5-1-1998

An investigation of the correlation between total SAT test scores and baccalaureate grade point averages of students for the 1995-1997 academic years

Jennifer Y. Ware
Clark Atlanta University

Follow this and additional works at: http://digitalcommons.auctr.edu/dissertations
Part of the Education Commons, and the Psychology Commons

Recommended Citation
AN INVESTIGATION OF THE CORRELATION BETWEEN TOTAL SAT TEST SCORES AND BACCALAUREATE GRADE POINT AVERAGES OF STUDENTS FOR THE 1995-1997 ACADEMIC YEARS.

A THESIS
SUBMITTED FOR APPROVAL TO THE FACULTY OF
CLARK ATLANTA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS.

BY
JENNIFER Y. WARE

DEPARTMENT OF COUNSELING AND PSYCHOLOGICAL SERVICES

ATLANTA, GEORGIA
MAY, 1998
The purpose of this study was to examine the correlation between three groups of students' total SAT Test scores and their baccalaureate grade-point averages. The population consisted of baccalaureate African-American students for the academic years of 1995-1998. Their chronological ages ranged from 18-22. A fairly representative sample was drawn from each of these classes. The sizes of the sample were 10, 16, 24, respectively. The research method was historical utilizing the Spearman Rank-Difference method of correlation, because it seemed to be appropriate for the study. Correlation coefficients were derived, between the total SAT Test scores submitted with applications for admission and the baccalaureate grade-point averages, for the 1995, 1996, and 1997 classes. The coefficients were .1182, .6614, and .5773. The latter two coefficients were statistically significant at the .01 and .05 levels of confidence. Because of the interest in using these results for predictive purposes, the coefficients of alienation were found to be .9866, .5625, and .6667, respectively.
ACKNOWLEDGMENTS

The writer of this paper acknowledges the guidance of Robert Smothers, Ph.D., throughout this graduate experience at Clark Atlanta University in the department of Counseling and Psychological Services. The support of my mom, Mary A. Ware, Ed.D. for always encouraging me to work hard, persistently, and motivating me to do my best. The support of my fiancé, Christopher McCrary, for keeping me mentally stable throughout graduate school and the completion of my master’s thesis. Special thanks to Mr. Samuel Baldwin, Office of Institutional Research.
### TABLE OF CONTENTS

**ACKNOWLEDGMENTS** .................................................. ii
**LIST OF TABLES** .................................................... iv

**CHAPTERS**

**I. INTRODUCTION** .................................................. 1
  - Statement of Problem ............................................. 2
  - Purpose of the Study ............................................ 3
  - Significance of the Study ....................................... 3
  - Assumptions ....................................................... 3
  - Limitations ...................................................... 4
  - Definitions ...................................................... 5

**II. REVIEW OF RELATED LITERATURE** .................................. 6
  - Critics Opinions of the use of SAT scores ...................... 7
  - Validity of African-American standardized tests scores ...... 8
  - Historical roles of Black colleges and universities .......... 12
  - University Locale ............................................... 12
  - University Admissions Standards ................................ 14

**III. METHODOLOGY** .................................................. 15
  - Purpose .......................................................... 15
  - Methodology .................................................... 15
  - Analysis of Data ................................................ 16

**IV. FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS** 21
  - Findings ...................................................... 21
  - Conclusions ................................................... 22
  - Implications .................................................. 22
  - Recommendations .............................................. 23
  - Discussion .................................................... 24

**Bibliography** ........................................................ 26
**LIST OF TABLES**

| TABLE 1. | Total SAT Test scores and grade point averages of the 1995 Baccalaureate class | 16 |
| TABLE 2. | Total SAT Test scores and grade point averages of the 1996 Baccalaureate class | 17 |
| TABLE 3. | Total SAT Test scores and grade point averages of the 1997 Baccalaureate class | 18 |
| TABLE 4. | Summary of Findings | 19 |
| TABLE 5. | Coefficients of Alienation | 20 |
CHAPTER I
INTRODUCTION

Traditional wisdom has held that the Scholastic Aptitude Test (SAT) added considerably to the success of school performance when used to predict college grade-point average. More recently, many have carefully analyzed the use of the SAT in college admissions' decisions. They criticize the alleged redundancy of the test, claiming that it adds very little to the prediction of first-year college grades. Critics point out the biases of the test, stating that its use results in the exclusion of members of certain groups, particularly females and ethnic minorities, whose lower scores cause under-prediction of college success.

