical technique was used. The multiple discriminant analysis procedure requires that all independent variables included in the analysis must be on a continuous scale of measurement (interval or ratio) or must be coded as a dichotomous variable and requires the dependent variable to be measured on a categorical scale. The dependent variable of this study was whether or not the student remained enrolled in the research institution in their fifth semester of study. The independent variables for the study were entered into the analysis as either continuous variables or as binary-coded (dichotomous) variables. The independent variables in this category were coded for the analysis as outlined below:

- a. Type of freshman housing (College of Business content-based residential college or not in the College of Business content-based residential college): This was coded as follows: If the student resided in the content-based residential college, it was coded as 1, if the student did not reside in the content-based residential college, it was coded as 0;
- b. Gender: This was coded as female = 1; male = 2;

c. Race: Each of the racial variables were coded as a binary variable and each subject was categorized by either possessing the trait or not possessing the trait. For example, a variable was created for the Caucasian race in which the subjects were classified as either possessing the trait of being Caucasian, coded as 1, or not possessing the trait of Caucasian, coded as 0. This was repeated for each of the other racial categories. The race categories of American Indian or Alaskan Native and Native Hawaiian or other Pacific Islander were not included in this analysis due to insufficient numbers;

d. High school grade point average (GPA): This was measured as a continuous variable;

e. College entrance examination (ACT/SAT) composite scores: This was measured as a continuous variable;

f. Credit hours the student earned in their first and second semesters: These were measured as continuous variables;

g. The overall GPA achieved at the end of the first year of college enrollment. This was measured as a continuous variable;

h. Whether or not the student changed major. This was coded as 1 if the students did change major and 0 if they did not change major;

i. The number of times the students changed their major. This was measured as a continuous variable;

j. The semester GPA achieved in the first and second semesters of college enrollment: These were measured as continuous variables; and

k. Whether or not the student was a resident of the state in which the study.

institution was located: If the student was a resident of the state in which the study institution was located, it was coded as 1 and if the student was not a resident of the state in which the study institution was located, it was coded as 0.

#### Step One of Discriminant Analysis

The first step in conducting the discriminant analysis was to examine the independent variables that were to be included in the analysis for the existence of multicollinearity.

Multicollinearity occurs when there are high correlations between predictor variables.

Multicollinearity is assessed using the tolerance value. According to Hair, Black, Babin, Anderson, and Tatham (2006),

Because the tolerance value is the amount of a variable unexplained by the other independent variables, small tolerance values and thus large VIF values because  $VIF = 1 / \text{tolerance}$ ) denote high collinearity. A common cutoff threshold is a tolerance value of .10, which corresponds to a VIF value of 10.

Tolerance values in this analysis ranged from .629 to .993, therefore no excess multicollinearity was found in the data.

#### Step Two of Discriminant Analysis

The second step in conducting the discriminant analysis was to compare the two groups of students: those that were retained in the fifth semester of college versus those that were not retained in the fifth semester of college. This was accomplished by comparing the means of each independent variable by category of the dependent variable, whether or not the student was retained in the fifth semester of college.

Using an a priori significance level of .05, 11 of the 17 independent variables had significantly different group means. Among the eleven variables for which significantly different group means were identified, ten variables were found to have higher means for the students that

were retained versus the students that were not retained.

These ten variables include:

1. End of First Year GPA;
2. Second Semester GPA;
3. First semester GPA;
4. Second Semester Number of Earned Hours;
5. First semester earned hours;
6. Number of Times the Student Changed Major;
7. High School GPA;
8. Whether or not the Student Changed Major at Least Once;
9. ACT score; and
10. Whether or not the student was a resident of the state in which the study institution was located.

The one remaining variable that yielded a statistically significant result but did not result in higher group means for students that were retained was Race—African American. The higher group mean for the Not Retained students indicates that the Not Retained group had a higher number of African Americans since the variable was coded “1” the Characteristic Race – African American was present and “0” if it was not present. The means of the groups for the remaining variables did not show a statistically significant difference. The means and standard deviations, including F-ratio values and probability values are listed in Table 4.20.

Table 4.20. Comparison of Discriminating Values, Variable Means, Standard Deviations, and F-ratios in the Derived Exploratory Discriminant Model by Retention Status for Students Who Attended a Research University-Very High Research (RU/VH) in the Southern Region of the United States

Discriminating Variable	Group Not Retained N = 133 M SD	Group Retained N = 613 M SD	F-ratio	df1	df2	p
End of First Year GPA	2.193 0.849	3.089 .581	216.162	1	744	< .001
Second Semester GPA	2.004 0.998	3.012 .691	194.777	1	744	< .001
First Semester GPA	2.155 0.994	3.055 .688	153.576	1	744	< .001
Second Semester Earned Hours	10.323 4.115	13.343 2.500	122.291	1	744	< .001
First Semester Earned Hours	10.700 3.908	13.317 2.420	99.448	1	744	< .001
Number of Times Changed Major	.639 .700	1.372 .937	72.554	1	744	< .001
High School GPA	3.186 .346	3.404 .366	39.537	1	744	< .001
Whether or Not Changed Major	.526 .501	.783 .413	39.029	1	744	< .001
ACT Score	24.158 3.235	25.434 3.226	17.078	1	744	< .001
Resident of the State	.744 .438	.865 .342	12.110	1	744	.001
Race—Black	.211 .409	.106 .308	11.068	1	744	.001
Race—White	.684 .467	.765 .424	3.829	1	744	.051
Gender	1.654 .477	1.579 .494	2.549	1	744	.111
Whether or Not the Student Lived the Residential College	.248 .434	.212 .409	0.830	1	744	.362
Race—Asian	.023 .149	.038 .190	0.726	1	744	.394
Race—Hispanic	.060 .239	.069 .253	0.122	1	744	.727
Race— Multi-Racial	.015 .122	.018 .133	0.054	1	744	.817

### Step Three of Discriminant Analysis

In the third step of the discriminant analysis, the researcher examined the computed standardized canonical discriminant function coefficients. The centroids for the groups were determined to be -1.447 for the students that were not retained and .314 for the students that were retained in the fifth semester of enrollment. A total of four independent variables entered the discriminant model yielding an overall canonical correlation of  $R_c = .559$ . These four variables were:

1. Overall GPA for the first year of enrollment;
2. The number of times the student changed major;
3. Number of earned hours in the second semester of enrollment; and
4. Whether or not the student was a resident of the state in which the study institution was located.

The variable that entered the discriminant model first and had the strongest effect on the dependent variable, whether or not the student was retained in the fifth semester, was the overall GPA for the first year of enrollment. This variable had the highest standardized discriminant function coefficient ( $\beta = .753$ ). The nature of the influence of the first year GPA on whether or not the student was retained in the fifth semester (the dependent variable) was such that having a higher GPA (first year) increased the likelihood of being retained to the fifth semester of study.

