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THE IMPACT OF BUSINESS PROGRAM ACCREDITATION ON RANKING AND ENROLLMENT FOR HBCU SCHOOLS

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ABSTRACT

Purpose- This article evaluates the effect of business program accreditation on the ranking of the nation's Historically Black Colleges or Universities to provide empirical data for program administrators.
Methodology- The methodology in this study consists of a series of Mann-Whitney U tests to determine the association between accreditation and rankings and an ANOVA test to determine if enrollments are significantly different among accreditation types.
Findings- The findings indicate that AACSB accreditation is associated with a statistically significant positive distinction in rankings and with statistically higher enrollments. ACBSP accreditation is not statistically corelated with rankings or enrollment. The effect of IACBE accreditation appears to be inconclusive in this study.
Conclusion- These findings lend support to the conclusion that AACSB accreditation could enhance rankings and increase enrollment; this same conclusion is not supported for ACBSP accreditation, and further research is needed for IACBE accreditation. The key limitation in this study is the lack of analysis that a change to AACSB accreditation will cause changes in rankings and enrollment, and avenues for future research are explored.

Keywords: Historically Black College or University (HBCU), business school accreditation, AACSB, ACBSP, IACBE
JEL Codes: I20, I23, M10

1. INTRODUCTION

Prior research on accreditation of business programs of Historically Black Colleges or Universities (HBCUs) has noted a dearth of targeted analysis to help HBCUs weigh the benefits of business program accreditation (Doh et al., 2018). An article by Doh et al. (2018) in the *Research Journal of Business and Management* asserted that research on the effect of accreditation has been focused on financially strong, research-based institutions, and the authors suggested that analysis is needed to help HBCUs with business programs make accreditation decisions. The study by Doh et al. (2018) identified this gap in the literature and sought to fill it by studying the effect of business school accreditation on growth in enrollment at HBCUs, and that study found that enrollment growth was not increased by AACSB accreditation. This study continues to fill this literature gap by assessing the effect of business school accreditations on the rankings of HBCUs and by assessing the association between accreditation and enrollment for HBCUs. This research could also be useful to all higher education administrators in business education that consider accreditation. The question of accreditation can be especially complex as decision makers address issues related to rankings (Alajoutsijärvi et al., 2018), and this study will provide empirical data related to accreditation and rankings. This paper will also discuss literature that explains the merits of accreditation as well as literature that discusses the costs and drawbacks of accreditation.

The analysis in this paper uses Mann-Whitney U tests to determine if accredited schools have higher rankings than schools with different accreditations or with no accreditation. This study then conducts an ANOVA test to determine if there is a difference in enrollment that is associated with accreditation. Both rankings and enrollment are of course important considerations for university and college administrators. This research is especially valuable for HBCUs that seek to understand empirical data that is often not available (Doh et al., 2018).

The recognized accrediting bodies for business programs in the United States are the Association to Advance Collegiate Schools of Business, commonly known as the AACSB, the Accreditation Council for Business Schools and Programs commonly

known as the ACBSP, and the International Assembly for Collegiate Business Education, commonly known as the IACBE (George, 2018).

1.1. Association to Advance Collegiate Schools of Business (AACSB)

The AACSB is one of the most recognized accreditations in the world (Skikne, 2019), and it is decidedly regarded as the gold standard among business programs (De'Armond & Patterson, 2018). Cara Skikne (2019) even speculates that there is a correlation between highly ranked programs and AACSB accreditation, which is the focus of this paper. The AACSB is not only the most prestigious, but also the oldest of the three accreditations (Guttenplan, 2011). AACSB programs must meet rigorous standards for instructor qualifications, and these programs must maintain strong scholarly output (George, 2018). In addition to instructor qualifications and scholarly output, the AACSB imposes demanding requirements for collecting quality assessment data (De'Armond & Patterson, 2018). While the AACSB is known as having the most challenging accreditation standards, the AACSB has occasionally amended its standards in order to compete with the other accrediting bodies (Hunt, 2015). In fact, recently in 2013, the AACSB developed new standards that recognize the diversity of ways that quality business education can be achieved (Scroggins et al., 2018).

