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## The University of Southern Mississippi

# COMPARATIVE ANALYSIS OF FACTORS RELATED TO COLLEGE SELECTION BY HIGH ACADEMIC ABILITY STUDENTS ATTENDING MISSISSIPPI'S PUBLIC COMMUNITY COLLEGES IN 2003 AND 2011

by

Randall Eugene Lee

Abstract of a Dissertation Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

#### **ABSTRACT**

# COMPARATIVE ANALYSIS OF FACTORS RELATED TO COLLEGE SELECTION BY HIGH ACADEMIC ABILITY STUDENTS ATTENDING MISSISSIPPI'S PUBLIC COMMUNITY COLLEGES IN 2003 AND 2011

## by Randall Eugene Lee

## December 2011

Studies have been conducted about high academic ability students in postsecondary institutions, but rarely has research explored the college choice factors involving high academic ability students who chose to attend a community college. The purpose of this study was to determine the factors related to why high academic ability students chose to attend Mississippi public community colleges. The study also examined the differences in perception of college choice factors among students according to the variables of age, gender, race, full-time or part-time enrollment status, attendance for first-generation students to college, if one or both parents or legal guardians attended the respective community college, if a sibling attended the respective community college, and if the student was a commuter or on-campus resident.

The participants were freshmen students who had scored 26 and above on the ACT composite score and who were enrolled in Mississippi public community colleges during the spring semesters of 2003 or 2011. There were 240 participants in 2003 and 247 participants in 2011.

The study found that females considered academic preparation, entrance requirements, availability of specific programs of study, and contact with college

representatives more highly than males; first-generation students considered community in which the college was located as more important; and on-campus students rated the following variables higher than commuters: varsity sports opportunities, racial/ethnic makeup, type of housing, extracurricular activities, social climate and activities, and male/female ratio.

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## The University of Southern Mississippi

# COMPARATIVE ANALYSIS OF FACTORS RELATED TO COLLEGE SELECTION BY HIGH ACADEMIC ABILITY STUDENTS ATTENDING MISSISSIPPI'S PUBLIC COMMUNITY COLLEGES IN 2003 AND 2011

by

## Randall Eugene Lee

A Dissertation Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Approved:

11
Thelma J. Roberson
Director
Lilian H. Hill
Thomas V. O'Brien
J.T. Johnson
G A G'I
Susan A. Siltanen
Dean of the Graduate School

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### CHAPTER I

#### INTRODUCTION

"I have a plan which is at the same time unique and comprehensive, which I am persuaded will revolutionize university study in our country" Rockefeller's letters stated (as cited in Boyer, 2005, p. 87). This quote and most of the credit for the junior college movement is attributed to William Rainey Harper, the University of Chicago's founder and first president. In 1895, Harper coined the term "junior college," and, in 1899, he created the associate degree for graduates of the junior colleges (Witt, Wattenbarger, Gollattscheck, & Suppiger, 1994).

In 1928, Mississippi was the first state to establish a junior college system advisory board (Young, 1972). Mississippi continues to provide a quality community college education for its citizens through its 15 public community/junior colleges (SBCJC History, 2011).

Recruitment of students is the lifeblood of any educational institution. Attracting students who are likely to persist to graduation and become supporting alumni of their colleges or universities is vital. As the traditional college student population (those who enter college immediately after high school graduation) decreases in Mississippi (*Chronicle of Higher Education Almanac*, 2010-11; NCES, 2008), competition among community colleges for high academic ability students has increased dramatically (Noel-Levitz National, 2009). High academic ability students are those who scored 26 and above on the ACT composite score.

In most states appropriations from the federal and state governments are tied to public colleges' and universities' enrollment figures. In Mississippi budget

appropriations for public community colleges are calculated on in-state, full-time equivalent (FTE) "headcount enrollment" figures of all in-state categories of students to include academic transfer, career technical, and vocational students, who are enrolled minimally until the end of the sixth week during the fall and spring semesters and the requisite time during the summer term. Credit hours for fall, spring, and summer semesters are totaled and divided by 24 to arrive at the FTE according to the executive director, finance, and administration for the Mississippi State Board of Community/Junior Colleges, (D. Gilbert, personal communication, March 10, 2011). Decreases in enrollment may adversely affect the operation of a college or a university creating a loss of financial support.

According to the deputy executive director for programs and accountability for the Mississippi State Board of Community/Junior Colleges, 4.82% of first-time entering students enrolled in a Mississippi community college during the 2009-2010 academic year reported an ACT score of 26 or above (D. West, personal communication, March 9, 2011). This represents an increase from the 1997-1998 academic year, when Day (1998) reported that approximately 4% of first-time entering students enrolled in Mississippi community colleges had an ACT score of 26 or above.

Research regarding factors related to selection of a college, particularly community colleges, by high academic ability students is lacking (Dale, 2010; Hu & Hossler, 2000; Kinzie et al., 2004; Schoenherr, 2009) although these students are more likely to persist to college graduation (ACT Inc., College Success, 2008; ACT Condition of College & Career Readiness Report, 2010; Corley, 2003). High academic ability students have also been shown to enter professional schools at a higher rate than students

who are not regarded as high academic ability students (Jones, 2008). Economists may debate the extent to which a college education benefits individuals and society; but, there is general agreement that an educated citizenry contributes to economic competitiveness, productivity, government revenues, and social equality (Kinzie et al., 2004).

The competition for high academic ability students has intensified because they are a much sought after and recruited population (Callahan, 2003; Carpetas, Garcis, & Allyne, 2008; Dale, 2010; Filter, 2010; Lee, Matthews, & Olszewski-Kubilius, 2008; Noel-Levitz National, 2009; Schoenherr, 2009; Trachter, 2010). Not only are colleges and universities concerned about the number of students they can enroll, but they are also particularly interested in high academic ability students in light of the enhancements that these students can contribute to an institution's reputation.

Although the majority of Mississippi students chose to attend one of the 47 private and public institutions of higher learning in Mississippi, in the fall of 2008 approximately 19% of these students chose to attend out-of-state colleges and universities (*Chronicle of Higher Education Almanac*, 2010-11). Due to the desirability of retaining the state's high academic ability students, it is worthwhile to examine why some of Mississippi's high academic ability students chose to attend Mississippi public community colleges.

#### Statement of the Problem

The study of why high academic ability students chose to attend Mississippi community colleges is important because enrollment of similar students can lead to increased enrollment and graduation rates. This in turn can lead to higher revenue through increased collections of tuition, fees, and state appropriations because these

students tend to persist to graduation at higher rates (ACT, Inc. College Success, 2008; Pascarella & Terenzini, 2005; Schoenherr, 2009; Schulz, 2008). Some community colleges may not focus on high academic ability students due to the intense competition and because such students have numerous options of where to attend college.

Researchers have investigated college choice factors for students who chose to attend community colleges (Christie & Hutcheson, 2003; Lee et al., 2004; McCullough, 2010; Santos, 2004; Townsend, 2007), and researchers have investigated why high academic ability students chose to attend four-year colleges and universities (Callahan, 2003; Dale, 2010; Kinzie et al., 2004; Schoenherr, 2009; Sztam, 2003; Trachter, 2010). However, there are few studies that include data regarding college choice factors related to high academic ability students attending community colleges (Filter, 2010; Schoenherr, 2009). Most research mentioned high academic ability and aspirations as influential factors in the college-choice process, but the research often included high academic ability students as part of a larger group who did not consider community colleges in their college search. The research on high academic ability students rarely mentioned community colleges as a college choice except in anecdotal statements that high academic ability students tend not to attend community colleges (Filter, 2010; Schoenherr, 2009).

This research can increase the awareness of college and university administrators regarding why high academic ability students choose to attend community colleges, which could lead to more efficacious recruitment efforts. Many high academic ability students are choosing to attend less prestigious universities and community colleges (Pluviose, 2008). To what extent do college choice factors facilitate their college decision?

## Purpose of the Study

The purpose of the study was to determine the factors related to why high academic ability students chose to attend Mississippi public community colleges.

Additionally, the study examined the differences in perception of college choice factors and recruiting factors among students according to the variables of age, gender, race, full-time or part-time enrollment status, attendance for first-generation students to college, if one or both parents or legal guardians attended the respective community college, if a sibling attended the respective community college, and if the student was a commuter or on-campus resident.

The ultimate purposes of the study were to provide data on recruiting high academic ability students, to determine what attracted them, and to communicate the findings to community college presidents, administrators, faculty, and staff of Mississippi community colleges. The results should prove beneficial to community college presidents, administrators, faculty, and staff throughout the United States. The study was conducted during the spring 2003 semester, and it was replicated during the spring 2011 semester at Mississippi's 15 public community/junior colleges by the researcher.

Specific purposes included:

- To determine the factors involved in college choice of high academic ability students who chose to attend Mississippi's public community colleges;
- To determine the perceptions of high academic ability students who attended Mississippi's public community colleges;

- 3. To determine the differences in college choice among respondent student groups by age, gender, race, full-time or part-time enrollment status, attendance to college for first-generation students, if one or both parents or legal guardians attended the respective community college, if a sibling attended the respective community college, and if the student was a commuter or on-campus resident;
- 4. To determine if institutional community college recruiting practices had an impact on attracting high academic ability students; and,
- 5. To present descriptive data relative to the variables of the study.

## Hypotheses

The following hypotheses of the study were used to test the relationships among the variables:

- H1. There was a significant difference in the factors of college choice between data collected in 2003 and 2011.
- H2. There was a significant difference between genders and factors of college choice.
- H3. There was a significant difference between race groups and factors of college choice.
- H4. There was a significant difference between first-generational groups and non-first-generational groups and factors of college choice.
- H5. There was a significant difference between commuter and on-campus residence groups and factors of college choice.

### **Delimitations**

The study was delimited by the following:

- Subjects in the study were limited to students who were enrolled in one of
  Mississippi's 15 public community colleges, who scored 26 and above on the
  American College Test (ACT) and who were freshmen at the time of the
  study.
- Data were collected during the spring 2003 academic semester and additional data were collected during the spring 2011 academic semester.
- 3. The predictor variable of college choice influences was limited to certain characteristics: age, gender, race, full-time or part-time enrollment status, first generational attendance to college, if one or both parents or legal guardians attended the respective community college, if a sibling attended the respective community college, and if the student was a commuter or oncampus resident.
- 4. The research did not consider retention.

## Assumptions

The assumptions of the study included:

- 1. The data that were used were accurately recorded.
- 2. The high academic ability students who were surveyed gave truthful responses.

## **Definitions of Terms**

For this study the following definitions were used:

- Academic Quality value judgments that students assign to community colleges
  based on their perception of the quality of faculty, facilities, equipment and
  technology, and the overall academic reputation of the community college
- American College Test (ACT): English, mathematics, reading, and science with a score range (1-36) for each of the four tests that are averaged to provide a composite score after being administered during a single test administration (rounded to the nearest whole number) ("The ACT," 2011)
- 3. College Choice a complex, multistage process during which an individual develops aspirations to continue formal education beyond high school followed later by a decision to attend a specific college, university, or institution of advanced vocational training (Hossler, Braxton, and Coopersmith, 1989)
- 4. Community College a two-year institution of higher education that offers oneyear vocational certificates and two-year career technical and academic programs of study
- 5. Community College Graduates students who attain either a one-year certificate degree or a two-year diploma to include associate of arts, associate of science, and associate of applied science degrees
- 6. Community College Transfer Students college students who begin their studies at community colleges and then transfer to a four-year university or college at some point before or after graduation
- 7. Drop Outs those students who leave college for various reasons and do not return

- Enrollment Management a comprehensive approach involving recruitment,
   retention, graduation of students, and which involves the entire campus (Noel-Levitz, 2009 National)
- 9. High Academic Ability Students for the purpose of the study, freshmen students who scored 26 and above on the ACT
- 10. Institutions of Higher Learning (IHL) all four-year colleges and universities above the secondary education level within Mississippi (see Appendix A for a listing of the eight public universities in Mississippi)
- 11. Mississippi Community College Board (MCCB) the advisory board of men and women who assist and advise the 15 public community colleges in Mississippi (previously titled State Board for Community/Junior College Colleges until July 1, 2011, when it changed its name to MCCB)
- 12. Mississippi Public Community Colleges two-year institutions of higher education within Mississippi that offers vocational, career technical, and academic programs of study (see Appendix B for a listing of the 15 public community/junior colleges in Mississippi)
- 13. Native Students students who matriculated and attended four-year universities and colleges as freshmen
- 14. No-Need Scholarships merit-based scholarships given to outstanding students based on aptitude without regard to financial need
- 15. Open-Door Policy the policy that governs admissions of students into the public community colleges in Mississippi (Students must have a high school diploma or a GED to be accepted into a Mississippi community college.)

- 16. Persistence a process whereby students remain in college and graduate from a community college
- 17. Recruitment the entire process of encouraging prospective students to attend a college
- 18. State Board for Community/Junior Colleges the advisory board of men and women who assist and advise the 15 public community colleges in Mississippi; "Junior" is retained because one of the 15 community/junior colleges retained the title "junior college," whereas the other 14 community colleges used "community"
- 19. Stop Outs those students who attended a community college but for various reasons decided to withdraw from college for a period of time and who re-entered the college at a later point in time

## Justification of the Study

Colleges and universities seek to attract high academic ability students from the graduating high school senior classes each year because these students tend to persist and graduate at higher rates than other students (ACT Inc., College Success, 2008; ACT Condition of College & Career Readiness Report, 2010; Corley, 2003). These high academic ability students also bring recognition and prestige to community colleges because the recruitment of high academic ability students is beneficial for positive development of a college's academic reputation (Schoenherr, 2009). Moreover, high academic ability students generally tend to positively influence other high academic ability students and general population students to enroll in their respective community colleges (Dale, 2010; Schoenherr, 2009; Schulz, 2008).

Mississippi's public community college enrollment managers need practical data to assist them with determining why high academic ability students attend their respective institutions. Research regarding college choice factors for students who attend community colleges has received some scholarly attention (Harris, 2010; McCullough, 2010; Morciglio, 2010). However, literature regarding recruitment of high academic ability students by community colleges is scarce.

High academic ability students fit into the mission of Mississippi community colleges as the majority of Mississippi community college students are reported as academic transfer students who plan to attend a four-year college or university (SBCJC, 2007). Institutions of high learning to include community colleges are constantly under pressure to graduate more students. The enrollment of more high academic ability students could increase persistence and graduation rates.

The study is important because high academic ability students who attend community colleges tend to persist and graduate at higher rates, and this group tends to bring prestige and positive attention to the community colleges (Capetas, Garcie, & Allyne, 2008; Filter, 2010; Lee et al., 2008). Community colleges expend significant time and resources attempting to attract prospective students to their institutions, and colleges expend resources attempting to attract those students who are considered high academic ability students (Dale, 2010; Noel-Levitz, 2007; Noel-Levitz National, 2009; Trachter, 2010). In the current dire economic circumstances and with the intense competition for Mississippi's high school graduates, recruitment of high academic ability students should receive increased attention.

The Mississippi community college system has a rich history of providing higher education opportunities to its students (SCBJC History, 2011). Due to the low cost of attending a community college and the academic quality offered, many Mississippi citizens who may not have otherwise had the opportunity to attend college were given access to higher education. Therefore, the history of community colleges and the history of Mississippi's community college system, in particular, are covered thoroughly in Chapter II.

There is a substantial amount of literature regarding college choice factors and what attracts students to colleges and universities in general (Abston, 2010; Allen, 2007; Cabrera & La Nasa, 2004; Callahan, 2003; Cooper, 2006; Dale, 2010; Filter, 2010; Harris, 2010; Hopkins, 2007; Kinzie et al., 2004; Kurlaender, 2006; McCullough, 2010; NPEC, 2007; Oates, 2009; Schulz, 2008; Tan, 2009). Literature pertaining to college choice factors in general, specific college choice literature regarding community colleges, and college choice factors regarding why high academic ability students choose to attend community colleges are reviewed in Chapter II. Much attention is also given to ACT statistical data and the importance of recruitment to all institutions, particularly community colleges.

The results of this study can provide useful, practical data not only to Mississippi's community college enrollment managers but also to community college enrollment managers in other states and in other types of institutions of higher learning. Success for colleges and universities is measured in enrollment figures, graduation rates, and the degree of satisfaction students express as alumni of their colleges. The successful enrollment of high academic ability students is a key to the aforementioned criteria.

Mississippi's public community colleges can take steps to attract high academic ability students. Community college enrollment managers can identify the college choice factors related to high academic ability students and their choice to attend community colleges. The findings of this study, when applied to community college recruiting strategies, can make the decision process less ambiguous for students, parents, and other involved constituents. It can also assist with the identification and clarification of effective recruiting strategies for community college administrators.

The results of this study can also provide data for assessing recruitment plans for attracting high academic ability students into community colleges. The results, in turn, can improve persistence rates and graduation rates. Improved recruitment, persistence rates, and graduation rates can result in higher revenue through increased collections of tuition, fees, and state appropriations.

Numerous studies clearly demonstrated that increased levels of postsecondary education led to higher salaries, longer working lives, more career mobility, and an increased quality of life (Hill, 2008; Kinzie et al., 2004; Mills, 2004; Pascarella & Terenzini, 2005; Schoenherr, 2009). Potentially, enrolling more high academic ability students may increase alumni fiscal contributions in the future for community colleges because high academic ability students tend to obtain higher level degrees and enter the workforce in higher paying occupations (ACT Research, 2004; Mills, 2004; Perna, 2005; Schoenherr, 2009).