There are some smaller institutions that function well without the use of the SAT. They use other criteria to determine admissions and predict success. Larger institutions, that must process large quantities of data, have found it difficult to discover some valid bases for admissions that are practical and superior alternative to the combination of high school performance and traditional admissions tests used to predict student achievement. In most institutions, the SAT or other admissions tests are not the only criteria used for making admissions' decisions.

All institutions of higher learning have some criteria for admission. Their admission policies place them in categories such as competitive, moderately competitive, and highly competitive. These categories are used to help set the admission standards and determine the status of the institutions. Admittance reforms have been put in place that are designed to raise the admissions standards and enable all institutions to be more selective. Selectivity forces the elementary schools and secondary institutions to better prepare students for
academic success. Similarly, the outcries from businesses and industries, regarding poor preparation of students entering the workforce, impact all learning institutions and force them to upgrade and improve curricula.

High school students are knowledgeable about the SAT. They get information from their peers and high school counselors who encourage them to do well on the examination so they can be admitted to the best schools or the schools of their choice. Many things are done to prepare students to take the SAT. Among them are classroom preparation, taking the PSAT, which is a practice SAT, and parents financing specialized SAT preparation classes. Students can take the SAT many times. The highest score is accepted.

The test is used as part of the criteria for admissions. Many institutions accept minimum scores for admission. For example, more competitive institutions may require a combined score of at least 1100 SAT while a less competitive school may accept students with a combined SAT score of 800. Some schools do not require the submission of these test scores. Because scores on the SAT are prominently used in admissions decisions, the question becomes what are schools looking for with the submission of these scores that could not be found in students' high school transcripts? Are these scores used as eliminators for admissions or do the institutions use them to predict how successful these students will be during their college careers?

**Statement of the Problem**

The problem was to investigate the predictive validity of combined SAT test scores on college graduates grade point averages.
Purpose of the Study

The purpose of this study was to critically analyze the correlation between SAT scores students submitted on their admissions applications and their grade point averages when they graduated from college.

Significance of Study

This study is significant because of the information provided. This information consists of empirical and valid data. The Office of Admissions and Registrar can use these data to justify their criteria for student admission at the undergraduate level. These predictive validating data can be used to establish levels of student successful completion of undergraduate degree programs before these students begin working on their programs. Another benefit these data can be used for the prediction of retention levels of students which is related to the admission issue.

Assumptions

The researcher made the following assumptions in conducting this study:

1. That the students SAT scores are valid.
2. That the basic focus of the undergraduate program will remain relatively stable over long periods of time.
3. That the students admitted to the undergraduate level will continue to be highly motivated to work hard and continue their success rate consistently.
4. That the students admitted have a sufficiently adequate level of intellectual ability to do college level work.

5. That the students will continue to receive appropriate instructions and skills from the university to help assure their successful completion of their programs.

Limitations

The writer recognized certain limitations in performing this study and reminds readers to exercise precautions in generalizing these results to the general population. The limitations are as follows:

1. The data used were historical which is typical of such studies.

2. The writer could not control the sizes of the groups of scores; however, the general population was well defined.

3. The writer makes no claim that these groups of scores represent a normally distributed population of undergraduate students.

4. The test scores were for select groups of students who sought admission to the University.

5. The information granted from the Office of Institutional Research only included the admission test score and GPA at graduation. Other pertinent information such as high school involvement, background, and scholarship information were not assessable.

6. The study will not account for individual differences and motivation of the students.

7. Tracking is limited to students who completed matriculation at the University. This study will not account for students who withdrew due to financial difficulties, poor
academic performance, personal problems, transfers, lack of interest in school, or judicial dismissal.

**Definition of Significant Terms**

The significant terms, used in conducting this study, will be defined to have the meanings below.