Based on the literature, it seems likely that students would gravitate to AACSB schools in a way that would increase enrollment and improve rankings. In fact, the AACSB website claims that the accreditation makes these schools the most desirable for potential employers (Business Management Degree, n.d.), which would likely attract career-minded business students. Thus, a reasoned hypothesis would be that AACSB programs would be the most highly ranked and have the highest enrollments. However, meta research by Hunt (2015) finds that there is in fact limited support for the assertion of AACSB superiority over other accreditations or no accreditation. This study will address the question of whether or not the AACSB is really better than other accreditations.

The cost of AACSB is high, as is the required commitment by school administrators (George, 2018). The cost for AACSB accreditation is an eligibility application fee of $2,000, a process fee of $6,500, an initial annual fee of $5,950, and an application fee of $15,000; the ongoing annual fee for business accreditation is $5,950 (AACSB, n.d.). This cost can be significantly higher with workshops, consultant fees, etc., and the extra costs can range from $50,000 to $100,000 to achieve AACSB accreditation (Brink & Smith, 2012). Furthermore, schools will generally need to invest more in faculty salaries and other resources to maintain the necessary accreditation standards (George, 2018). These ongoing incremental costs can be more than $500,000 annually for a small school for any of the three accreditations (Roberts et al., 2004 as cited in Brink & Smith, 2012). With such significant costs, administrators will undoubtedly benefit from an empirical assessment of the benefit of AACSB accreditation.

1.2. Accreditation Council for Business Schools and Programs (ACBSP)

The ACBSP is also a significant player in accreditation. The ACBSP was created in 1988 (ACBSP, n.d.) and was thus the first alternative for business programs that could not or would not conform to the AACSB accreditation process. The ACBSP accreditation has become known as a badge of quality (Cromwelle, n.d.), and compared to AACSB accreditation, the process for ACBSP accreditation is known to require a lower level of institutional commitment, a lower investment in assets and equipment, a more flexible interpretation of faculty qualifications and faculty scholarship, and lower overall costs (George, 2018). Consequently, the ACBSP can be an alternative for business programs that feel restricted by the confining accreditation standards of the AACSB. Many business program administrators felt that meeting the AACSB standards lead to a decline in quality teaching because of the necessary emphasis on research and scholarly output (George, 2018). George (2018) suggests that concerns about the subordination of teaching quality was the primary driver for the creation of the ACBSP.

While the accreditation process for ACBSP schools is considered more flexible than that for AACSB schools (George, 2018), the vetting process for ACBSP is still quite rigorous (Cromwelle, n.d.), and students in ACBSP programs can be confident in the quality and reputation of their program (Cromwelle, n.d.). ACBSP programs are highly respected, quality institutions, and potential employers highly regard the ACBSP stamp of approval (Cromwelle, n.d.). Costs for accreditation are a total of $16,900 over the first three years and $2,500 per year after that (ACBSP n.d.). As mentioned above, the additional costs to maintain accreditation might be more than $500,000 on an annual basis (Roberts et al., 2004 as cited in Brink & Smith, 2012).

1.3. International Assembly for Collegiate Business Education (IACBE)

The IACBE was created more recently (in 1998) than the other two accreditations; the IACBE offers programs more flexibility because the accreditation guidelines are less ridged than the standards imposed by the ACBSP (Hunt, 2015). Furthermore, the IACBE focuses less on input requirements and more on the assessment of outcomes (Hunt, 2015); in fact, the IACBE filled a demand by academic officials who desired an accreditation process that was driven by the mission and the outcomes of the program rather than by the resources and inputs (Business Management Degree, n.d.). As discussed above the resources necessary for AACSB accreditation are significant, and the accreditation process for ACBSP is also rigorous. Business programs without significant research and scholarship foundations are likely to find the mission and outcome driven standards of the

IACBE more appealing. Doh at el. (2018) describe the IACBE accreditation not as one that measures the value of the investment in the program but as one that measures the value of the results that those investments produce. For example, George (2018) notes that the IACBE definition of scholarship could entail any knowledge-creating activity and need not be typical peer-reviewed publications.