#### CHAPTER II

#### REVIEW OF RELATED LITERATURE

#### Introduction

Pascarella and Terenzini (1998) made a clarion call for more research regarding community college students and why they choose to attend community colleges, and findings from this study are still pertinent today:

Clearly, community colleges are major players in the national system of postsecondary education; but, with a few notable exceptions in the literature, precious little is known about their impact on students. While it may be the case that four out of every ten American college students are enrolled in community colleges, it would be a very liberal estimate to say that even five percent of the studies we reviewed for How College Affects Students focused on community college students. This empirical black hole means that we are functioning in virtual ignorance of the educational impact of one of the nation's most significant social institutions. (p. 157)

Much data is available concerning college choice factors with regard to students who choose to attend four-year colleges and universities (Abston, 2010; Allen, 2007; Cabrera & La Nasa, 2004; Callahan, 2003; Cooper, 2006; Dale, 2010; Filter, 2010; Harris, 2010; Hopkins, 2007; Kinzie et al., 2004; Kurlaender, 2006; McCullough, 2010; NPEC, 2007; Oates, 2009; Schulz, 2008; Smith-Vosper, 1997; Tan, 2009). A gap exists in research regarding community colleges and why students choose to attend them (Bers & Galowich, 2002; Lanaan, 2003; Pope, 2002; Somers et al., 2006; Townsend, 2007).

Moreover, there is a dearth of literature about why high academic ability students choose to attend community colleges (Filter, 2010; Lee, et al., 2004; Santos, 2004; Sztam, 2003).

In the fall of 2009, approximately 20 million students were enrolled in American colleges and universities with 37% of those students enrolled in two-year institutions of higher learning called community colleges (Knapp, Kelly-Reid, & Ginder, 2011). In the fall of 2000, approximately five million students were enrolled in more than 1,000 public two-year institutions of higher learning in the United States (*Chronicle of Higher Education Almanac*, 2002-03), and that figure increased to 6,640,344 students enrolled in 1,127 public two-year institutions in the United States in the fall of 2008 (*Chronicle of Higher Education Almanac*, 2010-11).

In Mississippi, 133,170 students attended one of 46 public and private institutions of higher learning located within the state during the fall semester of 2002. Of that total, 58,759 students attended one of the state's 15 state-supported, two-year institutions (*Chronicle of Higher Education Almanac*, 2002-03). In the fall semester of 2008, that total had increased to 144,224 students who attended Mississippi public colleges and universities, and of that total, 73,065 students attended one of the state's 15 state-supported, two-year institutions (*Chronicle of Higher Education Almanac*, 2010-11). For the first time in Mississippi, slightly more students attended public community colleges than attended public four-year institutions of higher learning (*Chronicle of Higher Education Almanac*, 2010-11).

From 1998 to 2008, college enrollment increased 32% nationally and was predicted to continue to increase (*Chronicle of Higher Education Almanac*, 2010-11). A projected 20,620,000 students will be attending colleges and universities by 2018

(National Center for Education Statistics, 2008). Although the number of high school graduates in the United States is projected to increase an estimated 3% from 2010-11 to 2020-21, the number of Mississippi high school graduates is projected to decrease 7% during that same time (*Chronicle of Higher Education Almanac*, 2010-11; National Center for Education Statistics, 2008).

Eighty-one percent of Mississippi's high school graduates attended a college or university in their home state in the fall semester of 2008, a statistic that ranked 16th among the 50 states (Chronicle of Higher Education Almanac, 2010-11). Credit enrollment has increased every year (fall semesters) since 1999 with the exception of two years, during which enrollment declined by 0.3% from 53,846 students in 1999 to 53,669 students in 2000. When Hurricane Katrina hit the Mississippi Gulf Coast, credit headcount enrollment dropped by 3.3% from the fall of 2004 to the fall of 2005 (D. Gilbert, personal communication, March 10, 2011). Although an increase in overall Mississippi community college enrollment of 49.6% since 1999 is significant, increases cannot be taken for granted in the future mainly because of the projected decrease in the number of future Mississippi high school graduates (Chronicle of Higher Education Almanac, 2010-11). There is increased competition for all students in Mississippi among the current 47 institutions of higher learning, and competition for high academic ability students is even more intense (Filter, 2010; Noel-Levitz National, 2009; Schoenherr, 2009).

Enrollment in Mississippi's public community colleges has risen for many years, and this has had a positive impact on these institutions' operating budgets. It is crucial that Mississippi's public community colleges emphasize recruitment of students to offset

the decreases in budget allocations from the state. Recruitment of high academic ability students has shown to have a positive impact on four-year colleges' and universities' enrollments (Callahan, 2003; Filter, 2010; Schoenherr, 2009). However, little is known about recruiting high academic ability students at community colleges.

History of the Community College - A National Perspective

In the midst of an economic downturn, the Panic of 1894, the Reverend J. M. Carroll, president of Baylor University, convened the Baptist colleges in Texas and Louisiana (Baker, 1994). The convention recognized that there were insufficient finances and students to support the numerous small Baptist colleges in the two states. Carroll advanced a pragmatic suggestion to reduce the curriculum of the small Baptist colleges to the first two years of college. Baylor would accept their students upon successful completion of their degree (Eby, 1927; Roark, 1926).

The idea found favor with Northern Baptists giving further credence to the junior college concept. Soon thereafter, William Rainey Harper, founding president of the University of Chicago, announced that if denomination colleges in the area reduced their curricula to two years, formal arrangements would be made to accept their transfer credit toward the baccalaureate degree (Baker, 1994). Harper also agreed with and proposed the idea that area high schools might extend their curricula to incorporate the first two years of college.

The junior colleges' inception paralleled the growth of compulsory secondary education and a reform movement to restructure university education toward research institutions. Many American university presidents of that era were educated in Germany and sought to bring greater organization and uniformity to higher education (Baker,

1994). Thus, the concept of a junior college for students' first two years of college work was born.

The idea of high schools offering the first two years of college also fit the plans for reforming the university. Presidents of Stanford University, the University of Minnesota, the University of Michigan, and the University of California agreed with Harper and endorsed this idea after the California legislature passed legislation allowing high schools to offer the 13th and 14th grades in 1907 (Ratcliff, 1984). Other states soon followed California's lead in authorizing the upward extension of high schools and the establishment of separate public junior colleges. Kansas and Michigan enacted such legislation in 1917. They were followed by Minnesota (1925); Arizona, Iowa, and Missouri (1927); and Louisiana and Mississippi (1928).

## History of Mississippi Community Colleges

In 1908, the Mississippi legislature passed the County Agricultural High School Law providing a boarding high school supported by county-wide taxes. Fifty of these county boarding high schools were organized between 1908 and 1919, thus developing the first state-wide system of high schools for the rural districts in the state (Broom, 1954).

By 1924, road conditions and transportation facilities were much improved, and many communities consolidated schools into community high schools. With consolidation occurring throughout the state, there was little need for county boarding schools or county agricultural high schools.

During 1924, Mississippi legislators enacted laws that allowed agricultural high schools to offer limited college credit. Because of public demand, 12 high schools began

teaching college-credit courses by 1928. Thus, the foundation was laid for the enactment of the Public Junior College Law of 1928, which provided that agricultural high schools include the first two years of college work.

Mississippi Senate Bill 131, Laws of 1928, approved on April 26, 1928, which authorized the establishment of junior colleges, also created a state commission for oversight of these institutions, the Commission on Junior Colleges. The commission held its first meeting on May 10, 1928, two calendar weeks after its legislative creation. The first actions of the commission were to identify its authority, establish standards which existing junior colleges must meet to qualify for state aid, and develop criteria required of agricultural high schools seeking junior college status. This action of the commission constituted the birth of the Mississippi State System of Public Junior Colleges, thereby giving Mississippi the distinction of having the first system of comprehensive two-year colleges in the nation (SBCJC History, 2011).

The 1928 statute that authorized the establishment of the junior college system was stated as follows (Young, 1972):

That junior colleges consisting of the work of freshmen and sophomore years will be organized for the purpose of providing such courses as will make the studies of the Agriculture High Schools and Junior Colleges a connected and correlated whole, a complete unit of educational work. These courses shall consist of agriculture, including horticulture, dairying, animal husbandry and commercial gardening; domestic science and household arts; commercial branches, including banking, accountancy and transportation; and the mechanical arts, such as carpentry, masonry, painting, shop work in iron and wood and repairing and

constructing of motor vehicles. Whenever it is practical, instruction shall also be given in teacher training, music, and public speaking. Insofar as possible the Junior Colleges shall offer a complete course of instruction so that their graduates may immediately thereafter enter professional schools if they so elect. (p. 19)

The act specified the two types of education the community colleges were to emphasize in Mississippi. The students could choose either training in vocational and practical farming applications or a program of study leading to a professional career, which required transferring to a four-year institution of higher learning. The two separate choices of training were the cornerstone of the new education system in Mississippi (Broom, 1954).

The unprecedented cooperation between Mississippi's community/junior college system, institutions of higher learning (IHL), and the state's private colleges began immediately as accreditation standards were developed with the four-year institutions' assistance. Among the representatives of the Mississippi Junior College Accrediting Commission were educators from Mississippi College, a Baptist college; Millsaps College, a Methodist college; and the University of Mississippi, a member of the IHL. Additionally, the state's annual Junior-Senior College Conference was initiated in 1934 (Broom, 1954) and has facilitated cooperation among all colleges and universities in Mississippi since that time.

Mississippi's community/junior college system has evolved into an educational system that provides effective instruction for academic students who desire to transfer to four-year colleges and universities (SBCJC History, 2011). It also offers career-technical programs that provide terminal degrees, which are designed to lead to immediate

employment. Additionally, many four-year colleges and universities have developed articulation agreements with community college career-technical departments to accept their career-technical courses into certain baccalaureate degree programs.

Funding Allocations and the Importance of Recruitment

Student recruitment is one of the key components of successful enrollment management, and effective recruitment requires increasing expenditures involving personnel and resources (Noel-Levitz, 2007; Noel-Levitz Report, 2009). The largest expenditure regarding recruitment is the salaries of those involved (Noel-Levitz Report, 2009). Other recruitment-related expenditures include promotional literature, travel, lodging, meal expenses, automation, direct mail campaigns, alumni relations, professional development workshops, cooperative recruitment programs, special market research, consultant fees, advertising via newspapers, television, and radio, video recruiting, various advertisements, and technology to support recruiting (Noel-Levitz, 2007; Noel-Levitz Report, 2009; Noel-Levitz, 2010). Special expenditures include the recruitment of nontraditional students, disabled students, veterans, part-time students, and international students (Noel-Levitz Report, 2009).

Institutions of higher learning in the United States reported the estimated cost to recruit one student (Noel-Levitz Report, 2009). The median recruiting cost reported for two-year public colleges was \$263; the median recruitment cost reported for four-year public universities was \$461; and the median recruitment cost reported for four-year private colleges was \$2,143 (Noel-Levitz Report, 2009). Recruitment costs in two-year public colleges have demonstrated a pattern, increasing from \$74 per student in 2005, to \$121 per student in 2007, and to \$263 per student in 2009 (Noel-Levitz Report, 2009).

The recruitment cost per student in public community colleges ranged from a 25<sup>th</sup> percentile of \$173 and a 75<sup>th</sup> percentile of \$462 (Noel-Levitz Report, 2009). The research also reported that smaller community colleges tended to spend more on recruitment cost per student than larger community colleges (Noel-Levitz, 2009 Report).

Recruitment as a cost-benefit ratio for three primary travel programs based on a travel budget of \$30,933 was researched (Noel-Levitz Report, 2009). It detailed the following costs: college fairs (\$6,187), high school visits (\$18,762), and off-campus receptions (\$5,984). Costs per enrolled student were college fairs (\$162.82), high school visits (\$220.73), and off-campus receptions (\$127.32). Such cost-benefit studies are essential to planning, evaluating, and determining the effectiveness of various recruitment activities in the demanding, austere fiscal environment faced by community colleges.

Throughout 2008-2011, community colleges have been in the midst of an economic crisis with shrinking budgets and resources. Although the Mississippi institutions of higher education were funded with a small increase of 2.8% for operating expenses in 2009-2010 from the year before (*Chronicle of Higher Education Almanac*, 2010-11), they had experienced budget cuts in the past.

Colleges and universities in Mississippi are facing the 2012 year with the loss of federal stimulus funds. Dr. Hank Bounds, Mississippi's Commissioner of Higher Education stated, "We have the least-educated citizenry of any state in the country, and trying to pull ourselves out of that statistic is much harder when you have fewer revenues to work with" (*Chronicle of Higher Education Almanac*, 2010-11, p. 80).

Without sufficient funding, recruitment is very difficult to conduct effectively.

Moreover, decreases in enrollment may adversely affect the operation of a Mississippi

community college. With the continual decrease in public funding and increased competition with private colleges and universities and public universities, public community colleges are now being forced to recognize the need for managing their enrollments more closely (Abston, 2010).

Enrollment is directly tied to funding. The ubiquitous full-time equivalent (FTE) allocations are the standard mechanisms for providing funding for many community college systems throughout the nation. Mississippi's coordinating board, the State Board for Community/Junior Colleges (SBCJC), uses a fairly simple funding formula that distributes funding from various categories on the basis of prior year full-time equivalency (FTE) of hours generated during the summer, fall, and spring semesters. Deborah Gilbert, the Deputy Executive Director for Finance and Administration for the SBCJC stated,

In Mississippi a majority of the appropriations from the legislature for public community colleges are distributed based upon full time equivalent (FTE) students. Academic, Technical, Vocational, Associate Degree Nursing, and Associate Degree Allied Health funds are disbursed based upon the basis of prior year FTE for hours generated during the summer, fall, and spring semesters for each public community and junior college student actually enrolled and in attendance the last day of the sixth week of each semester, or its equivalent, counting only students who reside within the state of Mississippi. However, associate degree nursing students who reside outside the state of Mississippi may be counted for pay purposes. Virtual Community College hosted and provided courses may qualify on the basis of the prior year FTE of virtual community

college hours generated during the summer, fall, and spring semesters. Those semester credit hours being hosted and provided by one institution shall receive funding at the weight of 1.0. Semester credit hours generated during the summer, fall, and spring in various categories are totaled and divided by 24 to arrive at the FTE. (D. Gilbert, personal communication, March 10, 2011)

Gilbert (personal communication, March 10, 2011) also reported that Mississippi appropriations distributed per enrollment are the largest amount of funds provided to community colleges although state revenue has diminished while tuition and fees revenue as a percentage of total revenue has increased from 55.2% state funding - 18% tuition and fees in 2000 to 39.2% state funding - 32.6% tuition and fees in 2011. Community colleges also must compete with primary and secondary schools, universities, and many other social programs for state appropriations (Leachman, Williams, & Johnson, 2011).

Johnsrud (1996) noted that the prosperous decade of the 1980s, in both enrollment and revenue growth, contrasted greatly with the lean decade of the 1990s. Likewise, lean times during the first decade of the millennium continue to plague the operating budgets resulting in all 15 public community/junior colleges raising their tuition costs significantly including an average tuition increase of 19.7% from 2008 to 2011 (Welker, 2011). The projected decrease in Mississippi high school graduates during the next decade (*Chronicle of Higher Education Almanac*, 2010-2011; National Center for Education Statistics, 2008) combined with increasing expenditures highlight the importance and impact of effective enrollment management. Thus, increasing enrollment at Mississippi's 15 public community/junior colleges is paramount to maintaining an adequate operating budget for each community college.

As Schulz (2008) reported, in an era of limited resources, pressure increases for public investments to yield demonstrable results, especially in comparison to other competing demands on public resources. The American public has increasingly demanded accountability regarding public and governmental entities. Community colleges face the same demands. Throughout the United States of America, state legislators continually attempt to pass statutes aimed at increasing accountability (Inside Higher Education, 2009).

#### **ACT Statistics**

The most prevalent method of distinguishing and recruiting high academic ability student prospects is via consideration of ACT scores. Mississippi's public community/junior colleges require the ACT as part of their admission requirements.

According to the ACT Condition of College & Career Readiness Report (2010), 26,887 Mississippi high school graduates (96%) sat for the ACT during the 2009 - 2010 school year. The students who attended one of Mississippi's public universities averaged 22 on the ACT composite score in 2009 (IHL, 2010). During the prior four years, the average ACT composite score for all college students who took the ACT in Mississippi was lower than the national average (*Chronicle of Higher Education*, 2010-2011), and the average ACT composite score for students who attended Mississippi Community Colleges was lower than the overall Mississippi average (D. West, personal communication, March 8, 2011) (see Table 1). However, the ACT data showed that the average ACT composite score had increased although more Mississippi students were taking the ACT than in previous years (ACT Condition of College & Career Readiness Report, 2010).

Table 1

Average ACT Composite Score for all Mississippi High School Students, Mississippi Community College Students, and Nationally

Year	All Mississippi High School Students	Mississippi Community College Students	National High School Students
2006	18.8	N/A	21.1
2007	18.9	18.1	21.2
Year	All Mississippi High School Students	Mississippi Community College Students	National High School Students
Year 2008	11 0	11	C

Note. No data was available in 2006 for the average ACT composite score for Mississippi community college students.

As Mississippi's public community colleges have attracted more students, a parallel rise in the number of high academic ability students attending community colleges has occurred. Day (1998) reported that 4% of first-time entering students enrolled in Mississippi community colleges had ACT composite scores of 26 and higher during the 1996-1997 year. During the 2009-2010 academic year, 4.82% of first-time entering students enrolled in Mississippi community colleges had ACT composite scores of 26 and higher (D. West, personal communication, March 9, 2011). The increase of high academic ability students enrolling in Mississippi Community Colleges paralleled a dramatic increase in the number of students attending Mississippi community colleges (SBCJC, 2007).