The variable that entered the discriminant model second was the number of times the student changed major. The standardized canonical discriminant function coefficient was  $\beta = .561$  and the nature of the influence on whether or not the student was retained in the fifth semester of study was such that having more changes in major increased the likelihood that the student was retained to the fifth semester of study.



The variable that entered the discriminant model third was the number of earned hours in the second semester of enrollment. The standardized canonical discriminant function coefficient was  $\beta = .185$  and the nature of the influence on whether or not the student was retained in the fifth semester of study was such that earning more hours in the second semester of enrollment increased the likelihood that the student was retained to the fifth semester of study.

The variable that entered the discriminant model fourth was whether or not the student was a resident of the state in which the study institution was located. The standardized canonical discriminant function coefficient was  $\beta = .147$  and the nature of the influence on whether or not the student was retained in the fifth semester of study was such that being a resident of the state in which the study institution was located increased the likelihood that the student was retained to the fifth semester of study.

In addition to examining the standardized discriminant function coefficients, the researcher examined the within-group structure coefficients. These structure coefficients provide the reader with a way to examine the association between the dependent variable (in this case whether or not the students were retained in their fifth semester of enrollment) measured as the discriminant score for each subject and the independent variables that entered the significant discriminant model calculated as a bivariate measure. A substantively significant structure correlation is considered to be any coefficient that is half or greater than the magnitude of the highest structure correlation. Therefore, any structure correlation of .400 (half the value of .799, which was the highest structure correlation in this study) or higher was considered substantively meaningful in this analysis.

There were seven independent variables that were found to have structure correlations that met this criterion. They were:

1. Overall GPA for the first year of enrollment;
2. Second semester GPA;
3. First semester GPA;
4. Number of earned hours in the second semester of enrollment;
5. The number of times the student changed major;
6. Number of earned hours in the first semester of enrollment; and
7. High School GPA.

One of the four independent variables that entered the discriminant model were found to have a structure coefficient that did not meet the criterion for substantive significance. This variable was Whether or not the Student was a Resident of the State in which the Study Institution was Located. Four of the seven independent variables that had substantively significant structure correlations did not enter the discriminant model. These four variables were: (1) Second semester GPA ( $s = .724$ ); (2) First semester GPA ( $s = .664$ ); (3) Number of earned hours in the first semester of enrollment ( $s = .456$ ); and (4) High School GPA ( $s = .447$ ). The data in Table 4.21 is a summary of the data for the discriminant analysis of the derived model.

Table 4.21. Summary Data for Stepwise Multiple Discriminant Analysis of the Exploratory Model for Retention Status of Students at a Research University-Very High Research (RU/VH) University in the Southern Region of the United States

Discriminating Variables	$\beta^a$	$s^b$	Discriminant Functions	
			Group	Centroids
Overall GPA for the first year of enrollment	.753	.799	Not Retained	-1.447
The number of times the student changed major	.561	.463	Retained	.314
Number of earned hours in the second semester of enrollment	.185	.601		
Whether or not the student was a resident of the state in which the study institution was located	.147	.189		

(table cont'd.)

Discriminating Variables	$\beta^a$	$s^b$	Discriminant Functions	
			Group	Centroids
Second semester GPA	<sup>a</sup>	.724		
First semester GPA	<sup>a</sup>	.664		
Number of earned hours in the first semester of enrollment	<sup>a</sup>	.456		
High School GPA	<sup>a</sup>	.447		

<sup>a</sup> Did not enter the discriminant model as a significant predictor

<u>Eigenvalue</u>	<u>Rc<sup>c</sup></u>	<u>Wilk's Lambda</u>	<u>p</u>
.455	.559	.687	< .001

$\beta$  = standardized discriminant function coefficient

$s$  = within group structure coefficient

Rc = canonical correlation coefficient

Note.  $N = 746$

#### Step Four of Discriminant Analysis

For the last step of the discriminant analysis, the researcher examined the correctly classified cases. As shown in Table 4.22, the model correctly classified 80.5% of original grouped cases. The Tau statistic is used to determine the substantive significance of the percent of correctly classified cases. The rule of thumb is that to be meaningful, the model should show a 25% improvement over chance. For a two-category dependent variable, this would be 62.5% of cases correctly classified. Since the measure in this analysis is 80.5% (which equates to a Tau statistic of 61%) the derived model yields both a statistically and substantively significant model.

Table 4.22. Retention Status of Students Who Entered a College of Business at a Research University-Very High Research (RU/VH) in the Southern Region of the United States

	<u>Predicted Group</u> $\frac{n}{\%}$	<u>Actual Group</u>	
		Not Retained $\frac{n}{\%}$	Retained $\frac{n}{\%}$
Not Retained		93 46.7	40 7.3
Retained		106 53.3	508 92.7
Total		199 100%	548 100%

Note: Percent of cases correctly classified: 80.5%;  $n = 747$

## CHAPTER 5. SUMMARY, CONCLUSIONS, IMPLICATIONS, & RECOMMENDATIONS

### Summary

The primary purpose of this study was to determine the influence of the housing in the College of Business Content-Based Residential College (CBRC) and selected demographic characteristics on the retention in the fifth semester of enrollment of students enrolled in the College of Business at a Research University (RU/VH) in the southern region of the United States.

### Objectives

The following specific objectives were developed by the researcher to guide the study:

1. To describe College of Business students who resided in the College of Business Content-Based Residential College (CBRC) at a research university in the southern region of the United States on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;

- j. Whether or not the student was retained in the fifth semester of college enrollment;
  - k. Whether or not the student changed major, and if so, the number of times changed.
2. To describe College of Business students who did not reside in the College of Business Content-Based Residential College, on the following selected demographic and academic characteristics:
- a. Gender;
  - b. Race;
  - c. High school grade point average (GPA);
  - d. College entrance examination (ACT/SAT) composite scores;
  - e. Credit hours the student earned each of their first four semesters of enrollment;
  - f. Whether or not the student was a resident of the state in which the study institution was located;
  - g. The overall GPA achieved at the end of the first year of college enrollment;
  - h. The overall GPA achieved at the end of the second year of college enrollment;
  - i. The semester GPA achieved in each of the first four semesters of college enrollment;
  - j. Whether or not the student was retained in the fifth semester of college enrollment;
  - k. Whether or not the student changed major, and if so, the number of times changed.
3. To compare College of Business students who resided in the College of Business

Content-Based Residential College (CBRC) with College of Business students who did not reside in the College of Business CBRC, on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;

- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college enrollment;

- j. Whether or not the student was retained in the fifth semester of college enrollment;

- k. Whether or not the student changed major, and if so, the number of times changed.