*Achievement* - a level of quality and quantity of a student's work brought about by resolve, persistence, and endeavor during a given period.

*Aptitude Test* - a test aimed at predicting a student's later performance in a specific type of behavior.

*Grade point average* - An average composite of all grades earned during a specified period and expressed on a point scale.

*HBCU* - Historically Black Colleges and Universities

*Post-secondary institution* - One that provides schooling beyond high school; colleges, and universities.

*Scholastic Aptitude Test* - a standardized test developed by the Educational Testing Service to measure academic ability.

*Standardized Test* - A test with specified content, prescribed directions for administering and scoring.
CHAPTER II
REVIEW OF RELATED LITERATURE

In a review of the related literature, the writer carefully investigated the significance of the use of Scholastic Aptitude Test scores, as they relate to African-Americans and their usefulness for the admittance of African Americans to colleges and universities. Voluminous amounts of research have been conducted on the cultural biases found from use of the SAT. That could preclude minority students, particularly African Americans, from ascertaining scores comparable or higher than the dominant culture and other minorities. The rationale for choosing this research topic was to examine the research that has been conducted on the SAT, some may show it is culturally biased to women and ethnic groups, in spite of its continued use as a measure of achievement for all groups. Because African American students' SAT scores are generally lower than other groups, the rate of their admission to chosen colleges can be limited. Does a low to moderate score on the SAT mean the students will likely be low to moderate achievers in college? Conversely, does this also mean that students scoring higher than 1000 on the SAT will have high levels achievement in college?

Many institutions begin the admissions process with the calculation of an Admission Index or an Eligibility Index, which is a transformation of a predicted freshman GPA based on a combination of SAT-verbal, SAT-math, and high school rank or GPA. Although the scores on these indexes can be used to flag promising students, all packets are usually considered individually, depending upon the number of required courses taken, and honor
or advanced placement courses taken, grade trends, extracurricular activities and special circumstances. The ultimate goal of the University and College admissions teams is to evaluate student application files and select students who will be successful at their institutions. The definition of success is not operationally defined or qualified.

**Critics' Opinions of the Use of SAT Scores**

There is literature that supports the SAT and other data that found biases and poor predictive validity for the SAT. The SAT is often criticized but it is one of the most widely used Standardized Tests in college admissions across the country. Another criticism of the use of the SAT in admissions predictions is whether the test is really an achievement test with predictive validity. There have been opposing arguments on the issue concerning the use of the SAT in college admissions and its effectiveness. Humphreys (1968) concluded that the SAT cannot predict grades after the freshman year, but a study by Mauguer and Kolmodin (1975) found evidence that the test’s validity is high enough to be of use in predicting how well a typical student would do during the course of his college career. Willingham (1985) found that high school ranks and SAT scores could be used to predict the cumulative GPA about the same as their first year grade-point averages.

While pursuing the question of the SAT test biases, Robert Cameron (1995) of the College Board, presented data from participants in the College Board Validity Study Service and concluded that, although females scored lower than males, the test was a better predictor of college performance for females than for males. Regarding ethnic differences, he found that using the high school record and SAT scores over-predicted achievement for African-
American students. He also pointed out that, on the average, African-American students score approximately 100 points lower than White students. The critics point out that these elements are indicative of test biases resulting in discriminative admissions decisions based on test scores (Cowen and Fiori, 1991). Charles Willie (1985) claims that SAT scores are valid predictors of only the Freshman GPA, especially for minorities. Minorities show substantial improvement from the first to fourth and fifth year’s performance. Neil and Medina (1989) questioned the validity of standardized tests. They stated that certain characteristics of these tests reflect the language, culture, and learning styles of socio-economically advantaged and disadvantaged students. They, therefore, measure race, ethnicity, income, achievement, ability, and skill. Some others believe that the inequalities in high school education, not test biases, are responsible for differential test performance.

