This study looked at the graduation rates of an urban, historically black, comprehensive community college to compare success rates of students who took a remediation course with those students who took no remediation courses. Data were collected from 659 first time freshman enrolled at Bishop State Community College (AL). Chi-square tests were conducted and showed that ultimately, there was no significant dependent relationship between enrollment or nonenrollment in math and English remediation courses and program completion. The study also looked at how selected factors such as: (1) admission status; (2) age; (3) ASSET Tests; (4) receipt of financial aid; (5) gender; (6) race; and (7) enrollment status influence grade point averages. Of these factors, it was found that program completion, age of students, and race emerged as statically significant predictors of the cumulative grade point average. Non-traditional aged students and nonminority students received higher grade point averages. Financial aid, enrollment status, and degree completion were not a factor in grade point average. A broad historical overview of the community college system and Black education is included in the paper. (Contains 61 references.) (AF)
Running Head: HISTORICALLY BLACK COMMUNITY COLLEGE

Characteristics of Students who Successfully Complete Two-Year Degree Programs at an Urban, Historically Black, Community College

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Abstract

The purpose of this study was to determine student graduation success or rates most and least likely from an urban, historically Black, comprehensive community college. This study analyzed selected factors such as: (a) admissions status, (b) age, (c) ASSET Tests, (d) receipt of financial aid, (e) gender, (f) race, and (h) enrollment status on the influence of cumulative grade point averages. The problems examined included; (1) determining whether certain demographic or academic variables influence cumulative grade point averages of students enrolled at an urban, historically Black, comprehensive community college; and (2) determining what differences existed, if any, between program completion rates of students who were remediated in English and math and those who were not remediated in English and math.

Sociodemographic and academic data were collected on 659 first time, native freshmen who enrolled at Bishop State Community College in the Fall Quarter, 1995. Transfer students were not included in this study.

Chi-square tests reported no significant difference between program completion rates and students who enrolled or did not enroll in math and English remediation course work. Independent t-tests indicated a statistically significant difference existed in mean cumulative grade point averages for the independent variables race, age of students, and program completion. The t-tests for independent samples indicated no statistically significant difference existed in mean cumulative grade point averages between students who received or did not receive financial aid, admission status, or enrollment status. The
multiple regression analysis revealed that variation in the students cumulative grade point averages were explained by five influence factors which include: (a) program completion, (b) race/ethnicity, (c) assessment test math, (d) age of student, and (e) admission status.
Historically Black Community College

Characteristics of Students who Successfully Complete
Two-Year Degree Programs at an Urban,
Historically Black, Community College

Introduction

On a national level, only one in five students receives an associate's degree at a community college, according to Clifford Adelman, (1992), senior associate in the U.S. Education Department. According to Adelman, people attend community colleges for a myriad of reasons. These reasons include but are not limited to earning a degree, transferring to a four-year institution, personal fulfillment, receiving a certificate, or training for a job. With these goals in mind it is no wonder that community colleges have less credential production or graduation rates.

Background to the Study

There is a significant body of research on the characteristics of students who successfully complete two-year degree programs and technical programs at community colleges (McHewitt, 1993; Clagett, 1993; Larkin, 1993a; & Price, 1993). Within this literature, studies have been conducted on ethnicity and associate degree completion (Blau & Presler-Marshall, 1996; Larkin, 1993a; Dorsey, 1995; Bohr, Pascarella, Nora, & Terenzini, 1995; & Nora 1987). Other studies were conducted to determine the relationship between previous preparation and two-year degree completion (Carnegie Foundation for the Advancement of Teaching, 1989; O’Neil, 1995; Baldwin, 1990; Whitney, 1991; Cervero, 1983; Kupferberg, 1992; Soltz, 1996; Quinn & Haberman, 1986;
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Klein & Grise, 1988; Rogers, 1977; & Schillo, 1990); the relationship between financial
aid and degree completion (Astin, 1973; Baime, 1996; Merritt, 1970; Larkin, 1993a, Noel,
Levitz, Saluri & Associates, 1985); nontraditional students and degree completion (Tyler,
1993; Rendon, 1995; Naretto, 1995; and Cleveland-Innes, 1994); and numerous studies
comparing part-time versus full-time students and degree completion (Garcia, 1994; &
Zwerling, 1980).

Statement of the Problem

The urban comprehensive community college serves a diverse and dynamic student
population. That population is almost always diverse in terms of ethnicity, gender, age,
socioeconomic status and previous educational experience. As well, the population served
by these institutions are student driven in terms of time and place of course offerings. In
other words, these institutions serve students who face not only the demands of urban life
but also of work. If these institutions are going to effectively serve the communities that
define their service area, they must understand the characteristics of the students that
persist to degree completion and those who do not. There are constant public concerns
and scrutiny of higher education institutional effectiveness. With scarce and unpredictable
resources there is fierce competition between higher education institutions for these
resources. Government, communities, business, and industries are all concerned with the
community college’s effectiveness and efficiency. This study will provide information on
institutional academic effectiveness at Bishop State Community College. In view of these
external demands, it is crucial that community colleges predict success of traditional and nontraditional or at-risk students.

**A History of Community Colleges**

Two-year local colleges were born out of demand from the people to establish access to postsecondary education. A number of historians of the two-year college movement characterize the evolution of this unique form of education to a Populist demand for access to knowledge (Witt, Wattenbarger, Gollattscheck, & Suppiger, 1994).