4. To determine if relationships exist between whether or not the students was retained in their fifth semester of college enrollment and the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;

- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The semester GPA achieved in each of the first two semesters of college enrollment;
- i. Whether or not the student changed major, and if so, the number of times changed; and
- j. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

5. To determine if a model exists that significantly increases the researcher's ability to correctly classify College of Business students at a research university (RU/VH) in the Southern region of the United States based on whether or not they are retained into their fifth semester of enrollment from the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;

- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The semester GPA achieved in each of the first two semesters of college enrollment;
- i. Whether or not the student changed major, and if so, the number of times changed; and
- j. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

### **Methodology**

Population and sample. The target population of the study was students enrolled in the programs housed in a College of Business in research universities located in the southern region of the United States. The accessible population was the first time college freshman students enrolled in programs housed in the College of Business at one selected research university in the southern region of the United States during 2014-2015 academic year. This accessible population was divided into two groups of students: Those who resided on campus in the College of Business content-based residential college and those who did not reside in the College of Business content-based residential college. The study sample consisted of 100% of the defined accessible population of the study.

#### **Instrumentation**

The instrument that was used to collect data for this study consisted of a researcher-designed, computerized recording form. The specific variables that were measured were selected based on the following sources of information and data:

- The review of literature conducted by the researcher,
- The Residential College Annual Report,



- The University's Office of the Registrar, and
- The study institution's Office of Undergraduate Admissions

All information needed for this study was downloaded from the identified databases into a file which served as the research instrument.

### **Data Collection**

Permission for this study was granted from the Institutional Review Board (IRB). The researcher applied for and was granted an Exemption from Institutional Oversight from the IRB. Computer assistance compiling data was requested from and approved by the Office of the University Registrar.

### **Summary of Findings**

#### **Objective One**

Of the 174 students who resided in the College of Business Content-Based Residential College (CBRC), the majority (129, 74.1 %) were identified as male. Regarding Race, Caucasian was the largest group of students ( $n = 124$ , 71.7%) with Black or African American identified as the second largest group of students ( $n = 29$ , 16.8%).

The mean high school grade point average (GPA) for students who resided in the College of Business Content-Based Residential College (CBRC) was 3.32 ( $SD = .352$ ). Students' GPAs ranged from a low of 2.42 to a high of 4.00. Additionally, the mean composite score on the ACT/SAT was 25.21 ( $SD = 3.336$ ). The scores ranged from a low of 19 to a high of 34.

When credit hours earned each semester was examined for the 174 students who resided in the CBRC during their freshman year, the mean number of credit hours earned was 12.90 ( $SD = 2.882$ ) in the first semester ( $n = 174$ ); 12.74 hours ( $SD = 2.999$ ) in the second semester ( $n =$

164), 13.10 (SD = 3.288) in the third semester (n = 148); and 12.98 (SD = 3.188.) in the fourth semester (n = 142).

The students were also described on the overall annual GPA earned in each of their first two years. For students who resided in the College of Business Content-Based Residential College (CBRC) the mean overall GPA at the end of their first year of study was 2.83 (SD = .716) (n = 174). The mean overall grade point average earned at the end of their second year of study was 2.92 (SD = .639) (n = 152).

Regarding whether or not the student was retained in the fifth semester of college, of the 174 students who resided in the College of Business Content-Based Residential College (CBRC) in their freshman year, 132 (75.9%) were retained in their fifth semester and 42 (24.1%) were not retained.

Student's GPA earned each of their first four semesters was another variable on which the students were described. These mean GPA's included: 2.84 (SD = .789) for the first semester (n = 174), 2.72 (SD = .819) for the second semester (n = 164); 2.85 (SD = .927) for the third semester (n = 148); and 2.85 (SD = .833) for the fourth semester (n = 142).

Students residing in the CBRC were also described on whether or not and the number of times they changed majors. Of the 174 students that lived in the College of Business Content-Based Residential College (CBRC), 121 (72.5%) changed their major at least once, and 46 (27.5%) did not change their major. The 121 students who did change their major, changed a mean of 1.66 (SD=.613) times. The majority of these students (n = 62, 51.2%) changed major two times.

When students were described on residence status, the majority (n = 126, 72.4%) were classified as residents of the state and 48 students (27.6%) were classified as nonresidents.

## Objective Two

Gender was the first variable on which the students were described. Of the 612 students who did not reside in the College of Business Content-Based Residential College (CBRC), 275 (44.9%) were identified as female and 337 (55.1%) were identified as male.

Race was the second variable on which the students were described. Of the 612 students who did not reside in the College of Business Content-Based Residential College (CBRC), Caucasian was the largest group of students ( $n=463$ , 75.7%). Black or African American was identified as the second largest group of students ( $n = 72$ , 11.8%).

High school grade point average (GPA) was another variable that was used to describe the students who did not reside in the College of Business Content-Based Residential College (CBRC). The mean GPA for these students was 3.36 ( $SD = .380$ ). Students' GPAs ranged from a low of 2.08 to a high of 4.00.

Another variable on which the study subjects were described was their college entrance examination score. The mean composite score on the ACT/SAT for students who did not reside in the College of Business Content-Based Residential College (CBRC) was 25.13 ( $SD = 3.232$ ). The scores ranged from a low of 16 to a high of 35.

When credit hours earned each semester was examined for the 612 students who resided in the CBRC during their freshman year, the mean number of credit hours earned was 12.61 ( $SD = 3.157$ ) in the first semester ( $n = 612$ ); 12.74 hours ( $SD = 3.229$ ) in the second semester ( $n = 590$ ), 13.17 ( $SD = 3.015$ ) in the third semester ( $n = 530$ ); and 13.41 ( $SD = 3.155$ .) in the fourth semester ( $n = 509$ ).

The students were also described on the overall annual GPA earned in each of their first two years. For students who did not reside in the College of Business Content-Based Residential

College (CBRC) during their freshman year the mean overall GPA at the end of their first year of study was 2.89 ( $SD = .769$ ) ( $n = 612$ ). The mean overall grade point average earned at the end of their second year of study was 3.04 ( $SD = .609$ ) ( $n = 535$ ).

During the second year of enrollment for the students included in this study, plus/minus grading was introduced at the study institution. For the 612 students who did not live in the CBRC during their freshman year 535 had data for the second year of enrollment. The mean GPA was 3.04 ( $SD = .610$ ). The lowest GPA was 1.05 and highest GPA was 4.123.

GPA earned each semester was another variable on which the students were described. In their first semester, among the 612 students who did not reside in the College of Business Content-Based Residential College (CBRC) the mean GPA was 2.829 ( $SD = .897$ ), with the lowest GPA of .000 and the highest GPA of 4.00. In the second semester, for the 590 students who did not reside in the College of Business Content-Based Residential College (CBRC) and were still enrolled, the mean GPA was 2.841 ( $SD = .880$ ), with the lowest GPA of .000 and the highest GPA of 4.00. For the third semester, the 530 College of Business students who did not reside in the CBRC during their freshman year and were still enrolled, the mean GPA was 2.954 ( $SD = .829$ ). The lowest GPA was .000 and the highest GPA was 4.30. In the fourth semester, for the 509 students who had not resided in the CBRC and were still enrolled in the university, the mean GPA was 3.006 ( $SD = .873$ ), with the lowest GPA of .000 and the highest GPA of 4.30.