**Validity of African-Americans’ Standardized Test Scores**

One study indicated that minorities have improved their overall performance on the standard tests since the 1970s. The first scores were tracked according to race or ethnicity. African-Americans have seen the greatest gains over the years. According to the 1994 profile of the Scholastic Aptitude Test and achievement test takers, African Americans continue to rank low compared to other ethnicities. The National Center for Fair and Open Testing has urged colleges and universities to completely abandon Scholastic Aptitude Test Scores as major criteria in assessing prospective students (Manzo, 1994).

Researchers stress the appropriateness and effectiveness of cognitive variables to
help predict success for colleges. The most reliable predictors of success are non-cognitive variables as predictors of academic success for African-Americans in general. These include: positive self-concept, realistic self appraisal, understanding of and an ability to deal with racism, preference for long-term goals, availability of strong support systems, successful leadership experiences, and demonstrated community service (Johnson, 1993).

If non-cognitive variables are so important to the success of African-Americans and the Scholastic Aptitude Test only measures cognitive variables, how valid is the test for African-Americans? Moffat (1993) conducted a study of five hundred and seventy people, three hundred and nine men, and two hundred and sixty-one women aged sixteen to sixty years, who attended a regionally accredited, southern church-related college. The research was conducted to determine whether or not the Scholastic Aptitude Test is a valid predictor of academic success for traditional and non traditional students. The data collected included grade-point average, gender, race, number of semesters enrolled, full- or part-time status, cumulative SAT scores, and mathematics and verbal SAT scores. The researcher concludes that the SAT is a valid predictor of academic success for Caucasian students under the age of thirty years, and that it is not a valid predictor for African-Americans of any age (Moffat, 1993). This researcher provides data which suggested appropriate use for the SAT as a predictive tool.

Also, this study identified how minorities have improved their performance on standard tests since the 1970s. The average verbal score of three hundred and fifty-two persons in 1993, was twenty points higher than in 1976. They have gained thirty-four points, on an average, in math and these scores held at three hundred and eighty-eight in
1994. But, according to the 1994 profile of the SAT and achievement test takers, although the scores have risen marginally, African-Americans continue to rank low compared to other ethnicities.

National Education Goals have been set-up to assist in researching the trends of students, especially African-Americans and how they compare with other minorities. Researchers of the test and school curricula pointed out that looking at achievement tests and the scholastic aptitude test should not be the focus. African-Americans are performing lower at the high school level, in comparison to the dominant culture, and they are not taking classes that are equivalent to the level of the dominant culture. The minority education agenda, according to research, should be the elimination of tracking and the Scholastic Aptitude Test scores, and the identification of instructional opportunities that give minority students fair chances at meeting world class standards (Warren, 1993).

Researchers, along with the general population, want to fully understand why these scores drop or remain the same for African-American students. Statistical data can be used to help answer this question. Research was conducted on African-American males at the University of South Carolina. It considered the most prevalent factors in the academic success of African-American males. It focused on the SAT mathematics, verbal scores and high school rank as the independent and cognitive variables. Self-esteem, academic self-concept, religiosity, African self-consciousness, and mother's educational level were the independent non-cognitive variables. The research consisted of two hundred and thirty-nine African-American male students enrolled in 1992. The results indicate that combinations are of both cognitive and non cognitive variables are important to the success of African-
Americans. Although colleges and universities’ suppositions are that only rank, academic self-concept and, SAT verbal scores have significant positive relationships with academic success. African-American self-consciousness has a significant negative relationship with academic success. These results were examined and measured in terms of Black Identity models and the need for multi-cultural curricula. African-Americans have shown improvement on the SAT, but they still remain significantly lower than Whites and Asians. For example, Whites scored an average of 441 and 489 on the verbal and mathematics sections, respectively, on the SAT. African-Americans, however, scored an average of 351 and 385 on the verbal and mathematics sections, respectively, on the same index. The research also pointed out that the difference between the two groups’ mean scores does not necessarily indicate that one group has any more intelligence than the other. Researchers stress the appropriateness and the effectiveness of cognitive variables to help predict success for colleges. But, the most reliable predictors of success for African-Americans are non-cognitive variables or affective variables as predictors of academic success for African-Americans in general.