The first colleges in the United States, the colonial colleges, were modeled after English and European colleges, which required three to four years of preparation in a prescribed classical curriculum for the children of the affluent to prepare for leadership; Harvard College and Dartmouth College were two of the first. Courses studied consisted of the following: Trivium (grammar, rhetoric, and logic), a quadrivium (arithmetic, geometry, music, and astronomy), languages (Greek, Latin, French, and German), and divinity.

Community college roots can be traced back before 1900 to the German university. The German university system believed in separating the preparatory years from the later rigorous and specialization years. A student of the German university system, Henry Tappan, president of the University of Michigan from 1825 to 1863, is the first American educator credited with suggesting that the first two years of college be transferred to the secondary schools (Monroe, 1972). Other American educators who believed the first two years of college should be separated from the university include
Historically Black Community College

W.W. Folwell of the University of Minnesota, Edmund J. James of the University of Illinois, and William Rainey Harper of the University of Chicago (Gerber, 1971).

William Rainey Harper founded the University of Chicago with a two-million dollar endowment from John D. Rockefeller. Dr. Harper was a Yale faculty member who held three professorships and was a Biblical scholar. When John D. Rockefeller decided to fund a new college in Chicago, Thomas Goodspeed, of Union Theological Seminary, persuaded Rockefeller to combine the college with the seminary. Harper, also a devout Baptist, helped formulate the ideas for the college and was offered the presidency of the new University of Chicago (Gerber, 1971).

Dr. Harper first purchased a 200,000 volume library from a German university and recruited a stellar faculty. The faculty for the University of Chicago included eight former presidents of colleges and professors from Yale University. By the time the University of Chicago opened its door it was one of the finest facilities in the world. Dr. Harper believed that it was best not to introduce research or advanced studies until the last two years of college. It was his belief that the first two years of study were those of the preparation, development, and exploration phase. At the first meeting of the faculty, Harper outlined a plan for a national system of feeder lower division colleges and an upper division college at the University of Chicago. The lower division colleges of the University of Chicago were the first junior colleges. In 1892 the lower division separated from the upper division and began granting degrees after 1899. In 1885, William Rainey Harper coined the term Junior Colleges for the lower division (Diener, 1986).
In 1901 the first two-year college was founded at Joliet, Illinois. The Upward Extension Law of 1907, passed by the California legislators, allowed high schools to offer two years of postgraduate classes. In 1910, a second two-year college was established in Fresno, California. The two-year college movement was off and running swiftly and sporadically. In 1918, the first national study of two-year colleges was conducted by Floyd McDowell, of Graceland College. The study found these reasons for the expansion: Preparing students to articulate to a four-year university, access to additional education, closer to home, and securing the community needs (Ratcliff, 1987).

Total student enrollment in these two-year junior colleges was more than 20,000 by the year 1922. This represented an average of 150 students per institution and 60 students per private institution. A total of 55,000 students studying a general studies curriculum were enrolled by the end of that decade in junior colleges (Eells, 1931).

In 1922, at the second annual meeting of the American Association of Junior Colleges, a junior college was defined as an institution offering two years of instruction of strictly collegiate grades (Bogue, 1950). The definition of a junior college was expanded, by 1925, so that the junior college could, develop a different type of curriculum suited to the larger and ever changing civic, social, religious, and vocational needs of the entire community in which the college was located. It was understood that in this case, also, the work offered would be on a level appropriate for high school graduates (Cohen & Brawer, 1989).

In 1924, Leonard V. Koos, an expert on the American Junior College movement and a professor of secondary education at the University of Minnesota, conducted the first
comprehensive study of this new kind of college. The report was titled The Commonwealth Fund Investigation. The investigation listed four major missions for junior colleges, intents which still apply in today's modern comprehensive community colleges:

- To provide the first two years of a four-year baccalaureate degree program.
- To provide programs of occupational preparation, which are completed in two years of college.
- To offer programs of continuing education for adults.
- To offer a two-year general college program for those who will not continue to senior college (Conger & Schultz, 1970).

From the beginning, educators such as Koos realized that junior colleges were created to serve a diverse population of students who would require vocational, technical, and continuing education. Their research showed that such institutions were not only practical but necessary to American educational growth. American Junior Colleges might have developed a much narrower focus without these educators’ efforts, literally depriving millions of the opportunities to improve their lives and communities.

Historically Black Colleges and Universities

Historically Black colleges and universities (HBCU's) were founded with one mission in mind, to educate African-Americans. These institutions were created to prepare Black youth for leadership positions and professions in the community. A total of 280,000 students were enrolled in HBCU's in 1994. There was a 26% increase in enrollment experienced by HBCU's between the years of 1976 and 1994. This 26 percent
increase is slightly lower than the overall 30 percent increase that occurred for all higher educational institutions (National Center for Educational Statistics, 1996).

For an institution to qualify as an HBCU the facility must have been established before 1964. There were 109 HBCU's in America in 1993 (Roebuck & Komanduri, 1993, p.3). These institutions can confer bachelor’s degrees or operate as community colleges and are legally authorized by the state in which they are located. As with all institutions, HBCU’s must meet all the standards and criteria established by five nationally recognized accrediting agencies (Myers, 1987).

The historically Black colleges and universities were founded and organized in a socially antagonistic or hostile environment. Historically, HBCU’s have served a unique group of students that have experienced severe educational, legal, political, economic and social restrictions (Thompson, 1978, p. 181).

History of Black Education

The history of Black education is divided into five periods. These periods are the Antebellum Period (pre 1865), the Postbellum Period (1865 to about 1895), the Separate but Equal Period (1896 to 1953), the Desegregation Period (1954 to 1975), and the Modern Period (1975 to present) (Roebuck & Komanduri, 1993).