Whether or not the student was retained in the fifth semester of college was another variable used to describe College of Business students who did not reside in the College of Business CBRC during their freshman year. Of these 612 students, 485 (79.2%) were retained in their fifth semester of enrollment.

Regarding changing majors, of 612 College of Business students that did not live in the College of Business CBRC, 433 (73.5%) changed their major at least once, and 156 (26.5%) did not change his/her major. For the 433 students who did change their major, the mean number of times they changed was 1.66 (SD=.613). The majority of these students had changed their major either one time (n = 191, 44.1%) or twice (n = 191. 44.1%).

The final variable included in the description of the students who had resided in the CBRC was whether or not the students were classified as an in-state resident by the study institution. The majority (n = 530, 86.6%) were classified as residents of the state.

### Objective Three.

Objective three was to compare College of Business students who resided in the College of Business Content-Based Residential College (CBRC) during their freshman year with College of Business students who did not reside in the College of Business CBRC, on the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first four semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The overall GPA achieved at the end of the second year of college enrollment;
- i. The semester GPA achieved in each of the first four semesters of college

enrollment;

j. Whether or not the student was retained in the fifth semester of college enrollment;

k. Whether or not the student changed major, and if so, the number of times changed.

For the variables measured on a categorical scale, the researcher used the chi-square test of independence to determine if each of the variables were independent of the variable, whether or not students lived in the Business Content Based Residential College. Using an a' priori significance level of .05, two of the variables were not independent of the variable, whether or not students lived in the College of Business Content Based Residential College. These variables were: (1) Gender (of student) and (2) Whether or not the student was a resident of the state. The results of the chi-square test of independence for the other variables; Race, Retention in the fifth semester of enrollment, and Whether or not the student changed major were not significant, indicating that these variables were independent of the variable, whether or not students lived in the College of Business CBRC.

When the variable, Gender, was tested for independence from the variable, whether or not the student participated in a content-based residential college during her or his freshman year, a statistically significant chi-square result ( $\chi^2_{(1)}=20.418$ ,  $p = < .001$ ) was yielded. The nature of the association between the variables was such that a higher percentage of students that lived in the College of Business Content Based Residential College during their freshman year were Male (74.1%) than those that did not live the College of Business CBRC (55.1%).

When the variable, whether or not the student was a resident of the state in which the study institution was located, was tested for independence from the variable, whether or not the

student lived in the College of Business CBRC during her or his freshman year, a statistically significant chi-square result ( $\chi^2_{(1)}=19.756$ ,  $p = < .001$ ) was yielded. The nature of the association between the variables was such that a higher percentage of students that lived in the Business College CBRC during their freshman year were not residents of the state (classified as out-of-state students) (27.6%) in which the study institution was located than those that did not participate in a content-based residential college (13.4%).

The independent t-test procedure was used to compare the College of Business students who lived in the Business Content-Based Residential College (CBRC) during their freshman year with the College of Business students who did not live in the CBRC during their freshman year. Students in these two groups (CBRC and non-CBRC) were compared on a total of 13 variables that were measured on a continuous scale of measurement. The groups were found to be significantly different on only one of these 13 variables. Students who did not participate in the CBRC during their freshman year were found to have a significantly higher GPA at the end of their second year of enrollment than those who did participate in the CBRC ( $t_{df = 685} = 2.246$ ,  $p = .025$ ). Students who did not participate in the CBRC had a mean GPA at the end of their second year of enrollment of 3.045 ( $SD = .610$ ), and the students who did participate in the CBRC had a mean GPA at the end of their second year of enrollment of 2.918 ( $SD = .635$ ). No other variables examined were found to be different by whether or not the students lived in the College of Business CBRC.

#### Objective Four

Objective four of the study was to determine if relationships exist between whether or not the students were retained in their fifth semester of college enrollment and the following selected demographic and academic characteristics:

- a. Gender;
- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- h. The semester GPA achieved in each of the first two semesters of college enrollment;
- i. Whether or not the student changed major, and if so, the number of times changed; and
- j. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

For the variables measured on a categorical scale, the researcher used the chi-square test of independence to determine if each of the variables were independent of the variable, whether or not students were retained in their fifth semester of enrollment in college. Three of the variables were not independent of the variable, whether or not students were retained in their fifth semester of enrollment in college. These variables were: (1) Whether or not the student changed major; (2) Whether or not the student was a resident of the state; and (3) Race (of student).

When the variable, whether or not the student changed major, was tested for independence from the variable, whether or not the student was retained in their fifth semester of



enrollment, a statistically significant chi-square result ( $\chi^2_{(1)}=42.874$ ,  $p = < .001$ ) was yielded.

The nature of the association between the variables was such that a higher percentage of students (87.2%) that changed major (one or more times) were retained in their fifth semester of enrollment in college than those that did not change major (66.3%).

When the variable, whether or not the student was classified by the university as an in-state resident, was tested for independence from the variable, whether or not the student was retained in their fifth semester of enrollment, a statistically significant chi-square result ( $\chi^2_{(1)}=17.788$ ,  $p = < .001$ ) was yielded. The nature of the association between the variables was such that a higher percentage of students who were classified by the university as in-state residents (81.3%) were retained in their fifth semester of enrollment in college than those that were classified as out-of-state residents (64.6%).

When the variable, race of student, was tested for independence from the variable, whether or not the student was retained in their fifth semester of enrollment, a statistically significant chi-square result ( $\chi^2_{(1)}= 15.253$ ,  $p = .004$ ) was yielded. The nature of the association between the variables was such that a lower percentage of African American students (64.4%) were retained than any of the other races represented in the data.

The independent t-test procedure was used to compare the College of Business students who were retained in their fifth semester of enrollment with the College of Business students who were not retained in their fifth semester of enrollment. Students in these two groups were compared on a total of 13 variables that were measured on a continuous scale of measurement. The groups were found to be significantly different on all 13 of these variables. The greatest differences tended to be in GPA's earned in the students periods of enrollment in college. In fact the four variables with the highest degree of difference and five of the highest six differences

were all college GPA measures. It should be noted that the students not enrolled in a specific semester or year were not included in the comparisons; therefore, a student's lack of academic GPA performance did not impact the differences found. It should also be mentioned that in all GPA comparisons, the retained students had significantly higher GPA's than the not retained students.

On the four measures of earned hours in each of the semesters studied, the retained students had significantly higher numbers of earned hours than the not retained students. The semesters that seemed to have the highest degree of significant difference between the retained and not retained groups of students were their first two semesters, with the first semester of enrollment found to have the highest impact among these variables ( $t_{df=784} = 9.142, p < .001$ ). Students who were retained in their fifth semester of enrollment were also found to have higher pre-college academic measures (specifically high school GPA and ACT/SAT composite score). Finally, retained students and not retained students were compared on the number of changes in their academic major. The retained students were found to have a significantly higher number of changes in their major (mean = 1.75, SD = .674) than the not retained students (mean = 1.21, SD = .476) ( $t_{df=116} = 8.346, p < .001$ ).

