

Alabama Community College Students: An Examination of the Association Between the Barriers to Graduation and the Motivating Factors

by

Tracy Patrick Kyser

A dissertation submitted to the Graduate Faculty of
Auburn University in
partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy

Auburn, Alabama
December 12, 2015

Copyright 2015 by Tracy Patrick Kyser

Approved by

James E. Witte, Chair, Professor of Educational Foundations, Leadership and Technology
Maria Witte, Professor of Educational Foundations, Leadership and Technology
Leslie Cordie, Assistant Professor of Educational Foundations, Leadership and Technology
Chih-hsuan Wang, Assistant Professor of Educational Foundations, Leadership and Technology
Abstract

This study identified motivating factors that address specific barriers to success for students attending Alabama community colleges. The motivating factors identified in the

research included academic support/tutoring programs, faculty mentoring programs, involvement in campus life, and personal resilience. The barriers include the lack of financial support, family support, academic preparedness, personal commitment, and social support. The study also ascertained which motivating factors each Alabama community college student experienced and how that impacted each of the specific barriers identified.

Approximately 300 Alabama community college students currently enrolled at two Southeast region colleges were presented with surveys, with a total return of 75 surveys (25%). The areas of interest included their experience in tutoring/academic support services, faculty relationships, campus involvement, personal resilience, financial support, family support, academic preparation, personal commitment, and social support systems developed while actively enrolled. Spearman Correlation Coefficient results indicated that the barriers of financial support, family support, academic preparation, personal commitment and social support significantly ($p < .001$) contributed to the motivating factors of tutoring/academic support services, faculty mentoring relationships, campus involvement and personal resilience. However, the motivating factor of faculty mentoring relationships was positively correlated to financial support, but the p-value was 0.0025. These factors had alpha reliability scores of .72 to .91. The results seemed to indicate that each of the identified motivating factors had a strong association with the identified barriers.

The data provided evidence of an association between all motivating factors and the barriers experienced by Alabama community college attendees. These findings suggested that the more motivating factors a community college student experienced, the more likely he or she will be to overcome the barriers and complete community college. While no specific motivating factor significantly impacted one barrier more than any of the others, this research does provide evidence that the barriers can be overcome with the assistance of involvement in the motivating

factors. All of the motivating factors had significant correlations with the barriers and had strong p -values that suggested an association.

Dedication

Over the years I have enjoyed the support and encouragement of many fine academicians, friends, family and colleagues. I would especially like to acknowledge my wife, Pamela, without whose patience and encouragement would have most certainly resulted in failure in this endeavor. I would also like to acknowledge my daughter, Elizabeth Kyser, for her willingness to teach an old dog new tricks. To my doctoral committee, Drs. James and Maria Witte, Leslie Cordie, and Chih-hsuan Wang, my sincerest gratitude for affording me this invaluable opportunity to expand my knowledge base and their willingness to accept me into the academe. To my best friend, Tom Pautip, I express my thanks. It is to these people that I dedicate this document.

Acknowledgements

Without question, Dr. James Witte, my committee chair, has been my guiding force in this project and his encouragement is invaluable. Thank you, Dr. Witte, for your continued

support and for the many sacrifices you made to help me complete this dissertation. I would also like to thank the other members of my committee, especially Dr. Maria Witte, who took hours upon hours to review my work and to provide insightful and meaningful feedback on my progress. I would also like to thank Dr. Johnny Green for his valuable assistance in reviewing this document.

Special thanks also to Wallace Community College and Enterprise-Ozark Community College for allowing me access to their facilities to complete the research for this study. A project of this magnitude cannot be completed alone. It is only with support of family, colleagues and fellow researchers that a final project can be submitted. Over the years, I have been fortunate enough to have benefitted from the support and confidence of many fine professors.

I would also like to acknowledge my cohort, referred to as the Enterprise Cohort, for being my “battle buddies” during this endeavor. James Stockton, JJ Martin, Cynthia Covington, Mark Tolbin and Sandy Granger, you are forever among my friends. And especially to James Stockton, to whom I owe a debt of gratitude. But for his efforts, the Enterprise Cohort would have never been born. Thank you, James.

Thank you to my friends and colleagues who stayed up late with me on many nights, and who continually asked about the research project and how it was progressing.

Thanks to God above for bestowing upon me my intense desire to continue learning even into later life and supplying me with the knowledge to succeed. I am still undecided if this intense thirst for knowledge is a curse or a blessing.

Table of Contents

Abstract	ii
Dedication	iv
Acknowledgements	v
List of Tables	xi
List of Figures	xii
CHAPTER I: INTRODUCTION	1
Overview	1
Statement of Problem	3
Significance of Study	14
Research Questions	17
Definition of Terms.....	17
Limitations of Study	19
CHAPTER II: LITERATURE REVIEW	22
Campus Involvement	26
Academic Support Services	34
Unemployment Rate	38

Faculty Support and Mentoring	38
Family Support.....	41
Academic Preparedness	43
.....	51
.....	51
Financial Aid for Community College Students	59
Job Placement	65
Personal Resilience	66
Student Loans.....	67
Conclusion	68
 CHAPTER III: METHODOLOGY	
.....	69
Research Design.....	69
Population and Sample	69
Instrumentation	70
The Cooperative Institutional Research Program (CIRP) Data	70
College Student Survey.....	70
Researcher Developed Survey	71
Validity of the College Student Survey (CSS)	71
Construct Validity	72
Reliability of the College Student Survey (CSS)	72
Data Collection	72
Data Analysis	73
 CHAPTER IV: RESULTS	
.....	74
Introduction	74

Sampling Statistics	75	
Analysis of Validity	75	
Face and Content Validity	78	Construct Validity
.....	78	
AVOVA Results	80	
Campus Involvement	93	
Faculty Mentoring Relationships	98	
Tutoring and Academic Success	100	
Personal Resilience	102	
Financial Support	103	
Family Support.....	105	
Academic Preparedness	107	
Personal Commitment	109	
Social Support	110	
Item Calculation for Open-Ended Question	111	
Content Analysis of Survey Comments	112	
Personal Resilience	113	
Family Support.....	115	
Social Support	116	
Faculty Support	116	
Religion/Spirituality	117	
Other	117	
Correlation	117	
Threats to Validity	119	

Summary of Findings	120
CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS	121
Summary	121
Conclusions	124
Recommendations	125
Strategies	125
Future Research	130
References	133
Appendix A: Questionnaire	143
Appendix B: Auburn University Institutional Review Board (IRB) Approval	153
Appendix C: Curriculum Vitae	159
List of Tables	
Table 1 Average Budget, EFC, Financial Need, Aid, Unmet Need, Net Price, and Earning for Low-Income Undergraduates Enrolled Full-Time, Full-Year, by Type of Institution and Dependency Status: 1995–96	56
Table 2 Percentage of Low-Income Undergraduate Enrolled Full-Time, Full Year who Applied for and Received Financial Aid by Type of Aid, Type of Institution, and Dependency Status	61
Table 3 Spearman Correlation Matrix for Motivating Factors and Barriers	118
List of Figures	
Figure 1. Average Financial Need for Low Income Undergraduates Enrolled Full- Time, Full Year, by Type of Institutions and Dependency Status	62

Figure 2. Residency Data.....	95
Figure 3. Community Service Data	95
Figure 4. Student Organization Involvement Data	96
Figure 5. Student Orientation	96
Figure 6. Intermural Sports	97
Figure 7. Social Engagement	97
Figure 8: Respect from Peers as A Motivator	99
Figure 9: Role Model as A Motivator	99
Figure 10: Interaction Outside of Classroom	101
Figure 11: Student Tutorial Interaction	101
Figure 12: Education as A Primary Motivator	102
Figure 13: Making Money as A Primary Motivator	103
Figure 14: Concern for Finances.....	104
Figure 15: Financial Situation	105
Figure 16: Parental Influence	106
Figure 17: Family Responsibilities	107

Figure 18: Interest Motivators	108
Figure 19: Academic Ability	108
Figure 20: Better Job as A Motivator	109
Figure 21: Improvement of Training	110
Figure 22: Self Confidence	111
Figure 23: Social Support System.....	111

CHAPTER I: INTRODUCTION

Overview

The purpose of this research was to examine the association of barriers to attendance, graduation or program completion and the motivating factors prompting participation in postsecondary community college programs within the State of Alabama. College attendance has become virtually essential in attaining gainful employment and upward socio-economic status in America. Far more students are attending community colleges today than in decades past, and it is predicted that this increase in enrollment will continue into the 21st century (London, 1992). Seemingly, as the number of students attending college increases, there continues to be an ever changing element of diversity. These students demonstrate a wider and wider range of challenges. Today's increasing diversity is based on race, gender, ethnicity, or socio-economic status, and countless numbers of groupings which are emblematic of America's widely varying population. The number of sub-groupings which represent the ever changing barriers and motivations continues to increase. This study examined many of these barriers and motivations, including examination of factors such as employment issues, income variations, recessionary pressures, rise in unemployment rates, a changing credit market, rising consumer prices, major increases in tuition rates, and higher costs of living. This study also examined the effects of changing family structures and responsibilities, family size, even longevity issues.

Additional factors gleaned from this study may affect motivating factors and barriers, such as first-generation status and the evolution away from traditional community college on-site instructional methods to on-line instructional methods.

In this study, a number of contributing factors will be introduced which will explain the need for, and increase in, community college enrollment in Alabama specifically, and the United States in general. This study examined the barriers and support programs (interventions) experienced by many community college students. Barriers often include financial support, family support, academic preparedness, personal commitment, and social support (YorkAnderson & Bowman, 1992). Interventions examined in this research include special academic support programs, mentoring programs (instructor/student interactions, both formal and informal), tutoring programs, and campus outreach programs. Research indicates that community college students are likely to be older than students enrolling in a typical four-year institution, with an average enrollment age in an Alabama community college being 25 (Allen & Seaman, 2008). This population of student also tends to remain enrolled longer and may take more time to complete their prescribed course of study (Artino, 2008). Although the typical Alabama community college student may take slightly more time to complete their course work, the percentage of successful completion and the number of those who excel, is slightly higher than the national average (Richardson & Skinner, 1992).

This study will also compare data collected in the generally more prosperous economic climate of the early 2000s, with the more difficult economic climate of the 2010s. Such examination includes comparison data on part-time versus full-time employment statistics, household income, decrease in amount and frequency of pay raises, the inflation rate, desire to

enter new fields, concern about repaying student loans, the dramatic increase in tuition, and a reduction in the availability of scholarships and other financial aid.

Statement of Problem

The evolution of American society into the 21st century has necessitated the need for more individuals to embark upon post-secondary education. Therefore, the trend toward postsecondary education as a prerequisite for success in American life has prompted an increase in the number of participants in such endeavors. This increasing population of students represents a number of challenges and benefits which impact their post-secondary experiences. In Alabama, a state which ranks 30 of 50 in overall economic prosperity in America, and a state which has a high percentage of families without a college graduate, the need for community colleges is most evident. In Alabama, the community college student is often challenged with conflicting obligations – such as family, job, and community; false impressions regarding the college experience, i.e. often lacking the academic skills and background needed; economic considerations; lack of support structures; and the barriers of gender, race, economic standing, and community support.

Alabama students also find that the above-mentioned elements are compounded by other inhibitive barriers such as financial inadequacies, familial support and cohesion, as well as their own personal commitment to this often difficult endeavor. Seventy-five years ago, even among the more elite of the middle class, a college diploma was not likely to adorn the study wall. This was not necessarily due to inhibiting factors perhaps more applicable to contemporary students, but due to the fact that a college diploma was not mandatory in many circles to achieve success and influence, which decades ago may have depended more on one's last name rather than a certain degree. For example, in 1940, only 38 percent of the overall student-age population

finished high school (Nellen, 2003). The same source states that only 5.7 percent finished college in 1940. Only 7.2 percent of those completing a four-year program (no data exists on the community college sub-group from that era) finished a higher degree (post four-year degree). Of this population, only 23.1 percent were from a category other than White male (Nellen, 2003). By 1950, in the years immediately following World War Two and the inception of the G.I. Bill, the numbers of those attaining college degrees saw drastic increase. For example, by 1950, 58% of the adult student population finished high school, 7.8 percent finished college, and 20% completed higher degrees (Lundberg, 2003). In just 10 years, the number of minority grouped students increased to 26% (females categorized as minority students in this early data). It was during the 1980s when America began to see sharp and more drastic increases in post-secondary education. By this time, a college education had new significance. A college degree became more essential in obtaining suitable employment or moving up the socioeconomic ladder (Mueller, 1997). The booming economy of the 1980s produced an all-time record number of college graduates. Many were seeking the MBA, what seemingly became the “Holy Grail” of degrees which implied wealth, status, and power to the bearer (Wilde, 1991). By 1980, 85% of the high school graduating population sought college degrees, 41.5 percent of which were minorities and women (U.S. Census, 2003). It was in the 1980s that the community college, with its lower tuition rates, quality education, convenient campuses, and diverse student populations, spawned an academic renaissance in America.

With this new generation of Renaissance men and women came a revival of some old barriers, as well as many new ones, in the quest for a college education. These challenges often included financial issues, social issues (family and community), personal challenges, and academics. For Alabama community college students, these barriers could sometimes be more

severe and frequent than when they occur in other areas of the country. This is due to the fact that many Alabama community college students have less or no basic foundation or formula for solving these problems. These problems, which may exist in some degree among other student population groups, may seem unique to the student residing in states where education is often a lesser priority, like Alabama. Stated differently, Alabama community college students often lack the foundation and problem solving skills to combat these barriers and utilize effectively interventions provided. They have no basis for comparison and no past familial experiences upon which to glean solutions. Interestingly, Alabama also has a higher number of first-generation students. Since no one in the family has dealt with these challenges, at least in this same context, solutions are often not easily forthcoming. These students may not consider themselves at all traditional. Alienation through self-imposed isolation is common (Schuh, et al., 1983). Although many of the barriers they face may not be solely unique to this group, the first-generation student is often overwhelmed and alienated by these challenges – often feeling alone and uncertain in endeavoring to solve them.

There appears to be a number of common barriers among Alabama community college students. These often include a deficiency in critical thinking skills manifesting from lack of pre-college experiences. There is often little encouragement (and often a defiance of) toward higher learning among some family members. Most Alabama community college students attain their desire to attend college from a teacher, usually in high school, rather than a family member (Terenzini, Springer, Pascarella, & Nora, 1996). The high school years are a crucial time in the development of an appreciation for, and prioritization of, higher education. Often, many community college students are also first-generation high school graduates. In these situations,

familial importance of education is perhaps non-existent – often relegated to status of novelty, or even condemned as a waste of time and effort.

It is also apparent from the research that membership in any number of minority categories may serve as a barrier to community college attendance. It must be pointed out, however, that the number of minorities attending community college is much higher when compared to decades ago. For example, in 2014, minority populations made up 41.2 percent of the overall post-secondary student population, and 48 percent of the overall community college population (U.S. Census, 2013).

Gender plays a paramount role in developing a composite of today's typical community college student population. In 1940, only 8% of women attended college, 9% in 1950 (the G.I. Bill was extended to many women which may explain this increase at a time when society had relegated women to their pre-World War Two domestic roles which re-emerged in the "Baby Boom" era), 41% in 1990, and 48% in 2014. In community colleges in particular, the percentage of women attendees is 53% (women now outnumber men in community college attendance) (Laffer, et al., 2014). Women often encounter their own array of barriers in attaining postsecondary instruction, such as familial responsibilities accompanying the traditional Mother Figure role.

Age variables imply certain barriers. For example, in today's community colleges, the average age at enrollment is 21, with the average age at graduation from a two-year institution is 25 (U.S. Census, 2003). The average age at graduation from a four-year institution is twentytwo. Many community college students often delay enrollment until later in life. This is often due to barriers discussed here. Many community college students will delay and are less likely to complete those collateral tasks needed to pursue post-secondary instruction – most

especially four-year institutions. Within the Alabama community college population, only 64 percent take the ACT or SAT in high school, only 41.5 percent of those enrolling will complete community college, 76% of those completing community college will continue by enrolling at a four-year institution, and of those 88% will complete the four-year degree (U.S. Department of Education, 2010). It is noteworthy that the ACT completion rates, as well as higher scores, are expected among Alabama community colleges in the near future, due to changes currently being implemented in Alabama high schools to mandate compulsory ACT testing and remediation.

A major dilemma facing Alabama community college students involves a redefining and reinterpretation of societal, community, and familial roles. Most will be introduced into a new world of prestige, and access to a seemingly endless pool of knowledge. They may perhaps be elevated into an unfamiliar world of academics and “free thinkers” (Richardson & Skinner, 1992). They often must redefine their roles with the family. Alabama community college students, most especially among first-generation student populations, often find themselves elevated within the family unit to head of the family. As grandiose as this promotion may seem, this new found power and influence also involves a new and higher level of work, responsibility, accountability, and understanding. The student may find their promotion to a higher level of power challenging and fulfilling. In order to succeed in and maintain this level of authority within the family it will require finely honed skills in listening, speaking, moderating, mediating, counseling, judging, and reprimanding other family members who may have been forced to relinquish their places in an earlier familial hierarchy. This promotion within the family unit may be emblematic of the value most of American society places on education.

Many community college students may also find greater opportunities to participate more readily in social, community, and political activities – again due to the prestige society garnishes

upon the educated. In Alabama, 43% of those joining social/fraternal organizations within their communities, such as Lions Club, Civitan, Kiwanis, Red Cross, United Way, and others, have at least a community college education (Bureau of Labor Statistics, 2011). Of those running for political office in Alabama, 87% have at least a community college education. Research indicates that educational level is of major importance when assessing the qualifications of political candidates (Bureau of Labor Statistics, 2011).

Of course, a major barrier, if not the major barrier, to community college involvement is economics. Research indicates that 76% of those surveyed saw economic barriers as an insurmountable obstacle in completion of their studies (Bean & Metzner, 1985; Billson & Terry, 1982; Buck, 1982; Choy, 2000; Hsiao, 1992; Levine & Nidiffer, 1996; London, 1992; Nunez, 1998; Richardson & Skinner, 1998). Community college students typically come from lower and middle class socio-economic groupings (Terenzini, et al., 1996; York-Anderson & Bowman, 1992; Zwerling, 1992). Their parents often have low paying jobs and little or no savings to assist their children in college endeavors. In impoverished households, paying the mortgage or providing for essentials such as food and clothing, inevitably will take precedence over money for college. Also, in community college families, often times, even when economic conditions may be such as to make college attendance possible, a college education is viewed as waste of time and resources by some family members (Zwerling, 1992).

Research indicates there are many barriers to community college involvement. Many could argue that these barriers are nothing more than common sense conclusions. The research is less clear on the positive motivating factors that eliminate or reduce the impact of these barriers on first- generation students (Bean & Metzner, 1985; Billson & Terry, 1982; Buck, 1982; Choy, 2000; Hsiao, 1992; Levine & Nidiffer, 1996; London, 1992; Nunez, 1998;

Richardson & Skinner, 1992; Terenzini, et al., 1996; York-Anderson & Bowman, 1992; Zwerling, 1992). To manage these barriers, many community college students utilize specially created academic support programs, mentoring programs, campus outreach programs. Faculty/student involvement and interaction, student determination, and community, governmental, and church involvement; be they emotional and/or economic, may also exist.

As of 2015, the recessionary pressures brought on by unemployment, an extremely tight and difficult credit market, and sky rocketing consumer prices, have produced greater attractiveness for the need for community college attendance, while at the same time, creating conditions which make it less affordable. Although community college attendance is still the better value among colleges, economic barriers continue to exist and become more challenging in contemporary times. Alabama is no exception. However, according to recent government studies, the economic barrier of higher tuition costs has not thwarted student interest (GAO, 2010). Ironically, increase in tuition and other costs may not have dampened desire for attendance, it has however encouraged more students to abandon the traditional Alabama brick and mortar community college, and opt for more on-line community college attendance. Since 2010, according to GAO reporting, over three-fourths of all community colleges have a majority of its generalized course offerings available via internet (GAO, 2010). Interestingly, many new instructional methods have trumped the traditional in-house learning processes. These include Scopia and Panopto classes more traditionally used by four-year institutions. However, with economic considerations now of paramount importance for the college student, competition among colleges, especially among community colleges, has forced these institutions to emphasize the element of economic value, at the expense of educational quality. In essence, contemporary students shop for economic value. They often opt for programs which promote

high graduation rates, internship programs, impressive post-graduation employment rates, successful alumni, military and civilian experience credit, and alternative programs. Alabama's community colleges are recognizing this trend and have adjusted their methods accordingly.

Many of Alabama's community colleges have successfully added on-line programs and extended curricula in non-traditional ways to promote higher attendance and retention rates. For most community college students this serves as a motivating factor. For some, especially older adults, it may prove to be a barrier. Research indicates many older adults prefer traditional, on-campus teaching methods. This may be due to difficulties in understanding technology and fear of stepping out of traditional student/instructor roles. Greater expansion of course offerings and methods of delivery, have not only helped recruitment and retention rates in Alabama, but has expanded the student demographic within the community college system. Therefore, enrollment in Alabama community college is up significantly from a decade ago (Maehl, 2004).

When examining motivators and barriers for Alabama community college students, an initial study was made to explore existing data. This examination illustrated major upward changes in numbers in the last decade or so. Many of the findings supported that current economic hard times have had a positive effect on Alabama community college enrollment and retention. For example, ten years ago, in 2005, annual unemployment was at 5.5%, with 8.8% in Alabama, as compared to 9.6 at the end of 2010 nationwide, and 11.2 percent in the state (McPherson, 2005). By 2015 these rates have dropped, but their effect on community college enrollment continues to remain steady. It appears community college is still a good value, with many students still opting for community college over more expensive four-year colleges. According to the Schneider (2011), from 2005–06 to 2010–11, "...average published tuition and fees increased by about ...11% at two-year colleges...."

Additionally, the availability and the change of repayment terms of student loans has proven to be a barrier for Alabama community college students. There has also been a major reduction in government non-repayment grants for students. This has the effect of making it harder for all students, regardless of venue, to afford an education-but has a motivating effect of making community college a better value. Also, families save less money for the purpose of paying for an education than ever before. In 2014, the personal savings rate as a percent of disposable personal income stood at around 5.8%. This is up from 1.8% in 2004-but down from nearly 25% in 1985 (Maehl, 2004). In essence, lack of financial aid, has had a major impact on barriers and motivating factors. The current government subsidized student loan for most students has an average APR of 6.5 percent. This at a time when interest rates for savings accounts is less than half a percent. Student loans are expensive and often difficult to repay. Income based student loans are less common than a decade ago. Pell grants are harder to qualify for and their benefits are reduced. Loan forgiveness is less common. These negative factors aside, it should be noted that it is still relatively easy to qualify for a student loan. This ease of loan qualification, tempered by global competitiveness has increased Alabama community college enrollment numbers. In spite of economic barriers, it is predicted that by 2017, enrollment in community college will increase by 19% among students over 25 and by 10% for students under 25. (NCES, 2009).

Additionally, it is expected that changes in age ranges are likely to occur in the next decade among community college students. The average starting age for community college is on the rise, with major increases in the numbers among older adults. However, it is expected of this increase, 30% of these non-traditional aged students will drop out of community college after the first year (Schneider, 2010). It is also noteworthy that the Schneider research reported

that there is a substantial increase in the number of women enrolling and completing community college (Schneider, 2010). It also appears that more community college students are more aware of both intrinsic and extrinsic variables affiliated with community college enrollment.

Continuing research suggested that a major factor contributing to student retention was that of student and faculty interaction and involvement. Astin (1985) suggested that a strong correlation between student success and overall satisfaction with the community college experience and the frequency of student/teacher interaction. This research was important enough to encourage an increase in institutional involvement in creating and implementing programs which encourage these relationships. The increase in involvement by colleges to formalize such programs that promote teacher to student mentoring has resulted in greater acculturation within the academic environments often presented in the college experience, as well as promoting overall student academic success and general satisfaction with the experiences offered within the academe (Wallace, 1997). Wallace, categorized community college students in general and first-generation college students particularly as being among high-risk student populations where race, gender, income, and physical disability are categorized (Wallace, 1997). However, categorization of the first-generation student as high-risk is arguable. Formal mentoring programs contribute to the overall emotional, academic, and environmental stability and success for the community college student (Astin, 1985).

In addition, research indicated greater satisfaction and success for students who take advantage of tutoring programs offered at college. Mueller (1997), determined that the overall level of success and satisfaction for the community college student was positively correlated to the amount of student involvement in campus centered curricular activities. Students who spent a great deal of time on the college campus itself, participating in both curricular and

extracurricular activities offered on campus, seemed to be more successful (Gardner, 1996). These successes among community college students seem to indicate these students are more involved in organized campus groups, academic study groups, honors societies, and academic enrichment activities than four-year college students. These students generally stay in college longer, are more likely to complete their prescribed course of study, and are more likely to be academically successful, and more satisfied with their experiences (Mueller, 1997). When asked what factors contributed to the higher level of success and satisfaction, most community college students equated their success to strong role models, especially as demonstrated by their instructors (Gardner, 1996).

It also appears that community college students are more persistent, self-motivated, and self-determined. Community college students were more resilient and more determined to meet the challenges and setbacks associated with the college experience, when compared to four-year college students (Kline, 2000). This resilience and dedication to college may be due to the sheer psychological mind-set that is often demonstrated by the community college student. These students often feel a greater need to prove to themselves and others that they have successfully overcome barriers to their success, be they real or self-imposed. There is a higher degree of anxiety for the community college student to prove they can succeed. This desire accounts for higher levels of persistence and success among this population of student (Wallace, 1997). The community college student may find the academic world a more alien experience than those students who can draw inferences from the experiences of those family members that came before them in college life. This research seems to indicate a higher percentage of firstgeneration college among community college populations than their four-year

institution counterparts. Often being first in their family to attend college may prove to be a disadvantage.

These students have no family member upon which to seek counsel based on experience.

Therefore, first-generation students often rely heavily on the counsel they receive from academic support programs (Richardson & Skinner, 1992). The barriers addressed in this study are certainly not unique to first-generation students or community college students as a whole.

However, the barrier's addressed in this study, appear more frequently and appear to be more pronounced among community college students.

The community college student may be overwhelmed by the culture shock of living in two separate and often very different social and economic cultures. In order to be successful in the academic world, certain interventions must take place. These interventions are not purely academic. In fact, they may be more cultural. The challenge for the community college student is how to compete and succeed in this new world, attain the knowledge and prestige that accompanies their new position in society, while maintaining a positive role within the family, which may be compromised by this new role. The purpose of this study was to examine what motivating factors exist in promoting community college attendance.

Significance of Study

As society continues to put more emphasis and credibility on higher education, and as competition for better jobs and societal status is often so dependent on a college degree-along with the growing involvement of government, both state and federal, in facilitating higher education, there is a growing number of students attending community college in the new century. Enrollment in Alabama, a traditionally disadvantaged state when compared to other states in the union, has dramatically increased in recent years. This population of student is

rising (London, 1992). Therefore, meeting the challenges and needs of the community college population of student is paramount. This population of community college student faces a number of unique challenges on the path to higher education: conflicting obligations (changing roles within family and community), false expectations (due to lack of experience and inference from family), and lack of preparation and support (both financial and cultural).

It is hypothesized that when examining economic data, i.e. employment and income, that community college students will indicate a higher level of part-time employment than will their four- year counterparts. Community college students indicate a lower level of full-time employment. The assurance of pay increases and fringe benefits was less for community college students twenty years ago. (London, 1992). A desire to keep their current job is more important for community college students than their four-year counterparts. The desire to begin a new career as a result of community college enrollment is high. Concern about repayment of student loans is high. And an increasing lack of availability of scholarships is of paramount concern (London, 1992).