In addition to requiring less prescriptive standards for accreditation, the direct and indirect costs of IACBE accreditation are significantly lower than AACSB and ACBSP (George, 2018). Faculty salary requirements are 15%-20% lower than ACBSP schools, and costs of faculty development and faculty release time are lower (George, 2018). George (2018) estimates the initial costs to obtain accreditation are $11,000. Direct ongoing, annul costs for IACBE accreditation are $2,650 plus maintenance fees of $500-$1,500 (IACBE, n.d.).

1.4. Overview of Research

The remainder of this paper will discuss literature related to the accreditation decision and then discuss the methodology that will be used to measure the association between accreditation and rankings and between accreditation and enrollment. The findings in this paper show that AACSB accreditation is related to better rankings and higher enrollment; there are no significant findings with ACBSP accredited schools or with IACBE accredited schools; however, there is an interesting set of results that show that AACSB schools are not necessarily associated with better rankings or higher enrollment than IACBE schools. These results and the accompanying conclusions will be discussed in detail. These findings are part of a mosaic that might assist administrators in higher education with accreditation decisions. However, the conclusions here lend themselves to needed future research; namely the need for assessing whether changes in accreditation are causing changes in rankings and enrollment. These limitations and the related future research opportunities will be discussed in the following sections.

2. LITERATURE REVIEW

As noted above, research by Doh et al. (2018) found a notable lack of empirical research to support accreditation decisions by business program administrators at HBCUs. However, there is plentiful literature that assesses the pros and cons of accreditation; much of this literature was discussed in the introduction above regarding each of the three accrediting bodies. This section will discuss and reiterate overall positives and negatives of accreditation for business programs.

Research by Brink & Smith (2012) indicates that business programs are facing increased criticism because of high tuition costs and the questionable value of education; as a result, business programs are turning to accreditation as a response to this criticism and as an indicator of the value of their programs. The accreditation process is a way of ensuring quality and of restoring confidence of stakeholders such as students and alumni (Brink & Smith, 2012).

The AACSB International Doctoral Education Task Force (2013) credits the AACSB standards with various improvements in accredited schools; the task force finds an increase in innovation, impact, and engagement in accredited programs. Schools that receive accreditation generally shift their focus to research and to some degree away from teaching (Bieker, 2014). This can have disadvantages, which will be discussed below; however, this can also have a tremendously positive impact. Research by the AACSB International Doctoral Education Task Force (2013) indicates that accreditation can be especially useful for business programs that offer doctoral degrees.

There are of course disadvantages to obtaining accreditation. An article by Julian & Ofori-Dankwa (2006) argues against accreditation for business programs because the accreditation process will impede a business program's ability to adapt to the competitive business education landscape; as the needs of business students change with the job market, a school may not be able to meet those needs due the burdens of accreditation (Julian & Ofori-Dankwa, 2006). The research of Brink & Smith (2012) mentions the significant cost of university resources that are necessary to be successful in the accreditation process. The financial costs were mentioned in the introduction and are of course an important consideration for any institution with limited funding. Interestingly, Brink & Smith (2012) find a notable absence of research that quantifies the non-financial effort in obtaining accreditation. This effort includes the time and resources of many members of college administration. But Brink & Smith (2012) explain that this cost has not been researched or quantified by the academic community. Thus, a very significant part of the cost (the administrative effort) may be unknown.