#### Objective Five

Objective five of the study was to determine if a model exists that significantly increases the researcher's ability to correctly classify College of Business students at a research university (RU/VH) in the Southern region of the United States based on whether or not they are retained into their fifth semester of enrollment from the following selected demographic and academic characteristics:

- a. Gender;

- b. Race;
- c. High school grade point average (GPA);
- d. College entrance examination (ACT/SAT) composite scores;
- e. Credit hours the student earned each of their first two semesters of enrollment;
- f. Whether or not the student was a resident of the state in which the study institution was located;
- g. The overall GPA achieved at the end of the first year of college enrollment;
- k. The semester GPA achieved in each of the first two semesters of college enrollment;
- l. Whether or not the student changed major, and if so, the number of times changed; and
- m. Whether or not the student resided in the Business Content-Based Residential College during their first year of enrollment.

To accomplish this objective, the multiple discriminant analysis statistical technique was used. The first step in conducting the discriminant analysis was to examine the independent variables that were to be included in the analysis for the existence of multicollinearity. No excess multicollinearity was found in the data.

The second step in conducting the discriminant analysis was to compare the two groups of students: those that were retained in the fifth semester of college versus those that were not retained in the fifth semester of college. Eleven of the independent variables had significantly different group means. Among the eleven variables for which significantly different group means were identified, ten variables were found to have higher means for the students that were retained versus the students that were not retained. These ten variables include: (1) End of First Year

GPA; (2) Second Semester GPA; (3) First semester GPA; (4) Second Semester Number of Earned Hours; (5) First semester earned hours; (6) Number of Times the Student Changed Major; (7) High School GPA; (8) Whether or not the Student Changed Major at Least Once; (9) ACT score; and (10) Whether or not the student was a resident of the state in which the study institution was located. The one remaining variable that yielded a statistically significant result but did not result in higher group means for students that were retained were: (1) Race—African American. The higher group mean for the Not Retained students indicates that the Not Retained group had a higher number of African Americans since the variable was coded “1” if the Characteristic Race – African American was present and “0” if it was not present.

In the third step of the discriminant analysis, the researcher examined the computed standardized canonical discriminant function coefficients. The centroids for the groups were determined to be -1.447 for the students that were not retained and .314 for the students that were retained in the fifth semester of enrollment. A total of four independent variables entered the discriminant model yielding an overall canonical correlation of  $R_c = .559$ . These four variables were:

- a. Overall GPA for the first year of enrollment;
- b. The number of times the student changed major;
- c. Number of earned hours in the second semester of enrollment; and
- d. Whether or not the student was a resident of the state in which the study institution was located.

The variable that entered the discriminant model first and had the strongest effect on the dependent variable, whether or not the student was retained in the fifth semester, was the overall GPA for the first year of enrollment. The nature of the influence of the first year GPA on

whether or not the student was retained in the fifth semester (the dependent variable) was such that having a higher GPA (first year) increased the likelihood of being retained to the fifth semester of study. The variable that entered the discriminant model second was the number of times the student changed major. The nature of the influence was such that having more changes in major increased the likelihood that the student was retained to the fifth semester of study. The variable that entered the discriminant model third was the number of earned hours in the second semester of enrollment. The nature of the influence was such that earning more hours in the second semester of enrollment increased the likelihood that the student was retained to the fifth semester of study. The variable that entered the discriminant model fourth was whether or not the student was a resident of the state in which the study institution was located. The nature of the influence was such that being a resident of the state in which the study institution was located increased the likelihood that the student was retained to the fifth semester of study.

In addition to examining the standardized discriminant function coefficients, the researcher also examined the within-group structure coefficients. One of the four independent variables that entered the discriminant model were found to have a structure coefficient that did not meet the criterion for substantive significance. This variable was whether or not the student was a resident of the state in which the study institution was located.

For the last step of the discriminant analysis, the researcher examined the correctly classified cases. The model correctly classified 80.5% of original grouped cases. The Tau statistic is used to determine the substantive significance of the percent of correctly classified cases. The rule of thumb is that to be meaningful, the model should show a 25% improvement over chance. For a two category dependent variable, this would be 62.5% of cases correctly

classified. Since the measure in this analysis is 80.5% (which equates to a Tau statistic of 61%) the derived model yields both a statistically and substantively significant model.

### **Conclusions, Implications and Recommendations**

#### **Conclusion One**

African American students were retained at a lower rate than students of other races in the College of Business at a research University.

This conclusion is based on the finding of the study which found that there was a statistically significant relationship between Race and Retention into the fifth semester of enrollment in the university. The nature of this association was such that African American students were retained at a lower rate (64.4%) than all other racial groups (78%-82%).

There are several potential implications of this conclusion. This study institution is located in a city of almost 500,000 population of which 44% are African Americans. The institution has publicly indicated that a high priority for the institution is to increase minority enrollment. However, the African American (AA) enrollment is currently at less than 10% of the total university enrollment. In recent years they have enjoyed some increased success in recruiting AA students to the university. However, if the institution continues to lose AA students at this elevated rate, any success in increasing the diversity representation among the student enrollment numbers will be short-lived. The University must find ways to improve the retention of the AA students who are recruited and enroll at the university. In fact, if progress is not made in improving the retention of AA students, the minority recruitment efforts may actually become a hindrance to improving minority enrollment rather than an advantage. If AA students who choose to enroll at the institution have a negative experience that ultimately leads to them dropping out the university, they may return to their home neighborhoods and schools

with advice for their AA friends and family that would discourage them from making the decision to enroll at the institution.

Based on this conclusion and these findings, the researcher recommends that research be conducted by the university and more specifically by the administration of the College of Business at the study institution to determine the reasons that the AA students who left the College of Business and the university made the decision to do so. This research might take the form of a qualitative study in which AA students who were not retained are interviewed in efforts to determine the exact reason that they chose to leave the college and institution. This research should be conducted with students in their home setting to maximize their level of comfort in sharing honest and in-depth information regarding their reasons for leaving. The researcher further recommends that the results of these interviews be utilized by the administration and faculty of the College and university to assess and revise procedures where appropriate.

Additionally, lack of retention of minorities, especially AA, at a Research University and specifically in the College of Business increases the institution's financial burden. Public higher education in the state in which this institution is located has been subjected to budget cuts during the several year which has led to substantial increases in tuition and fees. This has eclipsed the federal grant aid for low income students among which minorities are disproportionately represented. Studies have shown that four out of five African Americans acquire loans for college. However, if they are not retained to degree completion, they will still have the loan debt but without the degree that would ostensibly allow them to earn enough money to be able to reasonably repay the student loans. Therefore, they often end up in debt. This situation, if not addressed in a timely manner, may further increase the existing income inequality among races

in the U.S. Relatedly, Estelle Sommeiller has indicated that, “Rising inequality affects virtually every part of the country, not just large urban areas or financial centers” (p.2).