Although the need to include community college students in the sub-group of high-risk populations is arguable, it is obvious that this grouping of student is unique. The barriers that they face, may not always be limited to their population alone, but it is evident that these challenges do impact their experiences and outcomes. The literature suggests that these barriers must be overcome in order to succeed. These barriers include financial support, family support, academic challenges, personal and family commitment, and societal support (Bean & Metzner, 1985; Billson & Terry, 1982; Choy, 2000; Hsiao, 1992; Levine & Nidiffer, 1996; London, 1992; Nunez, 1998; Richardson & Skinner, 1992; Terenzini, et al., 1996; York-Anderson & Bowman, 1992; Zwerling, 1992).

In addition, the literature also provides that there are certain motivating factors and interventions that resolve, or at least impact, the level of severity of the barriers presented. This study examines these factors with a specific emphasis on the community college (junior colleges or any two-year college institution) within Alabama. These motivating factors and interventions include academic support and tutorial programs offered, faculty mentoring programs and overall faculty/student relationships, involvement in faculty life (both curricular and extra-curricular), and personal commitment and resilience (Astin, 1985; Gardner, 1996; Hsiao, 1992; Kline, 2000; Malitz & Ponder, 2000; Mueller, 1997; Mumford, 1994; Pelsa, 2002; Richardson & Skinner, 1992; Zwerling, 1992). This study will examine what impact these motivating factors have and what relationship these specific barriers and specific interventions may have on community college students in Alabama. Further research is desired to determine the relationship of the barriers and interventions for the community college student in Alabama.

Purpose of Study

This study will examine what influence each barrier has on each intervention. This study will also examine what role the community college institution plays in resolving obstacles and barriers. Research on the community college student in general, the role of barriers and interventions, familial and economic issues, and rates of completion, is adequate. However, far less information exists which specifically examines the first-generation student, the impact of the institution, family, faculty, and economic and cultural factors.

Research Questions

1. What barriers do community college students in Alabama experience?
2. What motivating factors impact the community college student in Alabama?

3. What are the relationships associated with these barriers and interventions (academic programs, tutoring programs, faculty/student relationships, mentoring programs, campus involvement, and personal dedication or resilience) and the barriers experienced by community college students in Alabama (financial concerns, familial support, academic issues, personal commitment, and societal concerns)?

Definition of Terms

Academic Preparedness Barrier – This characteristic is defined in the research as those experiences that have prepared or enabled the student to function successfully in college level academic work. This term is also indicative of those academic abilities acquired in the stages prior to entry into community college, such as academic support received in high school, critical thinking skills, and the basic acquisition of knowledge and expectations formed for the community college experience (Berkner & Chavez, 1997; Billson & Terry, 1982; Warburton, Bugarin & Nunez, 2001; York-Anderson & Bowman, 1992).

Academic Support and Tutoring Programs – These are defined as those programs formulated in community colleges which are designed to promote academic assistance and facilitate excellence in academic mastery and are those services which are optional and requested by the student (Astin, 1993; Culross, 1996; Richardson & Skinner, 1992; Tinto, 1987).

Barrier – Research identifies those obstacles that impact the community college student as personal commitment, social support structures, financial concerns, academic expectations and preparedness, and familial support concerns (Bean & Metzner, 1985; Billson & Terry, 1982; Buck, 1982; Choy, 2000; Hsiao, 1992; Levine & Nidiffer, 1996; London, 1992; Nunez, 1998; Richardson & Skinner, 1992; Terenzini, et al., 1992; Zwerling, 1992).

Community College – For the purposes of this study, the term community college is synonymous with junior college, to freshmen and sophomores in Alabama four-year institutions, and Alabama technical schools which foster two year programs.

Faculty Mentoring Programs – Faculty mentoring programs are those deliberate interactions, either formally or informally, between the community college student and the faculty member (Williams, 1997). For the purpose of this study, these interactions can be in or out of the classroom or campus setting, can be either academic or personal in nature, either formal or informal, in which mentoring between these groups occurs.

Family Support Barrier – This barrier for community college students (Terenzini, 1986) includes that emotional and economic support provided by immediate family members.

Financial Support Barrier – This barrier encompasses those economic support structures outside of the realm of family involvement-such as student employment, governmental financial aid, or other funding sources (Merriam & Cafferella, 1999; Saint John, Cabrera, Nora & Asker, 2000; Tinto, 1993).

First Generation College Student – The first-generation are those students who come from immediate families who lack any college or university experience. For the purpose of this study, and student who has never had an immediate family member (such as mother, father, brother, sister) to complete or graduate from a two year community college in Alabama.

Motivating Factors – Motivating factors influencing community college students are defined for the purpose of this research as academic support structures, tutoring programs, faculty/student interactions, mentoring programs, campus life involvement, and personal dedication and resilience (Astin, 1985; Gardner, 1996; Hsiao, 1992; Kline, 2000; Malitz &

Ponder, 2000; Mumford, 1994; Mueller, 1997; Padron, E.J., 1992; Richardson & Skinner, 1992; Zwerling, 1992). For this study, the above stated factors were used.

Personal Commitment Barrier – This barrier is identified as the lack of, or level of, participation and commitment exhibited by the community college student to bring community college completion to fruition. Past research defines this barrier based on personal drive and dedication (Kline, 2000; Komada, 2002; Mueller, 1997).

Personal Resilience – This motivator is defined in terms of internal factors of the respondents. This includes, but is not limited to, personal drive and dedication, determination, will to succeed, response to failure, self-analysis and remediation (Mueller, 1997; Kline, 2000; Komada, 2002). For the purpose of this study, these factors will apply to first-generation students who complete a two year degree program.

Social Support Barrier – This barrier will be addressed in terms of a conflict of adapting to two varying cultures often unique to community college students. These include the internal and external conflicts of the student interactions between prior social and community support systems and the new support systems of college friends and academic communities (Billson & Terry, 1982; Hsaio, 1992; London, 1992).

Limitations of Study

In order to obtain adequate sampling of survey respondents, it was necessary to make the survey available to students attending not only institutions classified as community colleges, but also those classified as junior colleges, technical colleges, and smaller four-year institutions which have a higher number of freshmen and sophomores. This broadening of respondents facilitated a sufficient number of community college students in Alabama to be surveyed. By

including those currently active and in pursuit of two year degrees and anticipate successful completion, more respondents could be surveyed.

Other limitations involve lack of data among the poorest of potential respondents. In today's society, economic barriers may be lessened by support from governmental structures, both state and federal, and by the numerous scholarships often available on the community college level. However, those in extremely poor economic situations may find it impossible to participate in college in lieu of work force participation. Examination of the barriers in this lowest economic sub-group offers interest to this researcher, but collection of needed data is not practical for this study.

Another limitation may be geographic. It may not be appropriate to assume the research gathered among community college students in Alabama is applicable to other regions of the country. It may also be unreasonable to assume that the same barriers and interventions exist beyond the two year college experience and therefore they are not addressed here. For the purpose of this study, little emphasis is placed on additional barriers such as race, gender, or age. In other words, respondents were surveyed if they were community college students in Alabama. Although data gathered addressing race, gender, and age will be presented in this study, it is likely results would vary if race, gender, or age were addressed as specific criteria for the study.

A limitation of this study is that only those enrolled in college at the time of the survey were questioned, so the study does not provide a representative sample of individuals who have experienced barriers too significant to allow their enrollment. Nor does it seek to investigate students who enrolled but did not continue to completion. The study does provide a valuable review of the changes between groups of enrolled students considering a shift in national

economic circumstances. It also provides a valuable comparison of differences in barriers and motivations to return to school for nontraditional students over a period of time.

The study of community college students in Alabama is relevant for several reasons. Among them is the need to substantiate, refute, and expand upon existing literature on the subject, in order to better prepare colleges for assessing and meeting the needs of community college students. By identifying such barriers and interventions, it reasons that informed students will be better prepared for these challenges and will take advantage of interventions offered more readily and more successfully if accurate data is offered. If students are aware of programs and solutions to barriers, they may be more socially, culturally, economically, academically, and emotionally ready for their academic quest.

Data will also be relevant to educators and administrators within Alabama's community colleges. Many of the barriers and interventions discussed herein may have gone unrecognized in the academic community. Current, relevant, and accurate data is needed to promote and expand existing programs and promote success with newly developed programs designed to address the barriers and interventions suggested in this study. Many programs have not been developed fully or proper interventions used, simply because it was not known that a need existed. Ideally, information from this study will be useful in assessing community college student needs, determining barriers and developing interventions, and assist in the successful completion of community college students in Alabama.

CHAPTER II: LITERATURE REVIEW

As the number of community college students continues to increase, institutions of higher learning have begun to devote more attention to defining the barriers and motivating factors experienced by community college students. This intervention by community colleges has manifested itself in the form of various programs designed to help students overcome the known barriers. The literature has provided supporting evidence as to the existence of barriers and motivating factors effecting this population of students.

This study will examine what motivators and barriers exist for the Alabama community college student and what relationship is associated with these barriers and interventions such as academic programs, tutoring programs, faculty/student relationships, mentoring programs, campus involvement, and personal dedication and resilience. Additionally barriers experienced by the community college student, such as financial concerns, familial support, academic issues, personal commitment, and societal concerns will be examined. Fortunately, more research has taken place to assess the value of availability of a community college education on the enrollment levels and outcome, i.e. program completion and successful course completion, for the adult learner. Most studies today establish an age and experience baseline for identifying adult learners. For this study, the broadest description offered in the literature is used to identify the adult learner. The National Center for Education statistics of the United States Department of Education defines the adult learner as “adult’s age 16 or older and not enrolled in the 12th grade or below” (NCES, 2005). Use of this broader definition allows for greater population sample numbers for this study and is most suited for examination of community colleges. Many

studies today, according to the literature, which examines community colleges and Freshmen and Sophomore programs for four-year institutions define the adult learner using the Osgood-Treston description which establishes that adult learners must be 25 years of age or older with multiple commitments, experiences that contributes to their learning, and goals based on specific and well-defined needs. The Osgood-Treston study further subdivides adult learners into two groups: Those who participate in organized learning activities”, i.e. enrichment and community education, and “those who engage in adult learning for academic credit” (p. 3). This study will examine data from both subdivisions.

Traditional community colleges have sought to create and adapt programs for adult learners that utilize existing facilities and resources in an after business hours scheduling, utilize remote or satellite campuses, and on-line environments such as Scopia and Access. For the purposes of this study, data will be collected by community college students using these on-line methods, as well as those using more traditional on-site methods. According to the Sloan Consortium (Allen & Seaman, 2008), online programs for community colleges grew 12% in 2007 from 2006 reporting. The projection is that these percentages will continue to increase by at least that amount annually into the foreseeable future. According to NCES data, 20% of all U.S. higher education students will take at least one course on-line in their first two years of college (NCES, 2013). The literature seems to suggest that newer educational format options such as on-line or distance classes presents both motivational and barrier factors for the community college student. Acceptance of these new formats is still in debate, both among students and instructors. However, on-line and distance learning programs seem to be acceptable to young adult learners than older ones. It is estimated that one million U.S. students participate in on-line or distance courses (Cowan, 2009). Economic factors among community

college students, along with the current U.S. economic downswing, seem to contribute to the increase in the use of these newer educational formats. The Sloan and Babson report reveals that, through the economic downturn, demand for face to face courses has increased at half of surveyed institutions while demand for on-line courses has increased at three-fourths of the institutions responding (Schneider, 2011). The U.S. Bureau of Labor Statistics (BLS) supports that traditional students flocked to college in the early years of the recession with a record 70.1 percent of 2009 high school graduates enrolled in colleges and universities the following fall. This increase was most evident in Alabama community colleges. Alabama community college students sought the economic affordability of community colleges, while seeing the value of a college education in the ever competitive job market. At the same time, the BLS notes that among youth, the greater likelihood of part-time students to be in the workforce while attending college. Female students were more likely than their male counterparts to be working (BLS, 2011).

While localized studies often suffer from a lack of generalizability, the volume of regionalized studies, which include Alabama, with similar findings suggests confluence in the barriers and motivations of adult learners. Ritt (2008) suggests that adult degree completion should be a national education priority for global competitiveness in the 21st century, a recognition that nontraditional students often cite as their motive for returning. Motivation studies have looked at both extrinsic and intrinsic reasons for adult enrollment and retention in community college. Among the performance based studies are those that focus on the tenacity of adult learners and the relationship of admissions test scores as predictors of performance (Hensley & Kinser, 2001; House & Keeley, 1996). Lundberg (2003) suggests that adult learners perform better in conditions that encourage social relationships, utilize their time management

skills, offer convenient faculty hours and encourage quality relationships with school administration. Nellen (2003) also encourages a schedule-friendly approach by faculty and administration to the after-normal-business-hours needs of adults.

Motivation to learn and its positive correlation to student hardiness are examined in the Cole, Field, and Harris (2004) study. Adults in non-degree learning programs, most notably among community college offerings, most frequently participated in work-related courses to maintain or improve skills, to learn new skills, to keep a certificate or license, because their employer required further education, or to receive a promotion or additional pay, but the level of their participation depends on age, income level, experience, and educational level (Reasons for adults..., 2005). Mbilinyi (2006) supported a number of top benefits that motivate students to return to school, including sense of accomplishment, pursuing interests, higher income, career changes and advancement, experience, and role modeling for children. The issue of hardiness is a chief component of the Vaccaro and Lovell (2010) study of women's participation as nontraditional learners. They found that family was a central component to women's motivation and inspiration to succeed in higher education. Timarong, Temaungil, and Sukrad (2002) supported the developmental promotional and financial motivations that adults often cite in their return for education.

Barriers to education among adult returners have been widely studied and are summarized in the Ritt (2008) study as "geographic location, personal and family commitments, work and family related activity schedules, past experiences in college, lack of adequate and consistent childcare services, financial limitations, and in some instances a general fear of returning to school." These barriers were generally supported in the Timarong et al. (2002) study. Jacobs (1998) refers to a number of these items as "life course transitions", with a

prediction that aging trend lines in enrollment cannot continue to hold. Jacobs could not have anticipated the popularity of online learning via community college venues in the late 1990s. Since 2001, the delivery method has emerged as a popular and preferred alternative to traditional community college classrooms for education, the military and business, and less focused research attention on student motivation to learn (Artino, 2008). Barriers to adults are different than those facing younger students, according to Mblinyl (2006) and vary from concern about personal ability, to time management and money.

Additionally, among community college students, it was found that adults cited the following as their chief motivations for seeking degree completion programs: personal accomplishments, finishing a degree started earlier, but not completed; role modeling for children, knowledge and skills in the area, and seeking a new career. Barriers noted were: care giving for a child or elder, funding for childcare and college, concern about paying back student loans, time away from family, and convenience factors related to location and time.

Campus Involvement

Contributions to the literature by such researchers as Astin (1993), has demonstrated the importance of campus involvement by the community college student success and overall satisfaction with the college experience and excellence in academic and social acculturation. According to Astin's study, community college students who are highly involved in campus life activities tend to demonstrate more active participation in student organizations (often rising to levels of leadership), spends more time on campus (multiple factors may impact this element), devotes more time to academic studies, interacts more readily with students and teachers. Astin explains that the resource of time contributed by the student has a positive impact not just for the student, but directly benefits the college. The community college student who dedicates

disproportionately more time to the academe than the non-community college counterpart, benefits both student and institution. Astin surmises that community colleges benefit greatly from student time management involving campus life. In addition, Astin explains that this increase in campus involvement most often leads to higher college completion rates. According to Astin, three fundamental elements contribute to student campus life involvement: student services, assessment and feedback, and instruction. Astin explains that student services involvement is enriched by more inventive ways of utilizing campus residential facilities, increased opportunities for on-campus student social activities, and more on-campus job opportunities (most often demonstrated through increase in college directed work-study programs which promote work while remaining on campus). By increasing the amount of student participation in the assessment and feedback portion of managing these programs, community colleges foster a proactive approach to creating programs and venues that will involve more students and result in higher rates of student and program success. Astin states that the level of positive student satisfaction with college participation and what accounts for higher percentage of student involvement is related to the degree in which students are satisfied with their academic instruction. Of course, satisfaction with academic instruction itself offers a number of composites worthy of study. Astin believes that student satisfaction with instruction is essential for positive student activities participation, but stresses that student satisfaction and hence participation in college led activities is intertwined with how well community college students invest their energy and time in affective formulation of goals, academically centered interests, and management of other interests and concerns that impact the time element. Astin (1993) suggests the most important factor to student participation and satisfaction in college activities is time management. According to Astin, the extent to which students involve

themselves in educational development is influenced by how involved they are with family, friends, job, community, and religious endeavors, and other outside, non-college sanctioned activities (Astin, 1993).

Astin most definitely demonstrates the characteristics of the andragogy approach to instruction. His approach to academics, especially when dealing with community college students, is to take primary focus away from course content and deal more directly with allowing students to develop their own techniques for mastering course content, while encouraging instructors to explore what teaching methods and environments best maximize student involvement and learning (Astin, 1993). Astin states the intended purpose of instruction is not a focus on course content and instructional technique and methods, but rather use of institutional practices which create instructor awareness of successful techniques which foster the greatest amount of student motivated involvement and encouraging of students to maximize the effectiveness of the time, energy, and resources they devote to the processes of learning (Astin, 1993).

Astin's Theory of Involvement states motivation and behavior are the paramount factors fostering success. Accordingly, Astin reasons that institutional policies and practices can be judged relevant and successful based on the degree of involvement they foster among students. In essence, Astin encourages students to come first, above the institution and faculty, and believes that when institutions recognize the need to unify their energies and resources, in this student-centered way, students will be more involved and more successful. Ultimately, when students are more involved in their learning, the more likely they are to successfully complete their course work, complete the degree program, and feel they have succeeded (Astin, 1993).

Review of the literature does seem to support the notion that involvement among community college students does promote student success and satisfaction. Previous research does lend credence to the notion that more college involvement fosters success. College involvement is characterized as follows: residing on campus on a full-time basis, part-time oncampus jobs (Astin, 1993), support offered by friends and community (Schneider, 2010), extracurricular activities (Spady, 1991), and from faculty/student interaction (Rock, 2001; Spady, 1991).

In 1975, Vincent Tinto did extensive research to determine if a correlation existed between campus involvement and student success. Although an older study, the Tinto research seems to apply well to today's community college student. To many, a relationship among these factors may appear obvious. But Tinto wished to determine that if such relationships did exist, to what extent the level and quality of such involvements promoted student success. It was an interesting study, which revealed the following: most social integration occurs primarily by means of informal peer group associations, semi-formalized activities involving faculty, administrative personnel, and extra-curricular activities, mainly through on-campus venues. These interactions most often resulted in more frequent and successful social communication, friendship support structures, more faculty support, and more college administrative cohesion. Each of these elements form the reward structures that manifests in the student's generalized evaluation of the costs and benefits of college (Tinto, 1975).

Tinto has done extensive study into student retention for community college students. He developed a student retention model which is often cited in the literature and used as a foundational philosophy by colleges in developing programs which promote student retention. Student retention and the number of students completing their college degree are most

fascinating among the community college population, which may encounter variables different from other student populations. Student retention is an important element for consideration. In this study, examination of student retention, as a motivating factor, especially its effect on college completion, is presented.

Another integral factor in evaluating community college student success is campus involvement. In a study conducted by Stegman (1969), he specifically designed experimental living area activities designed to promote college retention among freshman, and sought to determine their effectiveness (Stegman, 1969). The objectives of his study/experiment involved identification of potential dropout students, based on his formulated criteria, and then assigned them to a graduate student that also lived on campus, usually in the same dormitory. The role of the graduate student was to assist the at-risk drop-out student, by means of various motivational and academic interventions formulated by Stegman, which would lead to the student successfully completing college. These interventions were to be in the least intrusive way possible to order to promote student feelings of self-satisfaction. The results of this study, which was performed at Missouri State College, found that students who received this special mentoring, had a higher level of persistence and self-satisfaction (95%), when compared to freshman students who did not receive the special mentoring (Stegman, 1969). Students who participate in college campus activities are found to be more academically successful, more likely to continue college beyond the community college level, and display a higher level of overall satisfaction. (Stegman, 1969). In a study by Gardner, it was discovered that community college students were more successful when they had an association with positive role models (Gardner, 1996). Astin's Theory of Student Involvement demonstrates a positive correlation between amount of student involvement, physical and psychological energy invested, participation in campus mentoring, participation in campus social activities, and the level of potential student success (Astin, 1985).

By participating in various extracurricular activities, community college students were afforded the opportunity to apply the academic knowledge they received in the formalized classroom to real life situations in real-world environments that should better prepare them for the realities of living life after graduation (Astin, 1993; Kuh, 1995). On most college campuses (and to a lesser degree community college campuses), student organization fall into the following categories: student governing bodies (SGA officer and the like), Greek letter student organizations, student government groups (student advisory committees), academic clubs, professional societies, honor societies, publication and media groups, service groups, intramural sports clubs, religious organizations, and special interest/cultural groups (Astin, 1993; Craig & Warner, 1991). Involvement in extracurricular activities tends to lead to greater overall success and satisfaction among community college students. Community college students seem to place importance in these types of involvements when compared to the non-two year program student. Some studies seem to suggest that this may be due to the fact that the first-generation student may find these venues more fascinating and new, or perhaps more relevant, than their student counterparts. Research indicates that community college students often exhibit noticeable behavior changes and personality characteristics due to their exposure to these new environments. In other words, they display a new sense of cultural and academic belonging, a new sense of refinement (Astin, 1993; Pascarella & Terenzini, 1991).

Students who develop a higher level of connection with campus life and who are provided with numerous peer interaction opportunities, who embrace the many facets of student campus life, and who are involved in campus organizations exhibit a greater feeling of satisfaction to college life- especially among community college students (Astin, 1993). By using the College Student Experiences Questionnaire (CSEQ) to examine variables, it was

discovered that a significant difference existed between the college experiences of undergraduate students who were involved in student organizations as compared to those who were not (Abrahamowicz, 1988). Students involved more extensively in community college campus life, and more especially in roles of leadership, were found to more likely engage in student/faculty relationships, both formally and informally, than those not involved (Abrahamowicz, 1988).

The literature supports the idea that community colleges face unique and difficult challenges with students. These challenges can be accentuated if the community college student is additionally categorized as an immigrant, economically disadvantaged, from a non-White ethnic category, or is deficient in English language skills (Hirose-Wong, 1999). At many community colleges, these challenges are further compounded when a student fails to become involved in college at a level that promotes success. Accordingly, higher levels of student participation and overall involvement tend to explain gains in learning among this population (Tinto, 1997). In addition to research conducted by Astin, Tinto (1997) suggests that successful completion of college directly correlates with student development of educational communities at college, program, and classroom levels, which tend to integrate students into ongoing intellectual and cultural life in the institution. Tinto further differentiates involvement by the community college student from their counter-parts attending four-year colleges and universities. For the purpose of this study, this specification and differentiation is wholesome. Tinto justifies differentiation among community college students and those attending four-year institutions primarily due to the fact that most community college students do not reside on campus and most work, at least part-time, off campus. These factors seem to explain why many community college students find it more difficult to participate in traditional campus activities. Tinto (1997) directed his research into campus involvement by community college students into three primary

categories: freshman orientation, learning resource facilities, and community college learning communities (Tinto, 1997). Tinto further examines the importance of these factors specifically among the two-year student population.

It can also be summarized by the literature, that many community college students are unprepared, or at least underprepared, for the college-level academics they will encounter and often require assistance to achieve success of their academic goals. It is also interesting that other factors more common among community college students, such as older age at time of community college enrollment, more likely to be from lower socio-economic grouping, more likely to be rural, and more likely to be a community college student, also impact their experiences. These factors tend to promote more part-time college attendance among community college students, who often must work full-time in order to survive. This tends to afford the first-generation community college student less opportunities to participate in college enrichment activities. This seems to suggest that many community college students have a feeling of being “dispossessed” and unattached to the college experience. At a community college level, effective involvement occurs when students participate in activities such as orientation seminars, academic assistance and enrichment programs, and participate in a curriculum that exhibits relevance to the students and appears applicable to them in the workplace and in life off-campus (Tinto, 1997).

The existing literature suggests that there is a substantial correlation between student campus involvement and overall student success. Astin and others show that community college students that are actively involved in campus life are more likely to complete their academic programs, more likely to demonstrate higher levels of mastery, i.e. be recognized for academic honors, and are more likely to be accepted by four-year colleges for continued degree work.

This information suggests that community college students in particular, may face barriers which may hinder their ability to complete college successfully. These barriers include financial support, social support, familial support, academic foundation, and personal dedication to completing the program. The research thus far seems to indicate that community college student participation in campus resident life activities, various academic and non-academic peer enrichment groupings, membership in campus clubs, and strong instructor/student relationships, all tend to promote student success.

Academic Support Services

In 1992, Richardson and Skinner interviewed a number of community college students who were deemed to be successful at college and determined that their success was positively correlated to the availability and utilization of various academic support programs and academic related services offered while attending college. It appears from these studies, support services are of astronomical importance to students – especially the community college student.

Students who are happier and better adjusted to college life seem to be those students who are more socially and academically integrated with the college life. They tend to be more developed, academically successful, more socially accepted, more stable, more likely to complete community college, and more likely to continue to four-year institutions, than their lesser involved counterparts (Astin, 1993; Tinto, 1987). This integration promotes a feeling of belonging. By not feeling as outcast by their peers and instructors, these students tend to feel more comfortable, both academically and socially. They are more likely to embrace the material being taught, continue further study after course completion, integrate more successfully the material to which they have been exposed to life after college, embrace differing teaching and learning approaches, and develop more personal and impersonal relationships among the faculty

and their peers (Astin, 1993). It is also evident that students who are involved in academic support activities are less likely to be intimidated by the competitive elements of college life. They are less likely to be disrupted by academic setbacks, more willing to accept academic assistance without feeling like a failure, more likely to self-remediate, and more likely to accept special challenges. It is also interesting that students who partake of academic support services tend to be supportive of other students, seem to develop more personal versus impersonal interactions at college, and tend to be more accepting and interacting with students and teachers of differing gender or race.

Often, many community college students, especially in less prominent states like Alabama, tend to enter community college lacking in those essential academic skills needed to succeed – such as reading, writing, and arithmetic skills. This is often due to the failure of public schools, especially in socio-economically depressed areas, to adequately direct the student in prerequisite skills needed for successful college completion. More community college students from such sub-standard schools are likely to need refresher courses or the lowest level academic courses available when initially enrolling in community college (Culross, 1996).

Some community college leaders have questioned the necessity and feasibility of offering remedial programs to address the issue of under-preparedness. Some college administrators tend to believe that the role of remediation is best left to public school. Many see addressing underpreparedness as a lowering of academic standards traditionally expected by colleges. Many colleges fail to recognize student special needs and refuse to provide any accommodation for these students (Moses, 1999). The literature on this subject seems to suggest that some institutions fail to provide remediation services because they feel it is not the role of colleges to diagnose or remediate students at this point in their lives. Colleges are often inadequate in

making these diagnoses. Colleges often feel that developing and tracking the results of these programs go beyond the scope and responsibility of the college (Moses, 1999). Next, there appears to be no accepted definition of what “remediation” means to colleges. For most community colleges, remediation consists of offering low level introductory courses, which are to serve as refreshers to concepts presumed to have been taught at a high school level. In Alabama community colleges these are often listed as 99 level courses and may be suggested or required before taking regular 101 level introductory courses. Fortunately, many community colleges have begun to offer remediation services, complete with trained personnel to evaluate and diagnose learning issues. Many colleges have a wide array of counseling, tutoring, mentoring, and advisory services to meet remediation challenges. As more traditional views against the role of the college as mediator give way to more modern and accepted views regarding providing these services, it seems that more students are utilizing these services in a positive and effective way. Of course, the debate will continue as to the need for such programs and whether or not the community college should be responsible for providing them. In 1986, Prather and Hands did a study to determine what common indicators of persistence are present among the nontraditional student (of which they categorized the two-year program student) attending state community colleges (with an emphasis on community colleges with large commuter populations). Their research included examination of such variables as retention rates, ethnic status, age, race, various institutional variables which affected persistence, and various theoretical models which examined persistence. These researchers concluded that the best indicator of persistence was measured by GPA. These researchers determined, however, that a higher GPA (or lack thereof) was not related only to academic ability or smartness. They concluded that GPA was related to persistence and consistent with student success (Prather &

Hands, 1986). It was concluded that GPA as a contributor to persistence (or vice-versa), only in as much as it considered other variables such as demands of college life on the student, academic boredom resulting in student attrition, and lack of time and energy invested by the student in order to maintain minimum acceptable academic standards (Tinto, 1993).