In 1850, during the Antebellum Period, there were approximately four million Black slaves, approximately one million free Blacks, and twenty-seven million Whites in the United States. Eight million Whites and 92% of Blacks lived in the Southern states side by side (Berlin, 1974, p. 397-98). It was illegal in every state, except Tennessee, to formally educate or instruct slaves prior to the Civil War. The majority of Blacks, more
than 90%, residing in the South could not read or write in 1860 (Foner, 1988, p. 196). In 1783, after the Revolutionary War, free Blacks founded African private schools, African churches, and African fraternal organizations in most states. The purpose was to educate children, worship, and protect themselves. Prior to the civil war, only twenty-eight Black Americans received bachelor's degrees from the United States colleges or universities (Office for the Advancement of Public Black Colleges, 1985).

By the Postbellum Period (1865 to about 1895), five million freed Blacks lived in the United States. The majority of Blacks, approximately 92%, still lived in the Southern states. Many individuals and groups participated in the instruction of the Black Americans. These groups consisted of the Federal Government, Freedman's Bureau, church related missionary societies in the North, and Blacks themselves (Foner, 1988, p. 96-122).

The second Morrill Act of August 30, 1890, stated that universities either admit Blacks to existing colleges or provide separate but equal educational facilities for Blacks. Most Southern and border states chose the separate but equal clauses in the second Morrill Act. Between 1890 and 1907, one public Black college was built per year in each of the 17 Southern states. They were never equal then, nor now, and the HBCU's did not offer bachelor's degrees (Law & Clift, 1981; Blackwell, 1981, 11-13).

Browning and Williams (1978) and Baker (1989) lists three reasons for an explanation as to why HBCU's were created by the Southern states government.

- To access millions of dollars in federal funds for the development of White land-grant institutions.
Historically Black Community College

- To ensure that Black education was primarily vocational training.
- To segregate Black and White learning institutions.

The HBCU's produced many Black leaders, among them Booker T. Washington and W.E.B. DuBois. However, during the Great Depression and World War II, private Black colleges faced a grave financial crisis. The United Negro College Fund (UNCF) organized its first fund raising campaign in 1944, led by Dr. Frederick D. Patterson, the third president of Tuskegee Institute (Roebuck & Komanduri, 1993, p. 35).

The Desegregation Period began in 1954 and lasted till 1975. A very significant ruling for the Plaintiff in Black education is the Brown v. Board of Education of Topeka, Shawnee County, Kansas (1954). The Supreme Court ruled that separate but equal was unconstitutional. The Civil Rights Act of 1964 was the first significant legislation to combat desegregation. Financial aid and supplemental grants were awarded to disadvantaged students through the passing of the Higher Education Act of 1965. During this time, HBCU's experienced a decline in enrollments. Many Black students accepted their grant packages and enrolled in White institutions (Roebuck & Komanduri, 1993, p.39-40).

We are currently in the Modern Period, 1975 to the present. HBCU's were a special target by President Reagan in Executive order 12320 (1986). Title III was established for HBCU's under a reauthorization of the Higher Education Act of 1986. A minimum of $350,000 per eligible HBCU was guaranteed by Congress (Spearman, 1981).

Another critical decision includes the Supreme Court's majority ruling in the 1992, United States v. Fordice. It is the most important ruling affecting Black education since
the 1954 *Brown v. Board of Education*. The Supreme Court ruled that the state of Mississippi still operated dual systems of enrollment with 99% of White students attending the all White institutions and 71% of the Black students attending the three HBCU's. The Supreme Court ruled that the White institutions and the HBCU's had enormous duplication of non liberal arts and science programs, as well as masters and doctorate programs. The court also noted that some of these institutions were only thirty-five miles from each other. Many educators feel that these rulings will possibly merge institutions or close some HBCU's altogether. The *U.S. v. Fordice* ruling will have a significant impact on the higher education institutions in the nineteen Southern and border states (Roebuck & Komanduri, 1993).

Producing the overwhelming majority of outstanding Black leadership certifies HBCU's as a unique national resource. More than 80% of all Black military officers, Black lawyers, and more than 70% of Black elected officials attended an HBCU (Willie & Edmonds, 1978, p. 158).

The number of associate degrees conferred by HBCU's ranged between 2,400 and 2,700 between the school years 1976-77 and 1989-90. Between 1976-77 and 1989-90 the number of associate degrees awarded by HBCU's declined by 10%. A 23% increase was experienced in the same time period for all colleges (National Center for Educational Statistics, 1992, p.8).

Of total overall associate degrees awarded in the United States the HBCU's account for only a small percentage. During 1989-90 only 4.2% of all degrees awarded by HBCU's were associate degrees. This is because not many HBCU's are two-year
institutions. In recent years there has been an increase in the number of associate degrees awarded to women from HBCU’s: from 53 percent to 63 percent between 1976-72 and 1989-90 (National Center for Education Statistics, 1992, p. 8).

The historically Black colleges and universities provide a nurturing learning environment for Blacks, non-traditional Black and White students, students with physical challenges, students with alternate lifestyles, transient students (almost homeless), international students, and many students who would not feel acceptable or comfortable on mainstream campuses. The opportunities for leadership and self esteem building would not be available for these unique groupings of students at any campus other than a historically Black college and university.

