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A Descriptive Review of Successful Transfer Grade Point Average at Meridian Community College 2004-2009

Amy Aniece Wolgamott

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A descriptive review of successful transfer grade point average at Meridian Community
College 2004-2009

By

Amy Aniece Wolgamott

A Dissertation
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in Community College Leadership
in the Department of Leadership and Foundations

Mississippi State, Mississippi

August 2014

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2014

A descriptive review of successful transfer grade point average at Meridian Community
College 2004-2009

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In this educational study, the student population at one of the state's 15 community colleges was the target over a 5-year period (FY 2004-FY2009). Four variables (gender, race, socioeconomic status, and enrollment status) were studied to predict if they had any effect on a student's transfer grade point average. In 4 out of the 5 years in the study, this institution had the highest transfer grade point average as compared to native students at the state's 8 universities.

The purpose of this study was to examine the student population and look at four student variables to see if any were related to transfer grade point average. Over a 5-year period for this study, the number of women who have attended this community college has been 2 to 1. The number of students who receive a Pell Grant through financial aid is high. The ethnicity of the student population has also changed within the 5 years of this study.

The first research question examined whether gender or race could predict a student's transfer grade point average. The second research question explored whether socioeconomic status could predict a student's transfer grade point average. The third

research question asked whether a student's enrollment status could predict the transfer grade point average. The fourth question examined which of the set of four variables had the most impact, and which one had the least impact. Race and sex were shown to have stronger relationships to transfer GPA. These variables only explain about 9% of grade variance; therefore, there are other factors that explain differences in the transfer GPA.

The research concluded with a summary of the findings along with limitations of the study. Recommendations for practitioners and policy makers along with recommendations for future research were to study more variables, use other institutions, and perhaps to do a survey of the student population at community colleges.

DEDICATION

I would like to dedicate this dissertation to my entire family for their constant love and support over the years as I progressed through this program. Thank you to my parents, David and Peggy Wolgamott, for the encouragement and occasional financial support as I worked toward the finish line. This dissertation is also dedicated to the memory of my grandparents who always supported education, Tommie and Roy Wolgamott and Betty Wolgamott and Cubell and Bartie Nobles. James 1:4 states, “Let perseverance finish its work so that you may be mature and complete, not lacking anything.” This says it all in the gratitude of the many blessings the Lord has bestowed upon me, a steady reminder that He has always been there for me.

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CHAPTER I

INTRODUCTION

Community and junior colleges offer accessibility to the largest population groups, which is consistent with the mission of the Mississippi State Board of Community and Junior Colleges (SBCJC) now known as the Mississippi Community College Board. This Board mandates that education from a community or junior college should be accessible as well as affordable to everyone. As stated on the SBCJC (SBCJC, 2012) web site, “Mississippi’s community and junior colleges offer a wide variety of curriculum trades and professional training opportunities to meet everyone’s need at an affordable cost” (p. 1). Community colleges offer a vital service to society in making education fully accessible because many education specialists agree that “in terms of opportunities for college, our society is not a level playing field . . . middle and upper classes have far more access to the right information than others” (Dolan, 2007, 16). Fusch (1996, as cited in Jarrell, 2004) “indicates that for many students, community colleges offer access to higher education that otherwise could not be realized at the selective four-year colleges and universities. The two-year college, with its open admissions and greater flexibility, provides opportunities for disadvantaged (high-risk) individuals who might not otherwise attend college” (p. 514). Among the colleges that make up the unique system of access to higher education in Mississippi, Meridian Community College (MCC) is the most unique and perhaps the most successful. It is the

most unique because the college serves only one county (Lauderdale County) whereas the other colleges serve several counties. It is the most successful because it reports the greatest academic achievement when compared to the other community colleges within the state as found under Non-Financial Performance Indicators on the Research and Effectiveness Division webpage of the Mississippi Community College Board Web site (SBCJC, 2005, p. 1).

In 1922, H. M. Ivy, the first president of Meridian Junior College, now known as MCC, drafted a bill that first authorized the development of junior colleges in Mississippi (Young, 1978). It was not until 1928, with the establishment of the system of community colleges in Mississippi that the critical role of the community college in providing a route of transition from secondary education to postsecondary education was recognized. This system is somewhat exclusive to the United States in its provision of an intermediate avenue of access to the traditional university level of higher education. The state created this opportunity of intermediate education for the population of the state by providing 15 community colleges located throughout the state and serving a specific number of counties to assure opportunities of higher education were accessible to all people, including the following: those not wishing to travel far from home for an education; those not personally prepared for the university scene through environmental or social conditioning; those not able to afford the university costs; and those non-traditional students who have various restraints of family, jobs, or various responsibilities that would prohibit a university education.

In 1937, Meridian Municipal Junior College opened its doors to 132 students to attend the 13th grade. It was the 12th school to join the original multicounty junior

college system. The Mississippi Code of 1972, article §37-29-501 established Meridian Junior College in 1980, which included the area within the Meridian Municipal Separate School District. With this proposal, Meridian Junior College became the only municipally governed college in the state (Young, 1978, p. 180). Even though the college had been established in 1937, this new code put limitations on the institution. It was not until the 1964–65 academic year that Meridian Junior College began a new phase of community service as a separate unit fully aligned with the state system of junior colleges rather than with the City of Meridian. In 1969, the college grew with the addition of the enrollment of the T. J. Harris Junior College (an African American junior college), and by the 1973–74 academic year, the enrollment had increased to 5,000 students.

Dr. L. O. Todd was responsible in continuing the growth and changes that occurred on the campus. He saw the college go from a municipal junior college to a community college. In 1980, the college established its own Board of Trustees, breaking the ties to the Meridian Public School District. The college's name was changed from Meridian Junior College to MCC as part of the 50th anniversary celebration.

The Southern Association of Colleges and Schools (SACS) accredited MCC in 1942 as Level I. This accreditation gave the college the justification to offer associate in arts and associate of applied science degrees. The campus has been expanded through capital improvements, technology upgrades, and additional programs added to provide a quality, affordable education for the students of Lauderdale County and surrounding areas.

MCC's mission statement states, "The college is dedicated to improving the quality of life in Lauderdale County, Mississippi, and surrounding areas" (MCC, p. 5). It also states the following:

Through campus-based and distance education programming, MCC serves a diverse student population and accomplishes its mission by providing equal access to:

- Courses leading to the Associate in Arts Degree and/or transfer to senior colleges and universities;
- Associate of Applied Science Degree and Career and Technical Education certificate programs, and customized workforce training, leading to entry-level and/or enhanced employment opportunities;
- Continuing education courses designed for personal and/or professional enrichment, student support services, cultural enrichment events, and adult basic and developmental education programs designed to equip students for expanded opportunities. (p. 5)

The college is growing through the Tuition Guarantee Program as part of the MCC Foundation. Any student who graduates from a county high school, the city high school, or the local private high school is eligible for a scholarship. "By enrolling in the fall following their spring graduation, students retain the Tuition Guarantee for four consecutive semesters provided they earn a 2.00 GPA [grade point average] and maintain at least 12 hours each semester" (MCC, p. 40). The Tuition Guarantee program is the gateway for some students who may not have the economic resources to pursue a degree

at a 4-year college or university. This incentive is one way to attract students and assure that they stay close to home and attend MCC.

Statement of the problem

This study was conducted because of the lack of previous research on factors that relate to transfer GPA of MCC. It was intended to investigate whether and how race, gender, enrollment status and socioeconomic status relate to transfer GPA of the students at MCC. The results from this study provide a possible explanation of differences in GPA of the students at MCC.

Purpose of the Study

The purpose of this study was to examine the student population and look at four selected variables to see if any play a part in the transfer GPA of the students at MCC.

Research Questions

The following are the research questions that guided this study:

Research Question 1: To what extent do gender and race relate to transfer GPA at MCC from 2004-2009?

Research Question 2: To what extent does socioeconomic status relate to transfer GPA at MCC from 2004-2009?

Research Question 3: To what extent does enrollment status (full-time vs. part-time) relate to transfer GPA at MCC from 2004-2009?

Research Question 4: Which of the four variables are most strongly related to transfer GPA at MCC from 2004-2009? Which are less strongly related?

Definition of Terms

The following terms are defined for the purpose of this study:

1. *Community/junior college*: Cohen & Brawer (2008) define a community/junior college as

any institution regionally accredited to award the associate degree as its highest degree. Located in every state, these colleges provide occupational programs, the first two years of baccalaureate studies, basic skills development, and a variety of special interest courses to nearly half of the students beginning postsecondary education (p. 5).

The Mississippi Code of 1972, article § 37-29-233 gives the community/junior college the right to grant an associate degree.

2. *Federal student aid programs*: Federal student aid programs refer to programs authorized under Title IV of the Higher Education Act of 1965 that provide grants, loans, and work study funds from the federal government to eligible students enrolled in college or career school (Federal Student Aid Offices in the United States Department of Education, 2012).
3. *Federal student aid*: Financial aid “from the federal government to help you pay for education expenses at an eligible college or career school. Grants, loans and work-study are types of federal student aid. You must complete the FAFSA to apply for this aid” (“Federal Student Aid”, n.d., p. F).

4. *Race*: The Integrated Postsecondary Education Data System – Definitions for New Race and Ethnicity Categories (n.d) define race as ...categories used to describe groups to which individuals belong, identify with, or belong in the eyes of the community. The designations used to categorize are U.S. citizens, resident aliens, and other eligible non-citizens. Categories of race include American Indian or Alaskan Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, or White (p. 1).

5. *Socioeconomic status*: American Psychological Association (APA, 2014) stated socioeconomic status ... is commonly conceptualized as the social standing or class of an individual or group. It is often measured as a combination of education, income and occupation. Examinations of socioeconomic status often reveal inequities in access to resources, plus issues related to privilege, power and control (APA, 2014, para. 1).

6. *Transfer grade point average of GPA*: Transfer GPA is an arithmetic average of grades earned, weighted by credit hours, from courses attempted and all transferable courses from all institutions attended (University of North Carolina Wilmington, 2013).

Conceptual Framework

The study included the following variables: a) gender, b) race, c) socioeconomic status, d) enrollment status, e) category of financial aid allocated, and f) transfer GPA. Demographic characteristics included gender, race, enrollment status, and socioeconomic status (as indicated by amount of financial aid). These variables represent the components

under investigation for association with the transfer GPA of the students of MCC. This conceptual framework reflects Astin's I-E-O model of inputs, environment, and outcomes (Kelly & Sauter, 2007). The researcher explored how these variables related to transfer GPA of students attending the college from 2004-2009.