In addition to these direct costs such as money, effort, and resources of specifically obtaining accreditation, the process of accreditation will often require higher salaries for faculty, and these salaries could be as much as 50% more (Hedrick et al., 2010 as cited by Brink & Smith, 2012). Not only are salaries higher, but faculty usually require more time off for research and training, which decreases the amount of teaching output of faculty (Brink & Smith, 2012); this point was also supported by George (2018) as stated in the Introduction.

As noted above, Bieker (2014) demonstrates that schools that undergo AACSB accreditation shift their focus away from teaching and more to research; additionally, these schools might lose their autonomy in order to become more of a benchmark-type institution. This certainly has pros and cons. On the one hand, being a benchmark of quality could increase teaching quality and increase the reputation of the school; however, according to Bieker (2014), this could come at the cost

of lower quality research. Research can be valuable for an institution, and it can offer an overall benefit to society (Cozby & Bates, 2015), yet the implication here by Bieker (2014) is that research conducted and published merely to meet institutional goals may ultimately be of lower quality.

3. DATA AND METHODOLOGY

3.1. Data

The Data on the 2022 Rankings and enrollment is provided by *U.S. News and World Report*. The latest enrollment numbers were from fall of 2020 where possible, but in some cases the latest enrollment numbers were from fall of 2019. The *U.S. New and World Report* rankings are considered one of the top two reputable sources for colleges rankings along with *The Wall Street Journal* (Credle & Scott, 2016). Data on the type of accreditation of each school was gathered from the websites of the three accrediting bodies. Table 1 below shows the 2022 rankings, accreditation, and enrollment. The last school on the list, Southwestern Christian College, is unranked.

Table 1: Rankings for 2022, Accreditation Type, and Enrollment Numbers

Rank	Institution	Accred.	Enrollment	Rank	Institution	Accred.	Enrollment
1	Spelman College	None	2,207	40	Philander Smith College	ACBSP	799
2	Howard University	AACSB	7,857	42	Talladega College	None	1230
3	Xavier University of Louisiana	ACBSP	2,517	43	Cheyney Univ. of PA	None	616
4	Hampton University	IACBE	3,063	43	Texas Southern University	AACSB	5,298
4	Morehouse College	AACSB	2,152	45	Bethune-Cookman University	ACBSP	2,746
4	Tuskegee University	AACSB	2,280	46	Voorhees College	ACBSP	368
7	Florida A&M University	ACBSP	7,402	47	Mississippi Valley State Univ.	ACBSP	1,694
8	North Carolina A&T State Univ.	AACSB	11,130	48	Bluefield State College	None	1,243
9	Fisk University	ACBSP	879	48	Florida Memorial University	ACBSP	1,050
10	Claflin University	ACBSP	1,969	48	Virginia Union University	ACBSP	1,209
10	Delaware State University	AACSB	4,231	51	Central State University	ACBSP	4,021
12	Morgan State University	AACSB	6,270	51	Savannah State University	AACSB	3,250
13	North Carolina Central Univ.	AACSB	6,067	53	Bennett College	None	1727
14	Dillard University	None	1,215	53	Grambling State University	AACSB	4,153
15	Tougaloo College	None	708	53	West Virginia State University	ACBSP	4,009
16	Winston-Salem State Univ.	None	4,656	56	Langston University	ACBSP	2,026
17	Univ. of MD-Eastern Shore	AACSB	2,070	56	Stillman College	IACBE	712
18	Clark Atlanta University	AACSB	3,096	58	Albany State University	None	5,778
18	Jackson State University	AACSB	4,668	59	Allen University	None	656
20	Norfolk State University	AACSB	4,992	59	Arkansas Baptist College	None	531
20	Southern Univ. and A&M	AACSB	6,145	59	Edward Waters College	IACBE	3,085
22	Alabama State University	ACBSP	3,614	59	Harris-Stowe State University	ACBSP	1,630
22	Elizabeth City State University	AACSB	1,910	59	Huston-Tillotson University	ACBSP	1,112
24	Alcorn State University	ACBSP	2,729	59	Jarvis Christian College	None	867
24	Bowie State University	ACBSP	5,354	59	Lane College	None	1,095
24	Fayetteville State University	AACSB	5,661	59	LeMoyne-Owen College	None	835
24	Lincoln University (PA)	None	1,895	59	Lincoln University (MO)	None	1,892
24	Prairie View A&M University	AACSB	8,109	59	Livingstone College	None	845
29	Virginia State University	AACSB	4,025	59	Miles College	ACBSP	1,456
30	Johnson C. Smith University	None	1,253	59	Morris College	ACBSP	600
30	Oakwood University	ACBSP	1,461	59	Paine College	ACBSP	448
30	Univ. of Arkansas-Pine Bluff	ACBSP	2,507	59	Rust College	None	738
30	Univ. of DC	ACBSP	3,385	59	St. Augustine's University	None	1,110
34	Kentucky State University	ACBSP	2,148	59	Shaw University	None	1,174
35	Tennessee State University	AACSB	6,000	59	Southern Univ.-New Orleans	AACSB	1,941
36	Coppin State University	ACBSP	2,108	59	Texas College	None	940
36	South Carolina State University	AACSB	2,020	59	Wilberforce University	None	553
38	Benedict College	ACBSP	311	59	Wiley College	ACBSP	615
38	Fort Valley State University	None	2,542	None	Southwestern Christian	None	106
40	Alabama A&M University	None	5,093				