A positive correlation exists between ACT scores and higher grade point averages across racial/ethnic and family income groups (ACT Inc., College Success, 2008; Foster, 1999; Levitz, Noel, & Richter, 1999; Noble & Sawyer, 2002; Roberts, 2006).

Additionally, ACT composite scores serve as a predictor of the likelihood of enrollment in colleges and universities for African American and low-income students (ACT, Inc. College Success, 2008).

A positive correlation also exists between ACT scores and persistence as institutions of higher learning report that students with higher ACT scores have an average first-to-second-year dropout rate of less than 9%; whereas, open-admissions institutions where average ACT scores tend to be lower have a first-to-second-year dropout rate of 46% (Levitz et al., 1999; Robbins, Allen, Casillas, Peterson, & Le, 2006). These two studies indicate that students with higher ACT scores persist to graduation at higher rates.

Much research showed a positive correlation between higher ACT scores and increased graduation rates (ACT Inc., College Success, 2008; ACT Condition of College & Career Readiness Report, 2010; Bassiri, 2006; Corley, 2003; Levitz-Noel, 1999).

Levitz et al. (1999) illustrated that students with less than an 18 composite score on the ACT graduated at a rate of 32.5%; whereas, students who scored between 18 and 19.9 on the ACT composite score graduated at a rate of 42.8% rate. Students with higher ACT composite scores graduated at higher rates at four-year universities (Noel-Levitz National, 2009).

High academic ability students are also more likely to acquire higher-paying jobs ACT Research, 2004; Mills, 2004; Perna, 2005). For every 10% increase in the ACT

score, earnings increased by as much as 2% (ACT, Inc. College Success, 2008). If successfully recruited, high academic ability students could become future alumni of community colleges at higher rates than their representation today. It is tenable to assume that graduates support their community college alma maters with higher rates of alumni giving than those students who do not persist to graduation. Of particular note are the studies by McPherson and Schapiro (1998) and Winston (1999), which indicated that enrolling high academic ability students tended to influence other high academic ability students to enroll and may influence students with lower ACT scores to enroll at the respective colleges as well. Therefore, it seems practical and beneficial that recruiting students who score higher on the ACT would benefit Mississippi community colleges.

## General Recruitment Information

Smith-Vosper (1997) reported that factors related to college choice were not isolated determinants of college choice. The college choice factors influencing prospective college students' decisions are interrelated, complex, and difficult to analyze (Smith-Vosper, 1997).

Successful recruiting institutions reported that they engaged in more frequent recruitment activities and used holistic, strategic enrollment plans (Abston, 2010; Harris, 2010; Shulz, 2008; Smith-Vosper, 1997). It was also apparent that effective recruiting institutions were led by professional enrollment managers with strong institutional leadership skills (Harris, 2010; LoBasso, 2005). Furthermore, effective enrollment managers were found to be involved in the strategic-level planning and the implementation of enrollment strategies in a manner characterized as skillful and caring (Harris, 2010).

Enrollment management is a process that involves the entire campus (Hossler, 1999). The common theme of enrollment management is that it is a coordinated, institution-wide effort involving a wide variety of areas within an institution (Penn, 1999). Abston (2010) found that not all institutions considered enrollment management important as only one-half of respondents had a formal enrollment management plan.

Functions such as admissions, marketing, financial aid, academic advising, retention, academic planning, academic support services, career services, alumni relations, and development are widespread and integral to successful enrollment management (Harris, 2010; Noel-Levitz, 2007). Current literature on enrollment management and strategic planning suggests novel ways of approaching planning and development (Cohen & Brawer, 2003; Harris, 2010; Pascarella & Terenzini, 2005; Senge, 2003; Spendlove, 2007).

Enrollment management encompasses all of the aforementioned functions and areas. Zuker (1997) stated it well:

At its best, enrollment management calls the campus together in an effort which is at the heart of success for any educational institution. It allows the campus to marshal its forces around the essence of the educational enterprise, attraction of top scholars to our campuses, and the successful completion of the programs of study those scholars elect to pursue. (p. 46)

Recruitment is but one component of the overall enrollment manager's duties although it is the major focus of enrollment management and of this study.

Much research has been accomplished regarding guidance for recruitment activities and student college choice models (Allen, 2007; Callahan, 2003; Cooper, 2006;

Dale, 2010; Filter, 2010; Hopkins, 2007; Kinzie et al., 2004; Kurlaender, 2006; Noel-Levitz, 2007; Noel-Levitz, National National, 2009; Noel-Levitz Report, 2009; Noel-Levitz, 2010; NPEC, 2007; Oates, 2009; Schulz, 2008; Tan, 2009). Generally, those involved in recruitment of students agreed that institutions of higher learning can best serve students when they attracted and enrolled students who "fit" the institutions, i.e., students who will best benefit from the institution's programs (Morciglio, 2010).

Therefore, colleges and universities attempt to recruit students they believe will be a good match for their institution (Kirp, 2003; Morciglio, 2010). Effective recruitment strategies require an institution to accurately identify institutional strengths and weaknesses and effectively present the institutional image to prospective student groups. This implies that recruitment is an institution-wide function depending upon all elements or departments to support current recruitment programs.

Recruitment involves the marketing of an institution. Effective marketing by colleges involves carefully surveying current student groups and determining if they are being adequately served (Noel-Levitz National, 2009). An important projection to consider is whether the future enrollment of a sufficient number of students supports the community college mission (Noel-Levitz National, 2009).

Considerable thought and planning must be given to the recruitment of particular student groups, but it is also important for the community college to have a well-defined mission and a well-defined program that supports that mission (Noel-Levitz National, 2009). Institutional self-study, crucial to the accreditation process, provides an effective means of accomplishing the recruitment goal (Noel-Levitz National, 2009).

The process by which an institution presents itself is also important to the effectiveness and distinctiveness of the recruitment process (Noel-Levitz, 2009 National). When evaluating, rating, and ultimately choosing an institution, students make individual decisions. College characteristics interact with student backgrounds to determine the ideal college choice, but Chapman (1981) asserted that students seem to have unrealistic images of most colleges. Such stereotypical images of college life should be considered when developing student recruitment activities and materials. Fried (2005) concurred as he reported that the importance of an institution's reputation has grown, and the marketplace for students has expanded with an increased number of institutions offering degrees. The literature seems to confirm that effective recruitment efforts stem from an accurate institutional awareness (LoBasso, 2005; Trachter, 2010). The institutional awareness and understanding of the college choice process can help institutions enroll larger numbers of high academic ability students.

Little overlap exists between general recruitment research and the literature of how to best recruit high academic ability students to community colleges. Although there is some research regarding the exclusive recruitment of high academic ability students (Callahan, 2003; Dale, 2010; Filter, 2010; Schoenherr, 2009), there are even fewer sources regarding recruiting high academic ability students to community colleges (Kinzie et al., 2004). The researcher was unable to locate any studies on exclusive recruitment of high academic ability students to community colleges although minimal data regarding high academic ability student recruitment was found. Most research mentioned academic ability as a factor of college choice but often included high academic ability students as part of a larger group, not as a single case.

High academic ability students have opportunities to attend a wide variety of colleges and universities due to their high standardized aptitude scores and high grade point averages (Hu & Hossler, 2000; Lee et al., 2008). Based on academic ability, these students have the choice of choosing from among numerous colleges (Filter, 2010).

# College Choice Factors

Past and present trends and statistics suggest that factors that influence college choice process may be different for students in two-year and four-year institutions (Allen, 2007; Cooper, 2006; Filter, 2010; McCullough, 2010, Wyner, Bridgeland, & DiIulio, 2007). Allen (2007), Corley (2003), and Townsend (2007) indicated that students in two-year colleges conducted less intensive searches and were less focused than students who attended four-year colleges and universities. In contrast, high academic ability students were reported to be more analytical and deliberate in the college-search process (Avery, & Hoxby, 2004). Some high school graduates who attended community colleges experienced the process of deciding whether or not to attend college or to enter the workforce directly out of high school.

According to Cabrera and La Nasa (2000), "High school students develop predispositions to attend college, search for general information about college, and make choices leading them to enroll at a given institution of higher education" (p. 5). The decision to attend a particular college is a function of socioeconomic status, academic aptitude, education expectations, and aspirations. Student characteristics are in turn influenced by external groups, the fixed characteristics of the college, significant persons, and the institution's own efforts to communicate with the student (Callahan, 2003;

College Recruitment Practices, 2011; Dale, 2010; Filter, 2010; Lang, 1999; Rowe, 2002; Tan, 2009).

College choice models define certain noncognitive characteristics and significant influences as important to the choice of colleges that students attend. Noel-Levitz National (2009) reported that the top 10 effective recruiting strategies for two-year public colleges were

- 1. high school visits to primary markets;
- 2. hosting campus visit days;
- 3. hosting open house events;
- 4. telecounseling (direct telephone calls);
- 5. college-sponsored trips to campus;
- 6. weekend visits for high school students;
- 7. on-the-spot admissions decisions;
- 8. instant messaging;
- 9. using enrolled students in recruiting; and,
- 10. group area meetings for prospective students and parents.

This demonstrates that while technological innovations have added to the inventory of recruitment practices, many of the past traditional recruitment practices are still effective.

Noel-Levitz reported results from the "Student Satisfaction Inventory" in 2007 that asked, "What were the most important factors in why you attend a community college?" The responses were cost (78.7%), financial aid (67.2%), academic reputation (66.5%), personalized attention (56.3%), location (53.4%), campus appearance (51.8%), size of institution (48.5%), family/friends influence (43.5%), and sports (23.2%). Among

various types of institutions of higher learning, three factors were consistently reported as among the top-ranked factors of college choice: cost, financial aid, and academic reputation (Callahan, 2003; Dale, 2010; Hopkins, 2007; Noel-Levitz National, 2009). Factors regarding college choice are grouped and discussed in the following sections. *Parental and Family Influences* 

Throughout the literature, family economic status and parents' educational attainment were found to be key factors involved in the college choice process (Cabrera & La Nasa, 2000; Filter, 2010; Freeman, 2005; Kinzie et al., 2004; Pascarella & Terezeni, 2005; Paulsen & St. John, 2002; St. John et al., 2005; Sztam, 2003; Tan, 2009; Teranishi, Ceja, Antonio, Allen, & McDonough, 2004; Trachter, 2010). Parents' and other significant family members' influence are rated highly as they are repeatedly found to be important sources of college information who highly influence college choice (Bradshaw, Espinosa, & Hausman, 2001; Callahan, 2003; Noel-Levitz National, 2009).

In 1992, Flint stated, "Strong evidence indicates that college planning starts for many families well before the high school years and parents exert a heavy influence on those plans" (p. 689). The current literature still supports that statement. Tan (2009) found that parental encouragement had a positive effect on the decisions of community college students who were deciding where to attend college, and the literature consistently and currently contended that perhaps the greatest predictor of a student's predisposition and decision to attend a college is parental influence (Filter, 2010; MacAllum, Glover, Queen, & Riggs, 2007; Noel-Levitz, 2010; Tan, 2009; Trachter, 2010) Filter (2007), Filter (2010), and NPEC (2007) indicated that mothers played the major role in the majority of families when it came to the college choice. Likewise,

Pascarella & Terezini (2005) found that the mothers with a college education were a positive influence on college attendance. Mothers of African American students who were college graduates had stronger positive effects on African American men and women than did their Caucasian counterparts (Pascarella & Terenzini, 2005). Desjardins, Ahlberg, & McCall (2006) found that males appeared to be more effectively persuaded by their parents than female students.

Parental education and family economic status were generally highly correlated. Students from families that ranked high on both of these scales were more likely to encourage their children to attend college (Bers, 2005; Filter, 2010; Lee et al., 2004; NPEC, 2007). Dale (2010), Freeman (2005), and Nomi (2005) concluded that parents who had attended college tended to be much more involved in the college decisions of their children than those parents who had not attended college. Students from more affluent families considered a wider range of colleges as parents supported such searches (Avery & Hoxby, 2004; Paulsen & St. John, 2002; Rowe, 2002; Tan, 2009), whereas students from low-income families whose parents had not attended college had less direct knowledge of the benefits of postsecondary education and thus less influence (Lee et al., 2004; McCullough, 2010; Townsend, 2007).

First-generation students, who were more likely from immigrant families, minority families, and socioeconomically and educationally disadvantaged families, were greatly influenced by cost and their families' incomes (Ceja, 2006; Perna, 2007). In such families the research showed that parental influence increased as cost increased (Ceja, 2006; Filter, 2010). When parents did not view college enrollment as essential, students were more likely to attend a community college (McCullough, 2010).

Appropriate attention should be directed toward parents by college recruiters.

Realizing that family and friends are often reported as important influences in the college choice process, it is reasonable that institutions should continue to focus attention toward family members if future recruitment efforts are to be effective.

# Siblings and Friends

Many students relied on siblings, other family members, or special friends who influenced their college choice. Kaczynski (2011), Perez (2007), and Person and Rosenbaum (2006) reported that siblings had a positive influence on students' decisions to attend the college that they had attended. Kaczynski (2011) added that siblings were perceived as a comfort source. Older siblings who had attended institutions were found to be influential in directing students toward the college they attended (Allen, 2007; Freeman, 2005). Having an older sibling or friend enrolled in college had a strong influence on the educational planning of younger students as they were assisted with navigating through the information about college attendance. These students had greater first-hand knowledge about the college and the selection process (Allen, 2007).

Friends were also reported as a positive influence on the college selection process, especially when those friends were attending the particular college (Allen, 2007; Rowe, 2002; Tan, 2009). With open discourse on their college choice, friends give and receive information on their choice, thus influencing peers to attend (Freeman, 2005; Kinzie et al., 2004).

### High School Counselors and Teachers

Filter (2010) and Rowe (2002) found that research on high school counselors' influence on the college choice process of students was not extensive, had mixed results,

and was not unanimous. Filter (2007) and NPEC (2007) reported that counselors served more as information bearers instead of being influential in the decision process, and Broussard (2008) reported that counselor activities and programs minimally influenced college preparation and choice by students.

Students whose parents did not receive a college education were more likely to rely on school counselors for information about colleges and the process of college applications (NPEC, 2007). Merranko (2005) reported that first-generation students ranked counselors fairly high (11<sup>th</sup> out of 25) for factors that assisted them with choosing a college. Lower-income students relied more heavily on guidance from high school counselors than students whose families were more affluent (Filter, 2010).

However, many researchers have reported that a number of students consider high school counselors and teachers invaluable as informative sources (Bradshaw et al., 2001; Desjardins et al., 2006; Gonzalez, Stoner, & Jovel, 2003; Shoenherr, 2009; Teranishi et al., 2004), particularly students from low-income backgrounds whose parents had little formal education (MacAllum et al., 2007). It appeared that high school counselors may have had more impact on college choice if they had the availability and time to meet with students and develop a relationship with them (Broussard, 2009; Filter, 2010).

### Location

Location is a critical factor in college choice, and students usually attend institutions of higher education within their home state and in close proximity to their homes according to the literature (Allen, 2007; Clagget, 1999; Dale, 2010; Filter, 2010; Johnson, 2008; Kinzie et al., 2004; Kurlaender, 2006; Merranko, 2005; NPEC, 2007; Santiago, 2007). However, some research shows that students are more likely to attend

college outside of their local areas if they are male, belong to a higher socioeconomic status, have parents with higher education levels, and have high academic abilities (Callahan, 2003; Hoyt & Brown, 2003).

Distance proved to adversely affect college choice for high academic ability students (Filter, 2010) in similar ways that it affected other populations (Noel-Levitz National, 2009; NPEC, 2007). Throughout the literature, location is an important factor for college choice.

Cost

Many researchers have defined cost as important considerations regarding college choice (Cabrera & La Nasa, 2000; Desjardins et al., 2006; Filter, 2010; Grodsky & Jones, 2007; Hahn & Price, 2008; Hopkins, 2007; Kim, 2004; Kinzie et al., 2004; Kurlaender, 2006; Mills, 2004; Morciglio, 2010; St. John, Paulsen, & Carter, 2005; Tan, 2009; Teranishi et al., 2004). In response to a question about why students chose to enroll in their respective community colleges, Noel-Levitz (2007) reported that African American, Hispanic, Asian American, and Caucasian male and female students listed cost as the primary factor for their choice to attend a community college. Hoyt and Brown (2003) and St. John et al. (2005) reported that African American and Hispanic students were more concerned about cost when choosing a college than Caucasians students.

Grodsky and Jones (2007) found that perceptions of cost and the inability of individuals to enroll in college due to cost may impact those from low socioeconomic classes disproportionately. College administrators reflect that those students who are qualified to attend college but do not are mostly impacted by cost of tuition, fees, and other expenses (Hahn & Price, 2008). Many students attend community colleges due to

low tuition and the inability to afford tuition at private and public four-year colleges and universities.

Scholarships and Financial Aid

The college influence factors of no-need scholarships and financial aid packages were found to be highly predictive of college enrollment choice (Avery & Hoxby, 2004; Berge & Hendel, 2003; Dale, 2010; Hoyt & Brown, 2003; Kim, 2004; Rowe, 2002; Sztam, 2003; Tan, 2009). Financial aid and scholarships considerations appeared to be a key factor likely to influence enrollment decisions (Dale, 2010; Schoenherr, 2009).