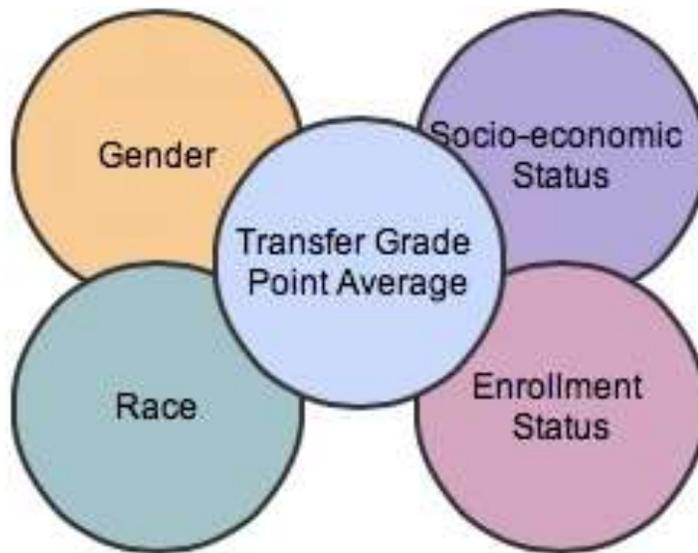


Figure 1. Conceptual framework of variables used in this study

Theoretical Framework

The theoretical framework used for this study was based on two college impact models: Astin's I-E-O model (University of Michigan, 2009) and theory of involvement and Pascarella and Terenzini's (2005) general model for assessing change. Astin theorized college outcomes are viewed as functions of three sets of elements: inputs, environment, and outcomes. His theory of involvement explores how students change and develop through five claims: psychology and physical energy, involvement, qualitative and quantitative energy, development of involvement, and educational

effectiveness as it relates to student involvement ([Kelly & Sauter, 2007](#)). Astin's theory relates to this study through gender, race, socioeconomic status as the inputs, their enrollment status as the environment and transfer GPA as the outcomes.

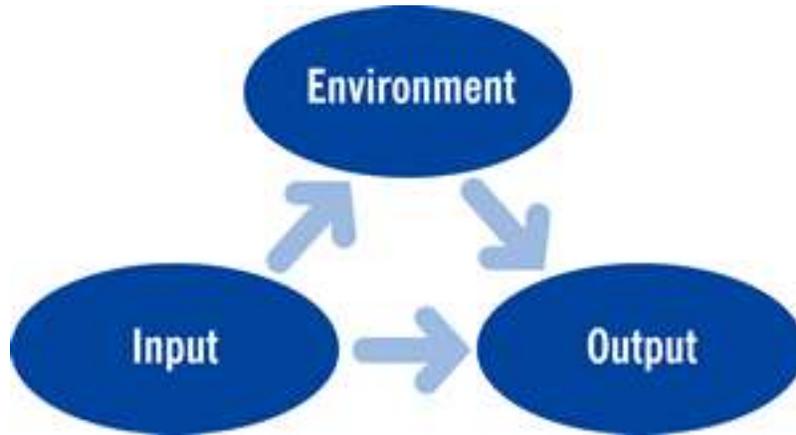


Figure 2. Astin's I-E-O model

Pascarella and Terenzini's (2005) model assesses student change and considers the direct and indirect effects of both an institution's structural characteristics and its environment. The model contains five variables: student background traits, organizational characteristics, institutional environment, socialization, and the quality of student effort. All four variables could be placed in this model to show how they relate to transfer GPA (learning and cognitive).

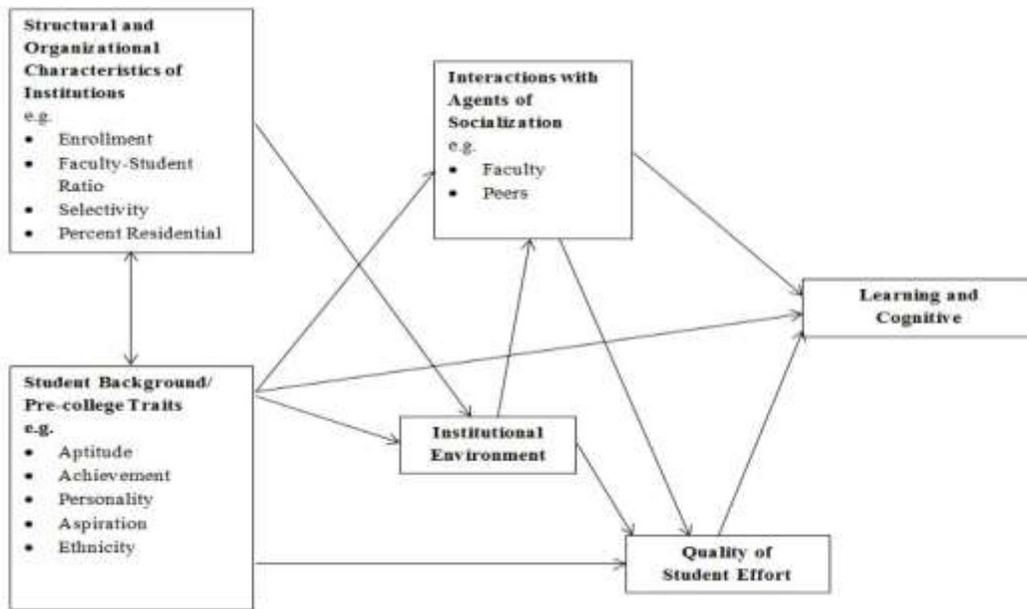


Figure 3. Pascarella and Terenzini's theory of involvement model.

Overview of Methodology

The study used existing the student records maintained at one of the public community colleges located in the east central part of the State of Mississippi. Data were collected for the community college students who were enrolled from the 2004–2005 academic year through the 2008–2009 academic year. IBM Statistical Package for the Social Sciences version 20.0 (SPSS) was used to analyze the data. Descriptive statistics are reported for all relevant variables. Simple and multiple linear regression were used to determine whether GPA is a function of students' race, gender, enrollment status, or socioeconomic status, thereby addressing research questions 1-4.

Limitations and Delimitations

The researcher examined only data from MCC. Within this delimitation, the study concentrated on data obtained for the academic years of 2004-2005 through 2008-2009.

Also, the data used for the study were archived data from the administrative software system BANNER at MCC.

Significance of the Study

“Upward transfer to four-year institutions has been a major function of community colleges” (Cohen & Brawer, 2008 as cited in Wang, 2012, p. 872). “It is crucial that institutions offer effective educational practices that help improve the academic performance of their community college transfer students” (Wang, 2012, p. 873). At the state and federal levels, transferring from community to 4-year colleges has gained attention as a potentially cost-effective way to increase bachelor degree attainment, not only for poor families but also for middle-class families feeling squeezed by rising college costs (Dowd, Cheslock, & Melguizo, 2008). Doyle (2006) stated 40% of all first-time freshmen begin their postsecondary careers in community colleges. He also stated students who are in a position to choose full-time enrollment were the most successful in eventually transferring to a 4-year institution.

This research contributes to the body of research on community college transfer students and adds to the existing literature on the predictors of students successfully transferring to 4-year institutions. This research will provide the administration of MCC the opportunity to observe what factors are related to the transfer GPA of its students, giving the administration the opportunity to assess the curriculum of the university transfer program at the college.

Organization of the Study

In this study, the researcher examined demographic variables at MCC. In five chapters, the researcher discusses the significance of demographic variables to explaining differences in transfer GPAs. In Chapter I, background information is given on community colleges, in particular, MCC. Chapter II covers the literature concerning the community college student, gender, race, socioeconomic status, financial aid, and the mission of a community college. In Chapter III, methodological aspects are discussed. In Chapter IV, data related to the Research Questions are presented. Chapter V contains discussion of the study results as well as recommendations for further study.

CHAPTER II

THE REVIEW OF THE RELATED LITERATURE

Introduction

The community college environment provides educational access to individual students, the community and other interested entities. A variety of courses and programs are in existence through both academic and social climates. Activities providing diverse social and cultural attributes as well as supporting civic and other educational activities are available at the community college. Additionally, a community college should provide the knowledge and necessary skills for one to become an educated member of society through educational programs and workforce development.

The researcher analyzed literature related to the community college and its many entities. This included literature relating to the makeup of the student population at a community college. This was followed by a look at how socioeconomic status affects financial aid and the cost of attending a community college. Next, the researcher looked into transfer rates and their affects on students in community colleges. The researcher investigated the mission of the community college in the United States and then focused on the public community and junior colleges in the State of Mississippi. Finally, the researcher examined current literature on how various demographics have a role on transfer rates.

The Community College Student

A perusal of Dr. Ben-David's commentary on higher education reveals his astute insight into the purposes and scope of education for the betterment of society. The following excerpt from Dr. Ben-David in Cohen and Brawer's *The American community college* (2008) reflected the historical view that education is a pathway toward individual development and mobility for optimum contribution to a productive social order.

Higher-education can make a real contribution to social justice only by effectively educating properly prepared, able, and motivated individuals from all classes and groups... Higher education appears to have been primarily a channel of individual mobility It can provide equal opportunities to all, and it may be able to help the disadvantaged to overcome inherited educational disabilities. But it cannot ensure the equal distribution of educational success among classes or other politically active groups. (p. 433)

But, also importantly, Ben-David made the case for individual and family responsibility in preparing the student in the early developmental stages of education for entry into the higher education processes. Once that basic preparation is in place, higher education can then channel individual aptitude toward its optimum impact on society and also foster development in educationally disadvantaged students so that they too may assume productive roles in society. Ben-David (as cited in Cohen & Brawer, 2008) acknowledged that higher education is not a panacea for leveling social and political groups within a society. Despite the reality that education is not an assured elixir for an optimized society, education—no doubt—is the best hope of any society. And perhaps in the American educational hierarchy, it is the local community college that best offers

unimpeded accessibility to education as perceived by Ben-David and by educational theorists in general.

The typical students in a rural community college usually live in rural areas not being served by a major university. Also, a number of these students could not afford the university tuition. Most students who attend a community college attend on a part-time basis, and they have had inadequate preparation in their secondary schooling. Often their educational pursuits have been temporarily interrupted due to jobs or family. About 45% of all first-time college students and 49% of all minority college students attend a community college. About 51% of community college students are first-generation students, meaning neither parent attended college (Vaughn, 2000). As a result of the community college's open-door policy, many new students at community colleges are not prepared for college-level work. In fact, at a typical community college, 30 to 40% of first-year students enroll in pre-collegiate courses (known as "remedial" or "developmental" courses) based on standardized placement-test scores (Jenkins, 2005). People with diverse racial and ethnic backgrounds from all walks of life, unemployed as well as underemployed, and recent high school graduates are what compromise the student body of a community college. In *Worlds apart: Why poverty persists in rural America*, Duncan (1999) summarized

. . . when we take into account all that we have seen about poverty and culture and politics . . . there is one fact that stands out. In every case, a good education is the key that unlocks and expands the cultural tool kits of the have-nots, and thus gives them the potential to bring about lasting social change in their persistently poor communities" (p. 208).