## Conclusion Two

Students who were retained in their fifth semester in a College of Business at a Research University had a higher number of hours earned in their first two semesters than students who were not retained.

This conclusion is based on the following findings of the study.

Students were compared on the number of hours earned during each of their first four semesters of enrollment. The retained students had significantly higher numbers of earned hours than the not retained students in each of these four semesters. However, the semesters that had the highest degree of significant difference between the retained and not retained groups of students were their first two semesters, with the first semester of enrollment found to have the highest degree of difference ( $t_{df=784} = 9.142, p < .001$ ).

There are numerous prospective implications of this conclusion. It is reasonable to interpret that at this research university students who were more successful in completing a greater number of hours seemed to be encouraged by this success and were therefore motivated to continue their enrollment. In addition, 120 hours are required to complete most if not all baccalaureate degree programs which translates to completing an average of 15 credit hours per semester in order to be able to complete the degree in four years. When students complete substantially less than 15 hours in their first, second, third and fourth semester, they are almost certain to need more than four years to complete a bachelor’s degree. Students who were retained in their fifth semester had successfully completed a greater number of credit hours in their first two semesters.



Another potential implication of this conclusion relates to the practice of direct admit of freshman students to their selected senior college. Many of the colleges (including the College of Business) in research universities (including the study institution) require that entering freshman students complete their first 30 hours in a freshman college before that are considered for admission to the College of Business). While the counselors that advise these freshman students may be good, they can hardly be as effective as individuals who are actually faculty and staff in the College of Business would be at advising business majors. Often this advisor may be from an entirely different content area. It seems to this researcher that the College of Business could assist these entering students in selecting courses in which they would experience a higher level of success. If this were the case there is a reasonable expectation that the College of Business might have a higher retention rate of students, perhaps to degree completion.

Based on this conclusion, the researcher recommends that the College of Business implement direct admit of freshman to the College on a trial basis for a small group of entering freshman students. This group should be randomly selected to participate in this program rather than selecting students for participation on the basis of an academic criteria such as ACT scores or high school GPA. If students are selected to participate on the basis of this type of criteria, then if a higher retention rate was discovered for the experimental group, the researchers would be unable to determine if the outcomes were a result of the pre-existing differences or if they were the result of the direct admit program.

In addition, the researcher recommends additional research to determine if students who complete fewer hours in their first semesters do so because they enroll in fewer hours or if they complete fewer hour because they drop a larger number of courses. In either case this research

should seek to determine the reasons that students either schedule fewer hours or if they drop more hours or both.

### Conclusion Three

Students that were not residents of the state were retained at a lower level compared to students that were residents of the state in which the study institution was located.

This conclusion is based on the following findings of the study: When the variable, whether or not the student was classified by the university as an in-state resident, was tested for independence from the variable, whether or not the student was retained in their fifth semester of enrollment, a statistically significant chi-square result ( $\chi^2_{(1)}=17.788$ ,  $p = < .001$ ) was yielded. This means that the variables were not independent. The nature of the association between the variables was such that a higher percentage of students who were classified by the university as in-state residents (81.3%) were retained in their fifth semester of enrollment in college than those that were classified as out-of-state residents (64.6%).

There are numerous potential implications of this conclusion: This result emphasizes the importance of university engagement activities such as university sponsored social activities; CBRC's; STRIPES (a four-day, three-night program that develops first year students for adjusting to at a Research University) etc. Additionally, such programs offer activities that are performed within small groups which supports team work, and they create a safe environment for students to meet new friends. This community of belonging, combats feelings of isolation among out of state students and can assist with the formation of profitable study routines and higher academic performance

At a prestigious research university, a large number of out of state students join the college of business every year. However, these out of state students are retained at a lower level

in comparison to the students that are residents of the state. It is imperative that the research find effective ways to recruit AND retain out of state students because building a national and international reputation for a research university is greatly influenced by the participation of high quality students from other states and countries. Therefore, the researcher recommends that further research be conducted to determine specific reasons that out of state students leave the university. This research should take the form of a qualitative study, most likely focus groups or perhaps even individual focused interviews with a very strong emphasis placed on confidentiality to enhance trust so that honest and complete responses can be acquired.

The researcher further recommends that the results of these interviews and focus groups be utilized by the administration and faculty of the university to revise institutional policies where appropriate and necessary.

#### Conclusion Four

Pre-college academic measures (specifically high school GPA and ACT/SAT scores) had an impact on retention of students into their fifth semester of enrollment.

This conclusion is based on the following findings of the study: (1) Retained students were found to have a significantly higher high school GPA's ( $M = 3.402$ ,  $SD = .367$ ) than not retained students ( $M = 3.171$ ,  $SD = .348$ ) ( $t_{df=784} = 7.321$ ,  $p < .001$ ) and (2) ACT/SAT composite scores ( $M = 25.43$ ,  $SD = 3.223$ ) than the not retained students ( $M = 24.12$ ,  $SD = 3.162$ ) ( $t_{df=116} = 4.712$ ,  $p < .001$ ).

While the not retained students had statistically significant lower pre-college academic measures, the measures for the not retained students were clearly at a level that the students had the capacity to be successful. A mean composite ACT/SAT score of 24.12 and a mean high

school GPA of 3.171 should have positioned the students to be able to be successful, especially if they had received even a modest level of academic support and resources from the institution.

Based on this conclusion and findings, the researcher recommends that additional research be conducted to identify the specific area(s) of weakness among the not retained students. For example, in this study, the only ACT score used was the composite score. However, there are sub-scores that might give the representatives from the university more specific information about the students' areas of strength and weakness. If, for instance, it was learned that not retained students consistently scored substantially lower on the "Math" or the "Reading" sub-score, then the institution would be better able to provide specifically focused resources for the students to improve their likelihood of success in maintaining their university enrollment. Similarly, examination of the students' high school academic records (GPA's) might reveal that the not retained students had consistently lower grades in an area (such as Math or English) which could then, as with ACT/SAT scores, enable the university to target specific resources for students who need them most in the areas where they are most needed. The researcher further recommends that the institution establish knowledgeable and accessible advisors and mentors to help low performing students to get access to University programs and resources because students that see or feel colleges as a Sisyphean task, are more likely to depart or dropout. Additionally, the University, faculty and staff should offer students sufficient opportunities for success through helping students set academic goals and support achievement.

#### Conclusion Five

Students that were retained into their fifth semester of enrollment were more likely to have changed their major and changed majors more times than the students who were not retained into their fifth semester of enrollment.

This conclusion is based on the following findings of the study: (1) When the variable, whether or not the student changed major, was tested for independence from the variable, whether or not the student was retained in their fifth semester of enrollment, a statistically significant chi-square result ( $\chi^2_{(1)} = 42.874$ ,  $p < .001$ ) was yielded. This means that the variables were not independent. The nature of the association between the variables was such that a higher percentage of students (87.2%) that changed major (one or more times) were retained in their fifth semester of enrollment in college than those that did not change major (66.3%). Additionally, the retained students were found to have a significantly higher number of changes in their major (mean = 1.75, SD = .674) than the not retained students (mean = 1.21, SD = .476) ( $t_{df = 116} = 8.346$ ,  $p < .001$ ).