There is some disagreement within the literature that the influence of cost and financial aid is considered important because as the students' income level and academic ability increase, the influence of cost and financial aid packages decrease (Kim, 2004; Paulsen & St. John, 2002; Schoenherr, 2009). For example, Perna (2007) concluded that financial aid in the form of grants and loans was not sufficient to increase enrollment in colleges and universities for African Americans, Hispanics, and Caucasians.

Academic Quality

Research has consistently shown that perceived academic quality is very important in relation to college choice (Allen, 2007; Bartini, 2008; Berge & Hendel, 2003; Filter, 2010; Hopkins, 2007; Kinzie et al., 2004; Morciglio, 2010; Niu & Tienda, 2008; Noel-Levitz, 2007; Paulsen & St. John, 2002; St. John et al., 2005; Tan, 2009; Teranishi et al., 2004; Zimbroff, 2005). Goenner and Snaith (2004) found that academic reputation was the most important factor, and Freid (2005) stated that because more institutions of higher learning are competing for students, academic reputation has increased in importance.

#### Personalized Attention

Information found in the literature indicated that personalized attention shown through institutional contacts had little impact if students did not have some predisposition to attend a particular type of institution (Callahan, 2003; Filter, 2010). However, these data do not discount the importance of providing timely, personal information to students with which they may make well-informed college choices (Noel-Levitz, 2007; Noel-Levitz, 2009 National; Noel-Levitz, 2010; Sztam, 2003).

An admissions program that utilizes a "personalized" approach to recruiting has the potential to offset possible enrollment declines in community colleges by encouraging students to enroll and persist in their academic aspirations (Noel-Levitz, 2007; Noel-Levitz, 2010). Sztam (2003) indicated that all functions associated with recruiting practices in colleges and universities affect student perception. Students reported that they vividly remembered their experiences at the institutions they contacted and visited as either positive or negative (Sztam, 2003). Females rated personalized attention higher in their college choice decisions than males (Callahan, 2003).

Noel-Levitz (2007) reported that the community college staff members who had recruiting responsibilities were responsible for a median number of 198 students as compared to 122 students being assigned to similar staff members in four-year public universities. Private and smaller institutions reported a lower staff-to-students ratio workload than reported by staff who were employed in larger institutions. Community colleges had larger numbers to serve making it more difficult for them to provide personalized attention (Noel-Levitz, 2007). Noel-Levitz (2007) also surveyed race groups about rating personalized attention among community college choice factors, and

the ratings were as follows: African American (67.2%), Hispanic (66.1%), Asian (53.7%), and Caucasian (51.2%). Pollock (2001) and Noel-Levitz (2007) added that an important, motivating factor was the impression made by faculty who expressed genuine interests in prospective students. A focus on quality academic interests by faculty was rated highly (McCullough, 2010; Morciglio, 2010).

The research suggested that colleges should provide personalized attention to attract students and draw them to the campus setting. Then, the merits of the colleges can be shown, and positive first impressions can be made.

## Campus Visits

Chapman's research in 1981 regarding campus visits is relevant today as the study explained that the campus visit was one of the most important factors in college choice because it allowed the student to experience and visualize what it was like to be on campus on a day-to-day basis. Noel-Levitz (2007) stated that one of the major influences of college choice was the amount of personal contact received, especially regarding the campus visit.

Among methods utilized to attract students, the campus visit was reported to be one of the most important information sources (Dale, 2010; Filter, 2010; Kinzie et al., 2004; Noel-Levitz, 2009 National). Additionally, Noel-Levitz (2007) reported that more than 50% of respondents ranked campus appearance as "important" or "very important" after they experienced a campus visit.

### Recruiting Materials

Students consistently reported that written print and mail communications remained important (Noel-Levitz, 2010). Colleges found it difficult to recruit effectively

without a comprehensive, responsive direct-mail program according to Dale (2010), Kinzie et al., (2004), Noel-Levitz (2010), and Tan (2009). Direct mail and brochures have proven to be one of the most economical and efficient methods of recruiting large numbers of students. Quatroche (2004) found that direct mail, brochures, and radio advertisements were the most effective methods to reach the greatest number of potential students to promote community colleges' low cost and convenient location.

The impact of recruiting materials on student college choice is a variable that has been difficult to assess because the effects of information are likely to be cumulative. Hossler and Vesper (1999) concluded that access to accurate and timely information is a critical component of efforts to assist high school students to achieve their educational goals after they graduate from high school. Hamrick and Hossler (1996) also found that early targeting of students to receive college literature and college-related information influenced active searching and was positively associated with later satisfaction about college decisions.

In 1989, Matthay reported that college catalogs and informative mail were important information sources. More recently, Noel-Levitz (2010) emphasized the need to continue to provide written and printed information sources but to also make it available online via websites. Online college catalogs were a popular website destination (Noel-Levitz, 2010). Mailing personalized print materials and personal postcards was rated highly as was providing social media communications such as Facebook (Noel-Levitz, 2007; Noel-Levitz, 2010).

Filter (2010) and Noel-Levitz (2010) revealed that despite technological advances, written materials still have an impact, and colleges should continue to utilize such

resources and increase sending of college information to students early in the students' high school years. Recruiting still includes the staples of direct mail and brochures. It is essential to reach students with information about college opportunities before their senior year according to Noel-Levitz (2010).

It seems that college information should be provided early in students' high school careers. With budget constraints and limited recruiting staff, reaching high school freshmen and sophomores may be very difficult, and the cost-benefit ratio may not be as productive as concentrating resources on high school juniors and seniors.

# Availability of Majors/Programs

It seems practical that if a desired major or program is not available to a student seeking to attend a particular college, then that student may not attend that college. Therefore, the availability of majors or programs was an important factor considered by students as they searched for an institution to attend (Allen, 2007; Cabrera & La Nasa, 2000; Dale, 2010; Engstrom & Tinto, 2008; Goble, Rosenbaum, & Stephan, 2008; Kisker & Oulcalt, 2005; St. John et al., 2005; Tan, 2009). Allen (2007) reported that interest in and the availability of a particular major or degree program was the most influential factor among students' college choice factors.

## Extracurricular Activities and Athletic Programs

In general, extracurricular activities and athletic programs were not rated as highly as other factors in surveys about college choice (Schoenherr, 2009). However, some students reported that extracurricular activities or athletic programs were important because those students participated in such activities in high school (Filter, 2010; Schoenherr, 2009). Students who were active in high school extracurricular activities

wanted to be active on campus during college years. Males rated extracurricular activities and athletic programs higher than did females (Briggs, 2006). Among some students, the availability of a particular activity (sports, music groups, or academic clubs) was the sole reason they chose to attend a particular college or university (Olszewski-Kubilius & Lee, 2004).

Community college varsity athletic programs attracted some students who would not otherwise have attended their college (Bucknavage & Worrell, 2005; Olszewski-Kubilius & Lee, 2004). Although the cost of operating community college athletic programs is controversial among some constituents, the perceived benefits include providing students with scholarships and opportunities to attend college (Cigliano, 2006; Walker, 2002).

# On-Campus Housing

Not all students live within a convenient driving distance of the college or university they attend; consequently, many students are positively influenced by oncampus housing opportunities. Burns (2006) reported that 70% of African American students valued the social interaction involved with on-campus living. To meet increasing demands of a more diverse demography, many community colleges reported that they were considering or had already built on-campus dormitories and apartments to meet that demand (Lords, 2010; Maxwell et al., 2003; Townsend, 2007). Moreover, concerns for safety have caused more community colleges to offer on-campus housing (Lords, 2010).

### Technological Advancement in Recruitment

Whereas many recruiting strategies have been utilized effectively for decades,

some have changed due to technological advances, which have greatly impacted recruiting practices involving potential college students (Noel-Levitz, 2010). Kinzie et al. (2004) and Tan (2009) noted that new marketing media and techniques such as electronic mail, websites, CD-ROMs, and social media innovations have altered the way colleges and universities communicate with prospective students. Rated highly as recruiting techniques were online sources that include applying online, website information, social media, electronic communications (e-newsletters), and e-mails from admissions personnel and faculty (Noel-Levitz National, 2009; Noel-Levitz, 2010). Technology has increased its effect on the college choice process because students are more technologically proficient and expect colleges and universities to keep pace with technological trends (Harris, 2010; Milliron & De Los Santos, 2004; Noel-Levitz, 2010). Noel-Levitz (2010) surveyed students and revealed that one in four students reported removing a college from their prospective list because of dissatisfaction with the college's website; 92% said they would be disappointed or would remove a college from their prospective list if they did not find the information they needed on the website; 76% used Facebook to explore prospective colleges; and an additional 23% of students reported searching college sites from their smart phones. Fifty-six percent of students surveyed also stated that they viewed college websites from "every day" to a "few times a week" during their college-search process (Noel-Levitz, 2010).

It is important to note that students utilize colleges' websites and that they value their content. Noel-Levitz (2010) reported that 54% of surveyed students identified academic-related content as the most valuable; 30% rated cost-related content as most valuable; 10% rated admissions-related content as most valuable; and, 3% rated student

life content as most valuable. The results showed that prospective students did read e-mails from college staff and were increasingly reading text messages (Noel-Levitz, 2010).

A new phenomenon caused by advances in technology involved prospective students exploring colleges online using official and unofficial sources without completing a college's response form (Noel-Levitz, 2010). Thus, the students may not have been known by college recruiters. Those students who decide to enroll often were not known until the point of application or when they took admissions tests.

Approximately 35% of college-bound students waited until the fall of their senior year to apply online and take the required admissions test according to Noel-Levitz National (2009). Communications is a key element of recruiting, and colleges can effectively recruit within budget constraints utilizing a combination of personal messages, e-mails, and social networking tools to reinforce key institutional messages.

If college recruiting budgets shrink, a less costly approach to efficacious recruitment of prospective students is for students to receive contact from college recruitment personnel via the website and e-mail. Prospects with higher yield possibilities should receive more personal contacts as they are more likely to enroll (Noel-Levitz, 2010).

Community College Recruitment of High Academic Ability Students

There is a dearth of literature concerning the college choice factors of high
academic ability students who chose to attend community colleges (Dale, 2010; Hu &
Hossler, 2000; Kinzie et al., 2004; Schoenherr, 2009). Is it necessary to use special
strategies designed to attract high academic ability students to community colleges?

Should community colleges concentrate their efforts and limited funds on other students who are more likely to attend a community college?

Typical marketing techniques would seek to define strategy and target particular populations. As potentially more high academic ability students enter the prospective student pool, Mississippi's public community colleges should determine if these students are attracted by different institutional opportunities than other student groups.

As Mississippi's public community colleges develop and implement plans to recruit high academic ability students, it is not very clear as to what approach should be taken because the students who are more likely to attend Mississippi's community colleges are those students who do not score the standard, minimal ACT score (18) and grade point average required for admission to one of Mississippi's eight public universities. These students have limited choices. If students who do not meet university admissions standards want to attend college, they must attend a Mississippi community college or attend an out-of-state institution of higher learning that will accept them; therefore, a majority of these students attend Mississippi's public community colleges.

However, one of the problems with attracting high academic ability students to community colleges is the fact that it is more difficult to recruit students who are dissimilar to currently enrolled students. In seeking to attract high academic ability students, community colleges must work to ensure that their particular needs are met.

The literature has consistently shown that students who attend community colleges have similar characteristics including having parents from relatively lower socioeconomic status than parents of students entering four-year colleges and universities, cost being a very important factor, and a convenient location being an important

consideration (McCullough, 2010; Morciglio, 2010; Townsend, 2007). Students are more likely to attend a community college if they are first-generation college students (Cooper, 2006; McCullough, 2010; Nomi, 2005). Other common characteristics reported were the availability of a particular major (Maxwell et al., 2003; Somers, et al., 2006); available on-campus housing (Christie & Hutcheson, 2003; Townsend, 2007); and the personal perception that they were not ready for a university setting due to a lack of social and academic preparation (Byrd & MacDonald, 2005; McCullough, 2010; Wells, 2008). Furthermore, research on the college choice processes of community college students indicated that they did not follow traditional patterns of college choice and that their choice processes may have differed from those of four-year students (Dale, 2010; McCullough, 2010; Morciglio, 2010; Noel-Levitz, 2007).

Increasingly, more students are choosing to attend community colleges possibility because of a combination of economic conditions and the lower cost of community colleges (Morciglio, 2010; Pluviose, 2008). The cost of community colleges is typically one-half the cost of four-year institutions (Provasnik & Planty, 2008). Therefore, despite the fact that the largest segment of first-time, college-bound students in the United States, high schools seniors, typically do not consider community colleges as a serious college option during the early search phase (Provasnik & Planty, 2008; Zahs, Pedlow, Morrissey, Marnell, & Nichols, 2005), more high school seniors are currently choosing to attend community colleges.

Students who were high achievers in high school may have attended community colleges for different reasons than students who were low achievers (Byrd & MacDonald, 2005). College-ready students who were considered high academic ability students may

have attended community colleges to take advantage of low tuition costs, to give them time to decide on a particular career path, or to use community college as a conduit to transfer to a four-year institution (Laanan, 2003; Schoenherr, 2009).

Historically, community colleges' efforts to enroll high academic ability students have been ineffective although differences exist among regions (Dale, 2010; McCullough, 2010; Pluviose, 2008). Consequently, these efforts have had varying degrees of success. Success in recruiting these students has been generally ineffective when compared to the recruitment of the general student population of community colleges (McCullough, 2010). Some enrollment administrators may have had the perception that high academic ability students would not have considered community colleges, thereby it may have influenced them to limit their efforts and persistence with attempts to enroll such students.

Enrollment statistics and ACT statistical data from the Mississippi SBCJC show that the number of high academic ability students enrolling and attending Mississippi's community/junior colleges has steadily increased as the general enrollment has increased (D. West, personal communication, March 9, 2011). Additionally, the overall mean ACT of all community college students in Mississippi increased from an average freshman ACT composite score of 17.2 in 1997 (ACT Inc., College Success, 1998) to an average of 18.1 in 2007 and 18.3 in 2009-2010 (D. West, personal communication, March 9, 2011). Anecdotal evidence shows that high academic ability students may be attending community colleges at a higher rate than in the past (D. West, personal communication, March 9, 2011; Pluviose, 2008; SBCJC, 2007).

Two critical questions should be analyzed and discussed. Can Mississippi's community/junior colleges adjust programming to better attract high academic ability students while continuing to serve all community college students well? Should community colleges divert more funds toward the recruitment of students who score higher on standardized admissions tests?

Central to this issue is a better understanding of high academic ability students' college choice preferences and general student group characteristics. Equally important is the need to understand individual characteristics of high academic ability students even though they may exhibit a wide range of lifestyle preferences.

Hill and Winston (2006) reported that approximately 12.8% of the high school seniors in the United States were considered high-ability students as defined by high ACT/SAT scores, and Hill and Winston (2010) also reported that among the high academic ability group of students, those in low-income families generally did not attend highly selective colleges. This information is in contrast to the perception that high academic ability students are rare and exclusively attend elite, private universities (Shulz, 2008). Thus, there may be more opportunities to enroll high academic ability students in community colleges than is perceived.

Research concerning recruitment of high academic ability students to community colleges is severely limited (Filter, 2010; Lee et al., 2004; Rinn, 2007; Santos, 2004; Sztam, 2003). Examining this limited literature revealed some information about college choice factors of high academic ability students who chose to attend community colleges. *Parental and Family Influences* 

Callahan (2003), Freeman (2005), Kinzie et al. (2004), McCullough (2010),

Paulsen & St. John (2002), Pascarella and Terenzini (2005), St. John et al., (2005), Sztam (2003), Tan (2009), Teranishi et al. (2004), and Trachter (2010) reiterated that the preponderance of literature that concluded that parents' or legal guardians' influence was particularly important in the decisions of students who chose to attend community colleges, and Callahan (2003) found that high academic ability students were influenced even more than the general population students by parents/legal guardians. As with all categories of college-seeking students, mothers and fathers who had a college education were more influential on their childrens' college choice than those who did not have a college education, and mothers were reported to have had the most influence (Cabrera & La Nasa, 2000; Freeman, 2005; Kinzie et al., 2004; NPEC, 2007; Teranishi et al., 2004). However, Toutkoushian (2001) reported that it appeared in some situations that academic ability may override restrictions on college choice based on family income.

As with students from general population groups, siblings and friends were influential in the college-choice decisions of high academic ability students (Allen, 2007; Kaczynski, 2011, Perez, 2007; Person & Rosenbaum, 2006; Rowe, 2002; Tan, 2009). Students who had siblings who were attending a college or who were alumni of a particular college were especially influential in persuading siblings or friends to enroll in that particular college (Allen, 2007; Freeman, 2005).

High School Counselors and Teachers

Siblings and Friends

Callahan (2003) found that high school seniors with high ACT/SAT scores often relied on many "people of influence" who helped them in the college decision process. High school counselors and faculty were more highly rated by high academic ability

students than by the general student population. Gonzalez et al. (2003) reported that high academic ability students considered teachers and counselors as important sources of information. High academic ability students who were from lower socioeconomic backgrounds and whose parents had little formal education also rated high school counselors highly (MacAllum et al., 2007; NPEC, 2007). According to Filter (2010), high school counselors may have a positive impact on college choice decisions of high academic ability students if they are accessible and develop relationships with the students.

#### Location

Most literature concluded that location and proximity of a college impacted high academic ability students' college-choice decision positively (Allen, 2007; Dale, 2010; Filter, 2010; Kinzie et al., 2004; Kurlaender, 2006; Merranko, 2005; NPEC, 2007; Santiago, 2007; Schoenherr, 2009). As with other categories of students, high academic ability students frequently attended colleges that were in close proximity to their home. Callahan (2003) and Hoyt and Brown (2003) noted that high academic ability students were more likely to attend college outside their local vicinity in higher rates than the general student population if they were male, belonged to a higher socioeconomic status, and their parents had higher education levels.