Vaughn (2000) mentioned the common theme of students is that they have discovered the community college and use it to fulfill their educational goals. Students who attend community college have reversed the role from being student-citizen to citizen-student. So how does this impact the community college? Community colleges realize they have more part-time students who have other responsibilities such as working full-time, paying taxes, supporting a family, paying a mortgage, and other responsibilities. Community colleges have the challenge of not only educating the citizen-student but the student-citizen who is looking for the true college experience with all of the extracurricular activities a 4-year college or university offers but on a smaller scale. One of the primary reasons students attend a community college is to transfer to a 4-year college or university. Other reasons for attending a community college are seeking entry-level job training, job upgrade, and personal interest.

Enrollment

Students enroll at community colleges for many reasons, many times for more than one reason, including pursuing personal interests (46%), to transfer to 4-year institutions (36%), to obtain an associate's degree (35%), to learn job skills (21%), to transfer to another 2-year college (15%), and to obtain an occupational certificate (13%; Provasnik & Planty, 2008). The variation in reasons for enrollment marks an important difference between community colleges and 4-year institutions and confounds research on factors relating to community college degree completion (Porchea, Allen, Robbins, & Phelps, 2010).

Porchea et al. (2010) stated:

Community colleges serve a diverse and growing population of students. Growth of community college enrollment has exceeded that of four-year institutions in part due to open access and lower tuition costs (AACCC, 2008). By 2006, approximately 35% of all postsecondary students were enrolled in community colleges (Provasnik & Planty, 2008, p. 2). Moreover, community colleges disproportionately serve under-represented gender and ethnic minority groups. In 2005, female and ethnic minority percentages at two-year institutions (59% and 37%, respectively) were greater than those at both public (56% and 28%, respectively) and private four-year institutions (58% and 27%, respectively; NCES, 2008, p. 681).

Community colleges enroll more than twice as many part-time students than 4-year institutions. Porchea et al. (2010) found that

The Community College Survey of Student Engagement (CCSSE, 2008) reported that 62% of community college students attend part-time and in excess of 56% work more than 20 hours a week (p. 9). Further, 54% and 69% of part-time and full-time students respectively receive some form of student aid (p. 18). (p. 682)

Community colleges saw increases in their enrollments in the 1970s, a steady decline in the 1980s, and finally an increase again in the early 1990s. These changes in enrollment were based on students who were 18 years old and beginning their postsecondary education (Cohen & Brawer, 2008, p. 45). With the fluctuation in the traditional age groups, community colleges began to offer programs to attract older students. The new programs allowed students who worked more job training to move or change to another position as well as fulfill their own personal interests. Therefore, a

change in the mean age of students attending a 2-year institution dramatically increased. The availability of financial aid to those with a lower socioeconomic status also brought in new students (Cohen & Brawer, 2008, p. 46).

In the article “2-Year colleges get strategic about enrollment” in the June 7, 2013, edition of the *Chronicle of Higher Education*, Lipka stated,

Students packed community college students during the recession, as enrollment saw a historic high with most campuses seeing nearly a 10 percent increase. Then the enrollment subsided and most would-be students went back to work forcing community colleges to re-think how to enroll students” (p. A-2).

Instead of using traditional methods of recruiting, community colleges are employing strategies utilized by other higher education sectors by going after students. Lipka (2013) also stated

While enrollment in community colleges is still up significantly over pre-recession levels, total head count in the spring of 2013 dropped by 3.6 percent over the previous year, the third straight annual decline, according to the National Student Clearinghouse Research Center (p. A-3).

With the steady increase of birthrates, the use of public services increases. Lester (2006) reported

Education, as one of these public services, is affected dramatically by population trends. To account for the increases in the number of students eligible for postsecondary education, colleges and universities must continue to grow.

However, decreased state appropriates to higher education place institutions in a

double bind; that is, they are trying to serve more students with less money. (p. 48)

Gender

“Students attend community colleges for different reasons: to prepare for transfer to four-year institutions, to obtain Associate Degrees or Certificates, to obtain basic skills, or perhaps to take refresher courses in non-credit programs – workforce students, for example” (Christophersen & Robison, 2002, p. 7). Students also enter community colleges at different educational levels (<High School (HS)/General Educational Development (GED), HS/GED equivalent, 1 yr post HS or less, 2yrs post HS or less or >Associate Degree (AD)). The majority of women who attended a community college in the State of Mississippi in 2000-2001 had at least completed a high school degree or GED equivalent (Christophersen & Robison, 2002, p. 9). The best way to look at the student population at a community college is through gender. Sander (2012) expressed in her article in the *Chronicle of Higher Education* that from the day they are born, boys and girls are treated differently, and this difference is being played out on the community college campus. Historically, more males have attended college than females. Harris III & Harper (2008) reported “In 2006, men were 41.4 percent of students enrolled at two-year colleges and earned 38.4 percent of associate degrees awarded (National Center for Education Statistics [NCES], 2007, p. 25). In spite of limited funds in a lower-class family, the male was the one who was able to attend college rather than the female. It was not until 1978 that the number began to shift when females outnumbered males in attendance at a 2-year institution. Early in the history of the community college, very few women attended, and if they did, they depended on their families for financial support.

Over the years, the number of women who attended community colleges increased such that, “by 2003, women were ahead, 58 to 42 percent” (Cohen & Brawer, 2008, p. 52). Minorities have found their place in the community college with the student body of a community college reflecting the population of the institution’s locale. Community colleges have the same effect on all of their students whether their students are in the majority or in the minority.

According to the NCES, 60% of all students earning an associate degree in the 2002-03 academic year were female. This shows the first statistical documentation of the increased female enrollment. Townsend (2008) states in her article “Community colleges as gender-equitable institutions” that by the 1990s, women were well represented on the campus of community colleges through students, faculty, and even presidents. “Although the community college was full of women in various roles, these women still appeared to experience some gender inequities” (p. 8). “As the twenty-first century began, the gender gap became defined as a declining percentage of male students relative to female students, whether traditional age or nontraditional age” (p. 9).

Though over half of the students attending a 2-year institution are female, equity is still a factor. Wolgemuth, Kees, and Safarik (2003) divided the female population at a community college into two categories: those who are highly ambitious and career directed and those who feel as if they need to stay close to home before moving onto the 4-year institution. A study conducted by Miller, Pope, and Steinmann (2006) showed female students more likely to participate in academic activities, get to know their instructors, and make plans for life after college. “Women on campus today are much less likely to be bound by traditional occupational stereotypes. Thus, access to certain

disciplines and majors needs to be free of barriers for all students” (p. 727). “A study by Kane and Rouse found that women who completed an Associate of Arts degree increased their earnings by 23 percent compared with women who were just high school graduates” (Maddox, 2006, p. 19). The community college is the ideal place for women who want to obtain a higher education. “They consider college an investment; plan for the future and budget for tuition; work while going to school; use campus computing resources; and are not significantly involved in campus activities” (Maddox, 2006, p. 726). “Its convenience, affordability, and low-pressure environment allowed women to ‘cope with the double or triple burdens of family, job and school’ ” (Johnson et al., 2000, as cited in Wolgemuth, Kees, & Safarik, 2003, p.762). As growth in the female population of the community college affects the influence of women, the presence of women in public life has correspondingly increased. “In sum, the context in which today’s community college women – whether administrators, faculty, or students – function is one where women are everywhere” (Townsend, 2008, p. 12).

Race/Ethnicity

The article, “Community college as a pathway to higher education and earnings” stated: “According to the most recent data from the U.S. Department of Education, community colleges enrolled 6.7 million students in 2007-08, or more than one-third of all students enrolled in higher education institutions” (Snyder & Dillow, 2010, p. 277). The majority of those students are minority students. Community colleges represent many distinct racial and ethnic groups (Laden, 2004, pp. 8–9). Boggs (2010) wrote in his article, “Democracy’s colleges: The evolution of the community college in America” that community colleges provide access to higher education to a more diverse student body

than ever before. The Truman Commission and Federal Higher Education Policy of 1947 saw the need for changing the access to higher public education “equally available to all students regardless of their race, creed, sex, or national origin” (Gilbert & Heller, 2013, 418). “It is the responsibility of the community, at the local, State, and National levels, to guarantee that financial barriers do not prevent any able and otherwise qualified young person from receiving the opportunity for higher education” (President’s Commission on Higher Education, 1947 p. 23). Gilbert and Heller (2013) found the following:

Passage of the Civil Rights Act of 1964 during the Johnson Administration, along with the aggressive enforcement of both this law and the *Brown v Board of Education* (1954) decision as they applied to higher education during the Kennedy and Johnson administrations, helped provide more opportunities for African American and other racial minority students who historically had been underrepresented in postsecondary education. (p. 422)

By the early 1970s, strides had been made for the equalization of educational opportunities for African American students. “In 2008, African Americans represented 13.5 percent of postsecondary enrollments, the same proportion in which they are represented in the population of the country” (Gilbert & Heller, 2013, p. 422). Herrera, Bernal, and Solorzano (2011) found that although minority students make up the majority of the community college student body, they are the minority when it comes to transferring to a 4-year institution, remaining at only 25% of those who transfer at all.

Transfer Function

A community college’s transfer function is to continue access to higher education. Handel (2009) stated:

Keeping students in school is the key. Research by Clifford Adelman, formerly an analyst with the U.S. Department of Education, revealed that it is the continuity and intensity of enrollment, along with the content of the curriculum, that best predict student success. Adelman writes that in addition to earning credits in collegiate math during the first year of college and participating in summer sessions, continuous enrollment makes a student more likely to transfer. (p. 52)

Jain (2010), in his article “Critical race theory and community colleges: Through the eyes of women student leaders of color,” wrote the following:

As the transfer function becomes less significant and vocational training becomes more prominent in national discussions centering on job placement and the current economic crisis (Jaschick, 2009), we must remember that for women and people of color the opportunity to transfer and obtain a bachelors degree represents not only academic achievement, but economic and personal security as well. For ‘these are the very students that society expects to cross class boundaries, and a college-based education is the ticket to the top of the academic and social ladder.’ (p. 7)

For students who transfer to be successful, 4-year universities need to be willing to accept more transfers, especially those from low-socioeconomic status. In his article, “Community college transfers and college graduation – Whose choices matter most”, Doyle reported that “40% of all first-time freshmen begin their postsecondary career at a community college with the intentions of earning a bachelor’s degree” (2006, p. 56). In Figure 4, it displays the percentage of students indicating their goal of acquiring a bachelor’s degree and the percentage of those who did transfer to a four-year institution.