3.2. Mann-Whitney U Test

In this analysis, a Mann-Whitney U test is conducted to compare the ranking of each type of accreditation to all other accreditations and to no accreditation. I.e., AACSB is compared to ACBSP, IACBE and to no accreditation. A Mann-Whitney U test is commonly used in place of an independent sample t-test when the data are ordinal (Gignac, 2016), as they are in the case of rankings. For a Mann-Whitney U test, the data will be divided into four samples, one for each accreditation type

including no accreditation. Each of the samples is then compared to each of the other samples and points are assigned based on how many entries rank above entries from the other sample (Statslectures, 2010). The Mann-Whitney U test then calculates a test statistic and an accompanying p-value, which indicates the probability that there is no difference between the two samples (Gignac, 2016). In other words, the Mann-Whitney U test indicates if the different types of accreditations (or no accreditation) are statistically related to the school's ranking in the 2022 *U.S. News and World Report*. Sample sizes of 20 or more a sufficient for the Mann-Whitney U test (Statslectures, 2010). The SPSS tests conducted in these analyses have null hypotheses of no statistical difference in rankings based on accreditation status, and the alternative hypotheses are that there is a difference in rankings based on accreditation status.

3.3. Analysis of Variance (ANOVA)

In this research, an ANOVA test is conducted to compare the enrollment numbers of each type of accreditation to determine if accreditation is related to a statistical difference in enrollment. The ANOVA test is a way to test between differences in population means, and the ANOVA test allows testing between more than two populations by examining samples from each population (Freed et al., 2013). The ANOVA test compares the variation within the samples to the variation between each sample; if the variation between each sample is significantly larger than the variation within the samples, then the ANOVA test will support the conclusion that there is a true mean difference for at least one of the population means (Freed et al., 2013). After the ANOVA test is conducted, a Tukey Honestly Significant Difference test is conducted to determine which, if any, of the tested means are significantly different, which is a common way to glean more detailed conclusions about differences among the sample means (Freed et al., 2013). The minimum required sample size is 30 (Freed et al., 2013), which is satisfied in this analysis. However, the fact that there are only three schools with IACBE accreditation may hinder clear conclusions for IACBE associations. The null hypotheses in SPSS for both the ANOVA and the Tukey tests are no mean difference; thus, low p-values will indicate statistically significant differences.