Bishop State Community College

Bishop State Community College (BSCC) is a state supported, open admission, comprehensive urban community college dedicated to serving the residents of Mobile and Washington counties in southwest Alabama. The college is a part of the Alabama College System, the state supported network of two-year community, junior, and technical colleges that serve the residents of Alabama. BSCC came into existence in August 1991 when the Alabama State Board of Education, the governing body for all two-year public institutions in the state of Alabama, consolidated the former Bishop State Community College, Carver State Technical College, and Southwest State Technical College. The new consolidated college adheres to the principles and philosophy of accreditation as prescribed by the Commission on Colleges of the Southern Association of Colleges and Schools. BSCC is a member of the Commission on Colleges. The college received its
initial accreditation by the Commission as a consolidated institution on July 19, 1992. BSCC is classified as a Level I institution, offering Associate of Arts, Associate of Science, and Associate of Applied Science Degrees (Bishop State Community College Catalog, 1996-98).

BSCC is a public comprehensive two-year institution with four campuses in Mobile, Alabama. The campuses include the Main Campus, Carver Campus, Southwest Campus, and the Central Campus. BSCC services Mobile and Washington Counties. Therefore, BSCC has established five off campus locations to service the population of students that attend the institution. These off campus locations are located on the following high school campuses: Baker High School, Theodore High School, Mary G. Montgomery High School, Citronelle High School, and Washington County High School. Programs of study are delivered days, nights, and weekends. The majority of students attend the main campus located at 351 North Broad Street, located in downtown Mobile. The main campus serves approximately 3,000 students (Blackledge, 1998).

Bishop State Community College began in the summer of 1927. The college began offering extension courses for in service teachers only during the summer months. This pattern of operation continued for nine years. In September 1936 the Mobile Branch of Alabama State Teachers College of Montgomery was established as an all year two-year college. The college continued its relationship with Alabama State College until 1965 when Bishop State was declared a state junior college by legislative action. This gave the institution its first independent legal status. The college was officially named Mobile State Junior College in November 1965. Several years later, in September 1971, the name of
the college was again changed by the State Legislature to S.D. Bishop State Junior College in honor of its president at that time, Dr. Sanford D. Bishop. Upon the death of Dr. Bishop in 1981, Dr. Joseph Christopher Mitchell was selected to serve as interim president. In September 1981, Dr. Yvonne Kennedy was appointed as the second president of the college. On February 23, 1989, the Alabama State Board of Education designated this institution as Bishop State Community College (Bishop State Community College Catalog, 1998).

The Carver Campus, formerly The Carver State Technical College, was chartered by the Alabama State Legislature on January 1, 1961, as Carver State Vocational Technical School. In 1962, the college was constructed on a nine acre site in the Toulminville area of Mobile, Alabama. The Alabama State Board of Education appointed Mr. Arthur L. Green as the first director in January 1962, and Mr. Earl Roberson as assistant director in the same year. Carver State underwent two additional name changes. In 1976, the Alabama State Board of Education approved the name of Carver State Technical Institute and, in 1978, approved the name of Carver State Technical College. Along with upgrading the institution from a postsecondary technical institute to a technical college, the top administrative official was upgraded from director to president, and additional administrative offices were provided. Office of Academic Dean and Dean of Student Personnel Affairs were added divisions to the college. With the retirement of Mr. Green in 1976, Mr. Earl Roberson was appointed as the president. Carver State was accredited by the Commission on Occupational Education Institutions of the Southern Association of Colleges and Schools in 1975 and was reaffirmed in 1980, 1985, and 1990.
The Institution was officially declared a Historically Black College by the United States Department of Education in August 1987 (Bishop State Community College Catalog, 1998).

The Southwest State Technical College was chartered in November 1950 and was officially opened in May 1954 to provide postsecondary vocational training for students from the greater Mobile Area and surrounding counties. The initial costs of opening the school were paid by the State of Alabama, under the George C. Wallace Trade School Act of 1947, while the original 26 acres on which the campus was located were provided by the City of Mobile. Additional acreage was acquired in 1968, and the campus now occupies 42 acres. The college's first president, Mr. Clay Knight, was appointed on May 15, 1951, and provided leadership from its planning stage until his retirement on July 1, 1974. Mr. Donald S. Jefferies was appointed president at that time, and he served until his retirement in June 1986. Mr. Earl Roberson served as interim president of Southwest State Technical College from July 1986 to March 1987. Dr. Thomas A. Mcleod was appointed as president on March 26, 1987. The first students to graduate from Southwest State Technical College were the 15 members of the practical nursing class who completed their training on January 29, 1954. The Practical Nursing Program had begun at temporary quarters at Mobile Infirmary on January 12, 1953. The first graduation ceremony was held at the First Christian Church of Mobile (Bishop State Community College Catalog, 1998).

Central High School, the pride of the Davis Avenue area in Mobile more than 20 years ago, has been resurrected to become the newest campus of Bishop State Community
Historically Black Community College College. The college held a week of activities November 13-19, 1995, introducing the BSCC's Baker-Gaines Central Campus to the surrounding community and honoring the former high school's rich history. Central High School was closed in 1970 following a mandated desegregation of all public schools in Mobile County. The name of Baker-Gaines is taken from the only two principals of the high school: Dr. B.F. Baker and Mr. J. T. Gaines. Dr. Yvonne Kennedy, president of Bishop State, stated that we are here not only to provide an educational mission for this city but also to serve the community and preserve the heritage of Central High School. Approximately 1,000 students attend the Central Campus. The Central campus houses programs such as physical therapy, funeral services education, nursing, early childhood education day care, as well as a Black History Museum and the 1,000 seat Yvonne Kennedy Auditorium. The site contains more than 129,000 square feet under its roof, and is one of the largest adaptive reuse projects ever completed in the Mobile area. The nursing school is the largest program on the Baker-Gaines Central Campus. The second floor of the building is designated for nursing and is equipped with four labs to accommodate 60 hospital beds and 32 offices. The Central Campus opened its door for classes in the Fall Quarter of 1995 (Jordan, 1996).