Many community colleges throughout Alabama have begun to address and/or increase their efforts in determining specific barriers which challenge the community college student and have begun appropriate interventions. Many of these institutions are realizing that many of these barriers originate within the community college and therefore endeavor to remedy them within the institution. These solutions are manifested in the form of greater academic support through curriculum changes and development, extracurricular activities, additional support personnel whose function it is to address these specific student and institutional challenges, and appropriate course offerings. It appears that these new personnel bring a sense of renewal and validity to institutional efforts to improve the experiences for the community college student. One recent innovation is to encourage the adult learner to utilize these services by alleviating the stigma that often goes along with seeking diagnosis and remediation services and utilize assistance offered. Often this assistance involves instructing the first-generation student how to identify their deficits (these students often have no basis for comparison when identifying areas of concern), and how to remedy them.

Academic ability is a leading indicator of student success. Many community college students are unfamiliar and unprepared for the world of college. The National Center for Educational Statistics has most recently increased its emphasis on data collection which pertains to the community college learner. Their research indicates specific and clear differences between

community college students and non-community college student populations by examining academic preparation, enrollment behavior, and field of study (Nunez & CuccaroAlamin. 1998).

Unemployment Rate

The unemployment rate in the United States is hovering at 5.5%, up from a decade ago. Unemployment rate has been found to be a good indicator of economic trends to predict college enrollment-including the more specific category of the community college (Pennington, McGinty & Williams, 2002). Numerous studies have examined the effect unemployment has on community college enrollment, as well as four-year enrollment. Typically, the trend indicates that in between shifts of unemployment, the unemployed make the decision to return to college. A study conducted in the state of Montana university system examined the short-run effect of changes in economic conditions on undergraduate college enrollment (Potzin, 2004). This trend held true in this study.

Another study found when comparing community college students to four-year college students, that those having a bachelor's degree or higher, the unemployment rate is considerably lower. According to this study comparing unemployment by educational level, the unemployment rate for individuals with less than a high school diploma is 15.4%, while for high school graduates unemployment is 9.4%. Those with some college or an associate's degree (community college) or higher had an unemployment rate of 4.7% (McPherson & Shulenburger, 2010). The current recession has driven many people to identify ways to retool themselves before reentering the job market following period (s) of unemployment.

Faculty Support and Mentoring

Recently, the importance of faculty mentoring has become paramount. Data suggests a positive correlation between the level of faculty mentoring and academic success (Levine &

Nidiffer, 1996). Authors Levine and Nidiffer, in their research focusing on how poor students succeed in college, found after interviewing 24 poor community college students (most of which were first-generation students), that virtually every respondent stated that an effective faculty mentor significantly contributed to their success and their overall satisfaction with their college experience. These students also stated that the mentor/student relationship (although often presenting an alteration in roles after graduation), continued to blossom into personal friendships and academic peer relationships after graduation (Levine & Nidiffer, 1996). Additionally, other researchers confirm findings which correlate frequency of faculty mentor/student interactions with greater levels of satisfaction with college and overall academic success (Astin, 1977). Interestingly, other researchers concluded that students experiencing positive and more frequent teacher/student mentoring relationships achieved higher retention rates and a greater propensity for continued education after graduation (Pascarella, Terenzini, & Wolfe (1986). Researchers Kramer and Spencer, in their 1989 research findings state: “Overall, faculty-student contact is an important factor in student achievement, persistence, academic-skill development, personal development, and greater satisfaction with the college experience” (p. 105).

When dissecting the characteristics of the most effective mentor/student relationships, the literature suggests that a positive correlation between the level of faculty involvement in the advising process and student success and satisfaction existed (Levine & Nidiffer, 1996). Kramer and Spencer concluded that when freshman students and faculty become more acquainted and interactive, that a foundation for future contacts was established (Kramer & Spencer, 1989).

The level of positive faculty advising experiences is vital for student retention, student completion, and overall satisfaction among community college students. Research indicated that these positive relationships were most critical in the first year of college. The literature also

suggests that not all faculty advising is positive or effective (Kramer & Spencer, 1989). Kramer and Spencer, in their 1989 research, indicated that the level of satisfaction and success for the community college student was correlated to the quality of advice received. They found that when an instructor seemed less concerned and involved in the advisory process, and when the advisory sessions were more formalized and less interpersonal, that the student felt more alienated and less valid-resulting in less satisfaction and less appreciation for the advisory process for the student. Coincidentally, this dissatisfaction for the advisory processes was most often experienced by the teacher as well, when these same circumstances existed (Kramer & Spencer, 1989). It was also determined that positive advising experiences reduced student alienation. Students were most satisfied with the advisory process when they felt their advisors were more informed, demonstrated a higher level of concern, were truly more concerned, and were more inter-personal (Kramer & Spencer, 1989). Perhaps some instructors may feel more comfortable with teacher/student roles that are more formal and lack the sharing of personal experiences – but research indicates that personalization of the advisory process is successful.

Another element of faculty/student interaction is the role of teacher as mentor. Ideally, one may argue that to be an effective advisor, one must be an affective mentor. Research does suggest that a good advisor is also a good mentor (Queen, 1994). But there are subtle differences between these two terms -they can exist independently of each other. When approached hierarchically, it seems that mentoring is a level above advising. Mentoring involves dealing with instructor/student relationships personalities in their totality. Stated differently, to escalate beyond advising to mentoring, personal experiences, feelings, and opinions must be introduced. A sense of genuine concern must develop which may not exist in the advisory phase. For the community college student, the mentor serves not only as advisor, but friend, coordinator, and

counselor. For community college students these closer attachments and more personal interactions with faculty mentors may fill a void that lack of guidance and interpersonal relationships present at home. Of course, these personalized faculty/teacher interactions may blur the lines of formality society prescribes to each role. It is arguable that more personalization results in less professionalism. It is also noted that although research indicated a strong positive correlation between community college success and a high degree of personalized mentoring, some teacher's may not be comfortable with this expansion of roles and hence chooses to abide by a strict self-imposed code of professional conduct void of personalization (Queen, 1994; Wilde & Schau, 1991). Interestingly, even when formal mentoring (regardless of level of personalization) is lacking, many community college students, through observation, promote their teacher's to the level of mentor. These students often observe their instructors as their instructors engage in their day-to-day activities. These students, often unknown to the instructor, assign themselves the role of protégé. Many students may eerily begin to mimic the traits and nuances of their favored professors. It is therefore evident that the role of mentor varies greatly. Research does indicate that the more personalized teacher guidance and advice is-the more satisfied students are with the advice they receive (Queen, 1994; Wilde & Schau, 1991).

Family Support

Community college students lack the opportunity to draw inference from the experiences of an immediate family member, such as a parent or sibling, when making decisions related to their community college experience. Lack of this invaluable resource presents unique challenges for these students. Some colleges have seen the need for developing programs that will replace the support ideally offered by family members familiar with the issues a student might face especially in the first year of college attendance (Terenzini, 1986). These services are often

the only source of advising and academic services attainable by the community college student. Evidence supports the notion that parents and siblings of the community college student also have the potential to benefit from these programs. This may explain why parents are encouraged (and sometimes required) to attend orientation seminars with their student. Whether intentional or not, colleges have included parents in a formative and important event in student college life (Terenzini, 1986). In addition to reducing the deficit of parental involvement for community college students, college enrichment programs, such as orientation seminars, tend to reduce parental anxiety and uncertainty which may be enhanced by their own lack of experiential references.

Research supports the notion that colleges are realizing the necessity to include parents, spouses, and children in the planning and processes of their community college family member (Terenzini, 1986). Research implies that, as a result of participation in academic orientation programs with their community college family member, additional family members may decide to attend college as well.

This may be a contributing element to additional family members from first-generation households returning to school, even later in life (Terenzini, 1986). Exposure to college enrichment opportunities for community college students and their families often exposes many unique issues and challenges, including changing interpersonal relationships, time management and constraint issues, and change in family role and status. For example, male heads-of-household who may do little of the day-to-day household chores and cooking which have often been relegated by social custom and norm to the female partner, may now find it necessary to assume these roles in order to allow his spouse to devote the extra time needed for successful school completion. These types of changes in traditional family roles can present problems-even

when family members are enthusiastic about their community college member attending college. Sometimes feelings of resentment, jealousy, displacement, loss of power and authority, and even anger result among these families (Terenzini, 1986). It is evident, therefore, that emotional sacrifice is often required from all family members, for the benefit of the one, college aged member. It may not be clear to some family members that when their community college member completes college, that they too will most often benefit from these achievements. Terenzini (1986) points out that community college students, whether intentionally or unintentionally, share with their families in their college successes. Community college students feel they more easily achieve their maximum potential when they harbor the full devotion and support of their family members.

Academic Preparedness

The need for higher education in America in the 21st century is increasing at an ever increasing rate (U.S. Census Bureau, 2013). This increase is expected to continue. This rise in attendance in community colleges has resulted in increasing challenges of diversity presented by community college students. While the literature supports an overall positive impact of the community college student on America's academic environment, it also identifies many barriers faced by these students. One such barrier is academic preparedness.

The literature defines the first-generation community college student as those students whose parents (and some researchers include siblings) have no college experience (Billson & Terry, 1982). When comparing the community college student to other college students (excluding students of special populations), it is evident that community college students often fail to utilize and maximize their critical thinking skills, are more likely to come from low socioeconomic income groups (especially on the community college level), and have been

encouraged by teachers and other community figures rather than their parents, and are more likely to be from a minority group (Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996).

In regard to academic preparedness among community college students in Alabama, a 1997 study by researchers Berkner and Chavez, identified a five step process leading to college enrollment and completion. First, community college students must decide to pursue and commit to post-secondary pursuits and decide on what they wish to study. Secondly, they must prepare (the research states they are most likely unprepared or underprepared after high school for continuing to college) for the academic proficiency expected in college. Next, they should take the SAT or ACT (research indicate fewer community college students take these tests in high school). Fourth, they must choose one or more institutions and file applications and gain acceptance for admission. Lastly, they must make the necessary arrangement, especially financially, to enroll (Berkner & Chavez, 1997). Although the importance of each of the previously stated criteria will most likely vary among students, and will vary in influence and intensity, the step which implies academic unpreparedness held over from high school is of utmost importance. Arguably, successful planning and completion of college, and possession of those academic and personal skills needed to complete college, should begin in high school. In other words, an easy transition to college is facilitated by processes that began in the ninth grade. Effective high school counselors will most often direct the course of study and selection of elective courses based on the students proposed plans for college. Often times, these declarations are influenced by parents and family members who have completed college. More simply put, children may make career decisions based on what their parents do for a living. They are especially influenced by this thinking in high school. College educated parents, even when good high school guidance services are lacking, tend to encourage, even insist, that their

child take whatever measures needed to ease the transition to college. However, some community college students lack this benefit. Their high school course undertakings may often be misdirected and unnecessary for the path they later choose in college. While completing a more structured and meaningful course of study in high school cannot guarantee success in college, research indicates that it can create a position of advantage upon entering college (Warburton, Bugarin, & Nuñez, 2001).

Proper academic preparedness is a paramount issue for community college students. In a report issued by The National Center for Educational Statistics in 2001 titled *Bridging the Gap: Academic Preparation and Postsecondary Success of Community College Students*, it was found that academic preparedness among community college students was deficient when compared to students who have college educated parents (Warburton, Bugarin, & Nuñez, 2001). Their research indicated math was the subject area in which community college students were least prepared. Therefore, higher achievement and proficiency in math lacking, most community college students postponed taking placement tests such as ACT or SAT batteries. They also scored less than students who emphasized mathematics in high school (Warburton, Bugarin, & Nuñez, 2001). In Alabama community colleges, more students, were placed in remedial and lower-level math classes. For example, a higher number of community college students were encouraged to take Math 99, the lowest remedial level math class, upon entry to Enterprise Community College, than those students who took higher level math classes in high school. The relationship here is that most community college students, due to lack of familial influence in high school, take fewer math classes in high school. Therefore, these students take the ACT and SAT later than their counterparts, score lower, and hence need remediation. This in turn, may take the community college student longer to complete college.

In addition, research in academic preparedness indicated that community college students are less likely to enroll in post-secondary colleges in the first place. Again, influence (or better stated a lack of influence) by non-college educated parents confirms the connection between academic preparedness and academic achievement. As previously stated, high school graduates who have non-college educated parents are less likely to enroll in post-secondary institutions. The literature further suggests that high school graduates who had non-college educated parents were less likely to continue beyond community college to four-year institutions, when compared to those from homes with college educated parents (Choy, 2001). Choy (2001) also indicated that community college students are more likely to gain a high school credential by way of the GED than those students from college educated parent households. Interestingly, more students will opt for attending a community college before continuing to a four-year college, than students from college educated families who are more likely to start college at a four-year institution (p. 211). In her study, Choy also points out that lower academic qualifications, as well as, lower expectations, accounted for lower enrollment rates for community college students (p. 344). Choy discovered considerably smaller proportions of those with more educated parents lacked qualifications (33% of those whose parents had some college experience and 15% of those whose parents had a bachelor's degree or higher).

Upon examination of the literature, the role of mathematics and academic preparedness, was zenith. The role of math, beginning in high school, and even earlier, is cited as a paramount factor contributing to enrollment, placement, and completion of community college (Warburton, et. al., 2001). According to their study, the "relationship between mathematics course taking and enrollment in a four-year institution is striking" (Washburton, et al., 2001, p. 9). Washburton et al., in their research indicate that 76% of 1992 high school students who took higher level math

classes (trig and calculus) enrolled in college by 1994, by only 2 years of high school graduation, 44% of those who took mid-level mathematics classes (up to Algebra II) went to college, and only six percent of those students taking lower-level math (consumer math) continued to college (Washburton, et al., 2001). These researchers did not, however, compare these high school math rates and college completion to the number of students who took math classes in community college to “catch-up” and rates of graduation. Earlier citing suggests that many community college students may postpone taking more difficult math classes in college. This fact, however, does not diminish the adverse effects of this delayed enrollment on test scores, placement, and success.

The focus of mathematics in high school and community academic planning is strongly related to the level of parent education, whether or not parental occupations involve math. Even when students took only the minimum mathematic requirements in high school or took no math classes after 8th or 9th grade, students with parents who were college graduates were still 55% more likely to take higher level math classes in college than community college level students (Choy, 2001). In Alabama, the percentage drops to 34%. Statistically, Alabama lags far behind other states in higher level math class enrollment in college and standardized math test scores. Choy’s (2001) research does support the positive correlation between community college higher level math class enrollment and mastery of higher level math concepts among students with college educated parents versus community college students. She also indicates a positive correlation between the time these students take math in their high school and college careers. Stated differently, when students took math early in high school, in 8th or 9th grade, they were more likely to take higher math courses in high school and in college, more likely to demonstrate higher achievement, and more likely to continue to a four-year college. It is also interesting that

graduates with parents who had no postsecondary education were still 64% less likely than their non-community college counterparts to enroll in a four-year institution and were 85% less likely than their counterparts to graduate from these four-year institutions (Choy, 2001). This number seems staggering. Choy's research on math and high school and college completion demonstrates the high significance of math centered curriculums for students. Her study did not focus on other academic areas such as English, science, or history (Choy, 2001). The United States Department of Education has performed several studies seeking to determine the relationships between academic preparedness and community college students. The indication was that community college students were at a significant disadvantage in terms of access to postsecondary schools and high level mastery – even when they demonstrated high levels of mastery and competency in high school. This was true even in math courses. But chances of increased mastery in math and the chances of these students enrolling in higher level math was improved when these students took math early in high school.

The research continues to demonstrate correlation between, and interrelationship among academic preparedness and achievement and parental postsecondary educational levels. For example, Horn and Nuñez, in their 2000 study, demonstrated the math/parental educational level relationship. Their research showed that 52% of those students who were community college students stated their parents encouraged them to take higher level math, compared to 70% of those students who had a parent with a bachelor's degree or higher (Horn & Nunez, 2000).

There was also a relationship between parent education and their involvement and counseling in the academic planning processes. Accordingly, community college students most frequently relied on the guidance of high school and college guidance counselors. This fact additionally demonstrates the importance of effective guidance counseling for students. Horn and Nuñez stated

that 48% of students with college educated parents received help from parents when enrolling for classes, compared to 34% of community college students. Twenty-eight percent of students with college educated parents said they enrolled without their parents help, compared to 39% for the community college population (Horn & Nuñez, 2000). Interestingly, the research indicates that even the most affective guidance counselors who serve as surrogates for direct parental involvement, are not as effective as direct parental involvement.

Another interesting component of the student preparedness and parental educational level relationship deals with the level of parent participation in the increasing number of applications, forms, and general “housekeeping chores” associated with going to college. In the Horn and Nunez’ (2000) research it is found that community college students rely more heavily on guidance counselors and themselves in completing these applications, than on parents. Research demonstrated a solid relationship between the educational level of parents and the level of involvement with these required forms and applications (Horn & Nuñez, 2000). Their study also demonstrated that forms and applications that were completed with parental input were more accurate than those completed by only the student or guidance counselor. Research also states that even in areas of financial matters, such as financial aid for college, the community college student is at a disadvantage over other students (Horn & Nuñez, 2000). Students with college educated parents seem to have the advantage of parental input in other areas of college planning such as what programs to attend, what educational opportunities should be utilized, and seeking information on financial aid. It is quite ironic that students with college educated parents are more likely to apply for more forms of financial aid and generally need it less than their community college counterparts (Horn & Nuñez, 2000). Community college students are less likely to have a parent attend orientation or school visits than those with college educated

parents. In their study, Horn and Nuñez found that 52% of students with educated parents used their help when completing applications, compared to 33% of community college students. It appears that community college students are more in need of parental input – but less likely to seek it out (Horn & Nuñez, 2000). It makes an interesting study to determine what accounts for this disparity. Is it lack of faith in the assistance rendered by non-educated parents or lack of interest by the non-educated parents – or both?

When dealing with the financial issues associated with college attendance, study reveals community college students are again disadvantaged. In Horn and Nunez' 2000 study, they found that most community college students have parents who have little realistic knowledge relating to the true financial considerations of college attendance. Most community college parents greatly underestimate the cost of college, have made fewer plans for providing for these costs, and have less experience in dealing with the processes of finding and applying for financial aid (Horn & Nuñez, 2000). Financial difficulties for community college students have proven to be a significant barrier to community college completion. As stated earlier, the deficit in financial resources for the community college group may help explain the higher enrollment numbers of this group in community colleges over four-year institutions. A group of 124 students were questioned by Horn and Nuñez in 2000 and asked to estimate the financial cost of a college education. Among 11th and 12th graders approaching high school graduation and community college attendance, 37% of students and 28% of parents could not realistically estimate the financial cost of college. The level of uncertainty increased as family income declined (Horn & Nuñez, 2000). It is obvious that community college students are often at a financial disadvantage when compared to others. This is compounded by increasing failure among this group to attain and complete necessary forms. Horn and Nuñez found correlation

between parent education and the number of pages completed in college preparation guides. Community college students are 46% less likely to aspire to attain a bachelor's degree, compared to 86% among those of four-year college-educated parents (Horn & Nuñez, 2000).

The literature suggests that community college students enrolling in community college report lower educational expectations, are less prepared academically, receive less support from family, demonstrated less planning and preparation for community college, and had more financial barriers to resolve.

Financial Support

Arguably, financial concerns tend to be the most difficult barrier for many community college students. These concerns often erode the element of student persistence. A nationwide study, which included Alabama, was conducted in 2000 which examined the effects of financial barriers on college students. According to this study, college students rank their financial-related concerns as follows: student aid, tuition, college related living expenses (Saint John, Cabrera, Nora & Asker, 2000). In a 1999 research study, data indicated that lack of money was the greatest single concern in deciding to enroll in college and was the greatest factor in preventing these students from registering at all (Merriam & Caffarella, 1999). Tinto, in 1993, cited financial concerns, both short-term and long-term, as the single most significant factor for student attrition. Family financial stability (or lack thereof) influenced student persistence and completion rates among students. Research suggests that community students more often come from families with very limited financial resources for school and often have less family assistance in paying for school. Therefore, these factors help explain the higher percentages of nonparticipation in college among community college populations. In regard to goal-setting and persistence levels among community students, research suggests that many of these students plan

their college course of study, i.e. their “major”, in an effort to combat the cycle of financial inadequacy they have experienced and have witnessed in their family. In other words, they may base what they study on what they can expect to be paid in the workplace in order to help end the cycle of poverty in the family (Tinto, 1993). Breaking the cycle of poverty is of paramount concern to the community college student. Finances affect community college student decisions on whether or not to initially enroll in school, how much education to seek, and where to attend college. Certainly, financial issues may impact decisions for all student populations, but for the community college student it is the apex. Financial shortfall is a major factor in community college drop-out rates. Often times, they simply do not have the money to finish. The lack of resources also accounts for the likelihood they will attend a community college first, over attending a more expensive four-year institution. Many community college students may end their college education with the completion of a two-year degree. This is due not to a lack of desire to continue, but because the money just is not available. In fact, research indicated that community college students who complete community college have a more intense desire to continue to a four-year institution, but financial concerns intercede (Tinto, 1993).

Tinto (1993) also found a correlation between finance and the caliber of institution attended by community college students. Community college students with major financial issues often have to attend school where they can afford to do so. This may result in a compromise to attend an institution that lacks adequate resources and may have instructors who lack higher levels of mastery and experience. Students from lower income community college families are most likely to have at least part-time employment in order to financially survive college. In one study, it was found that among community college students, 58.8% took a parttime job while enrolled in college. Of this number, 33.4% took jobs related to the degree

they were seeking and 25.4 assumed jobs unrelated to what they were wanting to do for a career (Valentine, 1997). The literature also suggests these students are more likely to drop out due to family hardships such as illness of a parent or sibling, marriage of a child, or pregnancy (Valentine, 1997).

Another interesting finding is how the changing role of government financial assistance has shifted in recent years. In the 1980s, the federal government offered an array of financial assistance to students, especially in grant programs such as the Pell Grant. In this new century, in an era of high levels of financial uncertainty in America, the federal government has now greatly reduced grant funding and replaced it with student loan programs. These programs are designed to be as convenient as possible for students, with competitive interest rates (currently averaging between 6.5 and 7.5 APR) and easier qualifying criteria. The reality is that these loans, although repayment is not required to begin until six months after completion or drop-out, do continue to accrue interest beginning at day one of the loan. Community college students often find no other option to pay for school than student loans. This means that community college students are very likely to accrue debt for student loans at the rate of \$10,250.00 per semester (U.S. Government, 2014). Interestingly, in today's economy, no guarantee of study-related employment exists after completing college. Many students cannot afford to invest time and money into attaining a college education, regardless of how desirous they are to do so, if they feel they cannot reap the financial reward of doing so. In today's world, it has become harder and harder for low-income, community college students to justify the financial burdens attainment of a college degree creates and therefore opt out earlier than other students.

There is also a shift from the federal government to state governments to assist in student financial aid. For states like Alabama, which rank below the 50th percentile in economic

comparison among the 50 states (ranking 30 of 50 in overall economic stability), providing student financial aid is difficult. Another contributing negative factor in state student financial aid in Alabama is that most help is granted only to full-time college students. This makes it more difficult for community college students to benefit from this assistance in Alabama, especially for older community college students and those with children, who may wish to attend only part-time.

As previously noted, community college students most often come from low-income families. In 2000, the United States Department of Education released data which provides insight into the financial issues challenging this group. For example, of the number of low income, full-time students attending college in 2000, 86% obtained some financial aid from the federal government. The average amount of aid received by these students was \$6,100. This number accounts for aid programs, such as Pell Grant, and does not consider student loans, which averaged \$10,250.00 per semester (U.S. Department of Education, 2010). Of the number of low-income students in 2010, 81% had to borrow money for college. For community college students in Alabama, the average annual student loan debt was less, about \$4,700.00 annually in 2010. But, as stated before, their expenses were less at the community college level.

Community college students in Alabama are less likely than students from many other states to use the maximum amount allowed under loan programs, such as the Stafford Loan. In Alabama, 66% of students “maxed out” their loan, compared to 94% nationwide. Government data stated that 81% of all college students, regardless of grouping, received federal financial aid, averaging \$3,900 annually (U.S. Department of Education, 2010). In regard to Alabama community college populations, this same source reported most of these students attended community

college full time and 60% of their aid was in the form of grants, 32% in the form of loans, and the rest from other sources, such as part-time work (U.S. Department of Education, 2010).

The U.S. Department of Education defines financial need as the difference between the price of attending a postsecondary institution and what the student may expect to spend based on family financial status. Among low-income students (which comprises most of the community college students), the average Expected Family Contribution (EFC) was very small (see Table 1).

For low-income students with low EFC, the amount of required financial assistance ranged from \$5,800 to \$16,700.00 annually, varying by institution and status (U.S. Department of Education, 1996). Investigation of community college student financial needs and how these needs are met (assuming they are met), presents interesting findings. It is inferred from the research that the community college student does have certain financial needs that are uniquely theirs and that many financial commonalities they share with their non-two year program counterparts are often exacerbated by their community college status. For example, regardless of category, virtually all students will have to buy books and supplies, pay for the cost of transportation, buy food, etc. The community college student often finds this financial challenge more influential than many of their non-community college counterparts. This seems to be due to two major factors-the first being that most community college students originate from low-income families, and secondly, these families have extremely limited financial resources to financially contribute to the student. Most financial aid programs provide assistance based on a uniform scale which is based on estimated costs associated with the students chosen institution and by their EFC. Upon examination of the community college student's financial situation in college, two characteristics seem prevalent. First, community college students are more likely to attend a community college rather than a four-year institution-stating financial

savings as a major reason for doing so. And secondly, community college students most often have a lower EFC.

Table 1

Average Budget, EFC, Financial Need, Aid, Unmet Need, Net Price, and Earning for Low-Income Undergraduates Enrolled Full-

Time, Full-Year, by Type of Institution and Dependency Status: 1995–96

	Student Budget	Expected Family Contribution (EFC)	Financial Need ¹	Total Aid	Unmet Need ²	Net Price ³	Earnings
Total ⁴	\$11,579	\$768	\$10,876	\$6,116	\$4,844	\$5,443	\$2,889
Type of Institution and Dependency Status Public							
Four-year	10,745	760	10,051	6,256	3,903	4,487	3,236
Dependents	10,300	932	9,488	5,531	4,056	4,763	2,593
Independents without Dependents	11,137	808	10,329	6,660	3,835	4,476	3,750
Independents with Dependents	11,347	149	11,226	7,667	3,564	3,672	3,630
Private, Not-for-Profit Four-year	17,203	1,127	16,264	10,060	6,367	7,145	2,801
Dependents	17,917	1,503	16,703	10,286	6,622	7,633	2,187
Independents without Dependents	16,745	797	16,012	10,718	5,444	6,030	3,613
Independents with Dependents	15,237	223	15,014	8,226	6,814	7,012	3,470
Public Two-year	7,659	606	7,051	3,059	4,088	4,598	2,361
Dependents	6,409	637	5,768	2,447	3,354	3,962	2,745
Independents without Dependents	9,025	1,128	7,897	3,399	4,871	5,627	1,418
Independents with Dependents	8,112	264	7,848	3,482	4,367	4,630	2,478

¹ Student budget minus EFC. In this table, the difference between the average student budget and the average expected contribution is not exactly equal to the average financial need because of missing data for each variable. The same is true for the other computed difference in this table. No variable used to compute differences has more than 1 percent missing data for full-time, full-year low-income undergraduates. ² Student budget minus EFC minus aid.