4. RESULTS

4.1. Ranking and Accreditation

The results of the Mann-Whitney U tests are summarized in Tables 2 through Table 7. Table 2 indicates that there is a significant statistical difference in rankings of schools with AACSB versus ACBSP with a p-value of 0.004. In Table 2, AACSB has a lower mean rank compared to ACBSP, and the lower number of rank indicates a better ranking; the p-value of 0.004 indicates that this difference in ranking is statistically significant. In other words, the better rankings of AACSB schools are associated with accreditation and not due to random chance.

Table 2: Mann-Whitney U Test Comparing AACSB Rank Versus ACBSP Rank

Accreditation	N	Mean Rank	Sum of Ranks
AACSB	22	18.8	413.5
ACBSP	28	30.77	861.5
Total	50		
Test Statistics			
Mann-Whitney U		160.5	
Wilcoxon W		413.5	
Z Statistic		-2.888	
P-Value		0.004	

Continuing with the Mann-Whitney U tests, Table 3 indicates that there is no statistical difference between AACSB and IACBE with a p-value of 0.335. Table 4 indicates that there is a conclusive statistical difference between AACSB and no accreditation with a p-value of 0.000 rounded to three decimal points. Table 5 indicates that there is no statistical difference between ACBSP and IACBE with a p-value 0.712. Table 6 indicates that there is no statistical difference between ACBSP and no accreditation with a p-value of 0.098, although the p-value of 0.098 comes close to indicating a statistical difference. Table 7 indicates that there is no statistical difference between IACBE and no accreditation with a p-value of 0.667.

Table 3: Mann-Whitney U Test Comparing AACSB Rank Versus IACBE Rank

Accreditation	N	Mean Rank	Sum of Ranks
AACSB	22	12.48	274.50
IACBE	3	16.83	50.50
Total	25		
Test Statistics			
Mann-Whitney U		21.500	
Wilcoxon W		274.500	
Z Statistic		-0.963	
P-Value		0.335	

Table 4: Mann-Whitney U Test Comparing AACSB Rank Versus No Accreditation Rank

Accreditation	N	Mean Rank	Sum of Ranks
AACSB	22	16.41	361.00
None	25	30.68	767.00
Total	47		
Test Statistics			
Mann-Whitney U		108.000	
Wilcoxon W		361.000	
Z Statistic		-3.599	
P-Value		0.000	

Table 5: Mann-Whitney U Test Comparing ACBSP Rank Versus IACBE Rank

Accreditation	N	Mean Rank	Sum of Ranks
ACBSP	28	15.80	442.50
IACBE	3	17.83	53.50
Total	31		
Test Statistics			
Mann-Whitney U		36.500	
Wilcoxon W		442.500	
Z Statistic		-0.370	
P-Value		0.712	

Table 6: Mann-Whitney U Test Comparing ACBSP Rank Versus No Accreditation Rank

Accreditation	N	Mean Rank	Sum of Ranks
ACBSP	28	23.75	665.00
None	25	30.64	766.00
Total	53		
Test Statistics			
Mann-Whitney U		259.000	
Wilcoxon W		665.000	
Z Statistic		-1.655	
P-Value		0.098	

Table 7: Mann-Whitney U Test Comparing IACBE Rank Versus No Accreditation Rank

Accreditation	N	Mean Rank	Sum of Ranks
IACBE	3	12.67	38.00
None	25	14.72	368.00
Total	28		
Test Statistics			
Mann-Whitney U		32.000	
Wilcoxon W		38.000	
Z Statistic		-0.431	
P-Value		0.667	

4.2. Enrollment and Accreditation

Table 8 through Table 11 display the enrollment analysis and the results of tests of the association between enrollment and accreditation. Table 8 shows descriptive statistics of enrollment for the 79 HBCUs studied. Table 8 indicates that the mean enrollment is 2,681, and the median enrollment is 2020, which suggests a sizable positive skew. The skewness of 1.380 is more than twice the standard error, which confirms a positive, non-normal skew (Bian, 2011). The standard deviation is 2,193.7, which is a large amount of dispersion, especially given that the mean is only moderately larger than the standard deviation. The range of enrollments is 11,024, which is a huge span between the smallest enrollment of 106 and the largest enrollment of 11,130. Lastly, the measure of excess kurtosis is 1.985, and the standard error is 0.535. The excess kurtosis is well over three standard errors above zero, which indicates a non-normal, leptokurtic shape generally characterized by a sharper peak and fatter, longer tails (Brown, 2016).