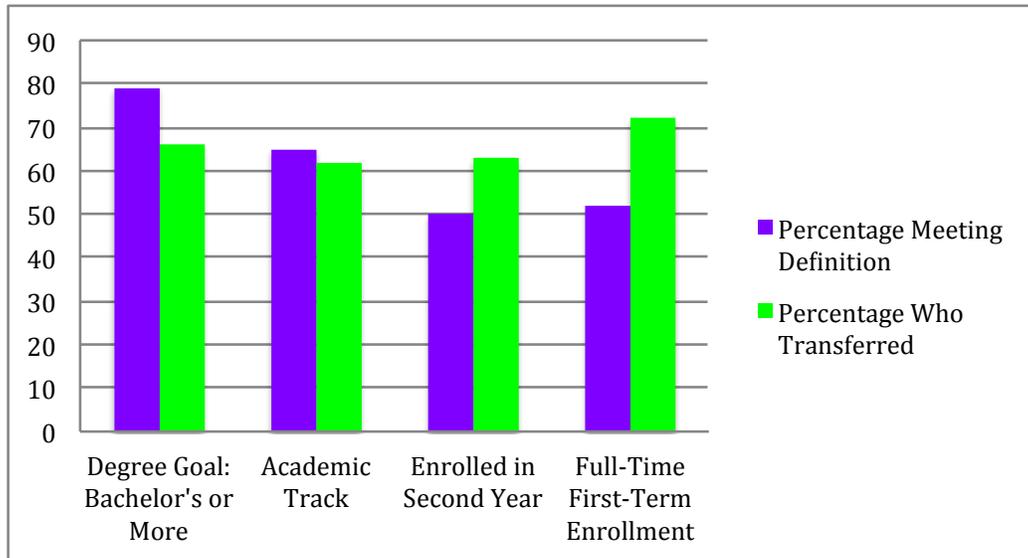


Figure 4. Percentage of students who were “transfer eligible” and percentage of students who transferred in 2001

In order for transfer students to have their credits transfer to four-year institutions, statewide policies and articulation agreements need to be in place. In Mississippi, there is an articulation agreement with all eight public universities. This agreement has been updated twice in the last two years to ensure students who do transfer have their credits accepted.

Socioeconomic Status

In his article “Transfer and the part-time student,” Handel (2009) stated, “As the gateway to higher education for low-income students and students from underrepresented groups, community colleges are an ever-increasing reservoir of emerging talent that represents the broad diversity of the U.S. better than most four-year institutions” (p. 50). Sometimes a student’s family finances or their race can play a major role in the attainment of a post-secondary degree. In a separate article, Carnevale & Strohl (2011)

stated “In a society where people start out in unequal circumstances, educational attainment measured by test scores and grades can partly be the outcome of being born into a family with the right bank account or of the right race” (p. B-34). The authors also stated, “students and parents recognize that postsecondary education has become the arbiter of economic opportunity, and as a result, enrollments have surged – including enrollment of low-income and minority students” (p. B-32). Even though the nation has progressed in its access to higher education, the most growth has been the enrollment of lower-income students making “America’s college system more economically polarized” (Carnevale & Strohl, 2011, p. B-32). This polarization of the “postsecondary system matters because it exacerbates the educational and resource gaps among students from different socioeconomic backgrounds” (Carnevale & Strohl, 2011, p. B-33). All of these factors contribute to the completion rate of students in the community college system. Dr. David T. Conley of the University of Oregon said, “In terms of opportunities for college, our society is not a level playing field. Middle and upper classes have far more access to the right information than others” (Dolan, 2007, p. 16). The model of higher education mimics the comprehensive high school track that was introduced in the 20th Century: “a college track, a vocational track, and a watered-down general track” (Carnevale & Strohl, 2011, p. B-34). This does not benefit the students or the economy. So how is this dilemma corrected? Carnevale and Strohl (2011) suggested the following:

We need to be sure that the most selective colleges don’t reduce their current commitment to students from lower-income families. Selective colleges can do more for lower-income students without violating their own standards. Focus on access for low-income and minority students should be accompanied by a focus

on upward economic mobility that comes from gainful employment. Finally, move high-quality programs, and the money to pay for them, to the community colleges and less-selective four-year colleges, where the least-advantaged half of students, are currently enrolled. (2011, p. B-35).

Therefore, the higher education system in place now encourages mobility as well as economic prospect; however, at the same time “risks the reinforcing of class stratification” (Carnevale & Strohl, 2011, p. B-35). Wells (2008) stated “Financial aid specifically may assist low-SES students because studies show that those receiving financial aid are as likely to persist as those who do not, and these effects may also be more striking at community colleges than at 4-year institutions” (Pascarella & Terenzini, 1991, 2005, p. 27).

Financial Aid

“Show me the money,” the now recognizable phrase from the movie *Jerry Maguire* may well be the exclamation of community college presidents throughout the nation (Crowe, 1996). Romano (2005) reported

Two-year colleges are looking for new sources of revenue in the face of expanding enrollments and declining state support. The biggest problem for public institutions of higher education is not that tuition is too high but that need-based financial aid is too low. Keeping tuition low subsidizes the education of the rich at the expense of the poor. (p. 33)

In 2000, the NCES reported that tuition at public community colleges then averaged about one-fourth of tuition at public 4-year colleges (Weber, 2004). “Students in community colleges are more sensitive to college costs than students in the four-year

sector. In addition, low-income students, who are disproportionately served by community colleges, show greater sensitivity than upper-income students to change in prices and aid” (Dowd & Coury, 2006, p. 35). Even with community college costs being more affordable than a 4-year institution, many community college students still have to take out loans to finance their education. These students feel that their education is an investment for their futures. They must be willing to give time, energy, and money to realize the rewards of education in the end.

Even though a student may qualify for financial aid, the continuing rise in tuition plays a major role in a student’s ability to pay for his or her education. Gorski (2010) reported

Community colleges, which educate about 40 percent of college students, remain affordable, with tuition averaging \$2,713. Lower income students receive enough aid to attend essentially for free. Still, tuition rose 6 percent at public two-year colleges. State and local budget cuts paired with sky-rocketing enrollment have prompted some schools to cut courses and limit enrollments. (p. 5)

For students to attend an institution of higher learning, they must have the funds. “On average, students and their families pay about two-thirds of the gross tuition charge” (McPherson & Schapiro, 1997, p. 560). Historically, those of a higher socioeconomic status had the opportunity to attend college while those on the lower end of the spectrum did not. In order to make any institution of higher learning available to everyone, the government needed to get involved; consequently, many federal programs were created to subsidize college tuition and costs.

Substantial strides were made in 1944 with the passage of the Serviceman's Readjustment Act, popularly referred to as the GI Bill. This piece of legislation impacted the nation socially, economically, and politically, but it almost never came to fruition because of opposition. The bill assisted veterans who wanted to pursue higher education after returning from the war. Vaughn (2003) wrote

Building on smaller federal student aid programs developed at the end of the Great Depression, the GI Bill represented the federal government's first attempt to provide student aid on a large scale, helping to break down the economic and social barriers to attending college. (p. 33)

Mississippi Congressman Gillespie V. "Sonny" Montgomery revamped the bill in 1984 to ensure veterans continued to receive assistance. The US Department of Veterans Affairs (n.d) stated

In 2008, the GI Bill was updated once again. The new law gives veterans with active duty service on, or after, Sept. 11 2001, enhanced educational benefits that cover more educational expenses, provide a living allowance, money for books and the ability to transfer unused educational benefits to spouses or children. (para. 17)

During the 1960s, other legislation came about to assist students financially who wanted to pursue higher education. The Higher Education Facilities Act of 1963 made it possible for campuses to grow and improve existing facilities. Van Dusen (1979) noted:

The development of publicly-funded student aid in the United States is an example of the type of compromise common in our pluralistic, democratic society. Often competing and occasionally conflicting public and private goals

have been modified and amalgamated into a series of student aid programs which fulfill, or attempt to fulfill, a variety of purposes. (p. 5)

Funding available for students to attend college did not become widely accessible and known to the public until the 1960s. During the 89th Congress, the Higher Education Act of 1965 was passed that was to be used for academic activities as well as aid for needy students. Before then, students who needed funding for college usually received a National Defense Student Loan (NDSL). In the year following year, the Act's Title IV created the College Work-Study (CWS) Program, the Guaranteed Student Loan (GSL), and the Educational Opportunity Grants Program, which later became the Stafford Loan Program and the Supplemental Educational Opportunity Grants (SEOG). This development of federal student aid was a popular source of income for those who wanted and needed funding to attend college. With its rise in the 1970s to its leveling off in the 1980s, federal student aid has been a constant consideration of college bound students, especially with growth in the Pell Grant and the Stafford Loan programs. According to Baum, as cited by Paulsen and Smart (2001), "Almost 4 million students receive grants from the largest federal program, the Pell grant program. After adjusting for inflation, grant aid rose 63 percent between 1988 and 1998 and now averages about \$2500 per full-time-equivalent (FTE) student" (p. 43).

Alexander (2002) explained that federal student aid only slightly achieved what it set out to do: improve lower-income students' access to higher education. Student aid has dramatically changed through demographic, economic, and political pressure to accommodate even more students of middle-class families. "In response Congress enacted the Middle Income Student Assistance Act (MISAA) in 1978, loosening Pell

Grant restrictions and removing maximum ceiling amounts on GSLs, thereby making available federal resources to students from varying economic backgrounds” (Alexander, 2002, p. 666).

Since its introduction, federal support for higher education through loans and grants has made access to college immensely available and financial aid frequently requested. Boulard (2004) reported

According to the U. S. Department of Education, 55 percent of all students attending community colleges in 2002 received some form of financial aid from either federal, state, institutional or other sources – an indication that most students who attend community colleges are from middle or lower-economic classes (p. 10).

However, the average amount of federal grants given to students attending community colleges was 49% lower than a student attending a private 4-year institution. One in three low-income community college students received aid, while three out of four students going to a private 4-year college received aid.

Three factors have been identified as reasons for the rising price of public colleges. First, state appropriations have not been increased. Also, colleges have intensified their spending in the areas of “student services, computing facilities, and faculty and administrative compensation” (Mumper, 2001, p. 327). Finally, enrollment has increased, but many students are unprepared to do introductory college work (Mumper, 2001, p. 327). These factors are strong indications of how much students rely on financial aid to reach their goals of higher education.