³ Student budget minus all aid.

⁴ Includes students who attended types of institutions other than those included here.

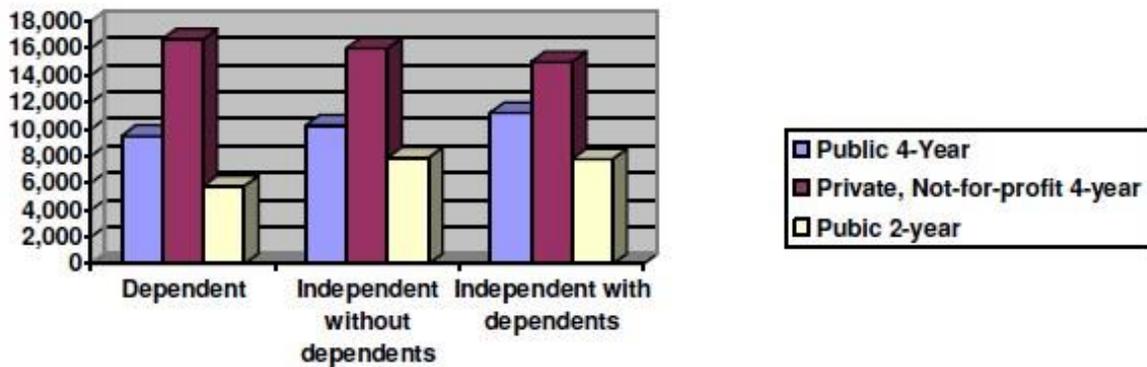
NOTE: Table limited to students who attended only one institution. Averages computed include zero values. For example, average total aid is computed including students with no aid.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995–96 National Postsecondary Student Aid Study (NPSAS:96), Undergraduate Data Analysis System.

Student financial need and assistance is usually assessed by using fixed rules and actuarial scales. Financial aid officers usually estimate the price of attending a specific institution, considering certain variables such as whether or not the student will reside on campus, collateral expenses related to their major (for example, lab fees which may be unique to their chosen major), existing financial resources (money in savings), projected student financial contribution (part-time work), and EFC (U.S. Department of Education, 2010). As stated earlier, most community college students can expect little, if any, familial contribution to college.

Most students begin their quest for financial assistance by completing what is commonly known as a FAFSA (Free Application for Federal Student Aid). This federal document will also be used by the state in determining financial aid. According to the U.S. Department of Education (2010), 99% of all freshmen will fill out a FAFSA – regardless of their financial situation upon applying for college. In recent years, it has become more difficult for students to receive grant money, that is, money that does not have to be paid back. But surprisingly, student loan criteria are rather liberal. Many students who have available funds for college, those who may have scholarships, and those who expect a higher EFC, often still qualify for financial loan programs through the U.S. Government. In developing a financial aid plan using the FAFSA,

the federal government also considers the factor of EFC. In determining a student’s estimated family contribution, the government examines family size, family income, family assets, and the number of other family members enrolled in college. In determining financial need, the financial aid officer will consider the estimated cost of attendance at the chosen institution minus the EFC. Obviously, if a student decides to attend a higher priced institution, there will be a broader gap between projected expenses and EFC. To reduce this projected gap, most community college students will opt for the lower-cost institution, such as a community college. The current data revealed by the U.S. Department of Education in 2010 suggests that even with governmental financial aid, and higher EFCs, most student financial needs are not fully met. Estimating the cost of college attendance can be a reasonably objective thing, but the EFC is quite subjective indeed. A student can expect, unless the information on the FAFSA dramatically changes, that the financial assistance promised by the government will be there – whereas, promised family financial help may constantly change and be very unreliable. For the community college student, family financial help is less likely.



Source: U.S. Department of Education, National Center for Education Statistics, 1995-1996 National Postsecondary Student Aid Study (NPSAS: 96), Undergraduate Data Analysis System.

Figure 1. Average Financial Need for Low-Income Undergraduates Enrolled Full-Time, Full Year, by Type of Institutions and Dependency Status

The literature has provided much information on the assessment of financial need and financial aid for community college students. Of course, there are no hard and fast rules regarding financial aid, because there are no “ideal” student situations – each student is different. Based on the literature, financial issues contributed greatly to the decision by students to attend community college in lieu of a more expensive four-year institution. These students most often realize little or no financial help from family members.

Financial Aid for Community College Students

As stated, the literature indicates that community college students often have more financial need than their non-community college counterparts and most often have little or no expectation to receive financial help from family members. Interestingly, the literature seems to indicate that many community college students do not apply for institutional, state, or federal financial aid (National Postsecondary Student Aid Study [NPSAS], 1996). When surveyed, these students cited fear that they would not qualify as the primary reason for not applying (NPSAS, 1996). The NPSAS study gleaned much useful information in determining factors which inhibited community college students from applying for financial aid. For example, among those students attending college full time, for the full year only 89% applied for aid. It is worth noting that in the U.S. Department of Education data presented earlier, 99% of students, regardless of financial situation, applied for financial aid (i.e. filled out the FAFSA). In the NPSAS study, they found that 10% fewer of those in the community college category applied for financial aid. When community college students were asked why they did not apply, 22% said they felt their family income was too high, 33% reported they could not pay for college without aid, 9% stated they did not want to owe any debt as a result of attending college, and 7% said they missed the deadline (NPSAS, 1996). The NPSAS study did not question why these

students felt they would not qualify or consider the cultural distaste for debt that many low-income families possess.

The type and amount of financial assistance provided to the low-income and community college populations varied by the type of institution they attended, the price of attendance to their institution of choice, federal, state, and institutional aid accepted, and EFC. The types and amounts of aid also depended on the dependency status, i.e. how many members of the household were under 18 and how many family members were in college (for community college students, this may not factor in). Among low-income students (it is assumed many were community college students) in the NPSAS (1996) study, among those attending full-time for the full year, 78 to 89 % received financial aid while attending community college, 88 to 94% attending not-for-profit institutions, and 85 to 94% attending four-year institutions (see Table 2).

According to NPSAS research, dependency status also contributed to whether or not a student attended part or full time in college, whether they held a part-time job while in college, or received financial aid. Their study revealed that students from low-income families who came from a family with a higher number of dependents were more likely to attend college only parttime. They also determined that because of this part-time status, fewer students were likely to receive financial aid. This seemed to contribute the higher number of students within these groupings to attend community colleges, instead of four-year institutions. The fact that more low-income students attended part time was also the result of their attempts to keep cost down and avoid debt. This finding creates an interesting irony. Those students from lower-income families with higher dependency numbers most often qualify for greater amounts of financial aid-yet may be less likely to apply for it, and less likely to use it to attend full-time. This may be due to their desire to keep college debt to a minimum.

Table 2

Percentage of Low-Income Undergraduate Enrolled Full-Time, Full Year who Applied for and Received Financial Aid by Type of Aid,

Type of Institution, and Dependency Status

	Applied for Aid	Any Aid	Type of Aid				
			Grants	Pell Grant ¹	Loans	Work Study	Other ²³
Total ¹	88.8	86.3	80.9	71.5	50.9	14.8	10.2
Type of Institution and Dependency Status							
Public Four-year	89.7	96.9	81.7	72.9	58.6	13.6	9.3
Dependents	87.9	84.7	80.1	67.3	47.7	14.8	7.0
Independents without Dependents	89.6	86.9	78.6	72.7	69.2	10.9	12.5
Independents with Dependents	95.6	94.0	92.4	90.2	71.2	15.2	10.1
Private, Not-for-Profit Four-year	93.9	89.7	85.6	70.3	64.1	29.7	11.2
Dependents	93.6	87.9	84.1	67.7	61.8	34.9	10.2
Independents without Dependents	95.5	93.7	88.9	71.1	70.8	24.0	17.6

¹ Included in grants

² All other types of aid, such as assistantships, veterans benefits and military tuition aid, vocational rehabilitation, and JTPA.

³ Includes students who attended types of institutions other than those included here.

Independents with Dependents	92.4	90.1	86.1	79.0	62.8	18.6	5.1
Public Two-year	84.1	83.0	77.8	69.7	20.2	12.9	10.0
Dependents	82.0	79.8	75.3	67.4	16.5	11.0	5.0
Independents without Dependents	77.9	77.7	65.3	55.0	20.5	9.1	14.6
Independents with Dependents	90.0	89.4	87.9	80.8	23.9	17.0	12.3

NOTE: Table limited to students who attended only one institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995–96 National Postsecondary Student Aid Study (NPSAS:96), Undergraduate Data Analysis System.

The United States Department of Education found less influence on dependency status at four-year institutions than at two-year institutions. They found no significant difference between dependency status and receipt of financial aid (U.S. Department of Education, 1996).

Interestingly, they also found less part-time attendance by low-income students at four-year institutions. In their study, 81% of low-income students attended a four-year institution full-time and for the full year (U.S. Department of Education, 1996). In 2010, the average grant for students from a non-dependent household was \$2,200, while the average grant amount for dependency students was \$7,900. It is important to re-state here that grants are different from loans. Grants are defined as money that does not have to be paid back-student loans do have to be repaid.

Loans were also an important part of financial assistance for community college students. In data compiled by the United States Department of Education (usually based on data revealed through the U.S. Census), it was revealed that lower amounts were borrowed by community college students versus students attending four-year institutions. This is interesting. It appears that most students attending community college are more likely to be from low-income, higher dependency families; more likely to attend part-time versus full-time; more likely to qualify for grants; are more likely to have greater financial need; and more likely to be a community college students – yet the amounts they borrow for college are less than their four-year college student counterparts. It appears from this study that the amount borrowed by the student was less likely to be based on financial need and related more on lower Stafford Loan Program borrowing limits which are based on the ability of the student to repay the loan after college and the low-income

student's unwillingness to assume debt in general. It is important to understand that the criteria and motives for the extension of student loans vary greatly from that of grants. They are almost polar opposites. Grants, those monies that do not have to be repaid, are likely to be higher for the low-income student from a high-dependency family. Loans, which have to be repaid, are less for low-income students from high-dependency families. To demonstrate, when examining data gathered by the United States Department of Education in 2000, the limits for subsidized and unsubsidized loans were as follows:

<i>Attendance Year</i>	<i>Dependents</i>	<i>Independents</i>
1 st year	\$2,625	\$6,625
2 nd year	\$3,500	\$7,500
3 rd to 5 th year	\$5,500	\$10,500

It is also interesting that those independent students that were offered the higher Stafford Loan limits, were more likely to borrow the entire amount offered, whereas their dependent counterparts, while being offered less, often borrowed less.

The data suggested that community college (often low-income) students are not taking full advantage of the loan system. In 2010 data released by the United States Department of Education, only 14% of students with dependency status, borrowed the full loan amount they were offered under the Stafford Loan. Of those students that did opt to borrow the full amount offered, 37% attended four-year colleges instead of community colleges (U.S. Department of Education, 2010). Community college students who attended college full-time for the full year on the average borrowed \$2,500 annually, and \$4,500 annually after transferring to a four-year college.

Part-time work, often in the form of work-study, is found to be more likely among community college dependent students than their independent counterparts. The literature supports that 35% of community college students work part-time, and 34% percent of students attending four-year college work part-time. The percentages are nearly equal, but slightly higher for community college students (U.S. Department of Education, 2010). It is also noteworthy that virtually all college students work for minimum wage-including on campus work study jobs.

Interestingly, the literature suggests that very few low-income, community college students receive what the government categorizes as other types of financial aid. These types of aid include assistantships, rehabilitation of JTPA funds (about 10%), and veterans' benefits or military tuition aid (U.S. Department of Education, 2010; Veterans Administration, 2000). However, when this additional aid was presented, it was usually quite substantial. Students receiving this aid obtained, on the average, an additional \$5,500 if a dependent, and \$5,000 if an independent – and if they attended full time for the full year (U.S. Department of Education, 2010). Military dependent financial college assistance is substantial for those who qualify. Most low-income, community college students do not come from a military household which would qualify for this assistance.

In general, federal, state, and institutional financial aid are important for the community college student. Alabama ranks lower in student utilization of these resources when compared to other states, but Alabama students do reap important benefits from these programs. In Alabama, among community college students attending full time, 70% to 92% received federal aid, depending on the dependency status (Bureau of Labor Statistics, 2010). It is interesting that Alabama is one of the states that currently collects data on community college students. Alabama also extends aid to 17% to 55% of its overall student population-again depending on multiple variables.

Job Placement

In the current economic state, few people are willing to quit their jobs to further their education. However, they recognize the benefits of having a degree. So, what is education's value? According to U.S. Census Bureau data (2013), wages for an individual with a bachelor's degree are greater than wages for an individual with a high school diploma only. Although the current census reports do not specify reporting for community college graduates, it stands to reason these graduates should expect to experience wages than high school graduates only, although the wages may not be as high as those with a four-year degree. This question makes for a suggestion of further study. Of course these findings are not surprising. As a result of these trends, many institutions of higher learning, including community colleges, are responding by offering degree earning options with flexible class schedules, which should facilitate greater ease in program attendance. This is one approach to overcoming the barriers for adult learners on a community college level. As more adults are going back to school to earn a degree, adult community college students are a growing segment of the graduating job seeker market. As a result, institutions are responding to this population of students by providing additional career services, such as job search groups and career counseling to enhance student employment opportunities upon graduation from community college. Adult learners are demanding more options in higher education, including access to community college venues, as well as an increase in the quality of education. Furthermore, potential employers have higher expectations of college graduates, including those endeavoring only for community college level courses completion. The research indicates that pay increase, the need to keep current job, and the desire to begin a new career are all fundamental motivating factors for the Alabama community college attendee. The psychological contract between employers and employees continues to change. Employees are not as loyal to one organization for years in exchange to job security. Individuals

change careers often in search of more satisfying, higher pay, and more fulfilling and increased opportunities for advancement from their work environment. The community colleges have begun to realize this modern shift in attitude and have begun to develop programs accordingly. This too serves as a motivator.

Personal Resilience

Personal commitment, self-determination, self-motivation, and dedication are among the traits which define personal resilience. The literature indicates that a high level of personal resilience is critical in maintaining high levels of student involvement and success in the college experience (Mueller, 1997). In a study conducted by Kline in 2000, junior college students cited self-motivation and self-determination as the most important factors in their ability to succeed (Kline, 2000). It is important to stress the word “self” here. It has been established earlier that many community college students cannot rely on positive motivation and moral support from family members who may see college as a waste of time and money. Therefore, they often rely on those internal mechanisms to boost their self-determination. In studies by both Mueller and Kline, the self-imposed desire to succeed by community college students was attributed to their successes in college. It is also important to point out that the college experience, although unique in many ways, cannot be an event unto itself. The level of success, motivation, dedication, the ability to overcome failure, and overall personal resilience most definitely does not begin and cease at the college doorway. These skills which perhaps played a seminal role in the new world of college, most certainly can be effectively utilized in the real world. Research also suggests that traits such as self-esteem and spirituality among these students impact their personal resilience (Komada, 2002). In her research, Komada concluded that community college students are more highly self-motivated, more intrinsically motivated, more self-analyzing, and generally more resilient, than four-year institution students.

Student Loans

In the current economic downturn, in 2015 many working adults are hesitant about incurring additional debt. Tuition and costs at schools have dramatically increased in the last decade. As a consequence, more students are seeking scholarships as well as federal assistance. “The Great Recession has had a detrimental effect on higher education forcing many students across the country to pay more colleges that offer less” (Clark, 2010, p. 511). Thus, a barrier to going back to school is the cost of student loans. Students are concerned about their future both professionally and financially (Galambos, 2009). Another concern might be that financial aid will be reduced or discontinued in the midst of their matriculation.

In response to these concerns students are becoming more creative. They are taking more community college courses which enable them to continue working and going to school. The shift by community colleges to incorporate on-line venues for course of study completion has encouraged enrollment increases. Some students are taking courses at community colleges to secure employment. Still others are taking courses at community colleges because it is less expensive. One recommendation for further study is how transferability of community college courses to four-year institutions influences these enrollment numbers in community colleges.

In response to these economic difficulties the federal government has implemented a reform of the student loan system that reduces college debt burdens. President Obama is exploring the idea of no-cost community college options. Upon completing their degree, or program of study, students are able to consolidate federal loans and pay them back based on an income repayment plan. In spite of these reform measures, there are still student financial assistance barriers to higher education.

Conclusion

Community college students most often face many barriers that non-community college students face. Of course, there are no hard and fast rules, no complete certainties, when dealing with the human circumstance, but community college students do seem to have a propensity for certain barriers. These barriers do vary from state to state and region to region across America as well. In this century, many colleges and universities, including those in Alabama, have begun to identify and seek to resolve these barriers. In the pages of this study, we have identified many of the barriers and the motivating factors (interventions), which impact the community college population of college student. Specific data has been gleaned from the literature which can best describe these issues for the community college student attending community college in Alabama. We have examined motivating factors and barriers that often pertain to campus life, academic support services, faculty mentoring, family support, financial aid, and personal resilience. Although additional research is desired and data related to the community college student is ongoing, the literature supports the need for further research and importance of a deeper understanding of the characteristics contributing to the community college experience.

CHAPTER III: METHODS

Introduction

The purpose of this study was to examine the association of barriers to attendance, graduation or program completion and the motivating factors prompting participation in post-secondary college programs with the State of Alabama. Further evidence will be presented which

determines the relationship between the barriers and the interventions for community college students in Alabama. This study will examine the influence each barrier has on each intervention. This study will also examine what role the community college institution plays in resolving obstacles and barriers.

Purpose of Study

The purpose of the study was to examine, through the use of the survey method, which motivating factors influenced students attending an Alabama community college. The research also examined what barriers existed that impacted attendance and/or completion at an Alabama community college. The research also examined what relationship, if any, existed between the motivating factors and barriers, and how these relationships affected community college attendance and/or completion.

Research Questions

1. What barriers do community college students in Alabama experience?
2. What motivating factors impact the community college student in Alabama?
3. What are the relationships associated with these barriers and interventions (academic programs, tutoring programs, faculty/student relationships, mentoring programs, campus involvement, and personal dedication or resilience) and the barriers experienced by community college students in Alabama (financial concerns, familial support, academic issues, personal commitment, and societal concerns)?

Research Design

This study used cross-section survey results and investigation of the literature and evaluation of prior research to examine the relationship between specific barriers and the motivating factors to success for the community college student in Alabama. This study used an

at-large sampling of students and former students who attended and preferably graduated from an Alabama community college. The variables representing the motivating factors in this study were academic support, tutoring programs, faculty mentoring programs, level of involvement in campus life and activities, and personal resilience. The variables representing the barriers were financial support, family support, academic preparedness, and personal commitment.

Population and Sample

Although exact numbers are not available, the population of students attending Alabama community colleges in the last decade are estimated to be in the thousands. Therefore, for this study, data was collected from students that were attending Enterprise-Ozark Community College, with emphasis on the two main campus branches in Enterprise and Ozark, Alabama, between 2005 and 2015.

Instrumentation Cooperative Institutional Research Program (CIRP) Data

In this study, data from the Cooperative Institutional Research Program was used. The Cooperative Institutional Research Program (CIRP) is a nationwide longitudinal study of higher education in the United States. It is widely recognized as a reliable source of information relating to college students in this country. Founded in 1966 by the American Council on Education, the Cooperative Institutional Research program is currently managed by the Higher Education Research Institute. It has long been considered by many researchers as an accurate source of data. It is a well-established organization, one of the nation's oldest, which has gathered data on approximately 1,800 institutions of higher education and over 11 million students since its formation in the 1960s. CIRP publishes an annual report of its findings based primarily on freshman surveys gathered from students beginning their college careers.

College Student Survey (CSS)

In addition to CIRP survey reports, the College Student Survey (CSS), developed and conducted through the Higher Education Research Institute (HERI), was used. This instrument can be used unilaterally, but since HERI works cooperatively with CIRP, a comparison of results was used. As of 2012, in excess of 350,000 students have participated in the College Student Survey, with approximately 850 institutions participating across America. The College student Survey endeavors to provide research findings based on institutional, comparative, and longitudinal data based on these surveys. College Student Surveys are available in paper form upon request and are also available on line. The survey investigates the following:

- Student involvement
- Student value structures, attitudes, and aims
- Areas of study (college major) and future career aspirations
- Level of academic involvement and achievement
- Cognitive development
- Satisfaction in college
- Use and proficiency with technology

Researcher Developed Survey

Additionally, a survey was prepared by the researcher, using questions presented by both the CIRP and CSS. Questions modified from these instruments and additionally developed questions were added which were considered relevant to this study. The selected questions were specific to four motivating factors identified in the literature as crucial to student success. Each factor was analyzed using questions related to a certain variable. For example, the variable of academic support will be evaluated based on responses by Alabama first-generation graduates on the question of academic support services offered to them while in community college.

Additionally, those other factors of support and the barriers presented in the literature will be evaluated using those questions relating to each variable. The support factors are academic support, tutoring programs, faculty mentoring programs, level of involvement in campus life and activities, and personal resilience, and the barriers were financial support, family support, academic preparedness, and personal commitment. The student's survey responses will establish if they experienced the barriers and interventions expressed in the literature, and if so, to what degree.

Validity of the College Student Survey

The CSS was developed in 1966. To date, it has surveyed approximately a third of a million students affiliated with over 800 institutions of higher learning. Content and face validity of these selected questions was done and the findings reviewed by a panel of subject matter experts. The purpose of this verification was to determine if the questions used to measure student experiences nationwide, do in fact, serve that purpose for first-generation community college students in Alabama. These evaluators assisted in clarifying and updating terms, eliminating confusing items, and to comment on each questions apparent validity to this study.

Construct Validity

A search for underlying themes was conducted using a factor analysis technique. This procedure also determined if a simple method for summing all of the items under each variable resulted in a total score for that specific variable.

Reliability of the College Student Survey (CSS)

When determining reliability of item relationship to the total score, an alpha correlation analysis was used, based upon factor analysis results. This procedure is accomplished if the

factor analysis indicated that either a simple regression equation for determining a total score could be utilized or if the individual items could be derived for a score total.

Data Collection

A total of 300 questionnaires was distributed in person to community college attendees in Alabama. Specifically, community colleges in southeast Alabama, such as Enterprise State Community College, MacArthur Technical College, Lurleen B. Wallace State Community College, and George C. Wallace Community College were surveyed. Determination of first-generation status was determined by survey respondent. Paper copies of the survey were also available. A cover letter accompanied each survey and permission was obtained from each participating institution, as well as Auburn University (see Appendix A). A response rate of 25% was obtained.

Data Analysis

The research questions were analyzed as follows.

1. What barriers do community college students experience?

Question one was answered using descriptive analysis. The information was obtained by asking if each community college student experienced the identified barriers of financial support, family support, academic preparedness, and personal commitment. This question was evaluated via CSS Profile data. The CSS Profile is used, often in conjunction to, or in lieu of the FAFSA, in determining a family's financial strength. The CSS Profile gives insight into a family's household assets and income. This information is used to determine which programs, if any, are available to assist a community college student in paying educational costs.

2. What motivating factors do community college students experience?

Question two was answered using descriptive analysis. The information was obtained by asking each respondent if they experienced the identified motivator, such as, academic support

and tutoring, faculty mentoring experiences, campus involvement and personal resilience.

Question two was evaluated by examining data supplied by CIRP. CIRP, (Cooperative Institutional Research Program) gathers data through surveying college freshmen before they enter school, via paper and web survey methods.

3. What is the relationship between each motivating factor (academic support and tutoring, faculty mentoring relationships, campus involvement and personal resilience) and the barriers of financial support, family support, academic preparedness and personal commitment?

Question number three was answered through use of a Spearman Correlation Coefficient. The independent variable being the barriers to community college students and the dependent variable being the motivating factors.

CHAPTER IV: RESULTS

Introduction

The findings proceed through a consideration of the sampling statistics, an analysis of validity for the study-which included content as well as face validity, and construct validity. Additionally, descriptive statistics are detailed, as well the calculation process used for each item on the survey instrument (see Appendix A). Following these items, the descriptive results are analyzed and include information regarding a summary of Alabama Community College students participating in the study, along with their various responses to multiple questions related to the individual experiences while at an Alabama community college. A collective descriptive analysis is included in order to outline the overall rating for each of the variables used in the study.

The research questions pertaining to the relationship between the motivating factors and the barriers relating to graduation or program completion are evaluated within the correlation section of this chapter. Each variable is examined and descriptive analysis is included to specify relationships between the various motivating factors and the barriers to attendance.

The purpose of this study was to determine what relationship, if any, exists between the barriers and interventions for community college students in Alabama. The study examined the influence each barrier exhibited on each barrier. The study examined the role the community college institution plays in resolving obstacles and barriers. The following research questions were used:

1. What barriers do community college students in Alabama experience?
2. What motivating factors impact the community college student in Alabama?
3. What are the relationships associated with these barriers and interventions?

The survey instrument included an open-ended questions section which allowed survey participants to respond to questions relating to their personal beliefs. These open-ended questions were analyzed and the results included in this chapter. Similar themes were identified in the open-ended responses which allowed for a qualitative analysis of independent belief systems of the respondents. Lastly, the threats to validity as well as a summary of findings are included within this chapter.

Sample

The survey instrument was made available in paper copy format to currently enrolled students at three prominent Alabama community colleges. The sample pool was approximately 300. There were a total of 75 completed surveys for a response rate of 25 percent. The surveys were voluntary and without compensation. The respondent population was from the general student population, at large, with age (over 18) being the only criteria limiting participation. The age range was from 18 years of age and upward. No special consideration or limitations were in place for gender, race, income level, or marital status.

Analysis of Validity

The various aspects of validity are examined in this section. Statistical analyses of the data were done at various levels beginning with descriptive statistics, and then to a ranking of mean respondents in the individual survey responses from the graduates. Following this level, was a correlation matrix across all items and factors, a factor analysis which examined construct validity, an alpha test against each factor to test for reliability, and a content analysis of the

survey comments to further test validity. A factor analysis and alpha tests were used to determine the levels of construct validity and reliability from the data. This analysis used principal component method with an oblique rotation. Spearman correlations were used to establish if there was a statistical relationship between the input variables, in this case the motivating factors, and the output variables, which were the barriers. This test helped identify any significant and substantial relationships of the motivating and barrier variables. The research included a content analysis of the comments of the respondents. It used an inductive content analysis software program for establishment of categories. The processes and procedures used within the software enabled this researcher to address the various issues of validity in this qualitative research. The clarity of steps and categorization provided for better review and to address interpretive validity from the participants' viewpoints. In other words, the paper trail showed that the categories represent the participants' perspectives and not those of the researcher.

Text categorization software may not examine human personality factors. The human characteristic analysis must be made by the principal investigator. These categories do supply useful information regarding texts. But the fact remains that the researcher, not the software, must glean the sophisticated knowledge and insights required for interpretation of this mapped or categorized information, usually situating it in the context of additional information about the texts' origins. Neither text categorization nor artificial intelligence can be expected to generate the deeper, often emotionally dependent understandings or upper levels of the mapping code in either the sense of an expert's comprehension from listening or that of a specialist, such as a linguist, cultural anthropologist, or psychoanalyst. This acknowledged, researchers might wish to consider what different insights text categorization and artificial intelligence programs offer. In this study, one open-ended question was introduced in the survey because such questions

often provide a source of varied and textured information about what respondents, think, know, or believe. This information afforded the examiner to experience this respondent input in the respondents own words. Additionally, the open-ended question was asked because a researcher often relies exclusively on close-ended questions. Therefore, a researcher might end up constructing and interpreting the respondents' reality. A researcher must not assume they accurately ascertain the main idea or construct correctly, failed to define significant alternatives, or did not show bias or skew respondent perspectives.

