

# **Examining Student Retention in a College of Business at a U.S. Research University (RU/VH)**

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*Prior research has documented the impact of the residential hall experience of college students on academic achievements. Integrating and engaging in college residential hall experience increases their chances to persist and complete their degree. In this paper, we examined the retention of college of business students who resided and did not reside in a College of Business Content-Based Residential College (CBRC) at a Research University in the Southern Region of the United States. The findings showed a statistically significant relationship between race, the number of hours during each of their first four semesters of enrollment, and retention into the fifth semester.*

*Keywords: persist, College of Business Content-Based Residential College, race, retention, first-time college freshman*

## **INTRODUCTION**

Businesses are extremely important in the American economy; 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. Education is if one of the factors that assist the business to flourish. According to (Patrício, L. D., & Ferreira, J. J. (2023), education equip individuals with competencies such as knowledge, risk mitigation, problem-solving, and leadership competencies. Colleges and Universities are some of the avenues to learn business competences for individuals who are interested in starting their own businesses or pursuing a career in the business arena. Universities and colleges provide different programs and variable resources to assist students to complete their college degree.

“In today's economy, college completion is essential to 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 drop out, ultimately impacting 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 the persistence of college students such as cognitive factors, social factors, institutional factors, and residential colleges. Swail (2004) also developed the Geometric Model of persisting and achievement to explain more deeply how cognitive, social and institutional factors affect students' persistence in an educational program.

**Cognitive factors.** According to Swail (2004), “cognitive factors relate to the intelligence, knowledge, and academic ability a student brings 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 about a student's persistence and achievement.

**Social factors.** Several social factors 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 to offer 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, Colonial rationalists founded Harvard 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 had to travel a long distance to attend classes (Blimling, 2003). The author continues by pointing out that traveling was difficult, unsafe, and took 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 on their success in college. (Blimling, 2014). The author stresses, “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 assists them in defining 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). Integrating and engaging in the college experience 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, increasing 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” (Blimling, 2014 p. 222).

Many universities today have formed residential halls 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 a 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 and 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 allows students 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 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 producing the outcomes it is designed and proposed to produce.

## **PURPOSE AND OBJECTIVES**

The primary purpose of this study was to describe and 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 of the selected demographic characteristics on 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 researcher developed the following specific objectives 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.

## **METHODOLOGY**

### **Population and Sample**

The study's target population 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**

Individual research objectives organized the data analysis. Objectives one and two are descriptive and were, therefore, analyzed using descriptive statistics. The goal for objectives one and two were 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).

## Findings

174 students 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 1).

**TABLE 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 a	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

a 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 score range with 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 2.

**TABLE 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, 174 students resided in the College of Business Content-Based Residential College (CBRC), the mean number of credit hours earned was 12.90 (SD = 2.882), the lowest number of credit hours earned is 0 and the highest number of credit hours earned is 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 3).

**TABLE 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
<b>TOTAL</b>	<b>174</b>	<b>100.0</b>	<b>164</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>	<b>142</b>	<b>100.0</b>

<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.

<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); 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 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.

**TABLE 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.

<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. 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 letter grade. 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 is 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 who 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 after 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.

#### *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 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 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

- a During the Fall 2014 semester, the mean GPA earned was 2.840 (SD = .789) and the range range was 0.00—4.00.
- b 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.
- c 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.
- d 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 who 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 changes was unavailable for seven of the students.

**Objective Two**

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 6).

**TABLE 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 a	Percent
Caucasian	463	75.9
Black or African American	72	11.8
Hispanic	40	6.6
Asian	23	3.8
Multi-Racial	10	1.6
American Indian or Alaskan Native	2	.3
Native Hawaiian or Other Pacific Islander	0	.0
Total	610	100

a 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 score range with 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 7.

**TABLE 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, 590 students who did not reside in the CBRC 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, 530 students who entered the College 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 13.17 (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 8.

**TABLE 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
<b>TOTAL</b>	<b>612</b>	<b>100.0</b>	<b>590</b>	<b>100.0</b>	<b>530</b>	<b>100.0</b>	<b>509</b>	<b>100.0</b>

<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 was another measured variable at the end of their first year of study. 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 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. 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 letter grade. 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 not living 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 the 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 9.

**TABLE 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

**a** For the first year the mean GPA was 2.89 (SD = .769) and the range was 0.00—4.00.

**b** 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 10.

**TABLE 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

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

b 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.

c 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 this semester.

d 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). Most of these students had changed their major once (n = 191, 44.1%) or twice (n = 191, 44.1%). The next largest group was those who had changed major thrice (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**

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 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 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 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 ( $\chi(1)=20.418$ ,  $p = < .001$ ) 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 12.

**TABLE 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	Yes
	n	n
	%	%
Female	275	45
	44.9	25.9
Male	337	129
	55.1	74.1
Total	612	174
	100.0	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 ( $\chi(1)=19.756, p = < .001$ ) 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 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 those 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 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	Yes
	n	n
	%	%
No	82	48
	13.4	27.6
Yes	530	126
	86.6	72.4
Total	612	174
	100.0	100.0

Note.  $\chi(1)=19.756, p < .001$

The groups were significantly different on only one of these 13 variables. Students who did not participate in the CBRC during their freshman year had 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 14).

**TABLE 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	Non-Residential College	<i>t</i>	Sig.
	<u>n</u> <u>m</u> <u>SD</u>	<u>n</u> <u>m</u> <u>SD</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

## CONCLUSIONS 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 study finding 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 recruited and enrolled 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. Suppose AA students who choose to enroll at the institution have a negative experience that ultimately leads to them dropping out the university. In that case, 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 the university conduct research 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 to determine why 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 where this institution is located has been subjected to budget cuts during the several years, 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, suppose they are not retained to degree completion. In that case, they will still have the loan debt but without the degree that would ostensibly allow them to earn enough money to reasonably repay the student loans. Therefore, they often end up in debt. This situation, if not addressed promptly, 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 more hours earned in their first two semesters than those 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 with 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 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 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 they are considered for admission to the College of Business). While the counselors who 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 directly admit freshmen 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 why students either schedule fewer hours or drop more hours or both.

### **Conclusion Three**

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

This conclusion is based on the following findings of the study: When the variable, whether or not the university classified the student 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 association between the variables was such that a higher percentage of students classified by the

university as in-state residents (81.3%) were retained in their fifth semester of college enrollment than those classified as out-of-state residents (64.6%).

This conclusion has numerous potential implications: 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 performed within small groups that support teamwork and 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, many 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. TThe research must 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 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.

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