Table 8: Enrollment Descriptive Statistics

		Statistic	Std. Error
Mean		2681.73	246.81
95% Confidence Interval for Mean	Lower	2190.36	
	Upper	3173.10	
5% Trimmed Mean		2482.68	
Median		2020	
Variance		4812462.3	
Std. Deviation		2193.73	
Minimum		106	
Maximum		11130	
Range		11024	
Interquartile Range		2971	
Skewness		1.380	0.271
Kurtosis		1.985	0.535
Sample Size		79	

Table 9 shows tests of normality of the enrollment data. The p-values for the Kolmogorov-Smirnov and the Shapiro-Wilk tests are both 0.000 round to the third decimal place. The low p-values indicate that the assumption of normality is rejected by both tests (Mordkoff, 2016). The non-normal result is consistent with the results in Table 8 that indicate positively skewed, leptokurtic data.

Table 9: Enrollment Tests of Normality

Kolmogorov-Smirnova			Shapiro-Wilk		
Statistic	df	Sig.	Statistic	df	Sig.
0.168	79	0.000	0.867	79	0.000

Table 10 and Table 11 show the results of the ANOVA analysis of the association between enrollment and accreditation. Table 10 shows a p-value of 0.000 rounded to three decimal places, which indicates that the difference within groups is statistically smaller than the difference between groups. In other words, when the schools are grouped by accreditation type, there are statistically significant differences among the average enrollment of each accreditation type. Table 11 shows the post hoc Tukey Honestly Significant Difference test for the ANOVA of enrollment data, and that test illustrates more specific information about the mean differences of enrollment when the schools are grouped by accreditation type. Table 11 shows that AACSB schools have, on average, a higher enrollment of 2,547.8 compared to ACBSP, and that difference is statistically significant with a p-value of 0.000 rounded to three decimal places. The AACSB schools in this study have an average enrollment that is 2,409.9 higher than the IACBE schools in the study, but that difference is not statistically significant given that the p-value is 0.145. The AACSB schools have an average enrollment that is 3,100.2 higher than the schools in this sample with no accreditation, and the difference is statistically significant with a p-value of 0.000. The ACBSP schools have an enrollment that is 137.8 lower than the IACBE schools in this study, but the difference is not statistically significant with a p-value of 0.999. Furthermore, ACBSP schools are not statistically different than schools with no accreditation in terms of enrollment given the p-value of 0.680. Lastly, IACBE schools are not statistically different in terms of enrollment than schools with no accreditation given a p-value of 0.924.

Table 10: Analysis of Variance (ANOVA) of Enrollment by Accreditation Type Descriptive Statistics

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	128362117.4	3	42787372.48	12.992	0.000
Within Groups	247009942	75	3293465.89		
Total	375372059.4	78			

Table 11: Post Hoc Test for ANOVA of Enrollment Data - Tukey Honestly Significant Difference