The inductive software used in this study contains a group of tools, and categorization procedures designed to assist the researcher in creating closed-coded categorical variables gleaned from the unstructured and voluminous information contained in typical verbatim responses. While this may not completely mechanize the classification of verbatim responses into categorical variables, it does provide a customized desktop and a tool kit to assist the researcher. Automatic categorization in the software program is a four-step process. To begin, the text is compared against a dictionary of words to assist in the deletion of words that are synonyms or aliases. Second, the program creates a matrix of similarities from the terms in the included terms list. It couples each term with every other term on the list and checks to see how often each pair occurs in the response. The program then constructs a 2 x 2 contingency table for each duo of terms. In turn, the program uses this information to compute a binary measure, the Jaccard similarity measure, for each pair of terms. The measure consists of the number of cooccurrences between the terms divided by the sum of co-occurrence plus non-co-occurrences. Next, the program hierarchically clusters the matrix of similarities and places the clusters into a specified maximum number of categories. The algorithm used for creating categories is a variant of hierarchical clustering with maximum distance amalgamation. This algorithm attempts to produce clusters whose largest distance between any two members is as insignificant as possible.

This tends to produce compact clusters. In a last set of procedures, the program uses multidimensional scaling in two dimensions to scale the matrix of similarities. This is independent of the clustering process. This process is useful, but must relate to the overall investigation.

Face and Content Validity

In order to obtain stronger face validity, a committee of faculty and doctoral students reviewed the draft survey and made minor changes to the wording of a few questions. These modifications contributed to greater readability of the survey instrument. The alpha test of reliability showed a high degree of consistency for each of the factors and therefore supports strong face validity for the instrument.

Content validity was established through the extensive literature review and explicitly linking the concepts, antecedents, and items in the survey instrument. The analysis of the survey comments supported the content validity. Also, the College Student survey has been used by more than 270,000 students at over 800 institutions across the United States.

Construct Validity

Surveys are the preferred method for collecting data from large numbers of students regarding their college experiences. Many instruments are locally developed, used a few times and then discarded. Others, such as the Cooperative Institutional Research Program (CIRP) instruments (Astin & Sax, 1999), are nationally normed and administered annually. It is not unusual for items used on nationally normed instruments to be adapted for use on local surveys due to the fact that researchers perceive them to be good and reliable.

The survey instrument used in this study is a variation of the College Student Survey administered by the Higher Education Research Institute. The CIRP is the nation's largest and

oldest empirical study of higher education, involving data on some 1,800 institutions and over 11 million students (Astin & Sax, 1999). It is often regarded as the most comprehensive source of information on college students. The annual report of the CIRP Freshman Survey provides normative data on each year's entering college students. Specifically, for this research, a modified version of the College Student Survey Instrument was used. The College Student Survey (CSS) is administered through the Cooperative Institutional Research Program (CIRP), which has conducted national surveys of college students and faculty since 1966. While the survey may be used as a single instrument, it was designed as a follow-up to the CIRP Freshman survey. As of March 2015, more than 270 thousand students have taken part in the CSS at almost 800 institutions of higher learning that have benefited from the institutional, longitudinal, and comparative data provided by the instrument.

A Cronbach Alpha test of reliability was performed. Cronbach's Alpha reliability normally ranges between 0 and 1. The closer the coefficient is 1.0, the greater is the internal consistency of the items (variables) in the scale. Cronbach's alpha coefficient increases either as the number of items (variables) increases, or as the average inter-item correlations increase. The survey (see appendix) data were sorted according to question and response. The survey (N=75) responses were also sorted according to gender. All non- demographic questions (N=31) were assigned a correlating number on the Cronbach Alpha. The results were formulated using SPSS software. The Cronbach's Alpha reliability score was .992. This indicates a superior reliability.

Cronbach Alpha test results:

		N	%
Cases	Valid	70	93.3
	Excluded ^a	5	6.7

Total	75	100.0
-------	----	-------

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.992	31

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
q1	89.4000	1531.229	.678	.993
g2	88.9143	1500.427	.802	.992
q3	89.4714	1522.050	.786	.992
q4	89.6714	1494.659	.922	.992
q5	89.7000	1474.068	.956	.992
q6	89.5571	1466.221	.955	.992
q7	89.7571	1455.259	.941	.992
q8	89.3429	1511.997	.812	.992
q9	89.4143	1478.130	.941	.992
q10	89.6000	1462.214	.948	.992
q11	89.5286	1470.282	.950	.992
q12	89.8000	1485.612	.910	.992
q13	89.6143	1463.574	.956	.992
q14	89.7429	1474.049	.946	.992
q15	89.5286	1483.209	.930	.992
q16	90.3143	1482.045	.940	.992
q17	90.9429	1490.316	.853	.992
q18	90.7571	1480.911	.896	.992
q19	90.7571	1483.201	.832	.992
q20		1476.130		

q21	90.5857	1482.973	.940	.992
q22	90.4286	1471.665	.950	.992
	90.2429		.956	.992
q23	90.4000	1454.388	.910	.992
q24	90.7571	1473.027	.849	.992
q25	90.4857	1458.369	.901	.992
q26	90.3571	1457.276	.944	.992
q27	90.3143	1458.277	.949	.992
q28	89.9143	1449.645	.937	.992
q29	89.9143	1450.688	.938	.992
q30	89.9000	1449.454	.918	.992
q31	90.0286	1469.275	.830	.992

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
92.9714	1575.796	39.69630	31

An ANOVA test was run on the motivations and barriers factoring the demographic of the respondents based on the following: age, gender, race, income, number of children and dependents, civil status, and employment.

ANOVA Results

ANOVA test based on age

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Your Age	(J) Your Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
A desire for personal accomplishment motivated me to enroll.	24 or under	25-34	-1.029*	.257	.001	-1.75	-.31
		35-44	-1.029*	.207	.000	-1.61	-.45

		45-54	-1.029*	.284	.005	-1.82	-.23	
		55 or over	-1.029*	.269	.003	-1.78	-.28	
	25-34	24 or under	1.029*	.257	.001	.31	1.75	
		35-44	.000	.286	1.000	-.80	.80	
		45-54	.000	.346	1.000	-.97	.97	
		55 or over	.000	.333	1.000	-.93	.93	
	35-44	24 or under	1.029*	.207	.000	.45	1.61	
		25-34	.000	.286	1.000	-.80	.80	
		45-54	.000	.311	1.000	-.87	.87	
		55 or over	.000	.297	1.000	-.83	.83	
	45-54	24 or under	1.029*	.284	.005	.23	1.82	
		25-34	.000	.346	1.000	-.97	.97	
		35-44	.000	.311	1.000	-.87	.87	
		55 or over	.000	.355	1.000	-.99	.99	
	55 or over	24 or under	1.029*	.269	.003	.28	1.78	
		25-34	.000	.333	1.000	-.93	.93	
		35-44	.000	.297	1.000	-.83	.83	
		45-54	.000	.355	1.000	-.99	.99	
A desire for knowledge/skills in this 24 or under degree field motivated me to enroll.								
		25-34	-1.086*	.229	.000	-1.73	-.44	
		35-44	-1.086*	.185	.000	-1.60	-.57	
		45-54	-1.086*	.254	.001	-1.80	-.37	
		55 or over	-1.086*	.323	.011	-1.99	-.18	
	25-34	24 or under	1.086*	.229	.000	.44	1.73	
		35-44	.000	.255	1.000	-.72	.72	
		45-54	.000	.309	1.000	-.87	.87	
		55 or over	.000	.368	1.000	-1.03	1.03	
							95% Confidence Interval	
							Lower Bound	Upper Bound
Dependent Variable	(I) Your Age	(J) Your Age	Mean Difference (I-J)	Std. Error	Sig.			
	35-44	24 or under	1.086*	.185	.000	.57	1.60	
		25-34	.000	.255	1.000	-.72	.72	
		45-54	.000	.277	1.000	-.78	.78	

	55 or over		.000	.342	1.000	-.96	.96
45-54	24 or under		1.086*	.254	.001	.37	1.80
	25-34		.000	.309	1.000	-.87	.87
	35-44		.000	.277	1.000	-.78	.78
	55 or over		.000	.384	1.000	-1.08	1.08
55 or over	24 or under		1.086*	.323	.011	.18	1.99
	25-34		.000	.368	1.000	-1.03	1.03
	35-44		.000	.342	1.000	-.96	.96
	45-54		.000	.384	1.000	-1.08	1.08

An ANOVA test showed that significant difference were observed on the “A desire for personal accomplishment motivated me to enroll” and “A desire for knowledge/skills in this degree field motivated me to enroll” among groups. It showed that the respondents 24 or under strongly disagreed to the two questions.

Tukey HSD

Multiple Comparisons

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
						A desire for personal accomplishment motivated me to enroll.	
	\$0-\$24,999	\$25,000-\$49,999	-1.022*	.215	.000	-1.62	-.42
		\$50,000-\$74,999	-1.476*	.204	.000	-2.05	-.91
		\$75,000-\$99,999	-1.476*	.222	.000	-2.10	-.85
		\$100,000 and over	-1.476*	.191	.000	-2.01	-.94
	\$25,000-\$49,999	\$0-\$24,999	1.022*	.215	.000	.42	1.62
		\$50,000-\$74,999	-.455	.236	.315	-1.12	.21
		\$75,000-\$99,999	-.455	.252	.380	-1.16	.25
		\$100,000 and over	-.455	.226	.272	-1.09	.18
	\$50,000-\$74,999	\$0-\$24,999	1.476*	.204	.000	.91	2.05
		\$25,000-\$49,999	.455	.236	.315	-.21	1.12
		\$75,000-\$99,999	.000	.243	1.000	-.68	.68
	\$75,000-\$99,999	\$100,000 and over	.000	.215		-.60	

		\$0-\$24,999	1.476*	.222	1.000	.85	.60
		\$25,000-\$49,999	.455	.252	.380	-.25	1.16
		\$50,000-\$74,999	.000	.243	1.000	-.68	.68
		\$100,000 and over	.000	.233	1.000	-.65	.65
	\$100,000 and over	\$0-\$24,999	1.476*	.191	.000	.94	2.01
		\$25,000-\$49,999	.455	.226	.272	-.18	1.09
		\$50,000-\$74,999	.000	.215	1.000	-.60	.60
	\$0-\$24,999	\$75,000-\$99,999	.000	.233	1.000	-.65	.65
A desire for knowledge/skills in this degree field motivated me to enroll.		\$25,000-\$49,999	-.883*	.207	.000	-1.47	-.30
		\$50,000-\$74,999	-1.275*	.197	.000	-1.83	-.72
		\$75,000-\$99,999	-1.429*	.214	.000	-2.03	-.83
		\$100,000 and over	-1.429*	.197	.000	-1.98	-.88
		\$0-\$24,999	.883*	.207	.001	.30	1.47
		\$25,000-\$49,999					
		\$50,000-\$74,999	-.392	.228	.432	-1.03	.25
		\$75,000-\$99,999	-.545	.243	.179	-1.23	.14
		\$100,000 and over	-.545	.228	.132	-1.19	.10
		\$0-\$24,999	1.275*	.197	.000	.72	1.83
	\$50,000-\$74,999	\$25,000-\$49,999	.392	.228	.432	-.25	1.03
		\$75,000-\$99,999	-.154	.234	.965	-.81	.50
		\$100,000 and over	-.154	.219	.955	-.77	.46

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig. d	95% Confidence Interval	
						Lower Bound	Upper Bound
	\$75,000-\$99,999	\$0-\$24,999	1.429*	.214	.000	.83	2.03
		\$25,000-\$49,999	.545	.243	.179	-.14	1.23
		\$50,000-\$74,999	.154	.234	.965	-.50	.81
		\$100,000 and over	.000	.234	1.000	-.66	.66
	\$100,000 and over	\$0-\$24,999	1.429*	.197	.000	.88	1.98
		\$25,000-\$49,999	.545	.228	.132	-.10	1.19
		\$50,000-\$74,999	.154	.219	.955	-.46	.77

		\$75,000-\$99,999	.000	.234	1.000	-.66	.66
Reports that people with this degree have greater opportunity for advancement motivated me to enroll.	\$0-\$24,999	\$25,000-\$49,999	-.905*	.226	.002	-1.54	-.27
		\$50,000-\$74,999	-1.443*	.214	.000	-2.05	-.84
	\$25,000-\$49,999	\$75,000-\$99,999	-1.705*	.233	.000	-2.36	-1.05
		\$100,000 and over	-1.905*	.281	.000	-2.70	-1.11
		\$0-\$24,999	.905*	.226	.002	.27	1.54
		\$50,000-\$74,999	-.538	.249	.208	-1.24	.16
	\$50,000-\$74,999	\$75,000-\$99,999	-.800*	.265	.030	-1.55	-.05
		\$100,000 and over	-1.000*	.308	.016	-1.87	-.13
		\$0-\$24,999	1.443*	.214	.000	.84	2.05
		\$25,000-\$49,999	.538	.249	.208	-.16	1.24
\$75,000-\$99,999	\$75,000-\$99,999	-.262	.255	.843	-.98	.46	
	\$100,000 and over	-.462	.300	.541	-1.31	.38	
	\$0-\$24,999	1.705*	.233	.000	1.05	2.36	
	\$25,000-\$49,999	.800*	.265	.030	.05	1.55	
\$100,000 and over	\$50,000-\$74,999	.262	.255	.843	-.46	.98	
	\$100,000 and over	-.200	.314	.968	-1.08	.68	
	\$0-\$24,999	1.905*	.281	.000	1.11	2.70	
	\$25,000-\$49,999	1.000*	.308	.016	.13	1.87	
The desire to begin a new career motivated me to enroll.	\$0-\$24,999	\$50,000-\$74,999	.462	.300	.541	-.38	1.31
		\$75,000-\$99,999	.200	.314	.968	-.68	1.08
	\$25,000-\$49,999	\$25,000-\$49,999	-.974*	.239	.001	-1.65	-.30
		\$50,000-\$74,999	-1.429*	.226	.000	-2.07	-.79
		\$75,000-\$99,999	-1.429*	.246	.000	-2.12	-.73
		\$100,000 and over	-1.429*	.267	.000	-2.18	-.68
	\$25,000-\$49,999	\$0-\$24,999	.974*	.239	.001	.30	1.65
		\$50,000-\$74,999	-.455	.263	.424	-1.19	.29
		\$75,000-\$99,999	-.455	.280	.490	-1.24	.33
		\$100,000 and over	-.455	.298	.551	-1.29	.38

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig. d	95% Confidence Interval	
						Lower Bound	Upper Bound
	\$50,000-\$74,999	\$0-\$24,999	1.429*	.226	.000	.79	2.07
		\$25,000-\$49,999	.455	.263	.424	-.29	1.19

		\$75,000-\$99,999	.000	.270	1.000	-.76	.76	
		\$100,000 and over	.000	.288	1.000	-.81	.81	
	\$75,000-\$99,999	\$0-\$24,999	1.429*	.246	.000	.73	2.12	
		\$25,000-\$49,999	.455	.280	.490	-.33	1.24	
		\$50,000-\$74,999	.000	.270	1.000	-.76	.76	
		\$100,000 and over	.000	.304	1.000	-.86	.86	
	\$100,000 and over	\$0-\$24,999	1.429*	.267	.000	.68	2.18	
		\$25,000-\$49,999	.455	.298	.551	-.38	1.29	
		\$50,000-\$74,999	.000	.288	1.000	-.81	.81	
		\$75,000-\$99,999	.000	.304	1.000	-.86	.86	
	\$0-\$24,999	\$25,000-\$49,999	-1.143*	.168	.000	-1.62	-.67	
		\$50,000-\$74,999	-1.604*	.159	.000	-2.05	-1.16	
		\$75,000-\$99,999	-2.143*	.173	.000	-2.63	-1.65	
		\$100,000 and over	-2.143*	.187	.000	-2.67	-1.62	
	\$25,000-\$49,999	\$0-\$24,999	1.143*	.168	.000	.67	1.62	
		\$50,000-\$74,999	-.462	.185	.105	-.98	.06	
		\$75,000-\$99,999	-1.000*	.197	.000	-1.55	-.45	
		\$100,000 and over	-1.000*	.210	.000	-1.59	-.41	
		\$0-\$24,999	1.604*	.159	.000	1.16	2.05	
		\$25,000-\$49,999	.462	.185	.105	-.06	.98	
	\$50,000-\$74,999	\$75,000-\$99,999	-.538*	.190	.047	-1.07	.00	
		\$100,000 and over	-.538	.203	.073	-1.11	.03	
	\$75,000-\$99,999	\$0-\$24,999	2.143*	.173	.000	1.65	2.63	
		\$25,000-\$49,999	1.000*	.197	.000	.45	1.55	
		\$50,000-\$74,999	.538*	.190	.047	.00	1.07	
		\$100,000 and over	.000	.214	1.000	-.60	.60	
	\$100,000 and over	\$0-\$24,999	2.143*	.187	.000	1.62	2.67	
		\$25,000-\$49,999	1.000*	.210	.000	.41	1.59	
		\$50,000-\$74,999	.538	.203	.073	-.03	1.11	
		\$75,000-\$99,999	.000	.214	1.000	-.60	.60	
	Encouragement from friends who have their degrees motivated me to enroll.	\$0-\$24,999	\$25,000-\$49,999	-1.152*	.185	.000	-1.68	-.63
		\$50,000-\$74,999	-1.641*	.176	.000	-2.14	-1.14	
		\$75,000-\$99,999	-2.111*	.198	.000	-2.67	-1.55	
		\$100,000 and over	-2.333*	.368	.000	-3.37	-1.29	

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
	\$25,000-\$49,999	\$0-\$24,999	1.152*	.185	.000	.63	1.68
		\$50,000-\$74,999	-.490	.204	.132	-1.07	.09
		\$75,000-\$99,999	-.960*	.224	.001	-1.59	-.33
		\$100,000 and over	-1.182*	.383	.026	-2.26	-.10
	\$50,000-\$74,999	\$0-\$24,999	1.641*	.176	.000	1.14	2.14
		\$25,000-\$49,999	.490	.204	.132	-.09	1.07
		\$75,000-\$99,999	-.470	.216	.204	-1.08	.14
		\$100,000 and over	-.692	.378	.367	-1.76	.38
	\$75,000-\$99,999	\$0-\$24,999	2.111*	.198	.000	1.55	2.67
		\$25,000-\$49,999	.960*	.224	.001	.33	1.59
		\$50,000-\$74,999	.470	.216	.204	-.14	1.08
		\$100,000 and over	-.222	.389	.979	-1.32	.88
	\$100,000 and over	\$0-\$24,999	2.333*	.368	.000	1.29	3.37
		\$25,000-\$49,999	1.182*	.383	.026	.10	2.26
		\$50,000-\$74,999	.692	.378	.367	-.38	1.76
		\$75,000-\$99,999	.222	.389	.979	-.88	1.32
A desire for more respect from my peers motivated me to enroll.	\$0-\$24,999	\$25,000-\$49,999	-1.108*	.157	.000	-1.55	-.67
		\$50,000-\$74,999	-1.381*	.148	.000	-1.80	-.96
		\$75,000-\$99,999	-2.081*	.162	.000	-2.54	-1.63
		\$100,000 and over	-2.238*	.184	.000	-2.76	-1.72
	\$25,000-\$49,999	\$0-\$24,999	1.108*	.157	.000	.67	1.55
		\$50,000-\$74,999	-.273	.172	.515	-.76	.21
		\$75,000-\$99,999	-.973*	.184	.000	-1.49	-.45
		\$100,000 and over	-1.130*	.203	.000	-1.70	-.56
	\$50,000-\$74,999	\$0-\$24,999	1.381*	.148	.000	.96	1.80
		\$25,000-\$49,999	.273	.172	.515	-.21	.76
		\$75,000-\$99,999	-.700*	.177	.002	-1.20	-.20
		\$100,000 and over	-.857*	.197	.001	-1.41	-.30
	\$75,000-\$99,999	\$0-\$24,999	2.081*	.162	.000	1.63	2.54
		\$25,000-\$49,999	.973*	.184	.000	.45	1.49

	\$50,000-\$74,999	.700*	.177	.002	.20	1.20
	\$100,000 and over	-.157	.207	.941	-.74	.43
\$100,000 and over	\$0-\$24,999	2.238*	.184	.000	1.72	2.76
	\$25,000-\$49,999	1.130*	.203	.000	.56	1.70
	\$50,000-\$74,999	.857*	.197	.001	.30	1.41
	\$75,000-\$99,999	.157	.207	.941	-.43	.74

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
A lack of confidence in my ability was a barrier to my enrollment.	\$0-\$24,999	\$25,000-\$49,999	-.273	.135	.268	-.65	.11
		\$50,000-\$74,999	-1.000*	.128	.000	-1.36	-.64
		\$75,000-\$99,999	-1.000*	.139	.000	-1.39	-.61
		\$100,000 and over	-2.222*	.144	.000	-2.63	-1.82
	\$25,000-\$49,999	\$0-\$24,999	.273	.135	.268	-.11	.65
		\$50,000-\$74,999	-.727*	.148	.000	-1.14	-.31
		\$75,000-\$99,999	-.727*	.158	.000	-1.17	-.28
		\$100,000 and over	-1.949*	.163	.000	-2.41	-1.49
	\$50,000-\$74,999	\$0-\$24,999	1.000*	.128	.000	.64	1.36
		\$25,000-\$49,999	.727*	.148	.000	.31	1.14
		\$75,000-\$99,999	.000	.152	1.000	-.43	.43
		\$100,000 and over	-1.222*	.157	.000	-1.66	-.78
\$75,000-\$99,999	\$0-\$24,999	1.000*	.139	.000	.61	1.39	
	\$25,000-\$49,999	.727*	.158	.000	.28	1.17	
	\$50,000-\$74,999	.000	.152	1.000	-.43	.43	
	\$100,000 and over	-1.222*	.166	.000	-1.69	-.75	
\$100,000 and over	\$0-\$24,999	2.222*	.144	.000	1.82	2.63	
	\$25,000-\$49,999	1.949*	.163	.000	1.49	2.41	
	\$50,000-\$74,999	1.222*	.157	.000	.78	1.66	
	\$75,000-\$99,999	1.222*	.166	.000	.75	1.69	
Concern about attending school with \$0-\$24,999 younger or older students was a barrier to my enrollment.	\$25,000-\$49,999	\$25,000-\$49,999	-.545*	.173	.021	-1.03	-.06
		\$50,000-\$74,999	-1.231*	.164	.000	-1.69	-.77
		\$75,000-\$99,999	-1.800*	.179	.000	-2.30	-1.30

	\$100,000 and over	-.750*	.154	.000	-1.18	-.32
\$100,000 and over	\$0-\$24,999	1.750*	.142	.000	1.35	2.15
	\$25,000-\$49,999	1.659*	.152	.000	1.23	2.09
	\$50,000-\$74,999	.750*	.149	.000	.33	1.17
	\$75,000-\$99,999	.750*	.154	.000	.32	1.18
	The lack of grants and scholarships for education was a barrier to my enrollment.					
\$25,000-\$49,999	\$25,000-\$49,999	-.861*	.126	.000	-1.22	-.51
	\$50,000-\$74,999	-1.183*	.119	.000	-1.52	-.85
	\$75,000-\$99,999	-1.852*	.130	.000	-2.22	-1.49
	\$100,000 and over	-2.667*	.147	.000	-3.08	-2.25
	\$0-\$24,999	.861*	.126	.000	.51	1.22
\$100,000 and over	\$50,000-\$74,999	-.322	.138	.152	-.71	.07
	\$75,000-\$99,999	-.991*	.148	.000	-1.41	-.58
	\$100,000 and over	-1.805*	.163	.000	-2.27	-1.35

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
\$50,000-\$74,999	\$0-\$24,999		1.183*	.119	.000	.85	1.52
	\$25,000-\$49,999		.322	.138	.152	-.07	.71
	\$75,000-\$99,999		-.669*	.142	.000	-1.07	-.27
	\$100,000 and over		-1.484*	.158	.000	-1.93	-1.04
\$75,000-\$99,999	\$0-\$24,999		1.852*	.130	.000	1.49	2.22
	\$25,000-\$49,999		.991*	.148	.000	.58	1.41
	\$50,000-\$74,999		.669*	.142	.000	.27	1.07
	\$100,000 and over		-.814*	.166	.000	-1.28	-.35
\$100,000 and over	\$0-\$24,999		2.667*	.147	.000	2.25	3.08
	\$25,000-\$49,999		1.805*	.163	.000	1.35	2.27
	\$50,000-\$74,999		1.484*	.158	.000	1.04	1.93
	\$75,000-\$99,999		.814*	.166	.000	.35	1.28
	\$25,000-\$49,999		-.671*	.173	.002	-1.16	-.19

The lack of personal funds to pay for \$0-\$24,999 college was a barrier to my enrollment.