According to the 1996 Digest of Education Statistics, African-Americans have scored below all other racial groups on the SAT since 1975. Each score category is based on a range of 200 to 800. With the average for African-American students remaining under 400 in verbal and mathematical scores, it is obvious that these students are deficient nationally. The National Center for Fair & Open Testing concluded that, although the gap in scores for males and females has narrowed by six points since 1987, the test is still unfair to women and minorities. Colleges are encouraged to abandon SAT scores as major criteria in assessing
applicants. To date, about 190 four-year institutions have SAT-optional admissions. The College Board’s survey of test-takers showed that students are taking more academic courses than previously. This is allowing admissions committees to make decisions based on the academic course patterns and subjective criteria.

African-American youth have been described as an endangered species. In response to this national crisis, many educators, community activists, and policy makers have come together to attempt to assess the magnitude of this trend. Of particular concern is the impact that the sociological phenomena surrounding African-Americans have on their interests in and or abilities to acquire a good education. In 1980, 28 percent of all African-American students between 18 and 24 were enrolled in college. Unfortunately, this number dropped to 19 percent by 1982. Recent trends seem to indicate that of those who attend college, as few as 12 percent actually complete the baccalaureate degree, and even fewer graduate from professional and graduate schools. This should alert educators that something is wrong with the educational system when the high school graduation rate increases, yet these students do not aspire to higher levels of education. This brings us to the importance of Historically Black Colleges and Universities’ roles in motivating and educating African-American students.

**Historical Roles of Black Colleges and Universities**

Historically Black Colleges and Universities (HBCUs) are post-secondary academic institutions, founded before 1964 whose educational missions have historically been the education of Black Americans. Located primarily in the Southern United States, there are
177 HCBUs in existence. They consist of a mixture of community and junior colleges, four-year colleges and universities, and public and private institutions. In comparison to other institutions, HBCUs are often under funded. HBCUs enroll less than 20 percent of African American undergraduates, but award one-third of all the bachelors degrees and a significant number of advanced degrees earned by African-Americans (HBCU Homepage).

Locale

This study was conducted at a comprehensive, private and urban coeducational liberal arts institution of higher education with a predominately African-American heritage. It is located in a large city. It is a non-profit school affiliated with the United Methodist Church. It was formed by the consolidation of a graduate school and an undergraduate institution. This new educational institution which unites the strengths of both parent institutions, is uniquely positioned to respond to the challenges facing America now and in the future. The mission of the university is to produce graduates who have met standards of excellence in contemporary higher education and who are educated to be creative thinkers and problem-solvers while keeping their perspective on the world and its people. Money Magazine ranked the University as one of the top five educational buys among historically black colleges and universities in its 1997 guide.

The University is dedicated to preserving and disseminating the heritage of black people. A people’s growth and survival are predicated upon self-knowledge and self-respect, which are rooted in the knowledge of its history. Serving a predominately African-American population, the university must serve as a disseminator of the black heritage and the black
University Admission Standards

The University admission is based solely on the academic qualifications of the applicant. The decisions are made without regard to race, creed, or other considerations irrelevant to aptitude. The admissions committee is composed of representatives from the faculty, administration, staff, and student body. This committee considers high school record, college entrance test scores, SAT and ACT, letters of recommendation, and students’ statement about themselves (CAU Undergraduate Catalog 1995-1998). The general requirements are based on the following structure:

♦ Required minimum test score on the SAT or the American College Test (ACT). The typical minimum score on the SAT on 800, and 15 on the ACT.
♦ A minimum high school grade point average 4.00 scale.
♦ Acceptable recommendations
♦ Applicants statement of purpose

It is possible to be admitted to The University on a probationary status. Probationary admission (conditional admission) may be granted to applicants who do not meet minimum SAT or ACT score requirements but have minimum GPA requirements and acceptable letters of recommendation. Conditional Admission is considered for applicants who demonstrate potential for college. Students admitted on condition will have one academic year to achieve a minimum 2.0 GPA. The University recognizes that admissions criteria must be flexible and therefore considers an applicant whose preparation varies from this general distribution.
Purpose of the Study

The purpose of this study is to determine whether undergraduate students admitted with high admissions test scores perform better academically than undergraduate students with lower admission test scores. More specifically, this study seeks the answer to the following question: Do undergraduate students admitted to Clark Atlanta University with high admission test scores perform significantly better than undergraduate students admitted with lower admission test scores?