In addition to its accreditation by the Southern Association of Colleges and Schools, the institution's programs are accredited or certified by a diverse group of accrediting and licensing agencies. Among these are the Alabama State Board of Education, The National League of Nursing, the Alabama Board of Nursing, the American Board of Funeral Service Education, and the Commission on Accreditation for Physical Therapy Education. Furthermore, more than 70% of the currently enrolled students
Historically Black Community College

responding to the 1993 Student Opinion Survey indicated that their education at Bishop State Community College prepared them effectively for their chosen occupations. Bishop State Community College has a reputation from its students and the community residents as an institution of quality (Blackledge, 1998).

Purpose of Research

The purpose of this research is to determine whether students who have been remediated at an urban, historically Black, comprehensive community college differ significantly in program completion from students who did not attempt remediation courses. Also, to determine whether certain demographic or academic variables influence cumulative grade point averages of students enrolled.

Sampling Procedure

Subjects for this study (n = 659) include all first time, native freshmen who enrolled at BSCC in the Fall Quarter, 1995. Transfer students were not included in this study. The subjects were identified by the mainframe computer system at BSCC. For this study freshman were selected on the basis of time to completion.

Descriptive Statistics of the Sample

Females comprise 55.7% of the sample population and males 44.3%. Frequencies of ethnicity include minority 66.8% and non-minority, or Caucasian, 33.2%. The sample contained 83.6% traditional age students (< 24) and 16.4% nontraditional age (≥25) students. Students admitted with high school diplomas totaled 88.6% of the sample, 11.4% had general equivalency diplomas, and 1% of the students admitted were waived of
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any admitting standard (only a select few of the technical programs such as nursing assistant admit students based on ability to benefit). The sample included 66.9% receiving financial aid and 33.1% receiving no assistance from title IV financial aid. A total of 38.1% of the students enrolled in a remediation course for English, and 61.9% did not enroll in English remediation courses. There were 46.3% of the entering freshmen participating in remedial math class (MTH 090), and 53.7% did not enroll in MTH 090. A total of 26.1% of the students graduated, and 73.9% did not graduate. Table 1 displays a breakdown of the students by method of acceptance, race/ethnicity, enrollment status, gender, age, financial aid status, enrollment in ENG 092, enrollment in MTH 090, and program completion.
Table 1

Distribution of the Sample by Selected Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Native Freshmen Fall Quarter 1995</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td><strong>Admission Status</strong></td>
<td></td>
</tr>
<tr>
<td>GED</td>
<td>74</td>
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<tr>
<td>High School Diploma</td>
<td>577</td>
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<tr>
<td>System Missing</td>
<td>8</td>
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<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>Minority</td>
<td>440</td>
</tr>
<tr>
<td>Non-Minority</td>
<td>219</td>
</tr>
<tr>
<td><strong>Enrollment Status</strong></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>473</td>
</tr>
<tr>
<td>Part-time</td>
<td>186</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>292</td>
</tr>
<tr>
<td>Female</td>
<td>367</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>Traditional ≤ 24</td>
<td>551</td>
</tr>
<tr>
<td>Non-traditional &gt; 25</td>
<td>108</td>
</tr>
<tr>
<td><strong>Financial Aid Status</strong></td>
<td></td>
</tr>
<tr>
<td>Received financial aid</td>
<td>441</td>
</tr>
<tr>
<td>No aid</td>
<td>218</td>
</tr>
<tr>
<td><strong>ENG 092</strong></td>
<td></td>
</tr>
<tr>
<td>Enrolled</td>
<td>251</td>
</tr>
<tr>
<td>Did not enroll</td>
<td>408</td>
</tr>
<tr>
<td><strong>MTH 090</strong></td>
<td></td>
</tr>
<tr>
<td>Enrolled</td>
<td>305</td>
</tr>
<tr>
<td>Did not enroll</td>
<td>354</td>
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<tr>
<td><strong>Program Completion</strong></td>
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<tr>
<td>Graduated</td>
<td>172</td>
</tr>
<tr>
<td>Not graduated</td>
<td>487</td>
</tr>
</tbody>
</table>

Note. n = 659
Research Questions

The following research questions were asked:

Research Question Number One

Research question number one asks: Is there a statistically significant difference between the program completion rates of students at an urban, historically Black, comprehensive community college who enrolled in MTH 090 and ENG 092 remediation courses and those who did not enroll in MTH 090 and ENG 092 remediation courses?

Procedure: Chi-square tests of independence were the statistical procedures utilized to answer Research Question One.

The sample included 659 first-time, native freshmen that enrolled the Fall Quarter of 1995 at Bishop State Community College. A chi-square test of independence was utilized to determine whether a dependent relationship existed between the criterion variable program completion and enrollment in MTH 090 and ENG 092 remediation courses. Results of the chi-square analysis, reported in Table 3, indicated that no significant dependent relationship exists between program completion ($\chi^2 = .215$, 1df, $p = .354$) and enrollment in MTH 090 remediation course. Results of the chi-square analysis, reported in Table 2, indicated that no significant dependent relationship exists between program completion ($\chi^2 = .411$, 1df, $p = .292$) and enrollment in ENG 092 remediation course work.

A summary of descriptive statistics for graduates and nongraduates of students that enrolled or did not enroll in ENG 092 and MTH 090 remediation courses is presented in Table 2 and 3. Of the subjects included in this sample (Table 2) 26.1% graduated, while
73.9% did not graduate. Of the 26.1% that graduated 24.7% of the graduated subjects enrolled in ENG 092 while 27.0% of graduated subjects did not enroll in ENG 092. The 73.9% of subjects that did not graduate, 38.8% did enroll in ENG 092 while 61.2% of the nongraduated students did enroll in ENG 092 remediation course work.