At first glance, this may seem to be counterintuitive since one might logically think that if a person enters college with a clear idea of their long-term career goals they will be more likely to be retained in college. However, a study conducted by Feduccia (2003) found that students who entered with a declared major were less stable in their choice of career fields than those who entered undecided and completed an online career exploration program. At the research institution, no career exploration program was available to the incoming freshman students, but it seems likely that the students who were more likely to be retained in their fifth semester of enrollment were conducting their own form of career exploration by examining and “trying out” various programs and majors by changing majors when they realized that the major in which they were enrolled did not meet their expectations and/or needs. It seems logical to interpret that students who either did not or could not change majors (perhaps because their academic performance was not adequate for them to gain access to certain majors) chose to leave the university, perhaps for another institution or to abandon pursuit of a college degree altogether.

Based on this conclusion and implications, the research recommends that universities implement a career exploration program that would be required of all entering students within the first semester of their enrolment. Evidence exists establishing the value of career exploration activities for college students (Feduccia, 2003), and this researcher interprets these findings to indicate that it would be of value to all students, even if they feel rather certain that they know what they want to study and pursue as a career. The researcher further recommends that additional research be conducted designed to determine the impact of the career exploration program on both the stability and satisfaction with the chosen field of study and employment.

This study could take the form of both quantitative follow up studies of a group of participants in the program each year of their enrollment and then at five-year intervals after their degree completion or other exit from the university as well as qualitative studies in the form of focus groups to identify areas of strength and needed improvements in the career exploration program. Additionally, the researcher recommends that the faculty of the Research University survey students regularly. This will assist the administration to take action based on feedback and identification of problems as they arise.

#### Conclusion Six

Retained student have higher academic performance in college than not retained students. This conclusion is based on the following findings of the study: The retained students were found to have a significantly higher GPA at the end of their second year (mean = 3.110, SD = .542) than the not retained students (mean = 2.210, SD = .650) ( $t_{df=116} = 11.221, p < .001$ ).

While it may seem too evident that retained students had higher GPA's, the more important question to ask is perhaps how can the university identify early the students who are encountering academic difficulties, and what can the College of Business do to address the

problems before they have progressed to the point of exit from the University? If the College of Business (CBRC) can implement academic assistance programs and use early detection techniques to identify the students' existing academic performance problems then perhaps through intervention programs such as tutoring, required advising sessions, etc. the ultimate goal of retaining the students in the College of Business, hopefully to degree completion, can be realized.

#### Conclusion Seven

Participation in the Business Content Based Residential College (CBR) did not influence the retention of business students into their fifth semester in Business at a Research University. This conclusion is based on the following findings of the study: When whether or not the College of Business students resided in the CBRC during their freshman year in college was examined for independence from whether or not the students were retained into their fifth semester of enrollment in the College of Business the variables were found to be independent ( $\chi^2_{(1)} = 0.920$ ,  $p = .337$ ). Additionally, whether or not the students resided in the CBRC during their freshman year in college did not enter the discriminant model as a significant factor explaining whether or not the students were retained into their fifth semester of enrollment in college.

Based on this conclusion and these findings, the researcher recommends that the administration of the College of Business at the research university that served as the site for this study re-evaluate specialized activities of the College of Business Content Based Residential College (CBRC). Other residential Colleges at the same institution that have been successful in impacting retention rates should be examined with the idea of possibly duplicating some of the activities of these residential colleges as appropriate. Residential colleges at other colleges and

universities, especially in colleges of business at other research universities, should also be studied to identify possible activities that could potentially have a positive influence on retention. The researcher further recommends that additional study be initiated with the current study subjects including such research approaches as following the students to the six year point to determine if the CBRC might have a longer term impact on degree completion even though no influence was seen on the retention to the fifth semester. Another potential area for study would be to see if a short-term influence might be evident in such areas as increasing retention to the second, third, or fourth semesters. In addition, the researcher recommends that a qualitative study be conducted of the students who exited to determine factors, and specifically factors related to the CBRC, that influenced their decision to exit from the College and University. A study should also be conducted that interviews students that were retained to determine if the CBRC influenced their continuation in the program, and specifically what activities exerted this influence.

One potential confounding factor is the fact that the College of Business CBRC had a significantly higher percentage of out of state students, and since out of state students had a lower retention rate retention overall. This could be confounding the potential impact of Content Based Residential College. Additionally, the University should examine the overall purpose of the CBRC with specific focus on whether or not the purpose is to increase retention. If this is the case, changes need to be made to the CBRC programmatic activities and if not the CBRC should be evaluated with a different purpose in mind.



## REFERENCES

- ACT (2000). National college dropout and graduation rates, 1999.  
[www.act.org/news/releases/200/02-16b00.html](http://www.act.org/news/releases/200/02-16b00.html).
- Anderson, E. W., & Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing science*, 12(2), 125-143.
- Blimling, G. S. (1998). The benefits and limitations of residential colleges: A meta-analysis of the research. In F. King Alexander & Don E. Robertson (Eds.), *Residential colleges: Reforming American higher education*. Murray, Kentucky: Oxford International Table and Murray State University Press.
- Blimling, G. (2003). *The resident assistant: Applications and strategies for working with college students in residence halls*. Kendall Hunt.
- Blimling, G. S. (2014). *Student learning in college residence halls: What works, what doesn't, and why*. John Wiley & Sons.
- Braxton, J. M., & McClendon, S. A. (2001). The fostering of social integration and retention through institutional practice. *Journal of College Student Retention: Research, Theory & Practice*, 3(1), 57-71.
- Brubacher, J. S., & Rudy, W. (2004). *The development of the Graduate School. Higher Education: A history of American colleges and universities*. New Brunswick, NJ: Transaction Publishers.
- Bush, V., Ferrell, O. C., & Thomas Jr, J. L. (1998). Marketing the business school: An exploratory investigation. *Journal of Marketing Education*, 20(1), 16-23.
- Chickering, A.W. (1969). *Education and identity*. San Francisco: Jossey-Bass.
- Chonko, L. B., & Roberts, J. A. (1996). An innovative introduction to business course: Marketing the skills that marketing majors (and others) as business majors will need for success. *Marketing Education Review*, 6(3), 53-71.
- Cox, P. L., Schmitt, E. D., Bobrowski, P. E., & Graham, G. (2005). Enhancing the first-year experience for business students: Student retention and academic success. *Journal of Behavioral and Applied Management*, 7(1), 40-68.
- Deloit (2012). What is the impact of mobile telephony on economic growth? Retrieved from <https://www.gsma.com/publicpolicy/wp-content/uploads/2012/11/gsma-deloitte-impact-mobile-telephony-economic-growth.pdf>.
- DeShields Jr, O. W., Kara, A., & Kaynak, E. (2005). Determinants of business student satisfaction and retention in higher education: applying Herzberg's two-factor theory. *International journal of educational management*, 19(2), 128-139.