Methodology

The methodology used was historical in that data were gathered over a period of three years, namely, 1995, 1996, and 1997. The Pearson Product-Moment correlational technique was used to analyze the data.

Population

The population consisted of three classes of graduation from the university during the academic years of 1995 to 1997. All students were classified as undergraduates. The majority of these persons were African-Americans. Their general level of intellectual capability may be classified as average and above average. Their socio-economic levels ranged from low- to middle class. Their chronological ages ranged from approximately 18-22.
Sample

A sample of subjects was drawn from each of these three classes. The composition of each sample consisted of 10, 1995 graduates, 14, 1996 graduates, and 24, 1997 graduates. The writer made no claim to the representativeness of any of these samples.

Analysis of Data

The total SAT Test scores and the final grade point averages of the baccalaureate degree recipients were correlated. The Spearman Brown Rank Difference Coefficients were calculated for each group. This statistical technique was judged to be approximate because of the nature of the two sets of data. The .05 level of confidence was used as the decision rule.

The analysis of each set of data is presented separately, in the tabular form, in the following sections. Table one contains the SAT Test score and grade-point averages of the sample of students who graduated in 1995.

TABLE 1.

Total SAT Test scores and grade point averages of the 1995 Baccalaureate class.

<table>
<thead>
<tr>
<th>Student No.</th>
<th>SAT</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>870</td>
<td>3.043</td>
</tr>
<tr>
<td>2.</td>
<td>690</td>
<td>3.198</td>
</tr>
<tr>
<td>3.</td>
<td>580</td>
<td>2.634</td>
</tr>
<tr>
<td>4.</td>
<td>860</td>
<td>2.532</td>
</tr>
<tr>
<td>5.</td>
<td>790</td>
<td>2.765</td>
</tr>
</tbody>
</table>
The total SAT Test scores ranged from 690 to 920 - and the grade point averages ranged from 2.532 to 3.927. The most salient feature of these data is the lack of a consistent pattern between the magnitude of SAT scores and grade point averages, e.g., the student that had the lowest total SAT score had a relatively high grade point average at graduation.

Table two contains the total SAT Test scores and grade point averages for the baccalaureate students in 1996.

**TABLE 2.**

**Total SAT Test scores and grade point averages of the 1996 Baccalaureate class**

<table>
<thead>
<tr>
<th>Type of Data</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Student no.</th>
<th>SAT</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>670</td>
<td>2.231</td>
</tr>
<tr>
<td>2.</td>
<td>680</td>
<td>2.336</td>
</tr>
<tr>
<td>3.</td>
<td>890</td>
<td>3.458</td>
</tr>
<tr>
<td>4.</td>
<td>720</td>
<td>3.762</td>
</tr>
<tr>
<td>5.</td>
<td>610</td>
<td>2.833</td>
</tr>
<tr>
<td>6.</td>
<td>850</td>
<td>3.195</td>
</tr>
<tr>
<td>7.</td>
<td>640</td>
<td>2.800</td>
</tr>
<tr>
<td>8.</td>
<td>790</td>
<td>2.924</td>
</tr>
<tr>
<td>9.</td>
<td>960</td>
<td>3.354</td>
</tr>
<tr>
<td>10.</td>
<td>1070</td>
<td>2.886</td>
</tr>
<tr>
<td>11.</td>
<td>1040</td>
<td>3.813</td>
</tr>
<tr>
<td>12.</td>
<td>630</td>
<td>2.632</td>
</tr>
<tr>
<td>13.</td>
<td>750</td>
<td>3.328</td>
</tr>
</tbody>
</table>
The most salient features of the data, in Table 3, is the lack of a consistent pattern between the magnitude of the total SAT scores and the baccalaureate grade point averages of the 1996 class. For example, the highest total score SAT score is opposite one of relatively low grade point averages. Other observations are the middle ranges between the highest and lowest SAT test scores used the grade point averages, respectively.