	\$50,000-\$74,999	-1.531*	.164	.000	-1.99	-1.07
	\$75,000-\$99,999	-2.062*	.178	.000	-2.56	-1.56
	\$100,000 and over	-2.540*	.185	.000	-3.06	-2.02
\$25,000-\$49,999	\$0-\$24,999	.671*	.173	.002	.19	1.16
	\$50,000-\$74,999	-.860*	.190	.000	-1.39	-.33
	\$75,000-\$99,999	-1.391*	.203	.000	-1.96	-.82
	\$100,000 and over	-1.869*	.208	.000	-2.46	-1.28
\$50,000-\$74,999	\$0-\$24,999	1.531*	.164	.000	1.07	1.99
	\$25,000-\$49,999	.860*	.190	.000	.33	1.39
	\$75,000-\$99,999	-.531	.195	.063	-1.08	.02
	\$100,000 and over	-1.009*	.201	.000	-1.57	-.44
\$75,000-\$99,999	\$0-\$24,999	2.062*	.178	.000	1.56	2.56
	\$25,000-\$49,999	1.391*	.203	.000	.82	1.96
	\$50,000-\$74,999	.531	.195	.063	-.02	1.08
	\$100,000 and over	-.478	.213	.179	-1.08	.12
\$100,000 and over	\$0-\$24,999	2.540*	.185	.000	2.02	3.06
	\$25,000-\$49,999	1.869*	.208	.000	1.28	2.46
	\$50,000-\$74,999	1.009*	.201	.000	.44	1.57
	\$75,000-\$99,999	.478	.213	.179	-.12	1.08

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Concern about paying back student loans was a barrier to my enrollment.	\$0-\$24,999	\$25,000-\$49,999	-.987*	.223	.000	-1.61	-.36
		\$50,000-\$74,999	-1.560*	.211	.000	-2.16	-.97
		\$75,000-\$99,999	-2.314*	.230	.000	-2.96	-1.67
		\$100,000 and over	-2.214*	.277	.000	-3.00	-1.43
\$25,000-\$49,999	\$0-\$24,999	\$50,000-\$74,999	.987*	.223	.000	.36	1.61
		\$75,000-\$99,999	-.573	.245	.148	-1.26	.12
		\$100,000 and over	-1.327*	.262	.000	-2.06	-.59
		\$50,000-\$74,999	-1.227*	.304	.001	-2.08	-.37
\$50,000-\$74,999	\$0-\$24,999	1.560*	.211		.97		

		\$25,000-\$49,999	.573	.245	.000	-.12	2.16	
		\$75,000-\$99,999	-.754*	.252	.148	-1.46	1.26	
		\$100,000 and over	-.654	.295	.032	-1.49	-.04	
	\$75,000-\$99,999	\$0-\$24,999	2.314*	.230	.000	1.67	2.96	
		\$25,000-\$49,999	1.327*	.262	.000	.59	2.06	
		\$50,000-\$74,999	.754*	.252	.032	.04	1.46	
		\$100,000 and over	.100	.309	.998	-.77	.97	
	\$100,000 and over	\$0-\$24,999	2.214*	.277	.000	1.43	3.00	
		\$25,000-\$49,999	1.227*	.304	.001	.37	2.08	
		\$50,000-\$74,999	.654	.295	.190	-.18	1.49	
		\$75,000-\$99,999	-.100	.309	.998	-.97	.77	
Discouragement by a spouse/ significant other was a barrier to my enrollment.	\$0-\$24,999	\$25,000-\$49,999	-.727*	.083	.000	-.96	-.49	
		\$50,000-\$74,999	-1.000*	.079	.000	-1.22	-.78	
		\$75,000-\$99,999	-1.000*	.165	.000	-1.47	-.53	
		\$100,000 and over	-1.000*	.165	.000	-1.47	-.53	
		\$25,000-\$49,999	\$0-\$24,999	.727*	.083	.000	.49	.96
			\$50,000-\$74,999	-.273*	.091	.035	-.53	-.01
			\$75,000-\$99,999	-.273	.171	.510	-.76	.21
			\$100,000 and over	-.273	.171	.510	-.76	.21
		\$50,000-\$74,999	\$0-\$24,999	1.000*	.079	.000	.78	1.22
			\$25,000-\$49,999	.273*	.091	.035	.01	.53
			\$75,000-\$99,999	.000	.169	1.000	-.48	.48
			\$100,000 and over	.000	.169	1.000	-.48	.48
		\$75,000-\$99,999	\$0-\$24,999	1.000*	.165	.000	.53	1.47
			\$25,000-\$49,999	.273	.171	.000	-.21	1.47
			\$50,000-\$74,999	.000	.169	.510	-.48	.76
			\$100,000 and over	.000	.223	1.000	-.63	.63

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
\$100,000 and over	\$0-\$24,999	\$25,000-\$49,999	1.000*	.165	.000	.53	1.47
		\$50,000-\$74,999	.273	.171	.510	-.21	.76
		\$75,000-\$99,999	.000	.169	1.000	-.48	.48
		\$100,000 and over	.000	.223	1.000	-.63	.63

Discouragement by parent(s) was a barrier to my enrollment.	\$0-\$24,999	\$25,000-\$49,999	- .182	.119	.549	-.52	.15
		\$50,000-\$74,999	-.692*	.113	.000	-1.01	-.37
		\$75,000-\$99,999	-1.100*	.123	.000	-1.45	-.75
		\$100,000 and over	-1.000*	.236	.001	-1.67	-.33
	\$25,000-\$49,999	\$0-\$24,999	.182	.119	.549	-.15	.52
		\$50,000-\$74,999	-.510*	.131	.002	-.88	-.14
		\$75,000-\$99,999	-.918*	.140	.000	-1.31	-.52
		\$100,000 and over	-.818*	.246	.013	-1.51	-.12
	\$50,000-\$74,999	\$0-\$24,999	.692*	.113	.000	.37	1.01
		\$25,000-\$49,999	.510*	.131	.002	.14	.88
		\$75,000-\$99,999	-.408*	.134	.030	-.79	-.03
		\$100,000 and over	-.308	.243	.712	-.99	.38
	\$75,000-\$99,999	\$0-\$24,999	1.100*	.123	.000	.75	1.45
		\$25,000-\$49,999	.918*	.140	.000	.52	1.31
		\$50,000-\$74,999	.408*	.134	.030	.03	.79
		\$100,000 and over	.100	.247	.994	-.60	.80
\$100,000 and over	\$0-\$24,999	1.000*	.236	.001	.33	1.67	
	\$25,000-\$49,999	.818*	.246	.013	.12	1.51	
	\$50,000-\$74,999	.308	.243	.712	-.38	.99	
	\$75,000-\$99,999	-.100	.247	.994	-.80	.60	
Discouragement by my employer was a barrier to my enrollment.	\$0-\$24,999	\$25,000-\$49,999	-.455*	.091	.000	-.71	-.20
		\$50,000-\$74,999	-1.000*	.086	.000	-1.24	-.76
		\$75,000-\$99,999	-1.000*	.133	.000	-1.38	-.62
		\$100,000 and over	-1.000*	.180	.000	-1.51	-.49
	\$25,000-\$49,999	\$0-\$24,999	.455*	.091	.000	.20	.71
		\$50,000-\$74,999	-.545*	.100	.000	-.83	-.26
		\$75,000-\$99,999	-.545*	.142	.003	-.95	-.14
		\$100,000 and over	-.545*	.187	.042	-1.08	-.01
	\$50,000-\$74,999	\$0-\$24,999	1.000*	.086	.000	.76	1.24
		\$25,000-\$49,999	.545*	.100	.000	.26	.83
		\$75,000-\$99,999	.000	.139	1.000	-.40	.40
		\$100,000 and over	.000	.185	1.000	-.53	.53

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound

	\$75,000-\$99,999								
		\$0-\$24,999	1.000*	.133	.000	.62	1.38		
		\$25,000-\$49,999	.545*	.142	.003	.14	.95		
		\$50,000-\$74,999	.000	.139	1.000	-.40	.40		
		\$100,000 and over	.000	.211	1.000	-.60	.60		
	\$100,000 and over								
		\$0-\$24,999	1.000*	.180	.000	.49	1.51		
		\$25,000-\$49,999	.545*	.187	.042	.01	1.08		
		\$50,000-\$74,999	.000	.185	1.000	-.53	.53		
		\$75,000-\$99,999	.000	.211	1.000	-.60	.60		
Time away from my job was a barrier to my enrollment.	\$0-\$24,999								
		\$25,000-\$49,999	-.909*	.141	.000	-1.31	-.51		
		\$50,000-\$74,999	-1.385*	.134	.000	-1.76	-1.00		
		\$75,000-\$99,999	-1.800*	.189	.000	-2.34	-1.26		
		\$100,000 and over	-2.000*	.281	.000	-2.80	-1.20		
	\$25,000-\$49,999								
		\$0-\$24,999	.909*	.141	.000	.51	1.31		
		\$50,000-\$74,999	-.476*	.156	.029	-.92	-.03		
		\$75,000-\$99,999	-.891*	.205	.001	-1.47	-.31		
		\$100,000 and over	-1.091*	.292	.004	-1.92	-.26		
	\$50,000-\$74,999								
		\$0-\$24,999	1.385*	.134	.000	1.00	1.76		
		\$25,000-\$49,999	.476*	.156	.029	.03	.92		
		\$75,000-\$99,999	-.415	.200	.247	-.98	.15		
		\$100,000 and over	-.615	.289	.224	-1.43	.20		
	\$75,000-\$99,999								
		\$0-\$24,999	1.800*	.189	.000	1.26	2.34		
		\$25,000-\$49,999	.891*	.205	.001	.31	1.47		
		\$50,000-\$74,999	.415	.200	.247	-.15	.98		
		\$100,000 and over	-.200	.318	.970	-1.10	.70		
	\$100,000 and over								
		\$0-\$24,999	2.000*	.281	.000	1.20	2.80		
		\$25,000-\$49,999	1.091*	.292	.004	.26	1.92		
		\$50,000-\$74,999	.615	.289	.224	-.20	1.43		
		\$75,000-\$99,999	.200	.318	.970	-.70	1.10		
Time away from my family was a barrier to my enrollment.	\$0-\$24,999								
		\$25,000-\$49,999	-.727*	.170	.001	-1.21	-.24		
		\$50,000-\$74,999	-1.462*	.162	.000	-1.92	-1.00		
		\$75,000-\$99,999	-2.143*	.200	.000	-2.71	-1.58		
		\$100,000 and over	-1.000*	.339	.037	-1.96	-.04		
	\$25,000-\$49,999								
		\$0-\$24,999	.727*	.170	.001	.24	1.21		
		\$50,000-\$74,999	-.734*	.188	.002	-1.27	-.20		
		\$75,000-\$99,999	-1.416*	.221	.000	-2.04	-.79		
		\$100,000 and over	-.273	.352	.937	-1.27	.72		

Dependent Variable	(I) How would you describe your total annual household income?	(J) How would you describe your total annual household income?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
								Interval
\$50,000-\$74,999	\$0-\$24,999	\$25,000-\$49,999	1.462*	.162	.000	1.00	1.92	
		\$75,000-\$99,999	.734*	.188	.002	.20	1.27	
		\$100,000 and over	-.681*	.215	.021	-1.29	-.07	
			.462	.348	.676	-.52	1.45	
	\$75,000-\$99,999	\$0-\$24,999		2.143*	.200	.000	1.58	2.71
		\$25,000-\$49,999		1.416*	.221	.000	.79	2.04
		\$50,000-\$74,999		.681*	.215	.021	.07	1.29
		\$100,000 and over		1.143*	.367	.025	.10	2.18
	\$100,000 and over	\$0-\$24,999		1.000*	.339		.04	
		\$25,000-\$49,999		.273	.352		-.72	
		\$50,000-\$74,999		-.462	.348	.037	-1.45	1.96
		\$75,000-\$99,999		-1.143*	.367	.025	-2.18	-.10
Lack of classes at a convenient time \$0-\$24,999 was a barrier to my enrollment.	\$25,000-\$49,999	\$50,000-\$74,999	-.636*	.175	.006	-1.13	-.14	
		\$75,000-\$99,999	-1.231*	.166	.000	-1.70	-.76	
		\$100,000 and over	-2.286*	.205	.000	-2.87	-1.71	
			-2.500*	.347	.000	-3.48	-1.52	
	\$50,000-\$74,999	\$0-\$24,999		.636*	.175	.006	.14	1.13
		\$50,000-\$74,999		-.594*	.192	.026	-1.14	-.05
		\$75,000-\$99,999		-1.649*	.227	.000	-2.29	-1.01
		\$100,000 and over		-1.864*	.361	.000	-2.88	-.84
	\$75,000-\$99,999	\$0-\$24,999		1.231*	.166	.000	.76	1.70
		\$25,000-\$49,999		.594*	.192	.026	.05	1.14
		\$75,000-\$99,999		-1.055*	.220	.000	-1.68	-.43
		\$100,000 and over		-1.269*	.356	.007	-2.28	-.26
\$100,000 and over	\$0-\$24,999		2.286*	.205	.000	1.71	2.87	
	\$25,000-\$49,999		1.649*	.227	.000	1.01	2.29	
	\$50,000-\$74,999		1.055*	.220	.000	.43	1.68	
	\$100,000 and over		-.214	.376	.979	-1.28	.85	
\$50,000-\$74,999	\$0-\$24,999		2.500*	.347	.000	1.52	3.48	
	\$25,000-\$49,999		1.864*	.361	.000	.84	2.88	
	\$50,000-\$74,999		1.269*	.356	.007	.26	2.28	

*. The mean difference is significant at the 0.05 level.

Campus Involvement

In a study by Astin (2003), in an effort to determine what made colleges and universities excellent, versus average or below average, in the opinions of attending students, found that resources that encouraged and facilitated student campus involvement resulted in more student participation in campus activities, as well as, higher student recognition that their college was excellent. According to Astin, more students were highly involved in campus life activities when these activities were made available. Interestingly, Astin expands his definition of student involvement. According to Astin, a student who devotes considerable time to study, is classified as a highly involved student. He further notes that generally students that devote more time to study are generally more involved in other campus life activities which would categorize them as highly involved. Astin found that these devoted students additionally spent more time on campus, actively participated in student organizations, and interacted more frequently with faculty.

When evaluating Alabama community college attendees, survey evidence seems to suggest that although there are most often less available on-campus organizations and activities than at large colleges and universities, and that these functions and organizations are generally much smaller in scale to their university counterparts, community college students who participate in these on-campus activities are generally more successful and view their community college experience more positively. The absence of Greek Life organizations at the community college level and the effect on community college students is not addressed here, but is a recommendation for further study. Astin also points out the value of student involvement in rating the success of a college or university. The element of campus life involvement is not

unilateral. Astin points out that student time and energy are essential elements in insuring institution success. It may appear to some that studying the effectiveness of campus life is less significant than other factors. In this study, the success or failure of campus life was examined. Astin suggests that money and resources devoted to campus life are well spent. Additionally, a student's success in completing college is statistically linked to their involvement in campus life. College or university ties must strive to direct its programs and institutions toward student involvement in order to foster and maintain an environment in which students enjoy their experience. This seems to lead to higher performance, greater prestige, and higher completion rates. Astin's research is validated by further studies by John Gardner, who indicates that measures taken to increase the amount of time that new college students spend on campus—whether it be in small study groups, library time, co-student's probability for success (Gardner, 1996).

The survey instrument used in this study did examine campus life involvement in Alabama community colleges. These questions were:

Figure 2. Where did you live while enrolled?

Figure 3. Did you participate in community service events while enrolled?

Figure 4. While in college, how often did you vote in student elections?

Figure 5. Did you attend the new student orientation program when you first enrolled?

Figure 6. While in college, how often did you participate in intramural sports?

Figure 7. Did you consider yourself socially engage in the life of the college (i.e. were you active in campus activities, social programming, etc.)?

Responses to each question is outlined in the figures below. For the purposes of factor analysis and correlation, the results from these questions on campus involvement were combined to give a composite score for this variable.

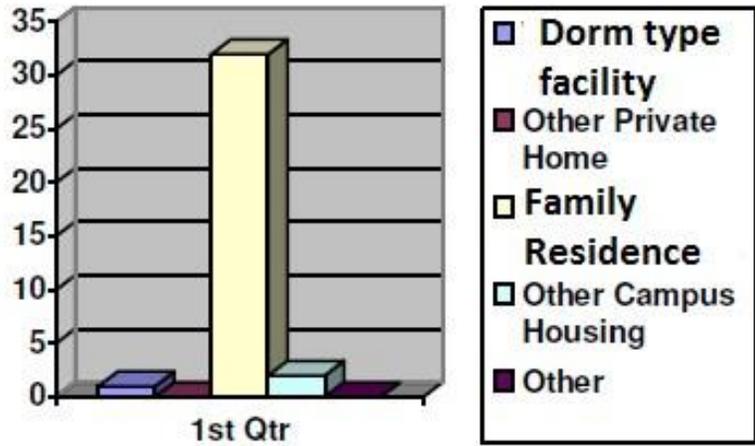


Figure 2. Residency Data

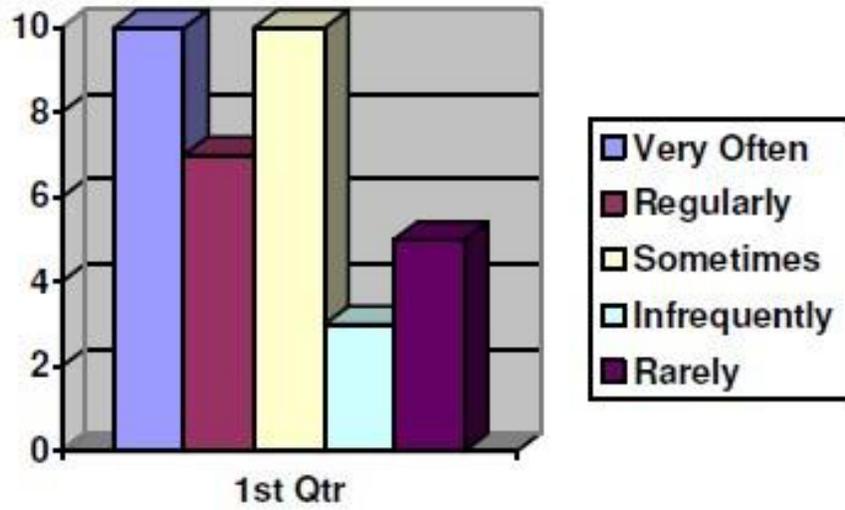


Figure 3. Community Service Data

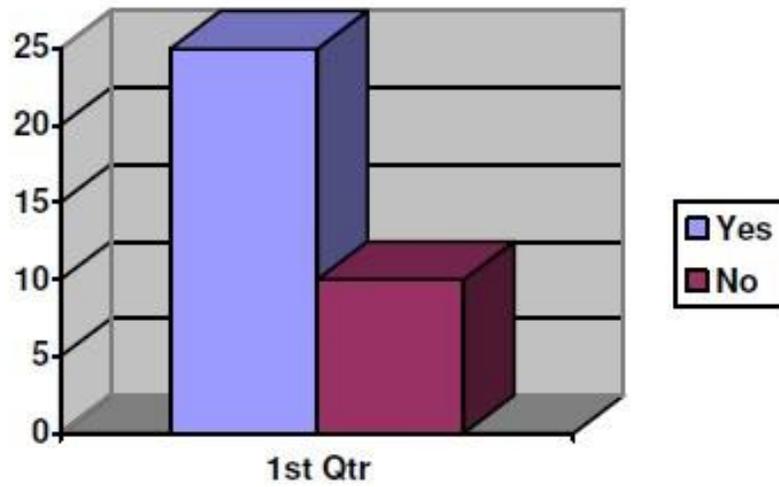


Figure 4. Student Organization Involvement Data

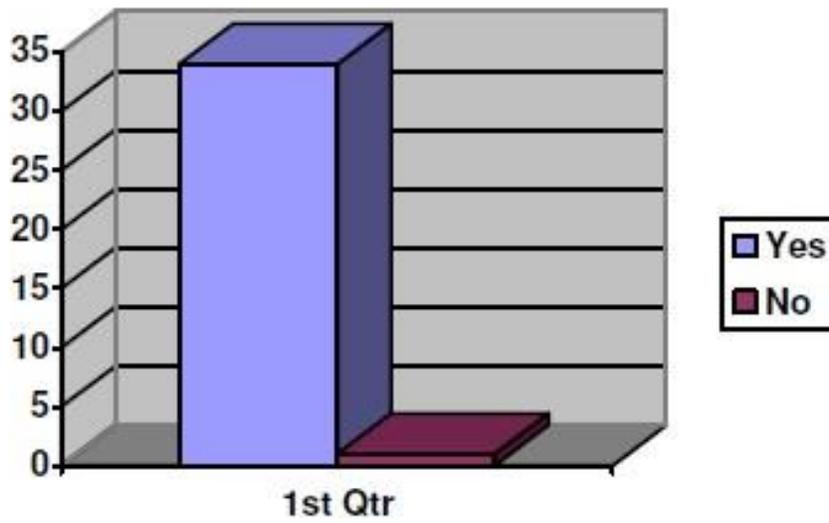


Figure 5. Student Orientation

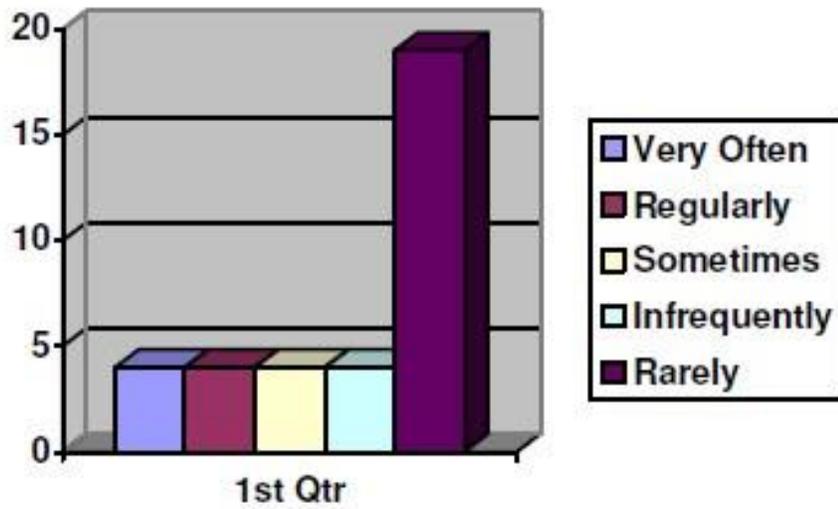


Figure 6. Intramural Sports

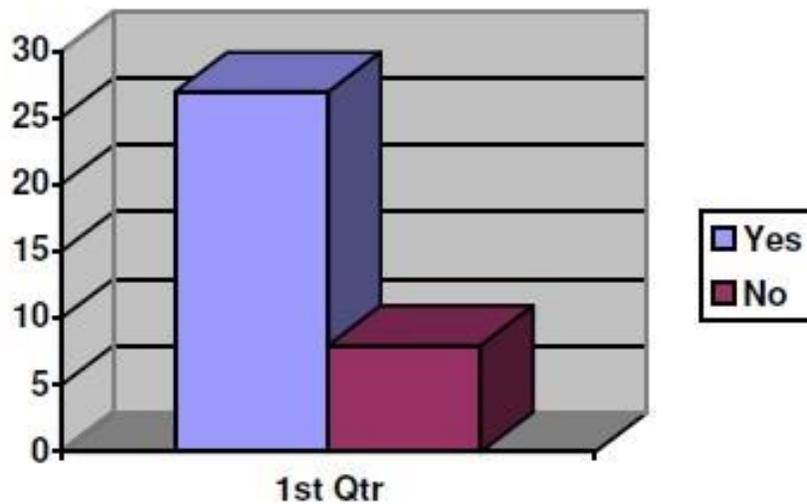


Figure 7. Social Engagement **Faculty Mentoring Relationships**

Astin (1977), reported that students who interact more frequently with faculty reported significantly greater overall satisfaction with their college experience. Most studies within the academe focus on larger colleges and universities when examining faculty/student involvement; however, in this localized study, it was determined that faculty mentoring relationships were

more pronounced on the community college level. This may be due to smaller student/teacher ratios found at community colleges, and the more personal nature of study afforded smaller institutions. Pascarella, Terenzini, and Wolfe (1986) emphasized the influence of faculty involvement on meaningful student retention and satisfaction with their education. Kramer and Spencer (1989) stated: "Overall, faculty-student contact is an important factor in student achievement, persistence, academic-skill development, personal development, and general satisfaction with the college experience."(p.105) The survey for this study also examined faculty mentoring relationships. For the purposes of factor analysis and correlation, the results from the individual questions on faculty mentoring relationships were combined to give a composite score for this variable.

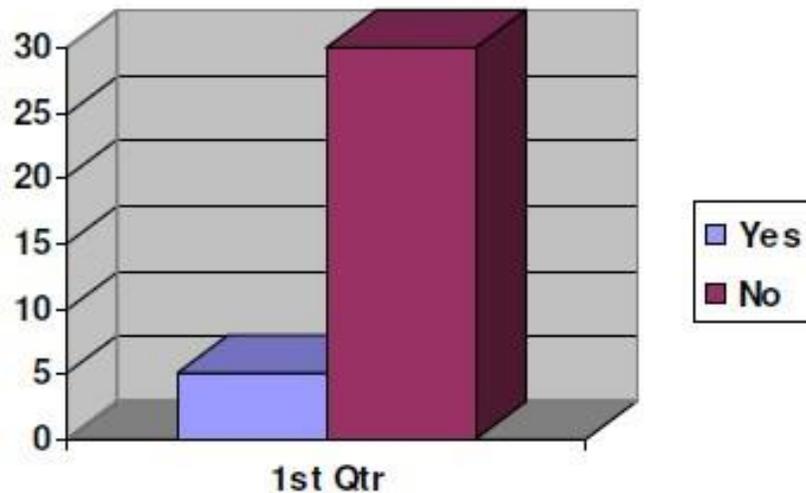


Figure 8. A desire for more respect from my peers motivated me to enroll.

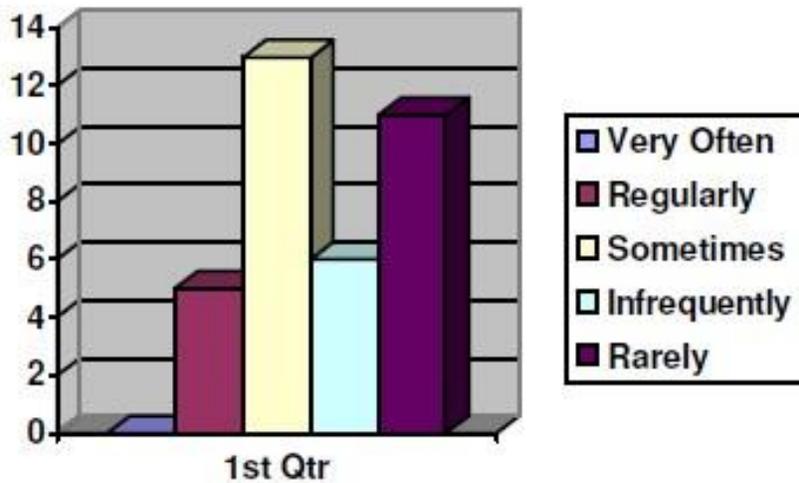


Figure 9. A desire to be a role model for my children motivated me to enroll.

Tutoring and Academic Success Programs

As noted earlier, Richardson and Skinner (1992) interviewed successful community college students and determined that they believed they would have never completed their prescribed courses of study, and maintained the higher level of reward and satisfaction for the overall academic experience, had it not been for higher levels of academic support afforded by their institution. In Alabama community colleges there is a larger number of older students, students in need of remediation, and students redirecting their lives to education, when compared to larger colleges and universities. Personalized academic support programs and tutorial programs are paramount in Alabama community colleges. Students who are integrated socially and academically while attending community college often profess higher levels of happiness

and satisfaction while evaluating their college experiences, tend to more often move to higher levels of learning by continuing work at university, seek and obtain higher degrees, and exhibit more significant learning outcomes (Astin, 1993; Tinto, 1987).

The survey used for this study examined tutoring and academic support services. For the purposes of factor analysis and correlation, the results from these questions were combined to give a composite score for variable.

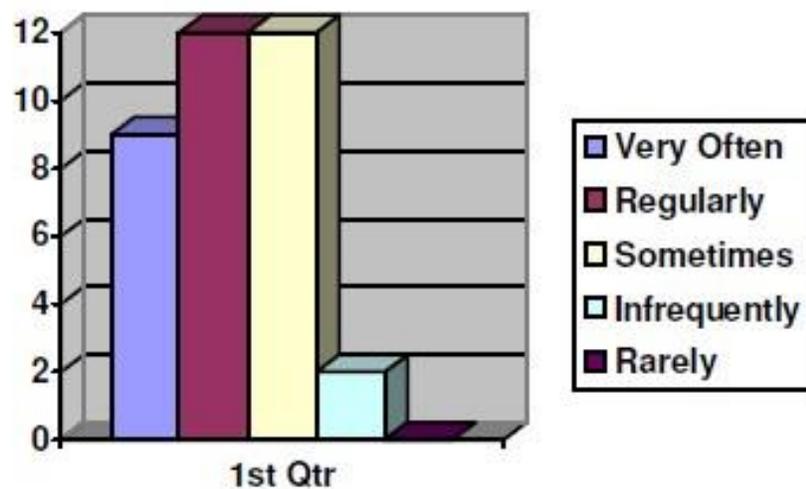


Figure 10. While in college, how often did you discuss course concepts with students outside of the classroom?

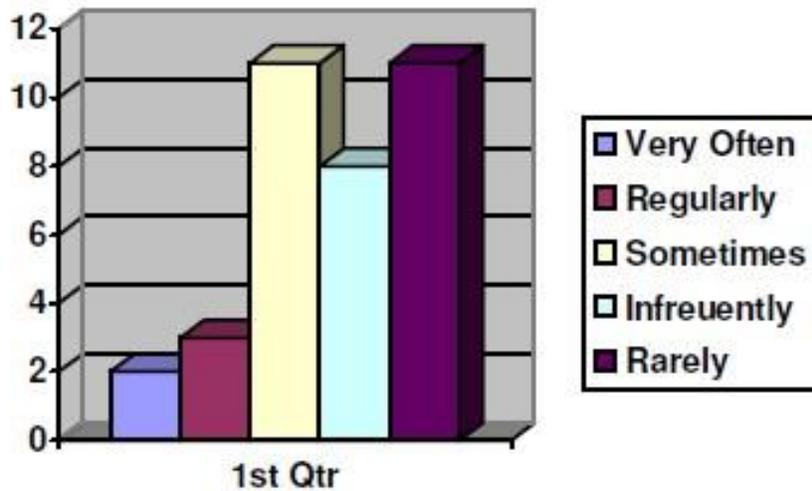


Figure 11. While in college, how often did you tutor another college student?