(I) Accreditation		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
AACSB	ACBSP	2547.77*	517.037	0.000	1189.21	3906.32
	IACBE	2409.92	1116.927	0.145	-524.89	5344.74
	None	3100.24*	525.714	0.000	1718.89	4481.60
ACBSP	AACSB	-2547.77*	517.037	0.000	-3906.32	-1189.21
	IACBE	-137.84	1102.473	0.999	-3034.68	2758.99
	None	552.48	494.263	0.680	-746.24	1851.19
IACBE	AACSB	-2409.92	1116.927	0.145	-5344.74	524.89
	ACBSP	137.85	1102.473	0.999	-2758.99	3034.68
	None	690.32	1106.568	0.924	-2217.28	3597.92
None	AACSB	-3100.24*	525.714	0.000	-4481.60	-1718.89
	ACBSP	-552.48	494.263	0.680	-1851.19	746.24
	IACBE	-690.32	1106.568	0.924	-3597.92	2217.28

*Statistically significant at the 1% level

5. CONCLUSION AND IMPLICATIONS

5.1. AACSB Accreditation Associated with Stronger Rankings and Higher Enrollment

The AACSB accreditation is associated with better rankings and higher enrollment compared to schools with the ACBSP accreditation and compared to schools with no accreditation. This finding of association is a critical step in assessing the causative factors that HBCUs should consider in order to improve rankings and increase enrollment. Thus, obtaining the AACSB could be an important consideration for HBCUs that wish to enhance rankings and increase enrollment. This study will not explore a detailed assessment of causation, and that is in fact a limitation of this study and an opportunity for future research. Nonetheless, the statistical relationship between AACSB accreditation and better rankings and higher enrollment is an important empirical finding for HBCU administrators.

5.2. ACBSP is Not a Significant Factor in Rankings or Enrollment

The fact that there is not a significant correlation between ACBSP accreditation and ranking or enrollment indicates that HBCU administrators should be cautious about seeking ACBSP accreditation in order to improve rankings and increase enrollment. The conclusion here is more definitive and useful than the conclusion with AACSB. The empirical results of this study demonstrate that obtaining the ACBSP accreditation will not cause a statistically significant change in rankings or enrollment because there is not even a statistical association in these variables. HBCU administrators may wish to consider other benefits of obtaining ACBSP accreditation, but they should not expect improved rankings or improved enrollment.

5.3. IACBE Association with Rankings and Enrollment Inconclusive

The findings of IACBE association with rankings and enrollment seem to be inconclusive. The interesting finding in the data is that there is no statistical difference in rankings or enrollment between AACSB and IACBE; thus, it may be true that AACSB accreditation is not superior to IACBE in these two factors. It seems that the small number of IACBE schools is driving the inconclusive results; there are only three IACBE schools in this study: Hampton University, Stillman College, and Edward Waters College. Hampton is rated highly, and the other two are ranked near the bottom. Similarly, Hampton and Edward Waters have enrollments above 3,000 students, and Stillman has enrollment of 712. The drastic differences among the small number of IACBE schools in this study complicate the strength of conclusions. While this study does not provide any conclusive evidence that IACBE accreditation will improve rankings and enrollment, it could be argued that a larger sample could show statistical merit in the IACBE accreditation.

5.4. Limitations and Future Research Opportunities

The key limitation in this research centers on the question of causation. While there is a correlation between AACSB accreditation and rankings and enrollment, there are additional steps required to prove that changes in accreditation will

lead to changes in rankings and enrollment. This study is specifically limited because the rankings relate to the entire institution and not specifically to a business program at the institution. While it is possible to find ranking literature on business programs and those of HBCUs, the strength and prestige of the *U.S. News and World Report* rankings are strong test variables, so they were used in this study. Future research might be able to piece together sources that paint a reliable picture solely of the strength of HBCU business programs.

The additional limitation discussed above is the small sample size of IACBE schools. The three IACBE schools have drastically different rankings and enrollments; thus, this study cannot conclude that there are statistical differences between IACBE schools and AACSB schools, nor can it conclude that there are differences between IACBE programs and programs with ACBSP or no accreditation. One way to address this issue could be to conduct research on all schools with business programs ranked in the *U.S. New and World Report*. While those results would not be specific to HBCUs, they could shed light on the overall strength of IACBE accreditation, which might in turn illuminate the IACBE results of this study.

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