Table three contains the total SAT Test scores and the grade point averages of the baccalaureate students in 1997.

### TABLE 3.

**Total SAT Test scores and grade point averages of the 1997 Baccalaureate class**

<table>
<thead>
<tr>
<th>Student No.</th>
<th>SAT</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>640</td>
<td>2.634</td>
</tr>
<tr>
<td>2.</td>
<td>730</td>
<td>3.075</td>
</tr>
<tr>
<td>3.</td>
<td>830</td>
<td>3.159</td>
</tr>
<tr>
<td>4.</td>
<td>720</td>
<td>2.921</td>
</tr>
<tr>
<td>5.</td>
<td>880</td>
<td>2.886</td>
</tr>
<tr>
<td>6.</td>
<td>780</td>
<td>2.875</td>
</tr>
<tr>
<td>7.</td>
<td>520</td>
<td>2.598</td>
</tr>
<tr>
<td>8.</td>
<td>570</td>
<td>2.265</td>
</tr>
<tr>
<td>9.</td>
<td>930</td>
<td>3.008</td>
</tr>
<tr>
<td>10.</td>
<td>880</td>
<td>2.851</td>
</tr>
<tr>
<td>11.</td>
<td>1060</td>
<td>2.919</td>
</tr>
<tr>
<td>12.</td>
<td>850</td>
<td>2.877</td>
</tr>
<tr>
<td>13.</td>
<td>450</td>
<td>2.729</td>
</tr>
</tbody>
</table>
Table four contains a summary of the findings.

**TABLE 4.**

**Summary of Findings**

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>ITEMS</th>
<th>RHO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>10</td>
<td>Total SAT with GPA</td>
<td>.1182</td>
</tr>
<tr>
<td>1996</td>
<td>14</td>
<td>Total SAT with GPA</td>
<td>.6614*</td>
</tr>
<tr>
<td>1997</td>
<td>24</td>
<td>Total SAT with GPA</td>
<td>.5773**</td>
</tr>
</tbody>
</table>

* PL .05  
** PL .01

The Spearman rank-order correlation of .6614, for the 1996 graduates, was statistically significant beyond the .05 level of confidence. A similar correlation of .5573, for the 1997 graduates, statistically significant beyond the .01 level of confidence.

The writer determined the coefficient of alienation for each correlation coefficient because of her interest in establishing predictive validity. The coefficients of alienation are presented in table 5.
Table five contains the coefficients of Alienation.

**TABLE 5.**

**Coefficients of Alienation**

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Rank Difference</th>
<th>Alienation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>10</td>
<td>.1182</td>
<td>.9860</td>
</tr>
<tr>
<td>1996</td>
<td>14</td>
<td>.6614</td>
<td>.5626</td>
</tr>
<tr>
<td>1997</td>
<td>24</td>
<td>.5773</td>
<td>.6667</td>
</tr>
</tbody>
</table>

Although statistically significant correlation coefficients were found for the 1996 and 1997 classes, the coefficients of alienation were .5626 and .6667, respectively. This means that accurate predictions could not be made because too much of the predictive variables is not used in the predictions.
CHAPTER IV
FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Recapitulation of Research Design

Purpose. The purpose of this investigation was to determine the relationship between the SAT total test scores when students entered the University and their grade point averages when they graduated with a baccalaureate degree. More specifically, the writer wanted to determine the predictive validity between an admission criterion, namely, applicants' total SAT test scores and a success criterion, namely students' grade point averages at the completion of the baccalaureate degree program.


Samples. The samples consisted of 10 students for the 1995 class; fourteen for the 1996 class; and twenty-four for the 1997 class.

Methodology. The Spearman rank-difference correlational research technique was used to analyze the data. Also, a historical approach was used because the data were taken over a period of three classes that had graduated.

Findings

The findings derived from the data obtained from this study were as follows;

1. A Spearman rank difference correlation coefficient of .1182 was found between the SAT total test scores and the grade point averages for the baccalaureate class of 1995.
2. A similar type of correlation coefficient of .6614 was found for the baccalaureate class...
of 1996.