Personal Resilience

Kline (2000) identified the elements of personal resilience in her research focusing on student success. Her findings found that the desire to succeed was the most important factor in student motivation. Her research seems to support the desire to succeed was prevalent in all elements of the college experience, not just the academic arena (Kline, 2000). Community college students seem as equally driven to succeed in the everyday events of college life, not just tests.

The survey used for this study had six questions which related to personal resilience. For the purposes of factor analysis and correlation, the results from these questions relating to personal resilience were combined to give a composite score for this variable.

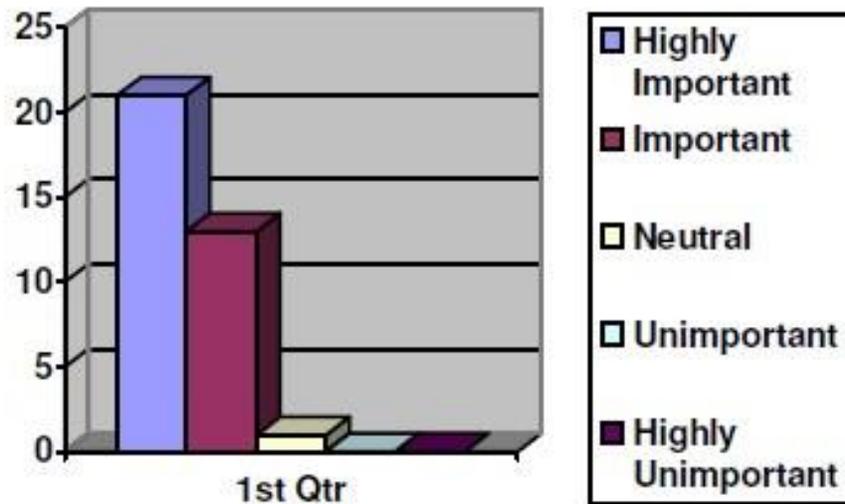


Figure 12. In deciding to go to college, how important was it to gain a general education?

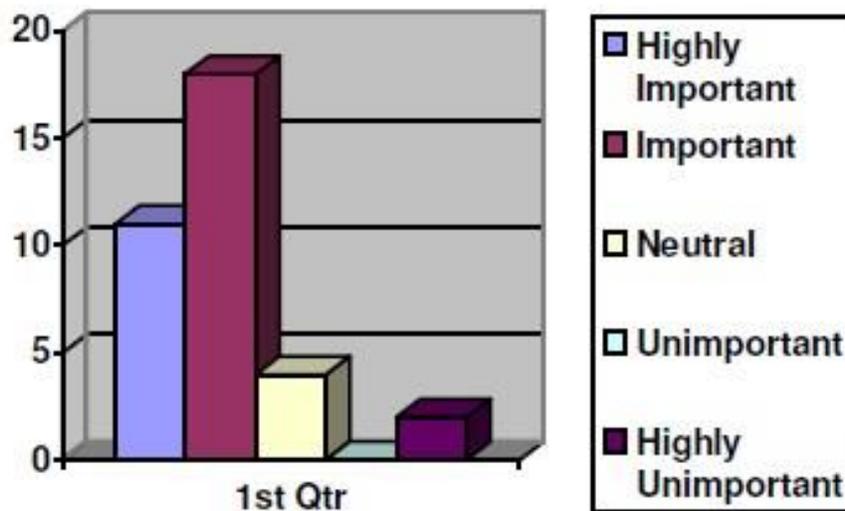


Figure 13. In deciding to go to college, how important was it to make more money?

Financial Support

Financial issues, by far, continued to be a significant factor as it pertains to student persistence and program completion on the college level. Saint John, Cabrera, Nora and Asker

(2000) noted that national studies show finance-related factors (student aid, tuition, and other costs, including costs of living) explains about half the total variance in the student persistence process. According to Merriam and Caffarella (1999), lack of money was one of the two most cited reasons for adult nonparticipation in adult education, including higher education. Tinto (1993) cited the effect of finances upon student attrition can be indirect and long-term as well as short-term economic circumstances. In other words, students fear the burden of student debt. They opt to continue in less-than-desirable life situations rather than attend college due to financial concerns. Many Alabama community colleges provide programs to relieve some financial concerns. For example, Enterprise-Ozark Community College, a two year institution, offers free tuition to students over the age of 60 (some restrictions apply). There also seems to be a number of small financial scholarships available, usually less than 1,000.00 dollars which are provided locally to assist students. Of the thirty-four locally funded cash scholarships, only one was over \$1K in value. However, these scholarships usually have minimal qualifications (usually minimal GPA requirements) in order to obtain.

Another advantage to community college, is significantly lower tuition rates when compared to four-year institutions. Family finances also affect persistence through their influence of educational goals. Finances also affect decisions on whether to attend college in the first, how much education to seek, and where one chooses to attend college. Financial considerations were the main concern in deciding to attend a community college over a larger four-year institution.

The survey used for this study has questions related to financial support. Each question is outlined below. For the purpose of factor analysis and correlation, the results from these questions are compared to give a composite score for this variable.

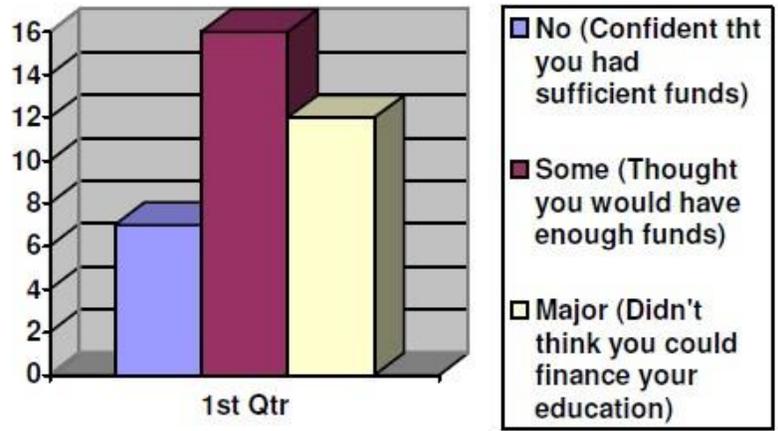


Figure 14. Were you concerned about your ability to finance your college education?

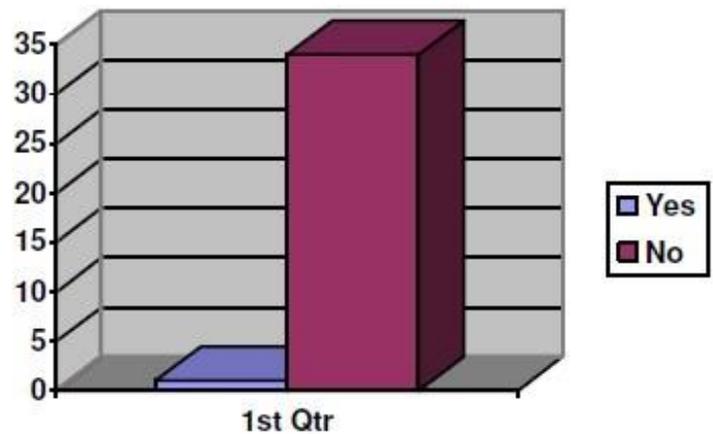


Figure 15. Do you feel your financial situation limited your ability to succeed in college?

Family Support

Many community college students in Alabama seem to demonstrate an awkward family dynamic when compared to four-year institutions. Many four-year institutions are predominately comprised of younger adult students, usually single, usually from middle and upper socioeconomic family backgrounds, and often statistically predominantly white. Attendees at Alabama community colleges tend to statistically have a wider array of age groups, are more

likely to facilitate lower socio-economic groupings, and more likely to accommodate African American and Latino student populations. There is a higher proportion of married students and interestingly, divorced students. There is a larger proportion of students with children, single parent households, and those working full-time. Many of these students are first-generation students and do not have the luxury of having a parent who attended college and who can therefore provide valuable information about the college experience. (Terenzini, 2006)

Terenzini (2006) advocates what he classifies as bridge programs that smooth the transition to college and provide sustained support through the first two years of college, as well as enhanced advising and academic support services. Although these programs are available to four-year institution students, their value is found paramount to the community college student. It also seems essential and wholesome that community colleges provide extensive comprehensive orientation programs. It also seems important that family members, regardless of family dynamic, participate, along with their student, in these orientation programs. In the case of first-generation students, these orientation programs may be the foundation of understanding regarding their family members' expected experiences and projected outcomes. As noted earlier, this is essential for parents who cannot provide direct experiential advice to their family member. The survey used for this study had three questions relating to family support. Two questions are outlined below. For the purposes of factor analysis and correlation, the results from these questions on family support were combined to give a composite score for this variable.

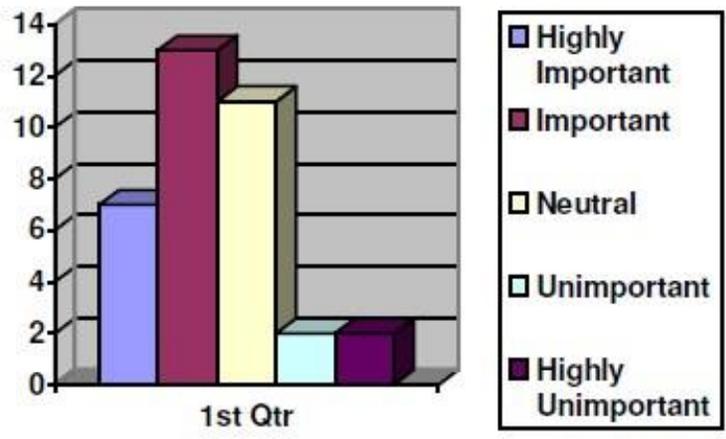


Figure 16. In deciding to go to college, how important was the following reason: parents wanted me to go?

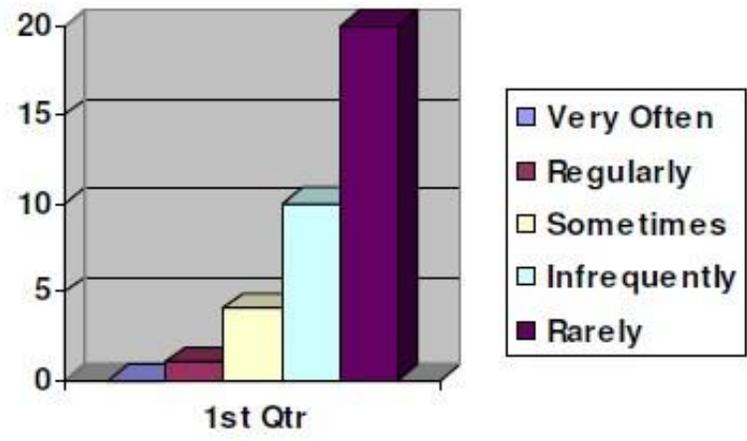


Figure 17. While in college, how often did you feel you didn't have time to study due to family responsibilities?

Academic Preparedness

Billson and Terry (1982) conducted studies on community college and freshmen students, with an emphasis on first-generation students. Their research compared freshmen and sophomores, community college and small specialized colleges like make-up and hairstyling

institute students to students attending larger, fully accredited institutions, and students with at least one year experience in these larger schools. Community college students, when compared to four-year institution students, had lower pre-college critical thinking abilities, and were more likely to come from lower socio-economic income families, were more likely to have been influenced by a teacher or other non-family member rather than a parent or sibling to attend college, and more likely to be from a minority population (Terenzini, Springer, Pascarella, & Nora, 1996). Several of the barriers (critical thinking skills, personal commitment, and level of family support) have been researched, indicating that community college students are at a disadvantage in most cases (York-Anderson & Bowman, 1992).

The survey used for this study had fourteen questions related to academic preparedness. Each question is outlined in the figures below. For the purposes of factor analysis and correlation, the results from the fourteen individual questions on academic preparation were combined to give a composite score for the variable.

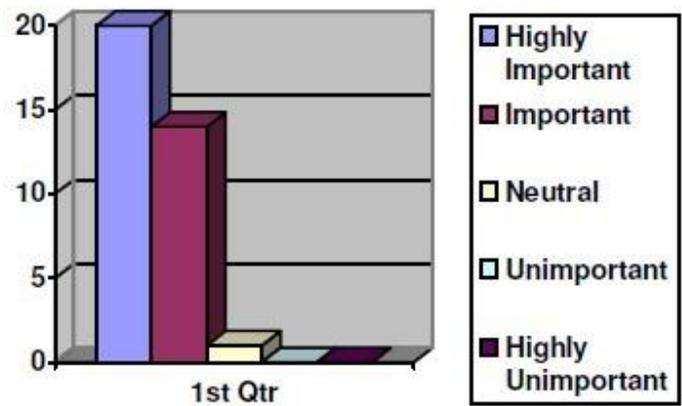


Figure 18. In deciding to go to college, how important was the following: to learn about things that interest me?

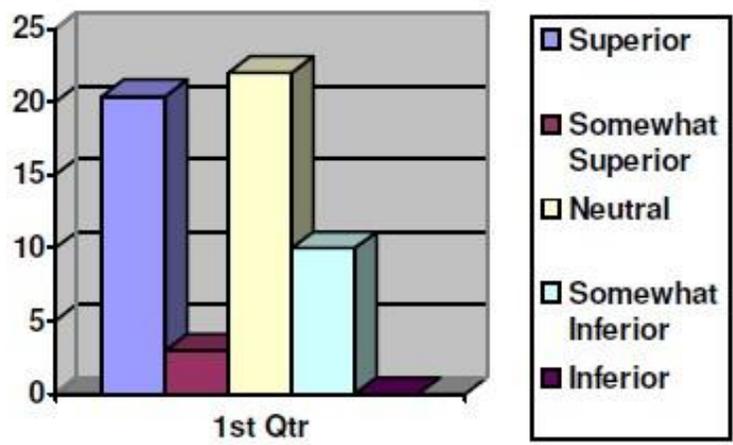


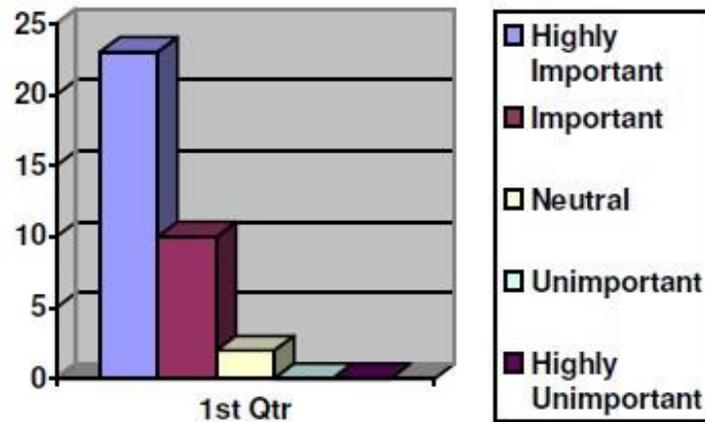
Figure 19. Rate yourself on the following traits in comparison with the average person in college: academic ability

Personal Commitment

Many community college students today have prior full-time work experience upon entering college when compared to their often younger four-year college counterparts, who often go directly from high school to college. This work experience seems to influence the community college students desire to enroll in community college. This is often due to the realization that life in the work force can be tough and chances for upward mobility can be stifled without a college degree. Therefore, community college students often exhibit a high level of personal commitment to completing their prescribed course of study. These students see the urgency and relevance to these programs. These students often exhibit a higher level of self-motivation and self-determination.

The survey used for this study had six questions related to personal commitment. Two questions are outlined in the figures below. For the purpose of factor analysis and correlation, the results from these questions on personal commitment were combined to give a composite score for this variable.

Figure 20. In deciding to go to college, how important was it to be able to get a better job upon



graduation?

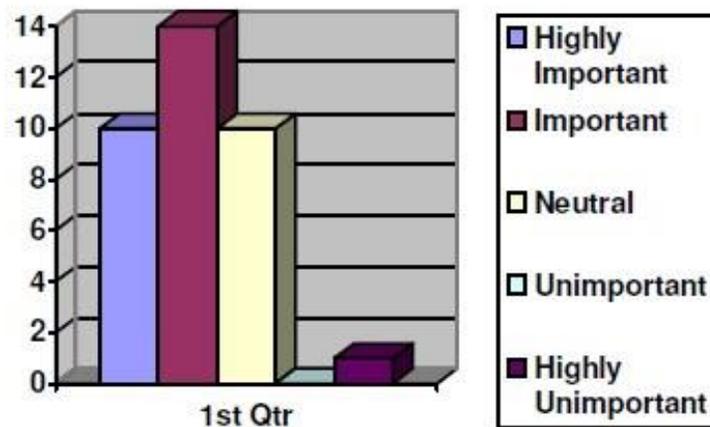


Figure 21. In deciding to go to college, how important was it to get training for a specialized career?

Social Support

The barrier identified as social support relates to the community college students ability to form relationships with peers in order to develop a system of support while attending community college. Whether deemed a barrier or merit, most Alabama community college students surveyed in this study worked either full or part-time jobs while attending college. This

combination of study and employment leaves little time for the development of strong social systems. Social support systems seems to serve as a motivating catalyst for academic success. These relationships offer validation and motivation.

The survey used for this study had two questions related to social support. Each question is outlined in the figures below. For the purposes of factor analysis and correlation, the results from the two individual questions on personal commitment were combined to give a composite score for this variable.

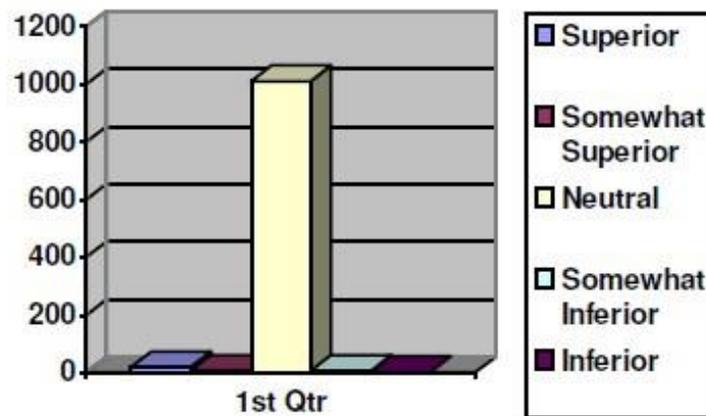
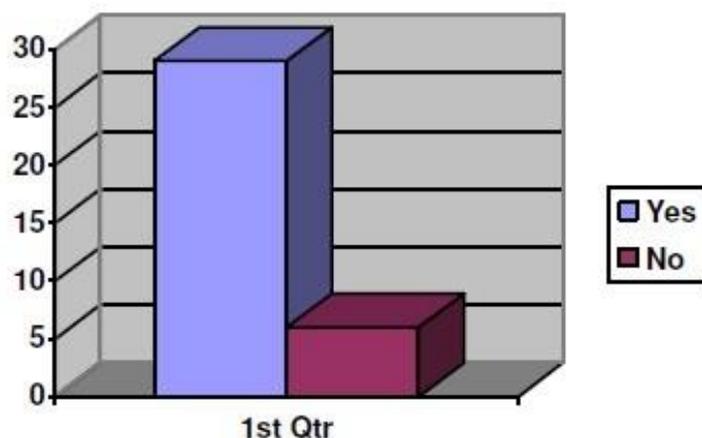


Figure 22. Rate yourself on the following train in comparison to the average person in college:
self-confidence (social).

Figure 23. Did you establish a social support system in college?



Item Calculation for Open-Ended Question

All comments provided by respondents on the survey instruments **were** relayed in the research. This researcher provided all comments in order to deter subjectivity in selection and use of only some comments. The comments were sorted by area of concern, with more general comments relayed in the other category. All comments were copied verbatim into a word processor and then all references to individuals, specific personal experiences or details, proper names, or any other personal identifiers were removed for confidentiality. In addition, spelling was corrected, but no changes were made to grammar or composition. No information was added or deleted to any response. The text was coded and analyzed using *TextSmart* for establishing categories. *TextSmart* is an inductive content analysis software program that processes text through a series of three algorithms. *TextSmart* evaluated the text and established five categories specific to the research in this study. Four of the categories had already been established by the researcher; however, *TextSmart* additionally established religion/spirituality as an additional category for comment exhibition. Each category was given a label, which selected those comments determined to be in that category. Any comment that stood alone in a category was grouped into a category of other for clarity. The categories included personal resilience,

family support, social support, faculty support, religion/spirituality, and other. Ninety-one percent of survey respondents provided comments on the survey. The number and length of the comments illustrates the depth of involvement in the survey topic on the part of participants. The categorization of written responses resulted in more than 99% of all comments being categorized. This is a high percentage of categorization and shows a consistency in topics of the respondents.

Content Analysis of Survey Comments

There were 75 survey respondents. Fifty-three are female and 22 are male. Section 4 of the survey instrument asked "are there additional motivations you had or barriers that you faced (or currently face) in your decision to enroll in college for the degree you currently seek? If so, please tell us in the space provided." The responses were as follows:

Personal Resilience

"Money and job security"

"The biggest motivator for me to attend a community college was being able to save money by getting scholarships and the prospect of smaller classes where maintaining good grades would be more manageable."

"Because I'm white, I have a harder time in college. Just because I'm white, I can't get a good chance at scholarships like non-white people do."

"I'm a retired military member, who has no excuse not attend college. Post 9-11 GI Bill pays for all of my classes and text books. However, I did work for 8 years before starting classes. The main reason was paying for my day-to-day living expenses."

"Seeing my parents struggle on occasion encourages me to strive to do better for myself"

“Funds were the initial reason why I had not enrolled. After I got married and had children, childcare became an obstacle. Once I received the federal grant, I was able to enroll. I took some classes in person at night, worked during the day. Because I hardly saw my children, I decided to enroll in online classes. Being military was also a huge hurdle in being able to finish my degree. Luckily, my community college offered many classes online. I still do not have my AA. I am one class short at this time of receiving it.

We are being ordered to a new post. I sent my credits to UNCP (University of North Carolina @ Pembroke), where many of my credits were not accepted.”

“I enrolled @ ESJC because I was able to work 3 part time jobs & maintain an athletic scholarship. My school & books were paid for, so I earned 2 years (89 quarter credits) in one year to save money and pay for my college.”

“The high costs of tuition is always a barrier. The potential rewards (increased knowledge, job opportunities, income) are always motivators.”

“None”

“I did not experience barriers of any sort upon enrolling in community college/Jr. College. I qualified for a full scholarship, and books were covered as well. I worked part-time and made money to spend on my personal needs, while my parents paid for medical, housing, and vehicle expenses.”

“I only took one class at a Jr. college — Math. It was easier there than at University of AL, where I am getting ready to go to school. I took this one class this one summer.”

“To be the first person from my school system to obtain this degree would also motivate me to develop a proposal to show the need for more technology positions to be created.”

“n/a”

“Barriers: finances, paperwork, logistics/driving”

“While attending ESCC, it helps that I can work on campus with a work-study program and am eligible for a Pell grant. They (guidance office) were also helpful in informing students about scholarships to help with tuition.”

“The only barriers were time and money. While I am seeking this degree I have two daughters in college, so that has been challenging. We pay a lot of tuition monthly. My motivation for getting this degree, honestly could not be any stronger. This degree represents a major life change for me. I am extremely passionate about developing a new career as a high school math teacher. I love everything about this profession and love being immersed in an in-depth study of math and the field of education. I have appreciated all aspects of this journey including my courses at the community college level. However, I would like to see more grants/scholarships available to returning adult students.”

“A drive to succeed and do better in life.”

“My own motivation”

“Desire, hard work, and motivation. A strong desire to attend graduate school.”

“Motivation to have a different life for myself.”

“I knew this was something I had to do for myself.”

“Willpower to overcome all odds and trials to succeed in life and in college.”

Family Support

“I didn’t want to fail in my parents eyes.”

“I wanted to make my family proud, and also myself.”

“I had a strong family support system along with a love for Enterprise and the encouragement of many professors.”

“My parent’s encouragement.”

“The motivation was from my family when I was growing-up. There was never the question of, ‘Are you going to college?’ It was always, ‘Where are you going to college?’”

“My husband didn’t like the idea of watching the children while I went to school. My sister helps me out.”

“I think we need a lottery or something. Like Georgia. We need a free education. My family helps all they can, but they are struggling also.”

“Obama is a loser. The government does nothing to help me with school. I and my folks paid it all. Pell grants are a joke—can’t buy one book. Students loans charge interest like credit cards.”

Social Support

“I surrounded myself with a close circle of friends that supported me emotionally through all my trials both personal and school related.”

“Great network of friends, family, professors and coaches.”

“My friends and family encouraged me tremendously.”

“Friends suck! They back stab. Do it your own self.”

Faculty Support

“I successfully completed college because of the faculty at ESCC.”

“The excellence of my instructors”

“The teachers who listened and encouraged me to follow my dreams despite my circumstances.”

Religion/Spirituality

“God’s grace”

“Recognition that I was blessed to get a chance to be educated”

“My spirituality helped me succeed”

“God”

“My church family”

Correlation

After categorizing the data for each of the variables, a univariate procedure was used to determine if the data was normally distributed. Initial review of the univariate information indicated that the data for some of the variables was not normally distributed. When working with the data that is not normally distributed, a Spearman Correlation Procedure is recommended. In order to complete these procedures, SAS software was used. SAS software assesses the data set for each factor. According to Hatcher (p.152), “The Spearman correlation is less useful than a Pearson correlation when both variables are truly normal, but it is more useful

than a Pearson correlation when one or both of the variables are non-normal.” Table 3 provides an overview of the Spearman correlation matrix that compares the motivating factors (tutoring/academic support, faculty mentoring relationships, campus involvement, and personal resilience) with the barriers (financial support, family support, academic preparation, personal commitment and social support).

Table 3

Spearman Correlation Matrix for Motivating Factors and Barriers

	TUT	FAC	CAM	RES
FIN	0.72059	0.70987	0.74098	0.74039
	0.00025	<0.0001	<0.0001	<0.0001
	35	35	35	35
FAM	0.70435	0.74335	0.74535	0.73847
	<0.0001	<0.0001	<0.0001	<0.0001
	35	35	35	35
ACA	0.74029	0.74229	0.73459	0.71029
	<0.0001	<0.0001	<0.0001	<0.0001
	35	35	35	35
COM	0.70199	0.70099	0.70079	0.94435
	<0.0001	<0.0001	<0.0001	<0.0001
	35	35	35	35
SOC	0.73567	0.71567	0.73467	0.72048
	<0.0001	<0.0001	<0.0001	<0.0001
	35	35	35	35

The correlation illustrates the association between the variables. The correlation is located on the top line of each cell. Just below the correlation is the *p-value* associated with the correlation. This is the *p-value* obtained from a test of the null hypothesis that the correlation between the motivating factor and the barrier is zero in the population. Specifically, the *p-value*

gives us the probability that one would obtain a sample correlation this large if the correlation between the motivating factor and the barrier was really zero in the population. For example, the motivating factor of tutoring/academic support (TUT) has a correlation of 0.73567 with the barrier of social support, the corresponding *p-value* is <0.0001. This means that, given the sample size, there is only one chance in 10,000 of obtaining a correlation of 0.73567 or larger if the population correlation was actually zero. Based on the information, one may therefore reject the null hypothesis and tentatively conclude that the motivator tutoring/academic support is related to the barrier of social support within the population.