Table 3 displays the results of the MTH 090 remediation course work. Of the 172 students that graduated 44.8% enrolled in MTH 090, while 55.2% did not enroll in MTH 090. Of the 487 students that did not graduate 46.8% enrolled in MTH 090 course work and 53.2% did not enroll in MTH 090 course work.
### Table 2

Chi-Square Tests of Independence for Program Completion and Enrollment in ENGLISH 092 Class

<table>
<thead>
<tr>
<th>Program Completion</th>
<th>ENGLISH 092</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enrolled</td>
<td>Not Enrolled</td>
<td>Total</td>
</tr>
<tr>
<td>Graduated</td>
<td>62</td>
<td>110</td>
<td>172</td>
</tr>
<tr>
<td></td>
<td>65.5</td>
<td>106.5</td>
<td>172.0</td>
</tr>
<tr>
<td>% within program completion</td>
<td>36.0</td>
<td>64.0</td>
<td>100.0</td>
</tr>
<tr>
<td>% within ENG 092</td>
<td>24.7</td>
<td>27.0</td>
<td>26.1</td>
</tr>
<tr>
<td>% of Total</td>
<td>9.4</td>
<td>16.7</td>
<td>26.1</td>
</tr>
<tr>
<td>Not Graduated</td>
<td>189</td>
<td>298</td>
<td>487</td>
</tr>
<tr>
<td></td>
<td>185.5</td>
<td>301.5</td>
<td>487.0</td>
</tr>
<tr>
<td>% within program completion</td>
<td>38.8</td>
<td>61.2</td>
<td>100.0</td>
</tr>
<tr>
<td>% within ENG 092</td>
<td>75.3</td>
<td>73.0</td>
<td>73.9</td>
</tr>
<tr>
<td>% of Total</td>
<td>28.7</td>
<td>45.2</td>
<td>73.9</td>
</tr>
<tr>
<td>Total</td>
<td>251</td>
<td>408</td>
<td>659</td>
</tr>
<tr>
<td></td>
<td>251.0</td>
<td>408.0</td>
<td>659.0</td>
</tr>
<tr>
<td>% within program completion</td>
<td>38.1</td>
<td>61.9</td>
<td>100.0</td>
</tr>
<tr>
<td>% within ENG 092</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>38.1</td>
<td>61.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\( \chi^2 = .411, 1 \text{df}, p = .292 \)

**Note:** \( n = 659 \)
Table 3

Chi-Square Tests of Independence for Program Completion and Enrollment in MATH 090 Class

<table>
<thead>
<tr>
<th>Program Completion</th>
<th>MATH 090</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Enrolled</td>
<td>Not Enrolled</td>
<td>Total</td>
</tr>
<tr>
<td>Graduated</td>
<td></td>
<td>77</td>
<td>95</td>
<td>172</td>
</tr>
<tr>
<td>Count</td>
<td></td>
<td>79.6</td>
<td>92.4</td>
<td>172.0</td>
</tr>
<tr>
<td>Expected count</td>
<td></td>
<td>44.8</td>
<td>55.2</td>
<td>100.0</td>
</tr>
<tr>
<td>% within program completion</td>
<td></td>
<td>25.2</td>
<td>26.8</td>
<td>26.1</td>
</tr>
<tr>
<td>% within MATH 090</td>
<td></td>
<td>11.7</td>
<td>14.4</td>
<td>26.1</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Graduated</td>
<td></td>
<td>228</td>
<td>259</td>
<td>487</td>
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<tr>
<td>Count</td>
<td></td>
<td>225.4</td>
<td>261.6</td>
<td>487.0</td>
</tr>
<tr>
<td>Expected count</td>
<td></td>
<td>46.8</td>
<td>53.2</td>
<td>100.0</td>
</tr>
<tr>
<td>% within program completion</td>
<td></td>
<td>74.8</td>
<td>73.2</td>
<td>73.9</td>
</tr>
<tr>
<td>% within MATH 090</td>
<td></td>
<td>34.6</td>
<td>39.3</td>
<td>73.9</td>
</tr>
<tr>
<td>% of Total</td>
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<td></td>
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<tr>
<td>Total</td>
<td></td>
<td>305</td>
<td>354</td>
<td>659</td>
</tr>
<tr>
<td>Count</td>
<td></td>
<td>305.0</td>
<td>354.0</td>
<td>659.0</td>
</tr>
<tr>
<td>Expected count</td>
<td></td>
<td>46.3</td>
<td>53.7</td>
<td>100.0</td>
</tr>
<tr>
<td>% within program completion</td>
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<td>100.0</td>
<td>100.0</td>
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<tr>
<td>% of Total</td>
<td></td>
<td>46.3</td>
<td>53.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

χ² = .215, 1df, p = .354

Note: n = 659
Research Question Number Two

Research question number two asks: How do selected factors such as: (a) admissions status, (b) age, (c) ASSET Tests, (d) receipt of financial aid, (e) gender, (f) race, and (h) enrollment status influence grade point average of students enrolled at an urban, historically Black, comprehensive community college?

Procedure: Multiple linear regression and independent t-tests were utilized to answer Research Question Four.

Independent t-tests for Cumulative Grade Point Averages

Independent t-tests were conducted on selected factors as follows: (a) admissions status, (b) age, (c) ASSET Tests, (d) receipt of financial aid, (e) gender, (f) race, and (h) enrollment status to determine if a relationship existed between the independent variables and the continuous dependent variable of cumulative grade point average. The results of these independent t-test are presented in Table 4.