#### Cost

The ability to afford a college education is arguably one of the most important determinants of the college-choice decision. Scholarships and low costs were more likely to attract lower socioeconomic students who possessed high academic ability to lower-tiered colleges, which included community colleges (Allen, 2007; Kim, 2004; Mills,

2004; Paulsen & St. John, 2002; Schoenherr, 2009; Trachter, 2010). Berge and Hendel (2003) and Callahan (2003) also confirmed that socioeconomic status was an influential factor in the college choice of high academic ability students.

# Scholarships and Financial Aid

The preponderance of situations involving the college choice of high academic ability students regarding no-need scholarships showed that it impacted their college-choice decision perhaps predominantly because of prestige factors or lower-income characteristics (Dale, 2010; DesJardins et al., 2006; Filter, 2010; Grodsky & Jones, 2007; Hahn & Price, 2008; Kim, 2004; Kurlaender, 2006). Financial aid and scholarship offers were perceived as very important for high academic ability students as they tended to compete for many financial aid or scholarship awards. In contrast, Avery and Hoxby (2004) and Cheng (2006) focused on college choice behaviors of high academic ability students and concluded that students whose parents attended more selective colleges were less deterred by college costs and less attracted by financial aid.

However, high academic ability students who chose to attend community colleges had numerous scholarship opportunities available to them and rated them as important (Dale, 2010; Schoenherr, 2009).

The community college no-need scholarships for high academic ability students are ubiquitous. Among Mississippi community colleges, scholarship amounts vary as per specific ACT ranges, but all offer incrementally-increasing scholarship amounts for higher ACT composite scores (SBCJC Finance, 2011). Callahan (2003) noted that high academic ability students indicated that scholarships were among the most important reasons they chose to enroll in a college.

Berge and Hendel (2003) found that students with somewhat lower ACT composite scores (21-24) were more likely to be attracted by scholarships, and students with ACT composite scores in the range of 25-36 were less likely to be attracted by scholarships due perhaps to having multiple offers from a wide range of colleges and universities. Berge and Hendel (2003) also reported that relatively lower ACT composite scores (average-21.1) were not found to have high predictive value. It appeared that students with higher ACT composite scores were offered scholarships by all colleges and universities, thus decreasing their impact on attending a particular community college.

As recruitment of high academic ability students has intensified, the use of noneed or merit scholarships has increased in the Mississippi community college system. As scholarships are only one factor in college choice, it is important for recruitment managers to highlight other factors that attract high academic ability students who have numerous options and offers to attend a variety of colleges (Callahan, 2003; Dale, 2010; Filter, 2010; Schoenherr, 2010). The common practice of offering no-need scholarships to high academic ability students indicates a need for a more personalized recruitment approach geared to individual characteristics.

### Academic Quality

Studies that have investigated college choice factors for high academic ability students repeatedly cited academic reputation or perceived quality as top indicators of college choice (Callahan, 2003; Freid, 2005; Goenner & Snaith, 2004; Kinzie et al., 2004; Schoenherr, 2009). Bartini (2008) found that academic reputation is consistently the primary factor in the college choice decision of high academic ability students.

Results of the aforementioned studies on perceived academic quality failed to provide an indication as to why some high academic ability students chose to attend colleges and universities that have a less prestigious reputation when the students had highly prestigious options available to them (Schoenherr, 2009). Similarly, there is a lack of information about high academic ability students choosing to attend community colleges and how their perception of academic quality affected their college choice (Schoenherr, 2009).

Perceived academic quality of community colleges is filled with inconsistencies and contradictions (Morciglio, 2010). Many of the characteristics marketed by most community colleges, i.e., accessibility, affordability, and convenience, can have a negative impact. Brafman & Brafman (2008) reported that community colleges may be perceived as low in quality because of persistent messages of being the least expensive, least selective, and most easily accessible institution.

It is critical to attracting high academic ability students that the students perceive respective community colleges as having academic quality. Pluviose (2008) reported that programs such as dual credit and dual enrollment have increased exposure of high academic ability students to community colleges. As high academic ability students become aware that community college academic courses transfer to four-year colleges and universities, the perception of quality may be reinforced. Trachter (2010) reported that many high academic ability students attended community colleges, and it served as a "stepping stone" to four-year colleges and universities. Trachter (2010) also reported that a higher concentration of high academic ability students was seen among transfer students.

#### Personalized Attention

Personalized attention by community college staff can include providing print materials, website information, electronic communications, personal letters and postcards, telephone calls, high school and college fair visits, social media contacts, personal visits, and campus visits. Callahan (2003) indicated that personal attention by college recruiters toward high academic ability students was influential in improving the perceived quality of a college and toward enrolling such students.

Research has also shown that high academic ability students begin college searches earlier than other student groups (Callahan, 2003; Filter, 2010; Schoenherr, 2009). The data suggest that recruiters should contact students in lower level grades (before their senior year of high school) and encourage these students to visit the college campus (Noel-Levitz, 2010). Trusty, Robinson, Plata, and Ng (2000) and Hossler (1999) found that students were influenced to attend certain colleges at a young age (8<sup>th</sup> and 9<sup>th</sup> grades). The approach of contacting high academic ability students earlier could impact the students before they become overwhelmed with contacts from other colleges and become more skeptical of the recruiting processes (Noel-Levitz National, 2009).

A focus on quality academic interests, especially by faculty, was rated highly (McCullough, 2010; Morciglio, 2010). Faculty members who exhibited courteousness and professionalism seemed to influence students who were considered conscientious and hard working, characteristics often attributed to high academic ability students, to enroll (Morciglio, 2010). Additionally, Morciglio (2010) concluded that community college instructors were perceived as available and caring. Females rated such personalized attention from faculty higher than males (Callahan, 2003).

Regarding research of enrolling high academic ability students, Berge and Hendel (2003) found that the college choice factors of no-need scholarships and campus visits were highly predictive of enrollment choice, and high school visits were significantly predictive of enrollment. According to Berge and Hendel (2003), outreach factors such as regional college fair participation had little effect on their college-choice decision. Such findings are important as enrollment managers budget and utilize scarce recruiting funds.

## Campus Visits

Dale (2010), Filter (2010), Kinzie et al. (2004), and Noel-Levitz National (2009) emphasized the importance of the campus visit as a critical factor for positively influencing the college choice of students. Regarding high academic ability students, Sztam (2003) reported that it was important to attract them to campus and to treat them enthusiastically and courteously because these students reported remembering positive and especially negative experiences during campus visits.

### Recruiting Materials

Although the research on the effect of recruitment materials on the college choice of high academic ability students is limited, it can be generalized as important due to their tendency to consider their decision more thoroughly (Avery & Hoxby, 2004; Dale, 2010; Kinzie et al., 2004; Quatroche, 2004; Tan, 2009). High academic ability students prepared for the college search process earlier so reaching them with recruiting materials and brochures on an on-going basis was critical to enrolling them (Dale, 2010).

Research by Noel-Levitz (2007) and Noel-Levitz (2010) consistently showed that students rated personalized print materials, postcards, and social media contacts by

college personnel highly. It is essential to reach high academic ability students with information about college opportunities before their senior year according to Noel-Levitz (2010).

# Availability of Majors/Programs

Availability of majors or programs are critical elements for high academic ability students' decisions to attend particular colleges (Cabrera & La Nasa, 2000; Dale, 2010; Engstrom & Tinto, 2008; Goble, 2010; Kinzie et al., 2004; McCullough, 2010). The uniqueness of community college programs such as the two-year healthcare programs attracted some high academic ability students to attend community colleges that have such programs (Bartini, 2008).

# Extracurricular Activities and Athletic Programs

High academic ability students were more greatly involved in extracurricular activities during high school than general population students (Filter, 2010; Matthews & Kitchen, 2007; Schoenherr, 2009). They planned and continued such participation in college with males participating in athletics more than females, and females being much more involved in other extracurricular activities (Bucknavage& Worrell, 2005). The availability of a particular activity may be the specific factor that attracts a high academic ability student to a community college campus (Engstrom & Tinto, 2008; Goble et al., 2008; Kisker & Oulcalt, 2005; Olszewski-Kubilius & Lee, 2004).

## On-Campus Housing

In the literature, on-campus housing is not generally rated highly, but it can be a key factor for a high academic ability student's choice to attend a community college not in close proximity to his or her home. Callahan (2003) in his research on the college

choice factors of high academic ability students reported that 80% of high academic ability students lived on campus.

### Conclusion

The study of how and why students choose a particular institution is important to community college administrators. Enrollment impacts funding levels and allocation of resources. Community colleges should market themselves by understanding various recruiting activities and a variety of practices that students report as important to their college choice decision. Community college recruiters should be aware of what attracts high academic ability students and tailor recruitment programs toward attracting such students more effectively.

Because recruitment can also be a reaction to demand, community colleges also have the option of changing existing programs or adding new programs in reaction to constituents' demands and requests. Community colleges have historically been flexible and responsive to student and market demands (MacAllum, Yoder, & Poliakoff, 2004). This flexibility allows institutions to curtail certain programs while enhancing others more rapidly (Hanson, 2011; MacAllum et al., 2004).

Establishment of a goal for recruitment activities made a significant difference in perceptions of effectiveness for those activities according to Harris (2010). Thielemann (2004) indicated that enrollment management activities were being implemented in community colleges, but these activities were not being implemented with the same level of intensity as were other areas such as academic program review.

The results of this research should be tempered by an awareness of the multiple factors that can affect college choice among high academic ability students. The diversity and multiplicity of factors impacting college choice should be considered.

It is particularly important that Mississippi's public community colleges find answers to the question of how to attract and enroll high academic ability students.

Typically, the percentage of these students attending community colleges has been relatively low. Most of these students matriculate at four-year institutions of higher learning in Mississippi. Mississippi's public community colleges should find ways to attract, enroll, and graduate larger numbers of high academic ability students because these students are more likely to persist and graduate.

At community college campuses throughout Mississippi, recruitment administrators may have the most important influence on the ability to achieve and maintain an adequate enrollment to accomplish institutional missions. Colleges increasingly need to strategize and conduct a more systematic and scientific approach to attracting and enrolling students. As in the case with every community college and four-year institution, each is facing its unique set of demographic circumstances and competition for enrollment. Colleges and universities must be efficient in targeting its recruitment efforts to those students who otherwise might not enroll (Thomas et al., 2001).

#### CHAPTER III

#### **METHODOLOGY**

#### Introduction

This chapter includes a description of the participants, the methods of data collection, and the instruments that were used in the study. A description of the techniques for analysis of data is included. This study investigated the college choice factors related to why high academic ability students chose to attend Mississippi public community colleges and the relationship to gender, race, first- or non-first-generation, and commuter and on-campus residence groups. It also examined the differences among such groups and college choice factors between data collected in 2003 and 2011.

# **Participants**

Participants for the study were freshmen students enrolled at the 15 public community/junior colleges in the state of Mississippi at two different points in time, the spring semesters of 2003 and 2011. It included community college students who were freshmen and scored 26 or above on the American College Test (ACT) composite score. Mississippi's public community colleges have an open-admissions policy; however, they do require an ACT for assessment or placement purposes from most of the students who attend. The average ACT composite score for all Mississippi students who took the ACT during 2009 - 2010 was 18.8 and 96% of all Mississippi high school graduates in 2009 - 2010 sat for the ACT (*Chronicle of Higher Education Almanac*, 2010-11).

The participants in this study were enrolled, undergraduate freshmen students who attended one of Mississippi's 15 public community/junior colleges during the spring 2003 semester and during the spring 2011 semester and who scored 26 or above on the ACT

composite score. According to the deputy executive director for programs and accountability for the Mississippi State Board of Community/Junior Colleges (D. West, personal communication, March 9, 2011), 4.82% of the total number of Mississippi public community/junior college students scored 26 or above on the ACT composite score in 2010-2011 as compared to 4.00% 1996-1997 (Day, 1998).

During the spring 2003 semester, surveys were mailed to the chief student affairs officers of each campus with stamped, self-addressed envelopes provided by the researcher for returning the completed surveys. The surveys were hand-delivered to the students via the offices of the chief student affairs officers at each respective community college campus.

During the spring 2011 semester, the same surveys were also mailed to the 15 community college presidents' chief student affairs officers. Each received a self-addressed envelope with the surveys provided by the researcher for mailing the completed surveys. The surveys were also sent via email. The surveys were then hand-delivered to the students via the respective offices at each community college campus.

#### **Data Collection**

The data collection procedures were gathered for the variables age, gender, race, part- or full-time enrollment status, first-generation attendance, parents' attendance or nonattendance to the respective community college, siblings attendance or nonattendance to the respective community college, and on-campus or commuter residence were reported by students on the recruitment survey. The survey included two open-ended questions: Why did you attend a community college instead of a four-year college or

university? What was the major reason that you decided to attend this community college? The survey concluded with a comments section.

The criteria used to establish college choice factors were collected by administering the student survey, which is a Likert-style survey. Students were asked to indicate the degree to which they believed each of 21 criteria were important in their decision to attend the community college.

In 2003, after obtaining approval from The University of Southern Mississippi's Institutional Review Board (Appendix C), the researcher then obtained approval from the presidents of the 15 community/junior colleges via a presentation to them and a letter requesting permission to conduct the research (Appendix D). In 2011, after obtaining approval from the University of Southern Mississippi's Institutional Review Board (Appendix E), the researcher then obtained approval from the presidents of the 15 community/junior colleges via a letter requesting permission to conduct the research (Appendix F).

After the surveys were mailed to each community college chief student affairs officer in 2003 and 2011, the researcher requested that the respective chief student affairs officers distribute the surveys to the participants. A cover letter that accompanied the survey was included with an endorsement from the chief student affairs officer from each community college (Appendix G). The cover letter included a request for the survey to be returned to the chief student affairs officer's office. Follow up letters, e-mails, and telephone calls to the chief student affairs officers were conducted by the researcher to encourage thorough gathering of the surveys.

#### Instrumentation

The instrument, The Recruitment Survey, was developed by the researcher (Appendix H). The survey was designed to establish the reasons that high academic ability students chose to attend one of the 15 public community/junior colleges in Mississippi. In 2003, the survey was distributed to the chief student affairs officers of the 15 public community/junior colleges in Mississippi. They in turn, distributed the surveys to the high academic ability students at the respective community colleges. In 2011, the survey was distributed to the chief student affairs officers of the 15 public community/junior colleges in Mississippi. They in turn, distributed the surveys to the high academic ability students at the respective community colleges. Demographic data was also gathered in the form of a questionnaire during 2003 and 2011. The model used the criterion list (see Appendix H). Students were asked to rate each of the criteria on a scale of 1 (not important), 2 (slightly important), 3 (neutral), 4 (moderately important), and 5 (very important).

In order to establish validity for the instrument, in the spring semester of 2003 a panel of five experts who were enrollment management administrators from various community colleges in Mississippi was asked to evaluate its format, content, and relevance to the stated objectives. Their recommendations were utilized in preparing the final form of the instrument used in the study.

In order to test the reliability of the instrument in the spring semester of 2003, a pilot study was conducted using 21community college freshmen who fit the definition of high academic ability students and who were attending a Mississippi community college.

The cover letter included two questions: Is the survey understandable and readable? Do

you have any suggestions for improving the survey? A Cronbach Alpha was established demonstrating reliability.

# Data Analysis

Analysis of the data was conducted using a general linear model (MANOVA) to test hypotheses of the study. The .05 level of statistical significance was used to test each hypothesis.

### **CHAPTER IV**

#### ANALYSIS OF DATA

#### Introduction

The goal of this study was to examine the significance of factors related to college choice factors of high academic ability students who chose to attend Mississippi public community colleges. The study examined the differences in perception of college choice factors and recruitment factors among students according to the variables of age, gender, race, full-time or part-time enrollment status, first generational attendance to college, if one or both parents or legal guardians attended the respective community college, if a sibling attended the respective community college, and if the student was a commuter or on-campus resident.

# Organization of Data Analysis

The research tool, the Recruitment Survey, was a 21-item Likert-type survey with two open-ended response questions and a comments statement developed by the researcher and designed to establish the reasons that high academic ability students chose to attend public community colleges in Mississippi in 2003 and 2011. Validity was established by the method of face validity, and Cronbach's alpha was established at 0.9071.

The survey was distributed to high academic ability students who attended one of the 15 public community colleges in Mississippi in the spring semesters of 2003 and 2011. Each student was asked to rate each of the criteria on a scale of 1 (not important), 2 (slightly important), 3 (neutral), 4 (moderately important), or 5 (very important). In addition to the 21 Likert items, responses for age, gender, race, part- or full-time

enrollment status, first generational attendance, parents' attendance or nonattendance to the respective community college, siblings' attendance or nonattendance to the respective community college, and on-campus or commuter residence were reported by students on the recruitment survey. The survey included two open-ended questions that inquired as to why they chose to attend a community college instead of a four-year college or university and the major reason that the student decided to attend the respective community college that he or she was attending. The survey concluded with an open-ended comments section.

#### **Participants**

The participants in the study included enrolled, undergraduate freshmen students who attended one of Mississippi's 15 public community colleges in the spring 2003 semester and in the spring 2011 semester. The participants had an ACT composite score of 26 and above. Responses were gathered from 240 students equally divided between males and females from 15 of the community colleges in 2003, and responses were gathered from 247 students, 144 females and 103 males, from 15 of the community colleges in 2011. Response to surveys was less than 100%. In an effort to increase response rates, the researcher requested verbal and formal written permission, assistance, and cooperation from the presidents and the chief student affairs officers of the 15 Mississippi public community colleges. The overall number of high academic ability students defined as freshmen with a 26 and above ACT composite score was not possible to determine.