The Mission of the Community College

“Today’s community college embodies Thomas Jefferson’s belief that education should be practical as well as liberal and should serve the public good as well as individual needs” (Vaughn, 2000, p. 1). With the passage of the Morrill Act of 1862, often referred to as the Land Grant Act, higher education became obtainable for those who had never considered continuing their education. In 1901, the first community college was established in Joliet, Illinois, expanding the educational offerings beyond high school through an intermediate institution rather than a traditional university. The American Association of Junior Colleges, founded in 1920, was

proposed by the U.S. Bureau of Education to function as an accrediting body for the rapidly growing number of junior colleges, became a forum for community college issues and a source of mutual support for its members at a time when the potential of the junior college was not widely understood or appreciated (Vaughn, 2000, p. 32).

Community colleges used characteristics from high schools, private junior colleges, and 4-year institutions to create its identity. Cohen and Brawer (2008) mentioned that “community colleges thrived on the new responsibilities because they had no traditions to defend, no alumni to question their role, no autonomous professional staff to be moved aside, no statements of philosophy that would militate against their taking on responsibility for everything” (p. 3). Community colleges also needed to have a threefold mission: the collegiate function, the vocational function, and the community education function. Even in the early part of the 20th century, Mississippi was one of the few states that established public junior colleges. The colleges were developed from the agricultural

high schools around the state. Mississippi was a pioneer in community college development as the first state to organize a governing board. The oversight group “worked closely with elected local boards in developing a strong network of public junior colleges that effectively balanced transfer and vocational programs” (Vaughn, 2000, p. 33). The government’s first attempt at providing financial assistance came with the creation and passage of the Servicemen’s Readjustment Act, commonly referred to as the GI Bill, in 1944. The piece of legislation gave veterans the opportunity to obtain a higher education after returning from World War II.

Townsend & Twombly (2001) reported

Despite the boost community colleges received from national initiatives such as the 1947 Truman Commission Report on Higher Education, they have remained secondary to four-year colleges and universities. However, for individuals and communities served by community colleges, these schools are, and have been, anything but marginal institutions. (p. ix)

Changes brought about at the federal level in the 1960s resulted in the local governments finding more ways to offer financial assistance to those who wanted to obtain a higher education through two pieces of legislation: the Higher Education Facilities Act of 1963 and the first Higher Education Act of 1965. In 1972, the American Association of Junior Colleges changed its name to the American Association of Community and Junior Colleges to reflect the growing number of colleges as well as what the institutions were offering. Also, the Workforce Investment Act of 1998 brought a major reform to job training. With its passage, more doors were opened for those who needed job training, adult education, and vocational rehabilitation. Even with their

untraditional approach to higher education, community colleges have worked with their mission to provide open access enrollment, academic transfer programs, vocational/occupational programs, workforce development training, and community-based institution of higher education. The Carl D. Perkins Vocational–Technical Education Act Reauthorization occurred in 1998 as well. “The reauthorization removes set-asides historically included in the law for special populations and provides states flexibility in determining how best to spend Perkins dollars. Community colleges are considered important providers of postsecondary vocational education” (Vaughn, 2000, p. 37). “Community colleges provide status and income to the towns and counties that support them, as well as low-cost access to higher education and job training for literally millions of individuals. Yet, as recently as 1996, the Education Commission of the States argued that policy makers failed to recognize the importance of community colleges when planning for postsecondary education” (Townsend & Twombly, 2001, p. ix). A community college should continue to be useful in the society for which it serves. The community college is a place where a small percentage of students will actually transfer to the 4-year college or university. The poorly prepared student along with the part-time and commuter can find a place in the walls of a community college. Students find the community college a place with ease in entrance, exit, and reentry, and this will continue to be a major factor in students’ participation and enrollment of a 2-year institution.

Summary

In the literature, the student body at a community college is made of traditional, non-traditional, male, and female students as well as students of different races and ethnicities. The open door policy allows anyone who wants to obtain a degree the

opportunity to do so. Community colleges are seen as a gateway for students to effectively transfer and complete a baccalaureate degree. Historically, a person's socioeconomic status made it difficult to pursue higher education, but with various forms of financial aid available, students are now able to pursue associate and baccalaureate degrees. Community colleges continue to serve a threefold purpose: a collegiate function, a vocational function, and a community function.

CHAPTER III

METHOD

Introduction

This chapter presents the research design, research questions, participants and instruments, data collection, and data analysis. The researcher focused on students who attended MCC from 2004-2009.

Research Design

A correlational design was chosen for this study. Fraenkel and Wallen (2006) defined correlational research as “researchers [who] seek to determine whether a relationship exists between two (or more) quantitative variables, such as age and weight or reading and writing ability” (p. 208). They also pointed out that multiple linear regression “is a technique that enables researchers to determine a correlation between a criterion variable and the best combination of two or more predictor variables” (pp. 338–339). The researcher analyzed the students’ gender, race, enrollment status, socioeconomic status, and transfer GPA.

Research Questions

The following research questions were addressed in this study:

- Research Question 1: To what extent do gender and race relate to transfer GPA from 2004-2009?

- Research Question 2: To what extent does socioeconomic status relate to transfer GPA from 2004-2009?
- Research Question 3: To what extent does enrollment status (full-time vs. part-time) relate to transfer GPA at MCC from 2004-2009?
- Research Question 4: Which of the four variables are most strongly related to transfer GPA at MCC from 2004-2009? Which are less strongly related?

Each question focused on what affects the transfer GPA of a community college student.

Participants and Instruments

In this study, the data were collected from records of students who were enrolled at MCC from the 2004-2005 academic year through the 2008-2009 academic year. The data set started at 12,748 students. Of these, 8,800 were not used based upon their record missing a transfer GPA. Duplicate records were also eliminated from the study. The final data set included 5,218 students over the 5-year period this study examined. The students represented in the study represented different academic programs. In this research, data elements gathered from existing records included gender (male or female), race (White, Black/African American, Hispanics, American Indian, or Asian), enrollment status (part-time or full-time), socioeconomic status (three levels: low income = < \$1201; mid income = \$1201-\$2500; high income = > \$2500; based on amount of aid received), and computed GPA. The data for socioeconomic status were pulled from financial aid applications after they had been submitted to the federal aid-clearing house and returned to the college. Indicators considered included the expected family contribution (EFC),

the amount of school cost the federal aid system expects the students or students' family to pay. All data were from archival records at MCC. For analyses purposes, the variables were coded the following way: a) gender: male or female, b) race/ethnicity: 1 = White, 2 = Black/African American, 3 = Hispanics, 4 = American Indian, 5 = Asian and 6 = No answer, c) enrollment status (part-time or full-time), d) socioeconomic status (three levels: low income = < \$1201; mid income = \$1201-\$2500; high income = > \$2500; based on amount of aid received), and e) a computed GPA.

Data Collection

The Institutional Review Board (IRB) located at Mississippi State University (MSU; Appendix A) approved this educational study along with the permission of the president of MCC (Appendix B). Before the research analysis began, the researcher was IRB certified to conduct this evaluation of the student body at MCC. In the administrative computing department, the director released archival data that related to the students' transfer grade point averages. The subjects' data were entered into a Microsoft Excel file and the IBM Statistical Package for the Social Sciences, version 20.0 for analysis; as a result, the researcher used multiple regression to analyze the information.

Data Analysis

In the study, the researcher used the IBM SPSS version 20.0 and the multiple linear regression to analyze the individuals' records. The simple or multiple linear regression was used to address the following research questions:

- Research Question 1: To what extent do gender and race relate to transfer GPA from 2004-2009?

- Research Question 2: To what extent does socioeconomic status relate to transfer GPA from 2004-2009?
- Research Question 3: To what extent does enrollment status (full-time vs. part-time) relate to transfer GPA at MCC from 2004-2009?
- Research Question 4: Which of the four variables are most strongly related to transfer GPA at MCC from 2004-2009? Which are less strongly related?

Research questions 1, 2, and 4 called for multiple linear regression, since they involved more than one independent variable. Research question 3 only required simple linear regression, since only one independent variable was involved.

Summary

The IRB at MSU granted approval to conduct the study. The MCC administration also approved the conduct of the study. As a result, the educational data were released from MCC. Variables used for analysis included the students' gender, race, socioeconomic status (based on financial aid received), enrollment status and transfer GPA.

CHAPTER IV

RESULTS

Introduction

This chapter represents the results of the acquired data that was discussed in the methodology of the previous chapter. The chapter presents descriptive statistics for the four predictor variables examined: gender, race, socioeconomic status, and enrollment status of students who attended MCC from the academic years 2004-2009. Summary statistics are also given for the transfer grade point average. Lastly, the individual research questions addressed using the results of the regression analyses.

Frequencies and Percentage Data

Table 1 shows there was a greater percentage of females (73.6%) as compared to males (26.4%) within the sample ($N = 5218$) over the 5 years studied for this research. This is also consistent with statewide data showing a higher percentage of females (64.1%) than males (35.7%; SBCJC, 2005). As stated in chapter II, in a study done by the NCES, it was reported that 59% of students enrolled in a two-year institution were female.

Table 1

Frequency and Percentage of Students' Gender

Variable	Frequency	Percentage
Male	1378	26.4%
Female	3840	73.6%
Total	5218	100.0%

Table 2 shows the race/ethnicity of the students at MCC during the 5-year period this research was conducted. It displays the percentage of White students (53.6%) as compared to Black (40.1%), Hispanic (0.7%), American Indian (1.9%), and Asian (0.4%) students and those who reported no ethnicity (3.4%). Even over a 5-year period, the percentage of ethnic minority students at MCC was greater than the percentage of ethnic minority students in 2005 as reported by NCES in 2008.

Table 2

Frequency and Percentage of Students' Race/Ethnicity

Variable	Frequency	Valid Percentage	Percentage
White	2796	55.5%	53.6%
Black/African American	2090	41.5%	40.1%
Hispanic	34	0.7%	0.7%
American Indian	98	1.9%	1.9%
Asian	22	0.4%	0.4%
Subtotal	5040	100.0%	96.6%
Missing or no answer	177		3.4%
Total	5218		100.0%

In Table 3, there is a breakdown of socioeconomic status as it relates to the students during the 5-year period. Of the sample records that could be classified as to income, ($N = 3872$), 68.7% of the students were from low-income families showing their earnings to be less than \$1201. The 310 students represented in the mid-income bracket had a family income ranging from \$1201 - \$2500. This percentage (8.0%) was the smallest of the three groups. Families who earned more than \$2500 were placed in the high-income bracket. There were 902 students representing 23.3% of the sample. Income status was unknown for 1346 (25.8%) of the students.