Table 4 summarizes independent t-tests for cumulative grade point averages on selected variables. There was a violation of homogeneity for group variances according to the Levene’s Test for Equality of Variances for the independent variables of admission status, age, and program completion. Therefore, t-tests for unequal variances were used to determine if any statistically significant differences existed between groups. There was no statistically significant difference in mean cumulative grade point averages for students entering with a high school diploma ($M = 1.740$) versus a GED Certificate ($M = 1.965$) according to t-tests results, $t(649) = -1.531, p = .129$. However, statistically significant differences existed in mean cumulative grade point averages of age of students and
program completion. Non-traditional aged students received higher grade point averages ($M = 2.289$) than did traditional aged students ($M = 1.870$), $t(657) = -3.446$, $p = .001$. In addition, students that graduated ($M = 2.641$) received higher mean grade point averages than students that did not graduate ($M = 1.690$), $t(657) = 14.532$, $p < .0001$.

No violation of homogeneity was detected according to the Levene’s Test for Equality of Variances and mean cumulative grade point averages for the independent variables of financial aid, race or enrollment status. Therefore, $t$-tests for equal variances were used to determine if any statistically significant differences existed between groups. Students not receiving financial aid ($M = 1.972$) and students receiving financial aid ($M = 1.921$) had no statistically significant difference between mean cumulative grade point averages according to $t$-tests results, $t(657) = .597$, $p = .550$. Additionally, the independent variable of enrollment status yielded no statistically significant difference between mean grade point averages for full-time student enrollment status ($M = 1.942$) compared to part-time student enrollment status ($M = 1.928$), $t(657) = .151$, $p = .880$. However, a significant difference was detected in cumulative grade point averages for the independent variable of race. Non-minority students ($M = 2.163$) received statistically significantly higher grade point averages than did minority students ($M = 1.829$), $t(657) = 4.020$, $p < .0001$. 
Table 4

Independent t-tests for Cumulative Grade Point Average for Selected Independent Variables

<table>
<thead>
<tr>
<th>Variable by Groups</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GED</td>
<td>74</td>
<td>1.740</td>
<td>1.209</td>
<td>-1.531</td>
<td>.129</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>577</td>
<td>1.965</td>
<td>.990</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>551</td>
<td>1.869</td>
<td>.977</td>
<td>-3.446</td>
<td>.001**</td>
</tr>
<tr>
<td>Non-traditional</td>
<td>108</td>
<td>2.289</td>
<td>1.190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Completion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>graduated</td>
<td>172</td>
<td>2.641</td>
<td>.601</td>
<td>14.532</td>
<td>.000***</td>
</tr>
<tr>
<td>non-graduated</td>
<td>487</td>
<td>1.690</td>
<td>1.030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Aid Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Aid</td>
<td>218</td>
<td>1.972</td>
<td>1.085</td>
<td>.597</td>
<td>.550</td>
</tr>
<tr>
<td>Received Aid</td>
<td>441</td>
<td>1.921</td>
<td>.996</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-minority</td>
<td>219</td>
<td>2.163</td>
<td>1.090</td>
<td>4.020</td>
<td>.000***</td>
</tr>
<tr>
<td>Minority</td>
<td>440</td>
<td>1.826</td>
<td>.974</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>473</td>
<td>1.942</td>
<td>1.018</td>
<td>.151</td>
<td>.880</td>
</tr>
<tr>
<td>Part-time</td>
<td>186</td>
<td>1.928</td>
<td>1.049</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.** **p<.01;*** **p<.0001**
Multiple Linear Regression Models Influencing Grade Point Average

This stepwise multiple linear regression analysis was performed to determine whether selected factors such as: (a) admissions status, (b) age, (c) ASSET Tests, (d) receipt of financial aid, (e) gender, (f) race, and (h) enrollment status account for a statistically significant amount of the variation in the grade point average of students enrolled at an urban, historically Black, comprehensive community college. The analysis built five models that accounted for a total of 22.3% of the total variation in the students grade point averages that was explained by five factors which include: (a) program completion, (b) race/ethnicity, (c) assessment test math, (d) age of student, and (e) admission status. After the first step of the regression analysis, the $R^2$ value was .170. This indicated that 17% of the variation in students grade point averages was accounted for by whether the student graduated or did not graduate. The second step of the regression analysis, the $R^2$ value increased to .191. This indicated that students race/ethnicity accounted for a change in the $R^2$ value of .021, which indicates that this variable accounted for an additional 2.1% of the variation in students grade point averages. The third step of the regression analysis, the $R^2$ value increased to .204. This indicated that the students assessment test math score accounted for a change in the $R^2$ value of .013, which indicates that this variable accounted for an additional 1.3% of the variation in students grade point averages. The fourth step of the regression analysis, the $R^2$ value increased to .213. This indicated that the age of the student accounted for a change in the $R^2$ value of .009, which indicates that this variable accounted for an additional .9% of the variation in students grade point averages. After the fifth and final
step of this procedure, the $R^2$ value increased to .223. This indicated that the admission of a student by either a GED or a high school diploma accounted for an additional 1% of the variation explained in the students grade point averages. Tables 5 and 6 summarizes this regression analysis.
Table 5