3. Another similar type of correlation coefficient of .5773 was found for the baccalaureate class of 1997.

Conclusion

The findings derived from a careful analysis of the data obtained from this study seem to warrant the following conclusions:

1. A real positive correlation existed between one of the admissions criterion, namely, the total SAT test scores, and the grade point averages of the baccalaureate class of 1996.

2. A similar positive correlation existed between the total SAT test scores, used as one of the admissions criteria, and the grade point averages of the baccalaureate class of 1997.

3. No statistically significant correlation existed between the total SAT test scores, used as an alienation criteria, and the grade point averages of the baccalaureate class of 1955.

Implications

The conclusions, drawn from the findings of this study, seem to warrant the following implications:

1. There are sufficient similarities between what the SAT Test measures and what the undergraduate curricula provides to warrant the use of the SAT Test as
a criterion of admissions to the University.

2. That the statistically significant correlations found between the total SAT Test scores and the grade point averages of the baccalaureates of 1996 and 1997 may reflect recent revisions of the content, normalization, and standardization of the SAT Test to make it more appropriate for African-American students.

3. That the curriculum may have been modified and up-dated to reflect the effects of newer and more relevant knowledge students are learning.

4. That teachers may have changed their teaching styles and the effects may be being manifested in students performance on the SAT and in baccalaureate degree programs.

**Recommendations**

The implications, inherent in the conclusions drawn from the findings of this study, seem to warrant the following recommendations:

1. That more carefully designed research studies be made to check the empirical validity of the correlation between students SAT Test scores and baccalaureate degree grade point averages.

2. That such studies cover wider spans of time.

3. That more careful analysis be made of criteria instruments’ content and curricular content of baccalaureate degree programs to determine their congruency.
Discussion

Many African-American students want to go to college after high school. Some African-American students become side tracked. For them college is not the next step. However, those who wish to continue may find college selection stressful and time consuming in light of their SAT results which may determine the type of post secondary institution they select by limiting their choices. Since all institutions want students to reach their maximum potential and succeed, a base score is used to accept or deny entrance to the institution.

Much research supports the concern that the SAT does not accurately predict the college achievement of African American students. We must then question why it is used. The data collected for this study show that although there is a typical minimum score for admission, a majority of the students admitted to the university have scored far below that mark. The students that have been admitted with combined scores below 800, have successfully matriculated through The University with grades similar to those admitted with combined scores of 800 and above. Did the scores accurately predict the student success? A high admission test score would ideally suggest that the student will excel at the institution. Conversely, a lower admission score would equate to lower achievement and possibly drop out.

As we pointed out previously, the SAT test has been criticized because it may discriminate unfairly against minority groups within a culture. Test developers have responded to this criticism by constructing tests that purport to be “Culture-Fair,” which means that words and facts that are culturally linked have been eliminated. Consequently, most of these tests do not require the subjects to use language. Although the culture-fair
testing movement has been gaining increasing favor by educators, there is some caution in accepting a culture fair test. For example, a growing body of evidence suggests that verbal test may actually be more culture-fair than non verbal test. Also, some psychologists and educators have argued that it is meaningless to construct tests that eliminate differences between groups, if there are true differences (Borg and Gall, 1989).

What implications does this have for African American student admission consideration? Admissions should be SAT-optional at schools that are considered small and have the power to make decisions based on the students complete file. There needs to be greater emphasis placed on the student profile, community involvement, leadership potential, and high school course enrollment. An open admission standard would allow students to have the opportunity or a chance in higher education. When students cannot perform they are dismissed just as any other student. Historically Black Colleges and Universities provide a more nurturing environment for students who may not have a chance at predominately white institutions. The population is generally smaller and instruction is more intimate. These factors can help students build confidence and succeed.
BIBLIOGRAPHY


Critical Comparisons of American Colleges and Universities/ In a nutshell. (World Wide Web, prepared July 1997).


Historically Black Colleges and Universities Homepage.


The Digest of Education Statistics 1996/ Table 126 (World Wide Web).