Table 3

Frequencies and Percentages of Students' Socioeconomic Status

Variable	Frequency	Valid Percentage	Percentage
Low income	2660	68.7%	51.0%
Mid income	310	8.0%	5.9%
High income	902	23.3%	17.3%
Subtotal	3872	100.0%	74.2%
Missing	1346		25.8%
Total	5218		100.0%

Table 4 shows the frequency and percentage of the enrollment status of students during the 2004-2005 academic year through the 2008-2009 academic year. The study revealed majority of the students who attended during those five years were full time students, those taking 12 or more hours per semester (54.1%). As stated in chapter II, 62 percent of students enrolled in a community college during 2007 were reported as part-time. This is 16.1% higher than the percent of part-time students at MCC (45.9%) during the 5-year study.

Table 4

Frequency and Percentage of Enrollment Status: Full-time and Part-time

Variable	Frequency	Percentage
Part-time	2393	45.9%
Full-time	2825	54.1%
Total	5218	100.0%

Means and Standard Deviation of Demographics

The results exhibited in Table 5 indicate the number of students in the sample as well as the means and standard deviation for the sample on transfer GPA. The items to look at in Table 5 are the mean score for the transfer GPA for females (2.84) and males (2.73) as well as the standard deviation of the females (0.63) and males (0.67), indicating there was not much difference in GPA between males and females.

Table 5

Descriptive Statistics of Transfer GPA by Students' Gender

Gender	<i>N</i>	Mean	<i>SD</i>	Std. Error
Male	1378	2.73	0.67	0.01
Female	3840	2.84	0.63	0.01
Total	5218	2.78	0.65	0.01

Notes: *N* = number of participants, *SD* = standard deviation

Table 6 summarizes transfer GPAs by race. Due to the lower number of Hispanic, American Indian, and Asian students and those who reported no ethnical background, all of these students were grouped together forming the category of "Other/Unknown." Even though the number of students ($n = 332$) who were grouped in "Other/Unknown" was small, the mean transfer GPA (2.86) was only one tenth behind the White group (2.96).

Table 6

Descriptive Statistics of Transfer GPA by Students' Race/Ethnicity

Race/Ethnicity	<i>N</i>	Mean	<i>SD</i>	Std. Error
White	2796	2.96	0.63	0.01
Black/African	2090	2.62	0.61	0.01
Other/Unknown	332	2.86	0.62	0.03
Total	5218	2.81	0.62	0.01

Notes: *N* = number of participants, *SD* = standard deviation

In Table 7, the transfer GPA is considered by students' socioeconomic statuses. Based on the financial aid students received, students (*N* = 3872) were grouped into one of three classes (low, medium, or high). Students (*n* = 1346) who had no financial aid information reported were not eliminated from this portion of the study, thus forming a fourth group. The students who were in the high-income bracket had the higher transfer GPA (2.96) than those in the low-income bracket (2.78). The standard deviation for students of high-income backgrounds (0.67), medium-income backgrounds (0.65), and low-income backgrounds (0.63) showed the diversity of students who attended MCC during these years.

Table 7

Descriptive Statistics of Transfer GPA by Students' Socioeconomic Status

Status	<i>N</i>	Mean	<i>SD</i>	Std. Error
Low income	2660	2.78	0.63	0.01
Mid income	310	2.82	0.65	0.03
High income	902	2.91	0.67	0.02
Missing/unknown income status	1346	2.61	0.94	0.02
Total	5218	2.81	0.63	0.01

Notes: *N* = number of participants, *SD* = standard deviation

Table 8 offers an insight into how transfer GPA related to student's enrollment status (full-time versus part-time). The number of full-time students ($n = 2825$) is greater than the number of part-time students ($n = 2393$). Coincidentally the mean transfer GPA for full-time students (2.89) is slightly higher than for those who are part-time students (2.74).

Table 8

Descriptive Statistics of Transfer GPA by Students' Enrollment Status

Status	<i>N</i>	Mean	<i>SD</i>	Std. Error
Part-time	2393	2.74	0.64	0.01
Full-time	2825	2.89	0.63	0.01
Total	5218	2.81	0.63	0.01

Notes: *N* = number of participants, *SD* = standard deviation

Table 9 presents Pearson correlations among all of the variables used in analysis of the four research questions. No single correlation with transfer GPA exceeded $|.24|$.

Table 9

Pearson Correlation Matrix

	TGPA	Gender	White	Black	Other/ Unknown	Part- time	Low- income	Mid- income	High-income
TGPA	1.00								
Gender	0.07	1.00							
White	0.23	-0.14	1.00						
Black	-0.24	0.14	-0.87	1.00					
Other/Unknown	0.01	-0.00	-0.28	-0.21	1.00				
Part-time	-0.11	-0.01	-0.08	0.09	-0.02	1.00			
Low-income	-0.04	0.13	-0.26	0.25	0.01	-0.08	1.00		
Mid-income	0.00	0.02	-0.03	0.03	0.00	-0.03	-0.25	1.00	
High-income	0.07	-0.03	0.13	-0.12	-0.02	-0.16	-0.46	-0.11	1.00

Research questions were analyzed using multiple regression. Multiple regression has three major assumptions (normality, homoscedasticity and linearity). All three assumptions were examined and no major problems were found.

Research Question 1

The first research question in this study to be examined asked the following: To what extent do gender and race relate to transfer GPA from 2004-2009? Multiple linear regression was used to determine if gender and/or race could be used to predict a student's transfer grade point average. Gender and race produced an adjusted R^2 of .077 for the prediction of transfer GPA, which was statistically significant, $F(3,5214) = 144.80, p < .001$. The standardized regression coefficient of -0.27 indicates race/ethnicity was the strongest predictor and specifically Black/African American vs. others. It was noted in Table 5 that females (2.84) did in fact have a higher transfer GPA than males (2.73). Tables 6 and 10 show race was a stronger predictor. Black/African American students (2.62) had a lower transfer GPA and the unstandardized regression indicates that their GPA was 0.36 lower than all other race groups, holding gender constant.

Table 10

Summary of Gender and Race Predicting Transfer GPA

Variable	<i>B</i>	<i>SE (B)</i>	β	<i>t</i>	Sig. (<i>p</i>)
Constant	2.84	0.01		160.32	< .001
Gender	0.17	0.02	0.11	8.69	< .001
Black	-0.36	0.01	-0.28	-19.98	< .001
Other/Unknown	-0.10	0.03	-0.04	-2.94	< .001

Note: $R^2 = .077$

Research Question 2

The second research question in this study to be examined asked the following: To what extent does socioeconomic status relate to transfer GPA from 2004-2009? Again a multiple linear regression was run to predict if socioeconomic status predicted a student's transfer GPA. Socioeconomic status produced an adjusted R^2 of .005 for the prediction of transfer GPA, $F(3,5214)=9.127, p<.001$. With a small R^2 value (.005), income level is a weak predictor of transfer GPA, even though it is statistically significant, given the large sample size. Table 7 shows that students who were in the high-income bracket had a higher transfer grade point average (2.91), and that the lower income bracket students did have slightly lower mean GPAs. Income alone, as defined in this study, does not do much to predict transfer GPA.

Table 11

Summary of Socioeconomic Status Predicting Transfer GPA

Variable	<i>B</i>	<i>SE (B)</i>	β	<i>t</i>	Sig. (<i>p</i>)
Constant	2.81	0.01		160.35	< .001
Low income	-0.02	0.02	-0.01	-0.92	0.35
Mid income	0.01	0.04	0.00	0.27	0.78
High income	0.19	0.02	0.06	3.93	< .001

Note: $R^2 = .005$

Research Question 3

The third research question in this study to be examined asked the following: To what extent does enrollment status (full-time vs. part-time) relate to transfer GPA at MCC from 2004-2009? A regression was done on the data to see if enrollment status predicted a student's transfer grade point average. Enrollment status produced an adjusted R^2 of .014, $F(1,5216)=74.077, p<.001$, for the prediction of transfer GPA. While

statistically significant, the adjusted R^2 value of .014 indicates that enrollment status is a minor predictor of a student's transfer GPA.

Table 12

Summary of Enrollment Status Predicting Transfer GPA

Variable	<i>B</i>	<i>SE (B)</i>	β	<i>t</i>	Sig. (<i>p</i>)
Constant	2.89	0.01		239.99	< .001
Part-time	-0.153	0.01	-0.11	-8.61	< .001

Note: $R^2 = .014$

Research Question 4

The fourth and final research question in this study to be examined asked the following: Which of the four variables are most strongly related to transfer GPA at MCC from 2004-2009? Which are less strongly related? Once again a regression was done on the data to compare the explanatory contribution of the chosen variables for differences in student transfer GPA. Gender, race, socioeconomic status, and enrollment status produced an adjusted R^2 of .086 for the prediction of transfer GPA which was statistically significant, $F(7,5210)=70.321$, $p<.001$. With all things held constant, Black/African American had a lower transfer grade point average, females had a higher transfer GPA and part-time students had a lower transfer GPA.

Table 13

Summary of Four Variables Predicting Transfer GPA

Variable	<i>B</i>	<i>SE (B)</i>	β	t	Sig. (p)
Constant	2.86	0.02		118.00	< .001
Gender	0.16	0.02	0.11	8.32	< .001
Black	-0.35	0.01	-0.26	-18.67	< .001
Other	-0.10	0.03	0.04	-2.93	< .001
Low income	0.03	0.02	0.02	1.47	.140
Mid income	0.04	0.04	0.01	1.15	.250
High income	0.07	0.02	0.04	2.53	.011
Part-time	-0.10	0.01	-0.08	-5.88	< .001

Note: $R^2 = .086$

Summary

For chapter IV, students who attended MCC from 2004–2009 were the focus of this study. It is important to note that, collectively, the variables of gender, race, socioeconomic status, and enrollment status can explain about 9% of the variance in student GPA. Therefore, there are other factors that can and do contribute to explaining the other 91% of variance in transfer GPA.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

In this study, four characteristics (gender, race, socioeconomic status, and enrollment status) of students who attended MCC from 2004–2009 were examined as possible predictors of student GPA. Elements presented in this chapter include the following: summary of findings and conclusions, limitations of the study, and recommendations for future research. The purpose of the study was to see if there was any correlation between a student’s gender, race, socioeconomic status, or enrollment status and students’ transfer GPAs.

In the literature that was reviewed, it showed in the early history of the community college that males made up for the majority of the student body. However, over the years, the trend began to change; more women started attending community colleges. This was the case with the students of MCC (73.6%). Race was another factor preventing students from attending, but due to lower tuition and an open door policy, the number of minority students began to increase. Deng (2006) reported “[A]mong the other variables, the strongest negative variable, which affects the transfer institution academic performance, is student gender. This finding indicated that female students who transferred from a community college performed better academically than male students at transfer institutions”(p. 7). Marrs and Sigler (2012) quoted “Sax (2008) notes that

college men devote less time and effort to studying and course-related activities” (p. 227).