Multiple Linear Regression Model Summary

<table>
<thead>
<tr>
<th>Variable</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Completion</td>
<td>.412</td>
<td>.170</td>
<td>.168</td>
<td>.9316</td>
</tr>
<tr>
<td>Race</td>
<td>.437</td>
<td>.191</td>
<td>.188</td>
<td>.9204</td>
</tr>
<tr>
<td>Asset Test Math</td>
<td>.452</td>
<td>.204</td>
<td>.200</td>
<td>.9134</td>
</tr>
<tr>
<td>Age</td>
<td>.462</td>
<td>.213</td>
<td>.208</td>
<td>.9090</td>
</tr>
<tr>
<td>Admission Status</td>
<td>.473</td>
<td>.223</td>
<td>.217</td>
<td>.9037</td>
</tr>
</tbody>
</table>

Table 6

Multiple Linear Regression Model Summary Change Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Completion</td>
<td>.170</td>
<td>132.505</td>
<td>1</td>
<td>649</td>
<td>.000</td>
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<tr>
<td>Race</td>
<td>.021</td>
<td>16.994</td>
<td>1</td>
<td>648</td>
<td>.000</td>
</tr>
<tr>
<td>Asset Test Math</td>
<td>.013</td>
<td>10.862</td>
<td>1</td>
<td>647</td>
<td>.001</td>
</tr>
<tr>
<td>Age</td>
<td>.009</td>
<td>7.296</td>
<td>1</td>
<td>646</td>
<td>.007</td>
</tr>
<tr>
<td>Admission Status</td>
<td>.010</td>
<td>8.695</td>
<td>1</td>
<td>645</td>
<td>.004</td>
</tr>
</tbody>
</table>
Research Questions and Findings

**Research Question I.** Is there a statistically significant difference between the program completion rates of students at an urban, historically Black, comprehensive community college who enrolled in math 090 and English 092 remediation courses and those who did not enroll in math 090 and English 092 remediation courses?

No significant dependent relationship existed between enrollment or non-enrollment in math 090 and English 092 remediation courses and program completion. The findings support a study by Jenkins (1991) that a very low correlation was observed between student success in English composition and scores on either the writing or reading section of the ASSET. These findings also validate a study conducted by Gabe (1989) that the policy of mandatory placement in remedial course work based on ASSET scores has questionable predictive validity and is not an accurate assessment for all students.

The findings of no significant dependent relationship between enrollment or non-enrollment in math 090 and English 092 remediation courses and program completion refute the findings by Haeuser (1993), that more than 50% of high risk students were successful in completion of remedial courses and had a higher rate of persistence to degree completion. Haeuser (1993) concluded that completion of developmental education course work increased the likelihood of the student succeeding academically in college level course work. The findings also refute the study conducted by Weissman (1995) that college level courses should not be permitted by skill deficient students before beginning their programs of remediation.
Consideration in these findings should be given to institutional faculty members and the significant role played in the student’s cognitive development. Some faculty members provide more opportunities for tutorial sessions, open classroom discussion, and one on one counseling sessions. Consideration should also be given to the fact that 90% of the population sample receives some type of financial aid. Therefore, one can conclude that this sample is more skewed to the lower end of the socioeconomic status. A lower socioeconomic status would account for the availability of less resources and therefore decrease a student’s opportunity for success.

Research Question II. How do selected factors such as: (a) admissions status, (b) age, (c) ASSET Tests, (d) receipt of financial aid, (e) gender, (f) race, and (h) enrollment status influence grade point average of students enrolled at an urban, historically Black, comprehensive community college?

Of the selected factors, with regards to the independent t-tests performed, program completion, age of students, and race emerged as statistically significant predictors of mean cumulative grade point average. A student must possess a minimum cumulative grade point average of a 2.0 to graduate. Therefore, it is no surprise that the independent variable of program completion would emerge as a statistically significant contributor towards the cumulative grade point average.

Non-traditional aged students received higher cumulative grade point averages as compared to traditional aged students. This finding supports the following two studies regarding non-traditional students. Seidi and Santer (1990) reported that despite barriers and responsibilities to hurdle, adult learners experience academic success. Brickell (1995)
in a study comparing non-traditional aged students and traditional aged student concluded that non-traditional students performed better academically.

Non-minority students received statistically significant higher grade point averages than did minority students. This finding supports the following study by Robertshaw and Wolfe (1982) which was the study's most major finding that community colleges contribute to the students cognitive development, however, benefits to black students were less noticeable than benefits to white students. In the state of Washington studies show that students of color (African-American, Asian, Hispanic, and Native-American), usually begin their collegiate studies at the developmental level (Kerlin, 1993). Findings have also indicated that students of color are progressing slower to advance to collegiate level classes which generate an overall lower level of succeeding for minority students versus non-minority students in the Washington Community College System.

Conclusions

Degree completion and success have been a source of concern by many educators and administrators. There is constant public concerns and scrutiny of higher education institutional effectiveness. With scarce and unpredictable resources there is fierce competition between higher education institutions for these resources. Government, communities, business, and industries are all concerned with the community college's effectiveness and efficiency. Therefore, community colleges are under constant scrutiny to show success and completion rates. Community colleges must justify continued existence
in the competition for funds. In order to do this, community colleges must have a clear perception and understanding of the students that they serve.

Consequently, it may be concluded that the lack of a statistically significant relationship between enrollment or nonenrollment in remedial English or math courses and degree completion justifies questioning whether mandatory remedial placement for students should be implemented as a mandatory policy. Bishop State Community College should, in this researcher’s opinion, make remediation courses optional for the students that it serves. The student should have a choice to remediate or not remediate English and math course work. A program similar to this is the one implemented at Kirkwood Community College. The institution advises students and the student has the freedom to accept or reject the placement advice (Weisman, 1995).
Historically Black Community College

References


Historically Black Community College


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