#### Data Analysis

Data was analyzed via both descriptive and inferential methods with responses directed at the significance of factors related to why high academic ability students chose to attend Mississippi public community colleges in 2003 and 2011. The 21 Likert responses along with other demographic data were entered into an Excel spreadsheet for each of the 240 respondents in 2003 and 247 respondents in 2011and later converted to the SPSS database for analysis. The inferential statistic applied to the data was a Multivariate Analysis of Variance (MANOVA) via SPSS software. The MANOVA allowed for the examination of the 21 dependent variables simultaneously and was desirable because of its capability to limit Type I error. Tests of Between-Subjects Effects ANOVAs and Tukey HSD Multiple Comparisons were applied as post hoc follow-up tests. All statistical tests were applied at the .05 level of significance.

## Descriptive Data

In 2003, there were 240 participants in the study. Although there was no data available concerning the number of Mississippi community college students who had a 26 and above ACT composite score in the 2002-2003 college year, Day (1998) had reported that approximately 4% of students enrolled in Mississippi's public community colleges had an ACT composite score of 26 and above. In 2011, there were 247 participants in the study. Approximately 4.82% of students enrolled in Mississippi's community colleges had an ACT composite score of 26 and above (D. West, personal communication, March 9, 2011).

The demographics of gender and race are illustrated in Table 2.

Table 2

Gender	and	Race
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	20	03	201	1
1	Frequency	Percent	Frequency	Percent
Gender				
Female	120	50%	144	58.3%
Male	120	50%	103	41.7%
Total	240	100%	247	100%
Race				
African Americ	an 15	6.3%	10	4.0%
American India	n 0	.0%	0	.0%
Asian American	n 0	.0%	6	2.4%
Caucasian	215	88.8%	220	89.1%
Hispanic	0	.0%	3	1.2%
Other Race	9	3.8%	8	3.2%
Total	239	100.0%	247	100.0%

Demographic information on enrollment status is shown in Table 3. Participants in the research were categorized as being either full-time (12 or more hours) or part-time (11 or fewer hours) students.

Table 3

Enrollment Status

	2003		2011		
	Frequency	Percent	Frequency	Percent	
Enrollment Status					
Full Time	228	95%	228	93.6%	
Part Time	12	5.0%	19	7.7%	
Total	240	100%	247	100%	

Demographic information on age is shown in Table 4. Participants in the study ranged from 18 years of age to 44 years of age in 2003. Participants in the study ranged from 18 years of age to 58 years of age in 2011.

Table 4

Means and Standard Deviations of Age

		2003			2011	
	n	Mean	SD	n	Mean	SD
Age	239	19.79	3.084	247	21.68	5.752

The greatest percentage of participants indicated that they were not first-generation college students. A lower percentage of participants indicated that one or both of their parents or legal guardians and a sibling or siblings had attended the respective community college that the participant was attending as indicated in Tables 5, 6, and 7.

Table 5

College Attendance by Parent(s) or Legal Guardian(s)

	2003		2011		
	Frequency	Percent	Frequency	Percent	
Yes	185	77.1%	188	76.1%	
No	55	22.9%	59	23.9%	
Total	240	100%	247	100%	

Table 6

College Attendance by Parent(s) or Legal Guardian(s) to the Same Community College

	2003		2011		
	Frequency	Percent	Frequency	Percent	
Yes	86	35.8%	87	35.2%	
No	154	64.2%	160	64.8%	
Total	240	100%	247	100%	

Table 7
Sibling(s) Attended the Same Community College

	200	03	2011		
	Frequency	Percent	Frequency	Percent	
Yes	85	35.6%	85	34.4%	
No	154	64.4%	162	65.6%	
Total	240	100%	247	100%	

Regarding commuter or on-campus residence status, more participants lived off campus than on campus as indicated in Table 8.

Table 8

On-Campus or Off-Campus Residence

	20	2003		11
	Frequency	Percent	Frequency	Percent
Yes	102	42.5%	74	30.0%
No	138	57.5%	173	70.0%
Total	240	100%	247	100%

# Tests of Hypotheses

Five hypotheses were tested using a general linear model (MANOVA). Based on the findings of this study, the results of testing the stated hypotheses were as follows:

There was a significant difference in the factors of college choice between data collected in 2003 and 2011. For this analysis the results of college choice factors from data collected in the spring semesters of 2003 and 2011 were considered. A one-way MANOVA was calculated examining the affect of demographic variables on college choice factors by year F(21,430) = 2.309, p = .001) (see Table 9). A significant univariate effect was found for the college choice factor of male/female ratio F(1,450) = 15.39, p < .001). Participants in 2003 rated male/female ratio higher than the participants in 2011 did. This was the only significant factor among the 21 college choice factors.

Table 9

Means and Standard Deviations for 2003 and 2011

	2003 (n=2	13)	2011 ( <i>n</i> =239)	
College Choice Factors	Mean	SD	Mean	SD
Academic Reputation	3.82	1.06	3.82	1.20
Location	4.31	.975	4.36	.857
Entrance Requirements	2.93	1.23	3.19	1.27
Community	3.32	1.28	3.28	1.24
Varsity Sports Opportunities	2.08	1.41	2.00	1.33
Racial/Ethnic Makeup	2.12	1.17	1.87	1.15
Type of Housing	2.46	1.47	2.36	1.47
Extracurricular Activities	2.92	1.42	2.59	1.50

Table 9 (continued).

Parents/Relatives Advice	3.48	1.25	3.22	1.35
Advice of Alumni	3.40	1.27	3.28	1.35
Program Availability	3.70	1.30	3.97	1.31
Size of Student Body	3.07	1.23	2.84	1.27
Cost	4.31	1.04	4.50	.898
Scholarships	4.34	1.02	4.33	1.10
Social Activities	3.15	1.20	2.92	1.33
Male/Female Ratio	2.59	1.23	2.14	1.18
Facilities	3.20	1.22	3.23	1.29
Friends	3.04	1.34	2.84	1.40
Counselors and Teachers	2.97	1.25	2.73	1.37
College Routine Contact	2.74	1.28	2.62	1.31
College One-on-One Contac	et 2.87	1.36	2.89	1.40

The second hypothesis stated: There is a significant difference between the genders and factors of college choice. For this analysis the dependent variables of choice were contrasted with the independent variable, gender. A one-way MANOVA was calculated examining the affect of gender on college choice factors. A significant effect was found (F, 21, 428 = 2.835, p < .001). Follow-up univariate ANOVAs indicated that four of the choice factors were significantly influenced by gender. The choice factors influenced by gender were academic preparation, entrance requirements, availability of

specific programs of study, and contact with college representatives. In each case, females scored these college choice parameters significantly higher than males.

Table 10

Means and Standard Deviations for Gender

	Females $(n=245)$		Males (n=20	05)
College Choice Factors	Mean	SD	Mean	SD
Academic Reputation	3.99	1.17	3.60	1.12
Location	4.37	.866	4.31	.944
Entrance Requirements	3.24	1.25	2.88	1.24
Community	3.44	1.23	3.15	1.29
Varsity Sports Opportunities	2.02	1.37	2.05	1.37
Racial/Ethnic Makeup	2.06	1.16	1.88	1.15
Type of Housing	2.56	1.53	2.20	1.36
Extracurricular Activities	2.85	1.46	2.59	1.46
Parents/Relatives Advice	3.42	1.34	3.24	1.27
Advice of Alumni	3.43	1.35	3.27	1.26
Program Availability	4.04	1.25	3.61	1.35
Size of Student Body	3.03	1.26	2.85	1.24
Cost	4.42	.958	4.38	.986
Scholarships	4.45	1.01	4.19	1.10
Social Activities	3.06	1.34	2.98	1.20
Male/Female Ratio	2.29	1.19	2.40	1.26

Table 10 (continued).

Facilities	3.33	1.28	3.08	1.20
Friends	2.89	1.37	2.97	1.39
Counselors and Teachers	2.92	1.36	2.74	1.27
College Routine Contact	2.89	1.30	2.42	1.25
College One-on-One Contac	t 3.05	1.35	2.67	1.38

The third hypothesis stated: There is a significant difference between the race groups and factors of college choice. For this analysis the dependent variables of choice were contrasted with the independent variable, race. A one-way MANOVA was calculated examining the affect of race for African American, Caucasian, and other students on college choice factors. A significant effect was not found F(21, 402) = 1.527, p = .065. Follow-up univariate ANOVAs indicated that none of the choice factors were significantly influenced by race (see Table 11).

Table 11

Means and Standard Deviations for Race Groups

	African Americans ( $n=21$ )		Caucasians (n=403)	
College Choice Factors	Mean	SD	Mean	SD
Academic Reputation	4.19	.873	3.81	1.13
Location	3.90	1.09	4.36	.899

Table 11 (continued).

Entrance Requirements	3.71	1.90	3.05	1.25
Community	3.52	1.03	3.31	1.27
Varsity Sports Opportunities	2.95	1.36	1.99	1.36
Racial/Ethnic Makeup	2.81	1.08	1.95	1.16
Type of Housing	3.10	1.26	2.38	1.47
Extracurricular Activities	3.19	.981	2.73	1.48
Parents/Relatives Advice	3.48	1.67	3.36	1.30
Advice of Alumni	3.52	1.12	3.36	1.32
Program Availability	4.14	1.11	3.81	1.32
Size of Student Body	3.00	.949	2.95	1.27
Size of Student Body	3.00	.949	2.95	1.27
Cost	4.33	.856	4.41	.976
Scholarships	4.48	.981	4.33	1.07
Social Activities	3.24	1.04	3.04	1.27
Male/Female Ratio	2.95	.973	2.32	1.21
Facilities	3.48	1.17	3.20	1.26
Friends	2.86	1.15	3.01	1.38
Counselors and Teachers	2.71	.956	2.88	1.34
College Routine Contact	3.24	1.26	2.69	1.29
College One-on-One Contac	t 3.48	1.03	2.88	1.38

The fourth hypothesis stated: There is a significant difference between first-generational groups and non-first-generational groups and factors of college choice. For this analysis the dependent variables of choice were contrasted with the independent variables, first-generational students and non-first-generational students. A one-way MANOVA was calculated examining the difference in first-generational students and non-first-generational students on college choice factors. A significant effect was found (F, 21, 428 = 1.688, p = .03). Follow-up univariate ANOVAs indicated that one of the choice factors was significantly influenced by first-generational group and non-first-generational group status. The choice factor influenced by first-generational group and non-first-generational group status was community in which the college was located. First-generational group status scored this college choice factor significantly higher than non-first-generational groups (see Table 12).

Table 12

Means and Standard Deviations for Generational Groups

	Parents attended		Parents did not attend	
	College ( <i>n</i> =347)		College ( <i>n</i> =103)	
College Choice Factors	Mean	SD	Mean	SD
Academic Reputation	3.83	1.15	3.77	1.20
Location	4.30	.902	4.48	.895
Entrance Requirements	3.03	1.28	3.23	1.16

Table 12 (continued).

Location	4.30	.902	4.48	.895
Entrance Requirements	3.03	1.28	3.23	1.16
Community	3.22	1.28	3.58	1.15
Varsity Sports Opportunities	2.05	1.39	1.98	1.27
Racial/Ethnic Makeup	1.97	1.16	2.01	1.16
Type of Housing	2.41	1.46	2.38	1.48
Extracurricular Activities	2.77	1.48	2.60	1.41
Parents/Relatives Advice	3.39	1.32	3.17	1.25
Advice of Alumni	3.36	1.30	3.30	1.34
Program Availability	3.78	1.34	4.06	1.18
Size of Student Body	2.89	1.26	3.14	1.22
Cost	4.39	1.01	4.44	.825
Scholarships	4.33	1.08	4.33	.994
Social Activities	3.04	1.30	2.97	1.19
Male/Female Ratio	2.39	1.24	2.19	1.14
Facilities	3.21	1.26	3.23	1.21
Friends	2.92	1.40	2.96	1.29
Counselors and Teachers	2.84	1.31	2.83	1.37
College Routine Contact	2.67	1.28	2.70	1.36
College One-on-One Contac	t 2.93	1.39	2.72	1.34

The fifth hypothesis stated: There is a significant difference between commuter and on-campus residence groups and factors of college choice. For this analysis the dependent variables of choice were contrasted with the independent variable, residence. A one-way MANOVA was calculated examining the affect of student residence on college choice factors. A significant effect was found F(21, 428) = 16.829, p < .001. Significant univariate effects were found for location F(1, 448) = 11.279, p = .001; community F(1, 448 = 11.2790, p = .001); varsity sports opportunities F(1, 448 = .001)126.179, p = .001; racial/ethnic makeup of college F(1, 448 = 47.973, p = .001; type of housing available F(1, 448 = 228.187, p = .001; extracurricular activities F(1, 448 = .001;61.272, p = .001; social climate and activities at the college F(1, 448 = 13.304, p = .001); and male/female ratio of student body F(1, 448 = 18.368 p = .001). Follow-up univariate ANOVAs indicated that eight of the choice factors were significantly influenced by residence. The choice factors influenced by residence were location, the community in which the college was located, varsity sports opportunities, racial/ethnic makeup, type of housing available, extracurricular activities available, social climate and activities, and male/female ratio of the student body. For six of the parameters for which there was a significant difference in the response for residence, students residing off campus rated these parameters significantly higher than on-campus students. Only for the "location" and "community" parameters were the responses of on-campus students significantly lower than commuter students.

Table 13

Means and Standard Deviations for Residence

	On-Campus ( <i>n</i> =155)		Commuter (n=295)	
College Choice Factors	Mean	SD	Mean	SD
Academic Reputation	3.92	1.17	3.76	1.14
Location	4.05	1.01	4.49	.803
Entrance Requirements	3.15	1.23	3.03	1.27
Community	3.03	1.24	3.45	1.25
Varsity Sports Opportunities	2.92	1.52	1.57	1.00
Racial/Ethnic Makeup	2.48	1.22	1.72	1.04
Type of Housing	3.57	1.15	1.78	1.22
Extracurricular Activities	3.43	1.24	2.37	1.44
Parents/Relatives Advice	3.57	1.24	3.22	1.33
Advice of Alumni	3.39	1.29	3.32	1.32
Program Availability	3.79	1.26	3.88	1.34
Size of Student Body	3.13	1.66	2.85	1.29
Cost	4.29	1.03	4.46	.932
Scholarships	4.48	.871	4.25	1.14
Social Activities	3.32	1.17	2.87	1.30
Male/Female Ratio	2.68	1.23	2.17	1.17
Facilities	3.29	1.21	3.18	1.27
Friends	3.19	1.32	2.79	1.39

Table 13 (continued).

Counselors and Teachers	3.06	1.26	2.72	1.34
College Routine Contact	2.90	1.22	2.56	1.32
College One-on-One Contact	t 3.13	1.31	2.75	1.39

## Summary

The goal of this study was to examine the significance of factors related to why high ability academic students chose to attend Mississippi public community colleges.

The study examined the differences in perception of college choice factors and recruiting factors among students according to the variables of age, gender, race, full-time or part-time enrollment status, first-generational attendance to college, if one or both parents or legal guardians attended the respective community college, if a sibling attended the respective community college, and if the student was a commuter or on-campus resident.

A 21-item Likert-type Recruitment Survey designed to establish the reasons that high ability academic students chose to attend public community colleges in Mississippi was administered to freshmen students who attended one of Mississippi's 15 public community colleges during the spring semester of 2003 and 2011 and who scored 26 and above on the ACT composite score. Responses were gathered from 240 students,120 females and120 males, in 2003, and 247 students, 144 females and 103 males, in 2011. Data were analyzed via both descriptive and inferential methods. The inferential statistic applied to the data was a Multivariate Analysis of Variance (MANOVA) via SPSS applied at the .05 level of significance. A significant effect was found in the factors of

college choice between data collected in 2003 and 2011. The only significant factor among the 21 college choice factors was male/female ratio.

Respective of the inferential analysis four of the choice factors out of 21 were found significant for gender, with females ranking all four higher than males. The choice factors influenced by gender were academic preparation, entrance requirements, availability of specific programs of study, and contact with college representatives.

However, there were no significant differences in any of the responses influenced by race.

For generational factors, there was one significant difference in the responses.

The choice factor influenced by first-generational group and non-first-generational group status was community in which the college was located. The first-generational groups scored this college choice factor significantly higher than non-first-generational groups.

For on-campus and off-campus residence status, there were significant differences in eight of the response factors. The choice factors influenced by residence were location, the community in which the college was located, varsity sports opportunities, racial/ethnic makeup, type of housing available, extracurricular activities available, social climate and activities, and male/female ratio. Students residing off campus (commuters) rated the following factors more highly than did on-campus residents: location and community in which the college is located. Students residing on campus rated the following factors more highly than did commuters: varsity sports opportunities, racial/ethnic makeup, type of housing, extracurricular activities, social climate and activities, and male/female ratio.

#### CHAPTER V

#### FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

Recruitment of students is an integral function that is considered one of the most important responsibilities in colleges and universities. The recruitment of high academic ability students is highly desirable among elite four-year colleges and universities (Callahan, 2003; Carpetas et al., 2008; Dale, 2010; Filter, 2010; Lee et al., 2008; Schoenherr, 2009; Trachter, 2010). Whereas more attention has been focused on enrolling high academic ability students because they tend to persist to graduation at higher rates, little scholarly information is currently available. Available research that even mentions the enrollment of high academic ability students into community colleges is rare, and community colleges often do not even consider recruiting high academic ability students. It was with this in mind that this study was implemented, to examine the effects of why high academic ability students chose to attend Mississippi community colleges.