Summary of Findings and Conclusions

Sander (2012) reported in her article “Colleges face a gender gap in student engagement...for decades women have enrolled in college in greater numbers than men, and by many measures, have outperformed them in the classroom” (p. B14). She also noted that by colleges focusing on gender, they are adapting their approaches to how they interact with their students.

Research Question 1: To what extent do gender and race relate to transfer GPA from 2004-2009?

Sander (2012), stated the following:

[S]ome scholars question the severity of the differences between the genders.

Race and class have a far greater impact on students’ academic success in college than does gender, says Richard Arum, one of the authors of *Academically Adrift: Limited Learning on College Campuses* (University of Chicago Press, 2011). He stated the impact of engagement on learning might be overstated or even misconstrued. Engagement is good for keeping students in college he said, but while researching for his book, he found no evidence that students who were more socially engaged learned more. He stated, “In some cases, they learned less”. He found that the only differences between the genders were in grades—women had higher grade-point averages—and choice of major (p. B16-17).

This rings true for the female students of MCC, having higher transfer GPAs than the male students by 0.1 on a 0-4 scale, this is a small effect.

Research Question 2: To what extent has socioeconomic affected transfer GPA from 2004-2009?

In their article, McKinney and Novak (2013) stated, “In 2007-2008, approximately 42% of community college students who were eligible to receive Pell grant funding did not file the Free Application for Federal Student Aid (FAFSA)” (p. 63). Those students who attend community colleges are the candidates most likely to benefit from need-based financial aid considering “forty percent of community college students have such low incomes that they have no resources to pay for a college education” (Institute for College Access & Success, 2009, p. 1). Over the 5-year period, most of the students who attended MCC were of a lower income. These students also had a lower transfer GPA when compared to students in either the medium-income bracket or the high-income bracket. However, the statistical differences were small.

Research Question 3: To what extent does enrollment status (full-time vs. part-time) relate to transfer GPA at MCC from 2004-2009?

Even if overall enrollment is up or down depending on the economy and other factors, more students enroll as full-time students than as part-time students. This trend was seen statewide during the same 5-year period of this study. Enrollment status was not a strong predictor of transfer GPA, but it did show that students who were enrolled as full-time students had higher transfer GPAs than those enrolled as part-time students.

Research Question 4: Which of the four variables are most strongly related to transfer GPA at MCC from 2004-2009? Which are less strongly related?

According to the results in Chapter IV, the order of explanatory power from greatest to least is the following: race, gender, enrollment, and socioeconomic status.

When all of the variables (gender, race, socioeconomic status and enrollment are combined, only about 9% of transfer GPA variance can be explained.

Limitations of the Study

There were several limitations in this educational study such as the following:

- Only one community college was studied
- Only four selected variables were examined for relationships with GPA.

The study focused on four variables and how they related to transfer GPA at one of the state's 15 community colleges.

Recommendations for Practitioners and Policy Makers

As for recommendations for practitioners and policy makers, other data could be studied that have already been submitted to the State Board for the report done by the Division of Research and Effectiveness. The study revealed 1) Black/African American students tend to obtain lower GPAs by nearly 4/10 a point; 2) females have slightly higher GPAs than males; 3) full-time student ever so slightly (and possibly negligibly) outperform part-time students; 4) students from higher income backgrounds have slightly higher average GPAs than those of mid or low income backgrounds. The implications of this information can be useful in deciding on how to recruit students, prepare students during their first semester on how to become a better student and learn to navigate their community college as well as assist those already enrolled with their study skills and academic goals. Allen (2011) reported

While it is acknowledged that not all first-time, full-time freshmen are motivated to complete college, and many who are motivated lack the academic preparation,

the financial wherewithal, or the bureaucratic skill to negotiate registration, advisement, financial aid and the like. In order to intervene more effectively on behalf of students who are motivated to complete college, it is important to better understand the wide array of motivational factors that may exist and their role in influencing student adjustment to college. Learning communities may be ideally positioned to provide such insight. (p. 4)

Recommendations for Future Research

Allen (2011) also reported “[L]earning communities promote persistence in that they foster peer group support, student involvement in classroom learning and social activities, perceptions of greater academic development, and greater integration of students’ academic and nonacademic lives (Pascarella and Terenzini, 2005)” (p. 4-5).

In executing this study, the researcher makes the following suggestions for further research by future researchers:

1. Explore other variables in a student’s record such as age, ACT score, and degree program (academic or career-technical) to discover if any of these variables have any bearing on transfer GPA.
2. Look at other variables not in a student’s record for example: on-campus or commuter; parent(s) hold a college degree; first generation college student to find if any of these variables have any bearing on transfer GPA.
3. Look at more recent data, to see if the relationships reported here continue to hold.

Summary

Chapter V summarized the findings of the research done in this educational study as described in Chapter IV and presented the conclusions of how transfer GPA is affected by gender, race, socioeconomic status, and enrollment status. Limitations of the study were discussed as well as recommendations to the state's community college presidents as well as to future researchers.

REFERENCES

- Alexander, F. K. (2002). The federal government, direct financial aid, and community college students. *Community College Journal of Research and Practice*, 26, 659–679. doi:10.1080/10668920290102680
- Allen, D. F. (2011). *SAIR and NCAIR Best Paper: Academic Confidence and the Impact of a Living-Learning Community on Persistence*. Retrieved from ERIC database. (ED531717)
- American Psychological Association. (2014). *Socioeconomic status*. Retrieved from <https://www.apa.org/topics/socioeconomic-status/>
- Baum, S. (2001). College education: Who can afford it? In M. B. Paulsen & J. C. Smart (Eds.), *The finance of higher education: Theory, research, policy & practice* (pp. 39-52). New York: Agathon Press
- Boggs, G. R. (2010). *Democracy's colleges: The evolution of the community college in America*. Paper presented at White House Summit on Community Colleges, Washington, DC. Retrieved from <http://www2.ed.gov/PDFDocs/college-completion/01-democracys-colleges.pdf>
- Boulard, G. (2004, May 10). College access still tied to income, report says. *Community College Week*, 10.

- Brock, T. (2010). *Community colleges as a pathway to higher education and earnings*. Paper presented at White House Summit on Community Colleges, Washington, DC. Retrieved from <http://www2.ed.gov/PDFDocs/college-completion/06-community-college-as-a-pathway.pdf>
- Brogan, R. (2009, December 23). *Socioeconomic Status*. Education.com. Retrieved February 23, 2014, from <http://www.education.com/reference/article/socioeconomic-status/>
- Carnevale, A., & Strohl, J. (2011). Our economically polarized college system: Separate and unequal. *Chronicle of Higher Education*, 58, B-32.
- Christophersen, K. A., & Robison, M. H. (2002, October 14). *The socioeconomic benefits generated by 15 community college districts in Mississippi* (Report No. 1). Moscow, ID: CC Benefits, Inc.
- Cohen, A. M., & Brawer, F. B. (2008). *The American community college* (5th ed.). San Francisco, CA: Jossey-Bass.
- Crowe, C. (Director). (1996). *Jerry Maguire* [Motion picture]. USA: TriStar Pictures.
- Deng, H. (2006). *Are There Differences between Transfers from Community College Career-Oriented Programs and Liberal Arts Programs?* Retrieved from ERIC database. (ED504379)
- Dolan, T. G. (2007, October 8). Minority students and college success: Real challenges/real solutions. *The Hispanic Outlook in Higher Education*, 18, 16–18.
- Dowd, A. C., Cheslock, J. J., & Melguizo, T. (2008, July/August). Transfer access from community colleges and the distribution of elite higher education. *The Journal of Higher Education*, 79, 442–472.

- Dowd, A. C., & Coury, T. (2006, February). The effect of loans on the persistence and attainment of community college students. *Research in Higher Education, 47*, 33–62. doi:10.1007/s11162-005-8151-8
- Doyle, W. R. (2006, May/June). Community college transfers and college graduation: Whose choices matter most? *Change, 56–58*.
- Duncan, C. M. (1999). *Worlds apart: Why poverty persists in rural America*. New Haven, CT: Yale University Press.
- Federal Student Aid*. (n.d.). Retrieved February 23, 2014, from http://studentaid.ed.gov/glossary#letter_f
- Fraenkel, J. R., & Wallen, N. E. (2006). *How to design and evaluate research in education* (6th ed.). New York: McGraw-Hill.
- Gilbert, C., & Heller, D. E. (2013). Access, equity, and community colleges: The Truman Commission and Federal Higher Education Policy from 1947 to 2011. *Journal of Higher Education, 84*, 417–443.
- Gorski, E. (2010, November). College tuition continues to climb this fall. *Community College Week, 23*, 5.
- Handel, S. J. (2009). Transfer and the part-time student. *Change, 41*, 48–53.
- Harris, F., III, & Harper, S. R. (2008). Masculinities go to community college: Understanding male identity socialization and gender role conflict. *New Directions for Community Colleges, 142*, 25-35. doi:10.1002/cc.322
- Institute for College Access & Success. (2009, May). *Quick facts about financial aid and community colleges, 2007-08*. Retrieved from <http://projectonstudentdebt.org/files/pub/cc%5Ffact%5Fsheet.pdf>

- Jain, D. (2010). Critical race theory and community colleges: Through the eyes of women student leaders of color. *Community College Journal of Research and Practice*, 34, 78–91. doi:10.1080/10668920903385855
- Jarrell, C. L. (2004). Creating a foundation for student success: From research to practice. *Community College Journal of Research and Practice*, 26, 513–524. doi:10.1080/10668920490277216
- Jenkins, R. (2005, September 9). Know thy students. *Chronicle of Higher Education*, 52, C1–C4.
- Kelly, T., & Sauter, A. (2007). *Student development theory chart* [Web post]. Retrieved from <http://studentaffairs.webs.com/collegeimpact.htm>
- Laanan, F. S. (2003). Older adults in community colleges: Choices, attitudes, and goals. *Educational Gerontology*, 29, 757–776. doi:10.1080/03601270390231184
- Laanan, F. S. (2007). Studying transfer students: Part II: Dimensions of transfer students' adjustment. *Community College Journal of Research and Practice*, 31, 37–59. doi:10.1080/10668920600859947
- Lester, J. (2006). Who will we serve in the future? The new student in transition. *New Directions for Student Services*, 114, 47–61. doi:10.1002/ss.206
- Lipka, S. (2013). 2-year colleges get strategic about enrollment. *Chronicle of Higher Education*, 60, A2–A4.
- Maddox, T. (2006). Yes we can! Adult women community college students beginning new lives. *Delta Kappa Gamma Bulletin*, 72, 18–21.