- Elliott, K. M., & Healy, M. A. (2001). Key factors influencing student satisfaction related to recruitment and retention. *Journal of marketing for higher education*, 10(4), 1-11.
- Feduccia, M. D. (2003). *Career Counseling for College Students: The Influence of a Computer-Assisted Career Decision-Making Program on the Stability of College Major Selection at a Research-Extensive University* (Unpublished Doctoral Dissertation). Louisiana State University, Baton Rouge, LA.
- Frost, S. (1993, Summer). Strategies to help freshmen succeed. *Planning for higher education*, 21.
- Hernández, A. (2011). Success Lives Here: The Impact of the Residential Experience on Student Success. *Hispanic Outlook*, 23.
- Hodges, D., & Burchell, N. (2003). Business graduate competencies: Employers' views on importance and performance. *Asia-Pacific Journal of Cooperative Education*, 4(2), 16-22.
- Jiménez, A., Palmero-Cámara, C., González-Santos, M. J., González-Bernal, J., & Jiménez-Eguizábal, J. A. (2015). The impact of educational levels on formal and informal entrepreneurship. *BRQ Business Research Quarterly*, 18(3), 204-212.
- Johnson, D.W., Johnson, R.T., & Smith, K.A. (1991). *Active Learning: Cooperation in the college classroom*. Edina, MN: Interaction Book Company.
- Kara, A., & DeShields, O. W. (2004). Business student satisfaction, intentions and retention in higher education: An empirical investigation. *Marketing Educator Quarterly*, 3(1), 1-25.
- Kou, L. (2013 March, 15). We're heading for a world with more smartphones than bank accounts. Retrieved from <https://qz.com/66061/were-heading-for-a-world-with-more-smartphones-than-bank-accounts/>.
- Kvochko, E. ( 2013 April, 11). Five ways technology can help the economy. Retrieved from <https://www.weforum.org/agenda/2013/04/five-ways-technology-can-help-the-economy/>.
- Lamb, C. H., Lee, J. B., & Vinton, K. L. (1997). Developing a freshman seminar: Challenges and opportunities. *Journal of Management Education*, 21(1), 27-43.
- Miller, J.A. (1991). Experiencing management: A comprehensive, "hands-on" model for the introductory undergraduate management course. *Journal of Management Education*, 15, 2, 151-169.
- Noel, L., Levitz, R., & Saluri, D. (Eds.) (1985). *Increasing student retention*. San Francisco: Jossey-Bass.
- Pascarea, E.T. & Terenzini, P.T. (1991). *How college affects students*. San Francisco: Jossey-Bass.

- Rae, D., & Carswell, M. (2000). Using a life-story approach in researching entrepreneurial learning: the development of a conceptual model and its implications in the design of learning experiences. *Education+ training*, 42(4/5), 220-228.
- Reason, R.D. (2003). Student variables that predict retention: Recent research and new developments. *NASPA Journal (Online)*, 40(4), 172-191.
- Robert, E., & Thomson, G. (1994). Learning assistance and the success of underrepresented students at Berkely. *Journal of Developmental Education*, 7(3), 1-14.
- Schudde, L. T. (2011). The causal effect of campus residency on college student retention. *The Review of Higher Education*, 34(4), 581-610.
- Spearman, J. J., Rahim, M. M. A., Ghanayem, S. W., & Ljepava, N. Factors Influencing Student Enrolment and Choice of University.
- Tinto, V. (1993, 1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tinto, V. (2002). Promoting student retention: Lessons learned for the United States. Presentation at the 11<sup>th</sup> Annual Conference of the European Access Network, Prato, Italy, June 19, 2002.
- Wagner, U., & Nettles, M. (1998). It takes a community to educate students: How three HBCUs succeed at retention. *Change: The Magazine of Higher Learning*, 20 (2), 18-25.
- Zemke, R. (2000). The best customer to have is the one you've already got. *The Journal for Quality and Participation*, 23(2), 33.

## APPENDIX A. INSTITUTIONAL REVIEW BOARD APPROVAL

### ACTION ON EXEMPTION APPROVAL REQUEST



TO: Reuben Twijukye  
LHRD

FROM: Dennis Landin  
Chair, Institutional Review Board

DATE: September 11, 2018

RE: IRB# E11158

TITLE: The Influence of Participation in a Content-Based Residential College and Selected Demographic Characteristics on the Academic Performance of Students Enrolled in a College of Business at a Research University (RU/VH) in the Southern Region of the United States

Institutional Review Board  
Dr. Dennis Landin, Chair  
130 David Boyd Hall  
Baton Rouge, LA 70803  
P: 225.578.8892  
F: 225.578.5983  
[irb@lsu.edu](mailto:irb@lsu.edu)  
[lsu.edu/research](http://lsu.edu/research)

New Protocol/Modification/Continuation: New Protocol

Review Date: 9/6/2018

Approved X Disapproved \_\_\_\_\_

Approval Date: 9/11/2018 Approval Expiration Date: 9/10/2021

Exemption Category/Paragraph: 4a

Signed Consent Waived?: N/A

Re-review frequency: (three years unless otherwise stated)

LSU Proposal Number (if applicable):

By: Dennis Landin, Chairman 

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING –  
Continuing approval is **CONDITIONAL** on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with DHHS regulations for the protection of human subjects\*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
7. Notification of the IRB of a serious compliance failure.

8. **SPECIAL NOTE:** When emailing more than one recipient, make sure you use bcc. Approvals will automatically be closed by the IRB on the expiration date unless the PI requests a continuation.

\* All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at <http://www.lsu.edu/irb>

## VITA

Reuben Twijukye was born in Bushenyi District in Western Uganda. He attended Kishenyi primary school, Old Kampala Sinor Secondary School for “O”level and later joined Makerere College School for “A” level. He holds an Associate Degree of sciences from South Plains College, a Bachelor of Arts in Sociology from Louisiana State University, and a Master of Science in Human Resource and Leadership Development from Louisiana State University. He was awarded both teaching and research assistantship at Louisiana State University to pursue his doctoral studies and he is currently preparing to graduate with a PhD in May, 2020

While in graduate school, his work and teaching experience included teaching Human Resource and Leadership Development online courses and face to face courses for more than 3 years. He also taught special education students at McKinley High School, and he was awarded the Certificate for Boosting Black Male qualities at the Annual Black Male Educator Appreciation Ceremony given at McKinley High School in 2019.

Reuben Twijukye has conducted several research projects and collaborated with authors on various projects. One of his papers was accepted and published in the Journal of Business Diversity. He has also presented five papers at International Conferences (Academy of Business Research). His Current research areas include Human Resource Management, Retention of Business Students, Diversity, and Entrepreneurship and Leadership