This chapter summarizes the data provided in Chapter IV, and links the findings to the relevant current literature discussed in Chapter II. Additionally, it discusses the limitations of the study, the implications of the findings for future studies, the implications for community college administrators, and concludes with a summary.

#### Purpose

The goal of this study was to determine the factors related to why high academic ability students chose to attend Mississippi public community colleges. The study examined the differences in perception of college choice factors among students

according to the variables of age, gender, race, full-time or part-time enrollment status, first-generational attendance to college, if one or both parents or legal guardians attended the respective community college, if a sibling attended the respective community college, and if the student was a commuter or on-campus resident.

The ultimate purpose of the study was to provide data on recruiting high academic ability students and what attracted them to the community college, which may be helpful to presidents, administrators, faculty, and recruitment staff of Mississippi community colleges. The study should also prove useful to administrators in other community colleges throughout the nation as well as to the four-year institutions of higher learning administrators. The study was conducted in the spring of 2003 among high academic ability students at Mississippi's public community colleges and again in the spring of 2011 among high academic ability students at Mississippi's public community colleges.

Specific purposes included:

- To determine the factors involved in college choice of high academic ability students who choose to attend one of Mississippi's 15 public community colleges;
- To determine the perceptions of high ability academic students who attend Mississippi's public community colleges;
- 3. To determine the differences in college choice factors among the respondent student groups by age, gender, race, full-time or part-time enrollment status, first generational attendance to college, if one or both parents or legal guardians attended the respective community college, if a sibling attended the

- respective community college, and if the student is a commuter or on-campus resident;
- To determine if institutional community college recruiting practices that are currently being utilized had an impact on attracting high ability academic students; and,
- 5. To present descriptive data relative to the variables of the study.

## Hypotheses

The following hypotheses of the study were used to test the relationships among the variables:

- H1. There was a significant difference in the factors of college choice between data collected in 2003 and 2011.
- H2. There was a significant difference between genders and factors of college choice.
- H3. There was a significant difference between race groups and factors of college choice.
- H4. There was a significant difference between first-generational groups and non-first-generational groups and factors of college choice.
- H5. There was a significant difference between commuter and on-campus residence groups and factors of college choice.

#### **Participants**

The participants of this study were college freshmen who had scored a 26 and above on the ACT composite score. These students were attending one of the 15

Mississippi public community colleges in either the spring semester of 2003 or in the spring semester of 2011.

Surveys were mailed to all 15 Mississippi public community colleges. Data collection during the spring 2003 semester resulted in 240 completed surveys being returned, and data collection during the spring 2011 semester resulted in 247 completed surveys being returned.

#### Limitations

A number of factors limited this study:

- Response to surveys was less than 100%. In an effort to increase response
  rates, the researcher requested verbal and formal written permission, assistance,
  and cooperation from the presidents and the chief student affairs officers of the 15
  Mississippi public community colleges.
- The research did not consider retention. The focus of the research was
  recruitment of students into community colleges although an important reason for
  recruiting high academic ability students was that they tend to persist and stay in
  college, i.e. retention.
- 3. The research was limited to Mississippi community college students and may not represent similar students in other states.
- 4. There was an unequal sample size with more Caucasian students (n = 435) than African American students (n = 25). All other race groups (n = 9) and those students choosing "other race" (n = 17) totaled 26 students. The demographic composition of the participants may limit the ability to generalize results to samples of high academic ability students that are not predominately Caucasian.

Likewise, the small percentage of non-Caucasian students may diminish the ability of the results of this research to be applied to non-Caucasian populations.

## **Findings**

## Summary

It can be concluded from this research that the college-choice factors of high academic ability students who chose to attend Mississippi community colleges in 2003 and 2011 are influenced by a complex combination of factors. However, it was clear that positive relationships from the results of the survey were revealed as the following factors were all rated as important in this priority order (1 = not important; 5 = very important): cost (4.41), availability of scholarships (4.33), location (4.33), availability of a specific program of study (3.85), academic reputation (3.82), advice of parents/relatives (3.34), advice of someone who attended the college (3.34), community in which the college was located (3.30), facilities available (3.21), entrance requirements (3.07), and social climate and activities at the college (3.03). High academic ability students that attended Mississippi community colleges during the spring of 2003 and 2011, generally reinforced previous literature by revealing that cost, scholarship, and location factors were the most important parameters that influenced their decision to attend a community college.

It was evident throughout this study that no college choice variables impacted community college attendance by high academic ability students more than the combined influence of the related factors of cost, scholarships, and location. These findings support earlier research that has shown a strong link between cost and community college attendance (Bers & Galowich, 2002; Lee et al., 2004; McCullough, 2010; Townsend, 2007). Tuition affordability at community colleges has been attractive to students who

desire to attend community colleges, and according to this research, it positively influences high academic ability students in their decision to attend Mississippi community colleges. This characteristic of community colleges, among others, may increasingly attract high academic ability students because of the continual increase in higher education tuition.

Although there has been some contradictions in research of the influence of financial aid or scholarships on college-choice decisions (McCullough, 2010; Perna, 2005), the findings of this research support the importance of merit-based scholarships (Dale, 2010; DesJardins et al., 2006; Filter, 2010; Grodsky & Jones, 2007; Hahn & Price, 2008; Kim, 2004; Kurlaender, 2006). The participants in this study rated the availability of scholarships as second in importance only to cost of attending their respective community colleges.

The financial realities of a college education are likely to influence a student's choice of where to attend college. Although families' socioeconomic impact was not accounted for in this study, the results can be construed that the importance of cost and scholarships indicate that many of the participants came from families who strongly considered cost as a factor that influenced their choice to attend a community college. Tuition affordability has been attractive to students who attend community colleges for some time (Lee et al., 2004; Townsend, 2007). These are important findings because often financial resources help determine the type of college a student attends.

As demonstrated throughout the literature, location is a primary factor in college choice for high academic ability students (Allen, 2007; Dale, 2010; Filter, 2010; Kinzie et al., 2004; Kurlaender, 2006; Merranko, 2005; NPEC, 2007; Santiago, 2007; Schoenherr,

2009). In this study, "location" was rated very highly (4.33) as the second highest in importance among 21 variables that influenced high academic ability students' decision to attend a Mississippi community college. Location was a significant factor in this study, and it concurs with the current literature that reports that location is a very important factor in college choice decisions.

The data found that among high academic ability students, the perception of a quality academic education from a community college is very important. These results support the preponderance of data in the literature that reveal that high academic ability students rate academic reputation higher than general student populations (Bartini, 2008: Callahan, 2003; Freid, 2005; Goenner & Snaith, 2004; Kinzie et al., 2004). However, the literature in this area offers little guidance to administrators who are responsible for recruitment in community colleges.

The findings of this study are in contrast to some research that seems to indicate that students who attend community colleges are not as concerned with academic quality as those who attend various four-year colleges and universities (Callahan, 2003; Filter, 2006; Filter, 2010; MacAllum et al., 2007; NPEC, 2007). The findings clearly accentuate that academic reputation or perceived academic quality is of primary importance to high academic ability students who chose to attend one of Mississippi's 15 community colleges.

Parents, siblings, and other important family members and friends are important in influencing high academic ability students to attend a community college in Mississippi according to the findings of this study. The literature has been very consistent with reporting high levels of influence of parents regardless of gender and

ethnicity (Callahan, 2003; Dale, 2010; Freeman, 2005; Kinzie et al., 2004; McCullough, 2010; Paulsen & St. John, 2002; Pascarella & Terenzini, 2005; St. John et al., 2005; Sztam, 2003; Tan, 2009; Teranishi et al., 2004; Trachter, 2010). The findings of this study support that literature.

The research findings did not rate the influence of high school counselors and teachers highly as that variable was rated the 15<sup>th</sup> in importance among 21 variables. This is in contrast to much of the literature (Bradshaw et al., 2001; Broussard, 2008; Desjardins et al., 2006; Gonzalez, Stoner, & Jovel, 2003; Shoenherr, 2009; Teranishi et al., 2004). It could simply mean that parents and other family members and friends were considered more important than high school counselors and faculty by the participants. Some studies reported that students whose parents had not attended college (23.4% in this study) tended to rely more heavily on high school counselors to guide them in their college-decision process (Filter, 2010; NPEC, 2007). Thus, the 76.4% of participants who reported that their parents had attended college may have relied on parents much more than on high school counselors or teachers.

The strongest predictor of enrollment of a high academic ability student into a Mississippi community college was the cost of attending. Closely related were the factors of the availability of scholarships and location. The next most important factors rated by participants were the factors related to perceptions of academic quality: availability of a specific program of study and academic reputation of the college.

Students who answered the open-ended questions responded overwhelmingly that the major reasons they attended their respective community colleges were cost, scholarships, location, and academic reputation. Approximately 61% of participants took

the time to respond that the transferability of courses to universities was a very important factor in their choosing to attend a community college.

Interesting findings gleaned from the open-ended questions include:

- approximately 5% of these high academic ability students chose to enter into twoyear terminal degrees that were offered at their respective community college, e.g. associate of arts nursing programs;
- a few participants indicated that they were reverse-transfer students who began at a four-year college or university but transferred to a community college their freshman spring semester;
- several students reported that friends' influence was a primary reason they attended a community college;
- 4. many participants indicated that they liked the smaller size of the community college;
- 5. approximately 5% of participants stated that they were single mothers; and,
- 6. approximately 10% of participants indicated that they attended their respective community college because of a varsity sports opportunity.

The hypotheses' findings indicated significant factors involved with college choice. general, they revealed that male/female ratio was the only significant difference in the factors of college choice between 2003 and 2011; that high academic ability females found academic preparation, entrance requirements, availability of specific programs of study, and contact with college representatives as more important than males did; and that there was a significant difference between commuter and on-campus residence groups and the factors of college choice of location, the community in which the college was

located, varsity sports opportunities, racial/ethnic makeup, type of housing available, extracurricular activities available, social climate and activities, and male/female ratio of the student body with commuters rating location and community in which the college was located significantly higher than on-campus students. On-campus students rated varsity sports opportunities, racial/ethnic makeup, type of housing available, extracurricular activities available, social climate and activities, and male/female ratio of the student body significantly higher than commuter students. There was not a significant difference between the race groups and factors of college choice.

#### Hypothesis 1

Hypothesis 1 stated that there was a significant difference in the factors of college choice between data collected in 2003 and 2011. Differences between the data collected in 2003 and 2011 were analyzed to research the differences among the affect of demographic variables on college choice factors by year, and the only significance found among the 21 college choice factors was the variable of male/female ratio.

Male/female ratio was considered more important in 2003 than in 2011 among high academic ability students attending Mississippi's community colleges. The demographic data showed that there was an increase in the number of high academic ability female students, 50% (120) in 2003 to 58.3% (144), who participated in the study. This percentage almost parallels the number of females and males attending institutions of higher learning in the United States, which equals 57% female and 43% male according to the latest 2011 report from the National Center for Education Statistics. Southern states have the largest gender gap in enrollment, with an average enrollment

ratio of 1.4 for females to males, which means for every 140 females enrolled in college in the southern region, there are 100 males enrolled (Mather & Adams, 2007).

These data may provide a reason for the significance of the college choice factor of male/female ratio. The survey results may simply reflect the reality that males are consistently informed that there are more females than male attending college.

Otherwise, it is difficult to ascertain the reason for the significant difference between the factors reported for male/female ratio between 2003 and 2011.

## Hypothesis 2

Hypothesis 2 stated there was a significant difference between the genders and factors of college choice. A significant affect was found as four of the choice factors were significantly influenced by gender with females significantly rating the following areas higher than males: academic preparation, entrance requirements, availability of specific programs of study, and contact with college representatives. These findings regarding the variables related to academic quality (academic preparation, entrance requirements, and availability of specific programs of study) are consistent with the literature that reports that females rate academic reputation higher than males do when deciding which college to attend (Kinzie et al., 2004; Luo & Williams, 2011; Noel-Levitz, 2007; York, 2008). In addition, whereas male students have been found in the past to have higher college aspirations than females, Chenowith and Gallagher (2004), Reynolds and Pemberton (2001), and Schoenherr (2009) have reported that females currently have higher educational aspirations than males.

The significant finding of this study that females rated contact with college representatives higher than males is also consistent with literature regarding

"personalized attention" being more important to females than males (Callahan, 2003; Dale, 2010). This is an important finding when developing recruitment plans concerning high academic ability female students. Luo and Williams (2011) found female students tend to be more influenced by academic factors; thus, providing personalized attention with a focus on academic reputation is critical to recruiting and enrolling high academic ability female students.

### Hypothesis 3

The third hypothesis stated that there was a significant difference between the race groups and factors of college choice. A significant effect was not found when examining difference among the race groups, African American, American Indians, Asian Americans, Caucasian, Hispanic, and other race groups, on college choice factors. Only 10.5% of non-Caucasian students were participants. Twenty-five African American high academic ability students participated in the study. The total number of American Indian, Asian American, and Hispanic students totaled only nine students, which was too small a sample to study. Seventeen participants chose to mark "other" for race on the survey. The strikingly low representation of non-Caucasian participants in the study made it difficult to analyze.

Analysis of Mississippi college enrollment shows that high academic ability

African American students are recruited heavily not only by the public universities, but
also by private colleges and universities (Burns, 2006; Cooper, 2006; Mather, & Adams,
2007). Mississippi is also home to three historically black public institutions that may be
attracting and enrolling African Americans who are considered high academic ability

students. These factors may account for the low number of African American students that attend Mississippi's community colleges or that chose to respond to the survey.

Hypothesis 4

The fourth hypothesis stated that there was a significant difference between first-generational groups and non-first-generational groups for the factors of college choice, and a significant effect was found for community in which the college was located. First-generation students rated location significantly higher than non-first-generational groups of students.

Previous research has found that first-generation students tend to receive less encouragement and support from their families when it comes to college attendance (Ceja, 2006; Schoenherr, 2009). The findings of this study are not as consistent with previous research that stated that a typical community college student is a first-generation student (NPEC, 2007; Pascarella, Pierson, Wolniak, & Terenzini, 2003). Most of the participants in this study were non-first-generation students. Findings revealed that 76.6% of all participants were from families whose parents or legal guardians had attended college. Only 23.4% of all participants in 2003 and 2011 were first-generation students.

The literature consistently reports the premise that high academic ability students from high socioeconomic backgrounds are more likely to attend more elite four-year colleges and universities (Schoenherr, 2009) and that low-income and first-generation students are comparatively disadvantaged compared to their more affluent peers when deciding on a variety of colleges to attend (Kinzie, et al., 2004; Nomi, 2005). Because participants in the study ranked cost, scholarships, and location as the three most

important factors in their decision to attend one of Mississippi's 15 community colleges, it can be construed that many of them fit the "low-income" to possibly "middle-income" level of socioeconomic status. However, it was surprising to find that the majority of the participants were non-first-generational students.

An explanation for such a high percentage of non-first-generation students could be related to the strong articulation agreement that exists between the Mississippi Community College Board that oversees the 15 public community colleges and the Institution of Higher Learning Board that oversees the eight public universities. This articulation agreement guarantees the transferability of courses from the public community colleges to the public universities (SBCJC, 2011). The fact that the community college system was the first one established in the nation in 1928 is another possible explanation for a relatively lower number of high academic ability non-first-generation students as generations of Mississippians have had the opportunity to attend their local community college. Finally, it is evident also that the majority of students who excel with high ACT composite scores (76.6% in this study) have parents who possess college degrees (ACT, Condition of College & Career Readiness, 2010; ACT Inc., 2008). *Hypothesis* 5

The fifth hypothesis stated that there was a significant difference between commuter and on-campus residence groups and factors of college choice. A significant effect was found for eight of the college choice factors. The choice factors influenced by residence were location, the community in which the college was located, varsity sports opportunities, racial/ethnic makeup, type of housing available, extracurricular activities available, social climate and activities, and male/female ratio of the student body.

Commuters understandably rated location and community in which the college was located significantly higher than on-campus students. On-campus students rated varsity sports opportunities, racial/ethnic makeup, type of housing available, extracurricular activities available, social climate and activities, and male/female ratio of the student body significantly higher than commuter students.

In this study, despite the importance of the community in which the college was located and the factor of location as rated by high academic ability students, approximately 36% of the participants resided on campus. Traditionally, most community college students in the United States live off campus (Townsend, 2007). However, the literature revealed a recent trend among community colleges in the United States increasingly providing on-campus housing for students (Townsend, 2007). Although most rural community colleges have offered on-campus housing to their students for some time now (Moeck, Katsinas, Hardy, & Bush, 2008), some community colleges are having difficulty meeting the housing demands of their students (Bekurs, 2007). These studies and the findings of this research show how important housing status has become to the enrollment of community college students. Mississippi community colleges provide on-campus housing, but many community colleges throughout the nation do not. Issues such as safety considerations and the increasing growth of community college enrollment have caused community colleges throughout the country to consider providing on-campus housing (Bekurs, 2007; Christie & Hutcheson, 2003; Moeck et al., 2008; Townsend, 2007).

Further analysis of the findings shows that the on-campus status of high academic ability students may be strongly related to why they chose to attend one of Mississippi's

15 community colleges. Individual factors such as housing, the social climate and activities such as bands and choirs, and varsity sports opportunities may not be significantly rated by the entire population of high academic ability students, but individually the respective factors may be the sole, deciding factor of why some individuals chose to attend a respective community college. Such factors should not be overlooked.