- Marrs, H., & Sigler, E. A. (2012). Male academic performance in college: The possible role of study strategies. *Psychology of Men & Masculinity*, 33, 227-241.
doi:10.1037/a0022247
- McKinney, L., & Novak, H. (2013). The relationship between FAFSA filing and persistence among first-year community college students. *Community College Review*, 41, 63–85. doi:10.1177/0091552112469251
- McPherson, M. S., & Schapiro, M. O. (1997). Financing undergraduate education: Designing national policies. *National Tax Journal*, 50, 557-71.
- Meridian Community College, The Mississippi Code of 1972. § 37-29-501.
- Meridian Community College. (2013). *2013-2014 Catalog*. Retrieved from <http://www.meridiancc.edu/Assets/1pdfs/catalog/catalog.pdf>
- Miller, M. T., Pope, M. L., & Steinmann, T. D. (2006). Trait and behavioral differences among community college students based on gender: Results of a national study. *Community College Journal of Research and Practice*, 30, 715–728.
doi:10.1080/10668920500207585
- Mumper, M. (2001). State efforts to keep public colleges affordable in the face of fiscal stress. In M. B. Paulsen & J. C. Smart (Eds.), *The finance of higher education: Theory, research, policy & practice* (pp. 321-350). New York: Agathon Press.
- Mupinga, D., Wagner, K., & Wilcosz, R. (2009, May/June). Choosing between public and private two-year postsecondary technical institutions. *The Clearing House*, 233–236.

- National Center for Education Statistics. (n.d.). *The Integrated Postsecondary Education Data System - Definitions for New Race and Ethnicity Categories*. Retrieved February 23, 2014, from <http://nces.ed.gov/IPEDS/reic/definitions.asp>
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.
- Paulsen, M. B., & Smart, J. C. (Eds.). (2001). *The finance of higher education: Theory, research policy, and practice*. New York: Agathon Press.
- Pekow, C. (2008, October 20). Temporary funding bill protects Pell grants. *Community College Week*, 10–11.
- Porchea, S. F., Allen, J., Robbins, S., & Phelps, R. P. (2010, November/December). Predictors of long-term enrollment and degree outcomes for community college students: Integrating academic, psychosocial, socio-demographic, and situational factors. *The Journal of Higher Education*, 81, 680–708.
- President's Commission on Higher Education. (1947) *Higher education for American democracy*. New York, NY: Harper & Brothers Publishers.
- Provasnik, S., & Planty, M. (2008). *Community colleges: Special supplement to the Condition of Education 2008*. Retrieved from National Center for Education Statistics web site: <http://nces.ed.gov/pubs2008/2008033.pdf>
- Romano, R. M. (2005, Winter). Seeking the proper balance between tuition, state support, and local revenues: An economic perspective. *New Directions for Community Colleges*, 132, 33–42.
- Sander, L. (2012). Colleges confront a gender gap in student engagement. *Chronicle of Higher Education*, 59, B14–B17.

Snyder, T. D., & Dillow, S. A. (2010). *Digest of education statistics 2009* (NCES 2010-013). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U. S. Department of Education.

State Board for Community and Junior Colleges: Division of Accountability and Technology (2005). *Mississippi Public Community and Junior Colleges: Statistical data 2004-2005*. Retrieved from <http://www.sbcjc.cc.ms.us/pdfs/rp/statdata200405.pdf>

State Board for Community and Junior Colleges (2005). *Mississippi Public Community and Junior Colleges: Program performance indicators and measures FY 2005*. Retrieved from <http://www.sbcjc.cc.ms.us/pdfs/rp/fy2005.pdf>

Townsend, B. K. (2002). Transfer rates: A problematic criterion for measuring the community college. *New Directions for Community Colleges, 117*, 13–23.

Townsend, B. K. (2008). Community colleges as gender-equitable institutions. *New Directions for Community Colleges, 142*, 7–14. doi:10.1002/cc.320

Townsend, B. K., & Twombly, S. B. (Eds). (2001). *Community colleges: Policy in the future context*. Westport, CT: Ablex Publishing.

University of Michigan. (2009). *U-M Accreditation 2010: The Learning Environment*. Retrieved from <http://www.accreditation.umich.edu/learn/>

University of North Carolina Wilmington. (2013). *Academic catalogue*. Retrieved from http://catalogue.uncw.edu/content.php?catoid=16&navoid=971#Admission___Transfer_Students

- US Department of Veterans Affairs. (n.d.). *Education and Training: History and Timeline*. Retrieved February 16, 2014, from <http://www.benefits.va.gov/gibill/history.asp>
- Van Dusen, W. D. (1979). The coming crisis in student aid: Report of the 1978 Aspen Institute Conference on student aid policy. *Journal of Student Financial Aid*, 9, 3-18.
- Vaughn, G. B. (2000). *The community college story* (2nd ed.). Washington, DC: Community College Press.
- Wang, X. (2012). Academic performance of community college transfers: Psychological, sociodemographic, and educational correlates. *Community College Journal of Research and Practice*, 36, 872–883. doi:10.1080/10668920903504976
- Weber, G. A. (2004, Fall). Meet the new community college student. *Phi Kappa Phi Forum*, 84, 49–50.
- Wells, R. (2008, July). The effects of social and cultural capital on student persistence: Are community colleges more meritocratic? *Community College Review* 36, 25–46.
- Wolgemuth, J. R., Kees, N. L., & Safarik, L. (2003). A critique of research on women published in the Community College Journal of Research and Practice: 1990–2000. *Community College Journal of Research and Practice*, 27, 757–767. doi:10.1080/10668920390220273
- Young, J. B. (1978). *The Mississippi public junior college story: The first fifty years, 1922–1972*. Jackson, MS: University Press.

APPENDIX A
INSTITUTIONAL REVIEW BOARD APPROVAL



March 31, 2008

Amy Wolgamott
PO Box 3171
Meridian, MS 39303

RE: IRB Study #08-064: A Study of the relationship between gender, socio-economic status and transfer rate at Meridian Community College

Dear Ms Wolgamott:

The above referenced project was reviewed and approved via administrative review on 3/31/2008 in accordance with 45 CFR 46.101(b)(4). Continuing review is not necessary for this project. However, any modification to the project must be reviewed and approved by the IRB prior to implementation. Any failure to adhere to the approved protocol could result in suspension or termination of your project. The IRB reserves the right, at anytime during the project period, to observe you and the additional researchers on this project.

Please refer to your IRB number (#08-064) when contacting our office regarding this application.

Thank you for your cooperation and good luck to you in conducting this research project. If you have questions or concerns, please contact irb@research.msstate.edu or 325-3294.

Sincerely,

A handwritten signature in blue ink that reads "Katherine Crowley".

Katherine Crowley
Assistant IRB Compliance Administrator

cc: Dr. James E. Davis

Office for Regulatory Compliance

P. O. Box 6223 • 70 Morgan Avenue • Mailstop 9563 • Mississippi State, MS 39762 • (662) 325-3294 • FAX (662) 325-8776

APPENDIX B
PERMISSION FOR DATA COLLECTION

MERIDIAN
COMMUNITY COLLEGE
Nine Ten Highway 19 North • Meridian, MS 39307-5890

February 1, 2010

Institutional Review Board
8A Morgan Street
Campus Mailstop 9563
PO Box 6223
Mississippi State, MS 39762

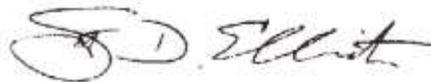
Ladies and Gentlemen:

This letter is to inform you permission has been granted to Amy Wolgamott to conduct her research using data from records at Meridian Community College.

She will be using data from fiscal years 2004-05 through 2008-09.

If you have any questions with regard to her research, please contact her at aaw105@msstate.edu or awolgamott@comcast.net or 601.484.8893 or 601.259.5488.

Sincerely,



Scott D. Elliott
President

APPENDIX C
CLOSING REPORT FROM INSTITUTIONAL REVIEW BOARD

This form should be used by Principal Investigators when oversight by the MSU IRB is no longer required.

Project Title: A Study of the relationship between gender, socio-economic status and transfer rate at Meridian Community College

IRB Study #: 08-064

I. Select the reason for closing

This research has been completed and no additional time is needed. I understand that if I need to conduct additional research on this project after the IRB file is closed, a new IRB application must be submitted and approved. (Proceed to section II)

OR

All data collection is complete and all identifiers have been removed from the data set(s) for this research. Future data analysis, distribution or publication from the data collected as part of this IRB study will not contain links to participants or identifiable data. (Proceed to section II)

OR

I am or will no longer be affiliated with Mississippi State University; however the research has not yet been completed. (Proceed to section III)

II. Removal of Identifiers

Have all identifiers been removed from the data set(s) for this research?

Yes Describe how the identifiers were removed from the data. (Attach an additional sheet if needed.)

When data was requested, identifiers(name) were removed.

(Proceed to section IV)

A permanent link was approved in the application and consent form (ex: an oral history). (Proceed to section IV)

No [Note: This form cannot be approved as long as identifiers remain. You must maintain IRB approval until the identifiers are removed. Identifiers must be removed to ensure that there is no link between the subjects and the data prior to submitting a closing report to the MSU IRB/HRPP Staff.]

III. Change in affiliation status

This section applies only to faculty, staff or student researchers who will be leaving MSU or have already left MSU.

1. Provide contact information for PI (to include, at a minimum, a valid email address for the PI and the name and address of the institution to which the PI will be moving):

2. Has approval been obtained from the IRB at your new institution and under whose authority you will act upon leaving MSU?

- Yes Attach a copy of the IRB approval letter.
- No Upon departure from MSU, you will no longer be permitted to conduct this research in the name of MSU or under the protections of MSU's Federalwide Assurance.

Prior to removing the data from MSU and closing the MSU IRB file, you must obtain approval from the IRB at your new institution. [Note: The closing request form will not be approved at MSU until verification of approval at your new institution is received by MSU IRB staff.]

3. Is this research federally funded?

- Yes [Note: If the data was collected under a federally-funded project and the investigator is granted permission to maintain possession of the data, the investigator must obtain IRB approval from an institution with an OHRP-approved Federalwide Assurance in order to remove the data from MSU. Otherwise, the data must be rendered non-identifiable or otherwise no longer meet the definition of human subject such that IRB approval is no longer needed.] (Proceed to section IV)
- No (Proceed to section IV)

IV. Is there any additional information you would like to provide?

Signatures:

Principal Investigator: Amy A Wolgamott

Signature: Amy A Wolgamott Date: 12/18/2013

Research Advisor (if applicable): _____

Signature: _____ Date: _____