### Implications for Future Research

The results of this research should be cautiously considered due to the multiple, complex factors that influence the individual college choices of high academic ability students who chose to attend community colleges in Mississippi. Moreover, regional and state differences in community college systems and individual community colleges should be taken into consideration as distinct differences exist. An example of the uniqueness of the Mississippi community college system is that it was the first state-wide system established in 1928 and has matured into a system that includes the advantage of a fully-articulated agreement for the guaranteed transfer of academic courses from the 15 community colleges into the eight public universities within the state (SBCJC History, 2011). This type of cooperation and collaboration does not appear to exist in all states.

This study has merely begun the discussion on the college-choice factors among high academic ability students who choose to attend community colleges. It is novel research that opens the door to numerous opportunities for more research as valuable information has been established, but there is considerably more to learn. Prior to this study, the specific scope of factors related to college choice of high academic ability students' decision to attend a community college was virtually unknown and unmeasured.

While the factors selected for inclusion in this study were grounded in the literature, there are other factors that likely contribute to the outcome of college choice that were not possible to include.

With these considerations, there are several areas or perspectives that would benefit from further research. Ideas for further studies include research on more diverse groups of high academic ability students, research on high academic ability students who are experiencing the college-choice process during earlier "search" phases, merit-based versus need based financial aid/scholarships studies, the impact of on-campus housing availability on college choice, and regional- and national-specific studies.

#### Research on Diverse Students

The most conspicuous demographic statistic is that the participants consisted primarily of Caucasian students (89.5%). As a result, this serves as one of the largest limitations in the research because high academic ability students come from a variety of racial and ethnic backgrounds and are not reflective of the homogenous group of students that participated in this study.

Acknowledging this limitation, a recommendation for further research is to seek a more diverse group of high academic ability students. Such students could be chosen based on other salient academic achievement predictors beyond ACT scores such as high school grade point average or class rank if it would include more minority students.

It would be beneficial to research high academic ability students who are from diverse race groups and attend community colleges. This could probably be accomplished through research conducted in different regions of the United States

where students from non-Caucasian groups reside and enroll in community colleges in greater numbers.

Researching High Academic Ability Students Prior to Community College Enrollment

It would be helpful to replicate this study with high academic ability students who are going through the college-choice process before they are fully enrolled at a community college. These students can offer more contextual experience than students who are reflecting on the decision almost one year later. The literature could also benefit from a longitudinal study, targeting high academic ability students earlier in their high school years as they narrow down their choices and ultimately make their decision.

Merit-Based Scholarships and Socioeconomic Status of Families

Among Mississippi community colleges, high academic ability students are offered numerous opportunities for scholarships that often pay for tuition plus other expenses with no regard to financial need. Although the participants in this study overwhelmingly cited that the availability of scholarships and cost of attending were influential reasons for choosing to attend their respective community colleges, the socioeconomic status of their families was not considered. An interesting concept would be to examine the difference between merit-based and need-based scholarships among community college high academic ability students along with examining the socioeconomic status of their families. This could be accomplished with data gleaned from college financial aid offices. It would also be interesting to study the effects of various amounts of merit-based scholarships on college-choice decisions. It may be worthy of consideration for community colleges to offer more scholarship funding to high academic ability students than is currently being offered. It could be beneficial to provide

a comparative analysis of the influential factors of high academic ability students based on socioeconomic status and parent educational attainment.

It would also be an interesting concept to examine and control for the role of costs and scholarships as they develop their choice decision. Research could be framed around the question: Did you consider this community college only because of the scholarship offer?

The Impact of On-Campus Housing

In Mississippi, on-campus housing is available to students, but this is not the norm in all regions of the United States (Moeck et al., 2008). Further research is needed to study the impact on housing opportunities to find out if on-campus housing could increase the number of high academic ability students attending community colleges in regions that currently do not provide it.

Replication of this Study in other Regions of the United States

It would be interesting to replicate this research in other state community college systems to examine the differences in factors of college choice to identify if there are state-specific phenomena or if the college choice factors are consistent among all high academic ability students who choose to attend community colleges throughout the United States. Distinct differences may exist in various state community colleges systems and within individual community colleges. It is also strongly recommended that future research is aimed at increasing the articulation of transfer courses in states that do not have such agreements. Conducting such research may lead to improved local and state fiduciary policies relative to postsecondary education opportunities across the country.

### Implications for Community College Administrators

The literature is clear that the establishment of well-planned recruitment goals and programs that are implemented with the same level of intensity as academic program activities result in more effective enrollment management (Abston, 2010; Harris, 2010; Thielemann, 2004). With the increasing accessibility of admissions to public and private colleges and universities and the overall precipitous climb in college attendance, the competition for high academic ability students is projected to increase (Filter, 2010; Noel-Levitz National, 2009; Schoenherr, 2009). Consequently, the ever-increasing costs of attending four-year colleges and universities, the improved articulation for transferability of courses, the offering of baccalaureate degrees at some community colleges, and the prevalence of dual credit courses in high schools from community colleges are increasing the awareness among high academic ability students and their parents that enrolling in community colleges is a viable, practical consideration (McCullough, 2010; Pluviose, 2008).

Understanding the findings of this study can assist community college administrators with improving recruitment strategies, which can lead to an increase in the enrollment of high academic ability students. Of utmost importance to high academic ability students is the cost of a community college education and the scholarships made available. The huge majority of participants in this study indicated that the cost and available scholarships were the primary reasons they chose to attend their respective community college.

The next most important factor was location as these students tend to enroll in their local community college that is within close proximity to where they reside.

Community college administrators should study, plan, and develop a scholarship program that attracts high academic ability students. Given the findings of this study that conclude most high academic ability students who attend community colleges attend those colleges in close proximity to them, administrators should strongly consider the benefits versus the costs of attempting to enroll students who do not live in their district, and they should learn as much as possible about the schools in their district.

Community college administrators need to have an in-depth understanding of the important factors that influence high academic ability students to attend their institution. Community college administrators along with faculty should be visible and involved in recruitment efforts of high academic ability students. Research has shown that faculty and staff of an institution are vitally important to their recruitment efforts as well as graduation rates (McCullough, 2010). According to the findings of this study, high academic ability students attach enormous importance to academic quality. Positive perceptions of academic quality are tantamount to enrolling high academic ability students in community colleges. It is recommended that faculty and staff engage in expressing the institution's academic excellence through various methods. Admission and recruitment efforts should be prioritized on effective communications, segmented with at minimum messages attractive to new first-time students and transfer students who are considered high academic ability students.

Direct marketing that could reflect the findings of this study is encouraged. It is essential for administrators, recruiters, and staff members to be aware that the importance of the influencing factors in college choice is different for various groups of students.

Therefore, enrollment communication efforts should reflect the uniqueness of high

academic ability students. College enrollment efforts should receive more emphasis on resources such as web-based information, social media contacts, campus visits, and scholarship opportunities.

Results of this study should be used with caution. Personalized attention to high academic ability prospects should not be precluded from recruitment efforts although "routine contact with college representatives" and "one-on-one personal contact" were variables that were rated relatively low, 17<sup>th</sup> and 14<sup>th</sup>, among the 21 variables studied. The efforts of effective community college administrators and faculty are essential to effective recruitment of high academic ability students. Many high academic ability students decide to attend a community college because of the impression they formed and the information they acquired from competent, passionate community college recruiters. Community college recruiters should be cognizant of the finding that females rate personalized attention higher than males.

As indicated in many open-ended responses, the primary reason that many high academic ability students chose to attend a community college were extracurricular activities, athletic opportunities, or other such factors listed among the 21 variables on the survey. These high academic ability students most likely would not have considered attending a community college were it not for such unique opportunities.

Faculty, staff, and administrators are vitally important to their recruitment efforts as well as graduation rates. Because of the attention given to academic reputation, the recruitment of high academic ability students continues to be a challenge for community colleges that are often perceived as low-quality institutions of higher learning.

Administrators should meet this challenge with aggressive efforts to highlight the

academic reputation of the community college and the positive results accomplished by dedicated faculty who teach effectively.

Often, recruitment responsibilities are compartmentalized and perceived as the duty of one office. Leaders should ensure that all faculty, staff, and administers are involved in recruitment activities, especially those that involve high academic ability students who are so highly desired in all types of colleges and universities.

### Summary

The purpose of this study was to examine the factors involved in why high academic ability students chose to attend one of Mississippi's 15 public community colleges when other choices abounded. Utilizing the existing literature as a guide, this research found that although high academic ability students navigated the college-choice process in different ways, they were influenced positively by the hallmarks of the college-choice literature: cost, location, scholarships, availability of specific programs or majors, academic quality, and advice from influential people. These influential factors offer insight and explanations into the complex decisions that students make and create opportunities for further research on how high academic ability students frame this important decision.

These findings also increase the awareness of phenomena related to the reasons high academic ability students attend community colleges. Furthermore, knowledge of the results can assist administrators and policy makers to develop informed decisions about funding policies regarding higher education.

Community college enrollment is now a viable option for many high-achieving students. The factors of cost, scholarships, location, and academic quality serve as potent

influences on the decision of a high academic ability student to attend a community college or not. As families and individual high academic ability students perceive that community colleges offer a quality education, community colleges will increasingly become not only a practical decision but also a wise one.

### APPENDIX A

### PUBLIC UNIVERSITIES IN MISSISSIPPI

- 1. Alcorn State University
- 2. Delta State University
- 3. Jackson State University
- 4. Mississippi State University
- 5. Mississippi University for Women
- 6. Mississippi Valley State University
- 7. University of Mississippi
- 8. University of Southern Mississippi

# APPENDIX B

# PUBLIC COMMUNITY COLLEGE IN MISSISSIPPI

1.	Coahoma Community College
2.	Copiah-Lincoln Community College
3.	East Central Community College
4.	East Mississippi Community College
5.	Hinds Community College
6.	Holmes Community College
7.	Itawamba Community College
8.	Jones County Junior College
9.	Meridian Community College
10.	Mississippi Delta Community College
11.	Mississippi Gulf Coast Community College
12.	Northeast Community College
13.	Northwest Community College
14.	Pearl River Community College

Southwest Mississippi Community College

15.

### APPENDIX C

### **HUMAN SUBJECTS APPROVAL IN 2003**

The Human Subjects Protection Review Committee approved the study in the spring semester of 2003, but original copies were not maintained at the University of Southern Mississippi Institutional Review Board office.

# APPENDIX D

# LETTER TO COMMUNITY/JUNIOR COLLEGE PRESIDENTS

April 2, 2003
Dear
I am Randall E. Lee, a doctoral candidate at the University of Southern Mississippi. I am currently in the process of completing a dissertation in partial fulfillment of the requirements for a Ph.D. in Higher Education Administration.
Upon approval, I would like to conduct a survey at
I am asking your permission to administer the survey at your community college by collaborating with your chief student affairs officer.
I do appreciate your cooperation. Thank you for your time and consideration.
Sincerely,
Randall E. Lee

#### APPENDIX E

#### **HUMAN SUBJECTS APPROVAL IN 2011**



#### THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147 Hattiesburg, MS 39406-0001 Tel: 601.266.6820

Fax: 601.266.5509 www.usm.edu/irb

#### **HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE** NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 11050303

PROJECT TITLE: A Comparative Analysis of Factors Related to Selection of a College by High Academic Ability Students Who Chose to Attend Mississippi's Public Community Colleges in 2003 and 2011

PROPOSED PROJECT DATES: 04/25/2011 to 10/04/2011

PROJECT TYPE: Dissertation

PRINCIPAL INVESTIGATORS: Randall Eugene Lee COLLEGE/DIVISION: College of Education & Psychology

DEPARTMENT: Educational Studies and Research

FUNDING AGENCY: N/A

HSPRC COMMITTEE ACTION: Exempt Approval PERIOD OF APPROVAL: 05/09/2011 to 05/08/2012

Jawrence a Homan Lawrence A. Hosman, Ph.D.

5-10-2011 Date

**HSPRC** Chair

### APPENDIX F

# LETTER TO COMMUNITY/JUNIOR COLLEGE PRESIDENTS

March 31, 2011

Dear
I am Randall E. Lee, a doctoral candidate at the University of Southern Mississippi. I am currently in the process of completing a dissertation in partial fulfillment of the requirements for a Ph.D. in Higher Education Administration.
Upon approval, I would like to conduct a survey at
I am asking your permission to administer the survey at your community college by collaborating with your chief student affairs officer or your designee.
I do appreciate your cooperation. Please email me at <u>rlee@eccc.edu</u> with your approval to conduct the survey at your institution.
Thank you for your time and consideration.
Sincerely,
Randall E. Lae

Randall E. Lee P.O. Box 129

Decatur, MS 39327

#### APPENDIX G

#### CONSENT LETTER TO RESEARCH PARTICIPANTS

#### Dear Student:

Your school's Chief Student Affairs Officer (CSAO) was asked to give this packet to students, like yourself, who are classified as freshmen, enrolled in a community college during the spring term and who scored 26 or higher on the ACT. Only students over the age of 18 are being asked to participate. If you do not meet any of these selection criteria, please notify your CSAO and do not complete the enclosed questionnaire.

To introduce myself, I am Randall E. Lee, a doctoral candidate at the University of Southern Mississippi. I am currently in the process of completing a dissertation in partial fulfillment of the requirements for a Ph.D. in Higher Education Administration. Your community college president has granted permission for me to contact you through your CSAO about my study. The purpose of the study is to investigate factors related to why high academic ability students chose to attend a public Mississippi community college. Data collected in this study will be compared with similar data collected in 2003. To that end, you are being asked to complete the enclosed questionnaire. Please be assured that your participation is completely voluntary, and you may decide not to participate or to discontinue participation at any time without penalty. It should take approximately 15 minutes for you to complete the survey. Your name has not been provided to me, nor will it be used in this study so you can be assured your participation is completely anonymous. Any information inadvertently obtained during the course of this study will remain completely confidential. Your responses will be combined with responses of other participants, analyzed, and only aggregated data will be reported. If you have questions about this research, feel free to contact me at <a href="mailto:randall.lee@eagles.usm.edu">randall.lee@eagles.usm.edu</a> or P.O. Box 922, Decatur, MS 39327.

The benefit to you as an individual is that you will be helping those in the field of higher education administration better understand the college choices of high academic ability students attending community colleges. A copy of the results of the study will be provided to administrators at your community college who can use this information to improve recruitment strategies. There are no known risks associated with participation in this study. All data and completed questionnaires will be maintained in a locked office and will be destroyed one year after the successful completion of my dissertation.

Thank you in advance for your participation. By completing and returning the enclosed questionnaire you give your consent to participate and permission for your anonymous

and confidential data to be used for the purposes described above. Please give your completed questionnaire to the CSAO who will mail it to me.

Thank you for your assistance.

#### Randall E. Lee

This project has been approved by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, 601-266-6820.

### APPENDIX H

### RECRUITMENT SURVEY

Thank you for taking time to respond to the items on this questionnaire.

Personal Information: Please circle the number of each item that applies to you.

GENDER: 1. Female 2. Ma	ale	
RACE: 1. African American	2. American Indian	3. Asian American
4. Caucasian	5. Hispanic	6. Other Race
ENROLLMENT STATUS: 1.	Full-Time (12 or more	hours) 2. Part-Time (11 or fewer
hours)		
What is your age?		
Did one or both of your parent(s	s) or legal guardian(s) a	attend college? 1. Yes 2. No
Did one or both of your parent(s	s) or legal guardian(s) a	attend this college? 1. Yes 2. No
Do you have a brother or sister	who has attended this c	college? 1. Yes 2. No
Do you reside on-campus? 1. `	Yes 2. No	
Circle the number that best indicates t	he importance of the follow	ing in your decision to attend this college.

Not Importar	nt	Slightly Important	Neutral	Moderately Important	Very Important			
1. Academic Reputation	1	2	3	4	5			
2. Location	1	2	3	4	5			
3. Entrance Requirements	1	2	3	4	5			
4. Community in Which the College is Located		2	3	4	5			
5. Sports Opportunities (Varsity Athletics		$\frac{1}{2}$	3	4	5			
6. Racial/Ethnic Makeup of the College		2	3	4	5			
7. Type of Housing Available		2	3	4	5			
8. Extracurricular Activities Available (Drama,	1	_		•	C			
Intramural Athletics, Music, etc.)	1	2	3	4	5			
9. Advice of Parents or Relatives	1	2	3	4	5			
10. Advice of Someone Who Has Attended the	•	2	3		J			
College	1	2	3	4	5			
11. Availability of a Specific Program of Study.	1	2	3	4	5			
12. Size of Student Body	1	2	3	4	5			
13. Cost of Attending	1	2	3	4	5			
14. Availability of Scholarships	1	2	3	4	5			
15. Social Climate and Activities at the College	1	2	3	4	5			
_	-		_	-				
<ul><li>16. Male/Female Ratio of the Student Body</li><li>17. Facilities Available (Labs, Classrooms</li></ul>	1	2	3	4	5			
Recreational Areas, etc	1	2	3	4	5			
18. Friends Attend or Plan to Attend the College.	1	2	3	4	5			
_	1	2	3	4	5			
		2	3	4	3			
20. Routine Contact(s) with College Representatives		2	3	4	5			
(Letters, Postcards, College Visits, etc.)	1	2	3	4	5			
21. One-on-One Attention You Received from								
College Representatives (Telephone Calls		2	2	4	~			
Personal Visits and Conversations, etc	1	2	3	4	5			
Why did you attend a community college instead of a four-year college or university?  What was the major reason that you decided to attend this community college?								
Comments:								

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