Threats to Validity

The primary threat to the validity of this study may be from a low response rate. Although the rate is not extremely low, it was lower than expected. The study netted a 25% return rate with 75 surveys completed. Originally, 300 surveys were prepared and distributed. Fink (2003) noted that the response rate is the number of actual responses divided by the number of eligible respondents. He went on to indicate that no single response rate should be considered standard. However, a higher response rate is preferable in order to more accurately make inference about the studied population. Fink further indicates that a “20% response is not uncommon” (p.43). While a response rate as low as 25% is acceptable (Sinicka), a higher response rate might provide a more accurate reflection of the experiences of the community college student in Alabama.

Another threat in validity might be the non-response bias. There was an adequate margin of error and power, and the content analysis supported the original constructs. However, exactly three-fourths of the distributed surveys resulted in no response. Because of the lack of responses from those non-participants, it is not possible to accurately identify barriers and motivating factors that may have impacted their abilities and experiences while in the Alabama community

college system. However, the higher rate of agreement among the responses obtained does result in generalizations in experiences of those participating in the community college experience. Also, the comments provided in the open ended question related to their personal view on why they succeeded in community college or why they were hindered in their endeavors, and does provide additional information supporting these shared themes.

Summary of Findings

Surveys (N=75) were returned by students attending Alabama community colleges. The areas of interest included their experience in tutoring and academic support services, faculty relationships, campus involvement, personal resilience, financial support, family support, academic preparation, personal commitment and social support systems developed while enrolled. Confirmatory factor and regression analyses identified five antecedents (barriers: financial support, family support, academic preparation, personal commitment and social support) significantly ($p < .001$) contribute to the motivating factors of tutoring and academic support services, faculty mentoring relationships, campus involvement, and personal resilience. These factors had alpha reliability scores of .72 to .91. The results seemed to indicate that each of the identified motivating factors had a strong association with the identified barriers.

CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

Summary

This study surveyed Alabama community college students in order to determine what barriers and motivating factors influenced their attendance and successful completion of their community college program. The following questions were developed for this study:

1. What barriers do community college students in Alabama experience?
2. What motivating factors impact the community college student in Alabama?
3. What are the relationships associated with these barriers and interventions (academic programs, tutoring programs, faculty/student relationships, mentoring programs, campus involvement, and personal dedication or resilience) and the barriers experienced by community college students in Alabama (financial concerns, familial support, academic issues, personal commitment, and societal concerns)?
4. In this chapter a summary of the relationships between the identified motivating factors and barriers faced by students attending an Alabama community college. Many of these motivating factors and barriers are experienced by most students in general, however, for the purpose of this study, emphasis is specific to Alabama community college students and more specifically first-generation students. Of the 75 respondents to the survey instrument, 11 responded as first-generation students. Additionally, the foundational concepts from the literature, and the methods used in this research are summarized. This is followed by any major findings and provides conclusions, recommendations for action and for additional research in this area.

This research focused upon examination of motivating factors and barriers specific to the community college student in Alabama, although the motivating factors and barriers may be universal to the student in general, whether in or out of a community college, and may be applicable to students outside of Alabama. Special focus was given to understanding these

components as they pertain to the first-generation student, however, the study was broadened as not to include this sub-grouping exclusively. This research recommends for further study an examination of the role of the motivating factors and barriers as they influence the first-generation student exclusively.

Additionally, although demographic data was collected from survey respondents in regard to age, race, gender, and socio-economic standing, these factors were not isolated in presentation of data. It is recommended that further research be conducted to determine if and how the motivating factors and barriers experienced in general by Alabama community college students affect students in these groups. Specifically, if the motivating factors and barriers identified by the literature for all college students would have a significant impact or relationship to the experiences of community college students. In addition, it was the goal of this study to determine if the graduates of an Alabama community college had experienced the barriers and motivators to their education identified in the literature.

The motivating factors identified in the research included academic support/tutoring programs, faculty mentoring programs, involvement in campus life, and personal resilience. The barriers included the lack of financial support, family support, academic preparedness, personal commitment, and social support. It is important to note that although the factors identified here had to be categorized specifically for the purpose of gleaned accurate statistical data, some of the factors that were identified as motivating factors, may also prove to be a barrier for some students, and vice versa. It was not impossible for a one factor to appear in both categories, depending on the experiences of the individual student. This too would make for interesting further study.

Additionally, there is some supporting literature that specifically focuses on the Alabama community college student. The Alabama Department of Vital Statistics, Alabama Department

of Education, Alabama Department of Economic Development, and the Alabama Department of Revenue offer data which details the college student in Alabama. These factors included financial support for their education, family support, academic preparation, personal commitment to their studies and the development of social support systems.

A total of 300 surveys were made available for distribution; only 75 students responded (25%). The areas of interest included their experience in tutoring/academic support services, faculty relationships, campus involvement, personal resilience, financial support, family support, academic preparation, personal commitment and social support systems developed while enrolled. Confirmatory factor and regression analyses show five antecedents (barriers: financial support, family support, academic preparation, personal commitment and social support) significantly ($p < .001$) contribute to the motivating factors (tutoring/academic support services, faculty mentoring relationships, campus involvement and personal resilience). These factors had alpha reliability scores of .72 to .91. The results seemed to indicate that each of the identified motivating factors had a strong association with the identified barriers.

The data provided evidence of an association between all motivating factors and barriers experienced by Alabama community college students. These findings suggested that the more motivating factors a community college student experience, the more likely he or she will be to overcome the barriers. While there seems to be no specific motivating factor that significantly impacted any specific barrier more than any other, this research does provide evidence that the barriers can be overcome with the assistance of involvement in the motivating factors. All of the motivating factors had significant correlations with the barriers and had strong p-values that suggested an association.

Lastly, the survey comments section directly supported the identified motivating factors. Participants were asked one open-ended question related to why they believe they successfully

completed college. The responses analyzed indicated consistent support for the identified motivators. However, the comments also pointed to an additional motivating factor that was not identified in the literature. Religion and spirituality emerged as a theme in the comment section. An additional suggestion for further study would be determining the impact of ones spirituality/beliefs on the college experience. It would be interesting to research the impact of the spirituality factor outside of this region.

Conclusions

The association between the motivating factors experienced by community college students and the barriers they face is the basis of this study. Although it may appear that many of these factors were common sense, it was the goal of this researcher to see if in fact the elements were of impact and if other not-so-common-sense motivators and barriers existed. By identifying the motivating factors that influence the barriers, colleges and universities can develop targeted programming aimed at assisting community college students to successfully complete college.

As noted in the previous section, after completing the Spearman Correlation Coefficient Procedure, each barrier showed a significant association with each motivating factor. In effect, this illustrates that students who participate in the motivating factors, even when faced with barriers, can successfully complete college. The clear contribution this study provides is the evidence to support community colleges in their efforts to provide quality, ongoing support to their students.

In effect, the results from the Spearman Correlation Coefficient Procedure suggested that the motivating factor of developing faculty mentoring programs and relationships is positively related to the students ability to overcome the barriers of financial support. Also, the results

suggested a similar positive association between each motivating factor and each barrier associated with community college students.

In addition, the study adds to the growing body of literature while helping to fill the gap in the area of application for the motivating factors to a specific population of students: Alabama community college students. As noted in the literature review, the motivating factors were identified as beneficial to the general student population and were successful in helping the general student population complete college. However, the literature failed to provide a direct link between the motivating factors and the barriers faced by Alabama community college students. This study provides that link and provides evidence of the association between each major motivating factor and the identified barriers.

Recommendations

The following recommendations address two areas of importance: (1) strategies for community colleges for serving their students, and (2) directions for future research in determining the association between motivating factors and barriers for community college students.

Strategies

Results of the research suggest an association between the motivating factors and barriers to success in college for Alabama community college students. The following are suggested strategies that colleges and universities may follow in order to assist the freshmen and sophomores, and that community colleges can utilize for their students to succeed at their institutions and ultimately graduate. This research suggests serious implications for developing and promoting the motivating factors outlined in this study.

The nature of education is changing quickly-especially for community college students, which are often older adults. Technological advancements, although positive, have introduced

many new factors which has changed the elements of education. This is likely to change the order of motivators and barriers. For example, many older adults attending community college are greatly intimidated by computer technology. Even younger students who have grown up with technology are often overwhelmed by the ever-increasing frequency of technological change. The instant availability of information via computer has begun to change the dynamic of formal education. It is likely that the traditional notion of the community college experience will drastically change very soon. The days of students meeting in a traditional classroom, with four walls and a professor at the blackboard are quickly giving way to the on-line experience of taking all classes while at home or office. In the last two years, some Alabama colleges have begun to offer degree programs which never require campus attendance. A student can now obtain a degree without ever attending an on-campus lecture. Methods of evaluation are changing. More student self-evaluation is now the norm.

Colleges and universities that are concerned with the retention of students should implement and support tutoring and academic support services. Students who are integrated socially and academically into college are happier with their experiences, tend to develop more, and have more significant learning outcomes (Astin, 1993; Tinto, 1997). Integration means feeling a sense of belonging with others at school, including faculty, students, and staff. Academically, it means that students feel at ease, safe, and secure at their institution and with those which whom they interact. Therefore, they often gain a stronger sense of engagement and affiliation with their institution. This facilitates a wholesome learning environment. Learning environment encompasses the type of material being taught, the instructional approaches and the relationships (impersonal and personal, competitive or supportive, and same or different gender or race) with other people in the learning environment.

It appears from the literature, that there is often a higher number of students attending community colleges that lack mastery in basic reading, writing, and math skills when compared to students accepted at four year colleges and universities. This may be due to the fact community colleges often have lower standards for admission, including lower composite scores on aptitude tests, such as ACT and SAT. The literature also suggests that many community college students scored lower in high school in these prerequisite classes, and therefore need more extensive review and tutoring to gain the skill level necessary to succeed in college. Therefore, community colleges must rely heavily on creating and maintaining refresher courses and academic support services (Culross, 1996). This study found that graduates who participated in tutoring programs and academic support services had a successful experience in college, which ultimately resulted in a higher graduation rate from community college.

Faculty mentoring relationships between students and members of the faculty is related to the successful completion of college for the students. Astin (1977) reported that students who interact more frequently with faculty, reported a significantly higher satisfaction rate with the overall college experience. In recent years, priority for traditional classroom environment methods has waned, especially in community colleges, in lieu of on-line methods. Just a decade ago, many community colleges resisted development of on-line programs. Most community colleges opted for traditional classroom methods, that is, students gathering in a classroom, with an instructor presenting material. Although these tried and true methods do work, their replacement with on-line venues often results in a student completing a class without ever meeting their instructor face to face. This is not necessarily a barrier. Today's student seems to favor these newer technology based learning methods. However, this shift in method has facilitated the need for emphasis on cultivating teacher/student relationships using alternative methods. This may include using SKYPE or other formats whereby students and teachers can

maintain a personal element to education. Years ago, many community colleges resisted on-line courses. They often gave only half-credit when a student took an on-line class. They often offered only elective type courses. For years, the Southern Association of Colleges and Schools refused to accredit fully on-line degrees.

The twenty-first century has brought change. The literature illustrates massive increase in on-line program attendance. Most Alabama community colleges are offering more on-line courses than traditional classroom courses. Therefore, instructors have had to, by necessity, learn to develop alternative methods of fostering student/teacher relationships. SACS has begun to accept and accredit most on-line programs. Today, a student can earn a college degree without ever stepping foot on a campus. However, further study is suggested to evaluate the effect of this new trend on teacher/student interactions. Pascarella, Terenzini, and Wolfe (1986) emphasized the influence of faculty involvement on student retention and satisfaction with education. Kramer and Spencer (1989) stated: "Overall, faculty-student contact is an important factor in student achievement, persistence, academic skill development, personal development, and general satisfaction with the college experience" (p. 105). The results from this study support the idea that these relationships positively impact the student's ability to succeed in college. College and universities should implement faculty mentoring programs on their campuses, integrate faculty into the advising system and encourage faculty to develop relationships with students outside of the classroom environment. Another suggestion for further study might be examination of how instructors meet the challenges of student/teacher relationships and mentoring programs. The literature seems to place the burden of successful interaction on the student. Some teachers, by their nature, prefer to maintain distance and impressionability with their students. Successful mentoring programs must maintain contributions by all parties involved.

Campus involvement has continued to be of paramount importance for students while at community college. In fact, many students opt for community college because these smaller institutions often provide more personalized campus experience opportunities. Astin (1993), in an effort to identify what makes a college or university excellent, noted that student involvement in campus life often leads to student excellence and success. According to Astin, a highly involved student is one who devotes considerable time to his or her studies, spends time on campus, actively participates in student organizations, and interacts frequently with faculty. True involvement, as noted by Astin, requires the investment of the students energy in academic relationships and activities related to the campus and the amount of energy invested will vary greatly depending on the student's interests and goals, as well as the student's other commitments. Research has shown, and the results of this study further suggest, that campus involvement leads to student success,

Certainly at the community college level, those institutions who are working to promote student retention and graduation of their students, strive to develop and support co-curricular programs that address students social needs. Although arguable, it is the purpose of the academe to promote well-roundedness and diversity of thought and idea when cultivating and leading students through the maze of the academic world. A professor that teaches only subject matter, without regard for helping foster a diversified student that appreciates learning and art beyond the confines of the subject they teach, has been remiss in developing a student to the zenith of their potential, thereby harming the gestalt of the academe.

The final motivating factor that was positively correlated to the barriers was personal resilience. Personal resilience is identified as the personal drive and determination of the student to succeed (Kline 2010; Komada, 2002; Mueller, 1997). College and universities may choose to include a review of this trait in the admission process. By determining the student's personal

level of resilience during the admission process, a college can develop a plan of intervention to meet the needs of each particular student. One might argue that it is the duty of the institution to help foster the skills needed to promote resilience. These skills seem to be quite important when molding students for the academe.

Future Research

The survey instrument used in this study provided much additional information not used for this particular research. The data has already been collected and could be analyzed to provide a clearer picture of the experiences shared in common by the college students participating in this study. For example, participants identified their personal emotional health, their creativity, generosity, kindness, leadership ability, and public speaking ability among other items. This data could provide insight into additional characteristics shared by those who have successfully attended community college.

For the purposes of this study, identifying descriptive information was not necessary. However, a future study could examine the responses of the participants based on several demographic fields. For example, further examination of race of the respondents, the distance the college is from their home, and their age at entry into community college, graduation and dropout rates, reasons for failure to complete program to graduation, could all glean useful information. Most institutions maintain demographic data which can be obtained and evaluated for further study.

The willingness of each individual community college to cooperate in research, is in itself, a suggestion for further study. This researcher discovered in the course of this investigation, that there was very little similarity among colleges in how they gather, maintain, evaluate, and disperse information for study. It was found that some institutions maintain no formalized body to oversee research, either within or outside of their institution. In this research,

no two institutions were the same. Some institutions were very interested in learning more about their institution and encouraged research and the researcher. Other institutions provided limited information. Of those schools that maintained any type of IRB, no two IRB codes were the same. Some community colleges maintain no internal method of evaluating proposed research.

Finally, it is recommended that a study of the non-respondents be conducted. Although this would prove to be exceedingly difficult, this might provide insight into characteristics of those who did not respond to this study. Information such as age, race, location and other demographic information. An analysis of this information may provide details about the population within the sample who did not respond.

REFERENCES

- Abrahamowicz, D. (1988). College involvement, perceptions, and satisfaction: A study of membership in student organizations. *Journal of College Student Development*, 29(3), 233–238.
- Allen, I. E., & Seaman, J. (2008). *Staying the course: Online education in the United States*. Report funded by The Sloan Consortium, and Babson Survey Research Group. Retrieved from website: http://sloanconsortium.org/sites/default/files/staying_the_course-2.pdf
- Allen, I. E., & Seaman, J. The Sloan Consortium, Babson Survey Research Group. (2010). *Class differences: Online education in the United States, 2010*. Report funded by The Sloan Consortium and Babson Survey Research Group. Retrieved from website: http://sloanconsortium.org/publications/survey/pdf/class_differences.pdf
- Artino, Jr., A. (2008). Promoting academic motivation and self-regulation: Practical guidelines for online instructors. *Tech Trends*, 52(3), 45–53.
- Astin, A. (1987). *Developmental Theory of Higher Education*.
- Astin, A. W. (1977). *Four critical years: Effects of college on beliefs, attitudes, and knowledge*. San Francisco: Jossey-Bass.
- Astin, A.W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25, 297–308.
- Astin, A. W. (1985). *Achieving educational excellence*. San Francisco: Jossey-Bass.
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey- Bass.

- Astin, A. W., Sax, L. J., & Avalos, J. (1999). The long-term effects of volunteerism during the undergraduate years. *The Review of Higher Education*, 21(2), 187–202.
- Bean, Jonathan, & Metzner, Herold. (1985). Factors associated with the persistence of students receiving learning support in a two-year college.
- Berkner, L., & Chavez, L. (1997). *Access to postsecondary education for the 1992 high school graduates* (NCES 98–105). U.S. Department of Education, NCES. Washington, DC: U.S. Government Printing Office.
- Billson, J. M., & Terry, M. B. (1982). *In search of the silken purse: Factors in attrition among first-generation students*. Rhode Island. (ERIC Document Reproduction Service No. ED 214 431).
- Brawer, F.B. (1996). *Retention–attrition in the nineties*. California. (ERIC Document Reproduction Service No. ED393510)
- Buck, C. B. (1982). *Summer bridge: A residential learning experience for high-risk freshman at the University of California, San Diego*. California. (ERIC Document Reproduction Service No. ED 264 462).
- Bureau of Labor Statistics. (2011). *College enrollment and work activity of 2010 high school graduates*. Retrieved from website: <http://www.bls.gov/news.release/hsgec.nr0.htm> Bureau of Labor Statistics. (2011). *Consumer price index*. Retrieved from website: <http://www.bls.gov>
- Bureau of Labor Statistics. (2011). *Labor force statistics from the current population survey*. Retrieved from website: <http://www.bls.gov/cps>
- Cabrera, A. F., Castaneda, M. B., Nora, A., & Hengstler, D. (1992). The convergence between two theories of college persistence. *Journal of Higher Education*, 63(2), 143–164.

- Choy, S. (2000). Students whose parents did not go to college: Postsecondary access, persistence and attainment. Findings from the condition of education. (NCES- 2000-153).
- Choy, S. P. (2000). *Low-income students: Who they are and how they pay for their education* (NCES 2000-169). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Clark, K. (2010, September 01). Learning the hard way. *U.S. News and World Report*, 147(8), 16–24.
- Cole, M. S., Field, H. S., & Harris, S. G. (2004). Student learning motivation and psychological hardiness: Interactive effects on students' reactions to a management class. *Learning & Education*, 3(1), 64–85.
- Cowan, K. (2009). Learning across distance. *Harvard Education Letter*, 25, 1–4
- Craig, D. H., & Warner, T. R. (1991). Working together: The “forgotten majority” of student organizations and campus activities. *Campus Activities Programming*, 23(9), 42–46.
- Culross, R. (1996). Remediation: Real students, real standards. *Change*, 28(6), 50–52. (ERIC Document Reproduction Service No. 03084257)
- Fink, A. (2003). *The survey handbook*. Thousand Oaks, California: Sage Publications.
- GAO, Testimony before the Committee on Health, Education, Labor, and Pensions by Gregory D. Kutz, U.S. Senate. (2010). *For profit colleges: Undercover testing finds colleges encouraged fraud and engaged in deceptive and questionable marketing practices* (GAO10-948).
- Galambos, C. (2009). From the editor: A dialogue on the economic decline and higher education. *Journal of Social Work Education*, 44(1), 1–5.
- Gardner, J. N. (1996). Helping America's first-generation college students: A bottom-line list institutions of higher learning must do. *About Campus*, Nov-Dec, 31–32.

- Hatcher, L., & Stephanski, E. J. (1994). *A step by step approach for using the SAS system for univariate and multivariate statistics*. Cary, NC; SAS Publications.
- Hensley, L., & Kinser, K. (2001). Perspectives of adult learners on returning to college: A study of tenacious persisters. *Academic Exchange Quarterly*, 5(12), 181–186.
- Hirose-Wong, S. M. (1999). *Gateways to democracy: six urban community college systems*. ERIC Clearinghouse for Community Colleges. (ERIC Document Reproduction No. ED438873).
- Horn, L., & Nuñez, A.-M. (2000). *Mapping the road to college: First-generation students' math track, planning strategies, and context of support* (NCES 2000– 153). U.S. Department of Education, NCES. Washington, DC: U.S. Government Printing Office.
- House, J., & Keeley, E. (1996). Differential prediction of adult student performance from miller analogies test scores. *Journal of Genetic Psychology*, 157(4), 3–35.
- Hsiao, K. P. (1992). *First-generation college students*. California. (ERIC Document Reproduction Service No. ED 351 079).
- Jacobs, J., & Stoner-eby, S. (1998). Adult enrollment and educational attainment. *The Annals of the American Academy of Political and Social Science*, 559(1), 91–108.
- Kline, W. (2000). *Resilience: A case study of the post-secondary experience of TRIO program students*. Unpublished dissertation.
- Komada, N. M. (2002). *First generation college students and resiliency*. Unpublished dissertation.
- Kramer, G. L., & Spencer, R. W. (1989). Academic advising. In M. L. Upcraft, J. N. Gardner, and Associates (Eds.), *The freshmen year experience: Helping students survive in college* (pp. 95–107). San Francisco: Jossey-Bass.

- Kuh, G. D. (1995). The other curriculum: Out-of-class experiences associated with student learning and personal development. *Journal of Higher Education*, 66(2), 123-155.
- Kuh, G. D., Schuh, J., Whitt, E. & Associates. (1991). *Involving Colleges*. San Francisco, CA: Jossey-Bass.
- Laffer, et al. (2014, February 27). The Laffer curve, tax progressivity, and government revenue: What's the higher priority for leftists, raising revenue or punishing success?
- Levine, A., & Nidiffer, J. (1996). *Beating the odds: How the poor get to college*. San Francisco: Jossey-Bass.
- London, H. B. (1992). Transformations: Cultural challenges faced by first-generation students. *New Direction for Community Colleges*. No. 80, Winter.
- Low, L. (2000). Are college students satisfied? A national analysis of changing expectations. *New Agenda Series*, 2(1). Indianapolis, IN: USA Group Foundation.
- Lundberg, C. (2003). The influence of time – limitations, faculty, and peer relationships on adult student learning: A causal model. *Journal of Higher Education*, 74(6), 665–689.
- Maehl, W. (2004). Adult degrees and the learning society. *New Directions for Adult and Continuing Education*, 103, 5–17.
- Malitz, Abraham, & Ponder, Eric. (2000). Adult learner persistence - NELRC.
- Mbilinyi, L. (2006). *Degrees of opportunity: Adults' views on the value and feasibility of returning to school*. Informally published manuscript, TNS Research, Capella University, Minneapolis, MN. Retrieved from http://www.degreesofopportunity.org/inc/degrees_opportunity_report.pdf
- McPherson, P., & Shulenburger, D. Association of Public Land-grant Universities. (2010). *Expanding undergraduate education to meet national goals: The role of research universities*. Retrieved from website:

<http://www.aplu.org/NetCommunity/Document.Doc?id=1672>

- Merriam, S., & Caffarella, R. (1999). *Learning in adulthood: A comprehensive guide*. San Francisco: Jossey-Bass Publishers.
- Moses, Y. (1999). Taking a stand on remediation. *Presidency*, 2(3), 20–25. Copyright American Council on Education. (ERIC Document Reproduction Service No. 49744673)
- Mueller, K. (1997). *Involvement as a critical factor in the persistence of seniors who are firstgeneration students*. Unpublished dissertation.
- National Center for Education Statistics, U.S. Department of Education Institute of Education Sciences. (2005). *Reasons for adults' participation in work-related courses, 2002–2003* (NCES 2005-088). Retrieved from website: <http://nces.ed.gov/pubs2005/2005088.pdf>
- National Center for Education Statistics, IES. (2009). *Digest of education statistics*. Retrieved from website: http://nces.ed.gov/programs/digest/d10/tables/dt10_200.asp National Center for Education Statistics (NCES). (2013).
- National Postsecondary Student Aid Study. (1996). National postsecondary student aid study, 1996: Field test methodology report.
- Nellen, A. (2003). Using technology to teach nontraditional students. *The Tax Adviser*, 34(5), 290–292.
- Nunez, A. M., & Cuccaro-Alamin, S. (1998). *First-generation students: Undergraduates whose parents never enrolled in postsecondary education* (NCES 98-082). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Osgood-Treston, B. (2001). Program completion barriers faced by adult learners in higher education. *Academic Exchange Quarterly*, 5(2). Retrieved from <http://www.highbeam.com/doc/1G1-76770283.html>

- Pascarella, E., Terenzini, P., & Wolfe, L. (1986). Orientation to college and freshmen year persistence/withdrawal decisions. *Journal of Higher Education*, 57, 155–175.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass.
- Pennington, K., McGinty, D., & Williams, M. (2002). Community college enrollment as a function of economic indicators. *Community College Journal of Research and Practice*, 26–31.
- Potzin, P. (1984). The impact of economic trends on higher education enrollment. *Growth & Change*, 26–31.
- Prather, J. E., & Hand, C. A. (1986). *Retention of non-traditional students*. Georgia. (ERIC Document No. ED274296)
- Queen, K. W. (1994). Meeting affective needs of at-risk students. *Psychological Reports*, 74, 753–754.
- Richardson, R. C., & Skinner, E. F. (1992). Helping first-generation minority students achieve degrees. *New Direction for Community Colleges*. No. 80, Winter.
- Ritt, E. (2008). Redefining tradition: Adult learners and higher education. *Adult Learning*, 19(1), 12–14.
- Rock, D. (1971). College environments and student achievement. *American Educational Research Journal*, 8, 623–634.
- Rooney, G. D. (1985). Minority student involvement in minority student organizations: An exploratory study. *Journal of College Student Personnel*, 26(5), 450–456.
- Saint John, E., Cabrera, A., Nora, A., & Asker, E. (2000). Economic influences on persistence reconsidered: How can finance research inform the reconceptualization of persistence models. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (1st ed.).

- Nashville: Vanderbilt University Press.
- Schneider, M. (2010). Finishing the first lap: The cost of first year student attrition in America. *American Institutes for Research*, Retrieved from http://www.air.org/files/AIR_Schneider_Finishing_the_First_Lap_Oct101.pdf
- Schuh, J. H., & Laverty, M. (1983). The perceived long-term influence of holding a significant student leadership position. *Journal of College Student Personnel*, 24(1), 28–32.
- Sinicka, A. D. (2001). Unraveling the mysteries of sampling. Best Practice Measurement Strategies. London.
- Spady, W. (1971). Dropouts from higher education: Toward an empirical model. *Interchange*, 2, 48–62.
- Stegman, W. N. (1969). A study to develop living area activities designed to improve the retention ratio of potential student dropouts. Final Report. (ERIC Document Reproduction Service No. ED 035 379)
- Terenzini, P. T., Springer, L., Yaeger, P. M., Pascarella, E., & Nora, A. (1996). *First-generation college students: Characteristics, experiences, and cognitive development*. Pennsylvania: (ERIC Document Reproduction Service No. ED 387 004).
- Timarong, A., Ternaungil, M., & Sukrad, W. (2002). Adult learning and learners: Briefing paper. *Pacific Resources for Education and Learning*. DOI: PB0203.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45, 89–125.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition* (1st ed.). Chicago: University of Chicago Press.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.

- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education*, 68(6), 599.
- United States Census Bureau. (2003).
- United States Census Bureau. (2013).
- U.S. Department of Education. National Center for Education Statistics. (1996). *National postsecondary student aid study*. Washington, D.C.
- U. S. Department of Education. National Center for Education Statistics. (1998). *Stopouts or stayouts? Undergraduates who leave college in their first year*. Washington, DC. (NCES Publication No. 1999-087)
- U.S. Department of Veterans Affairs. (2000). Outlays 2000–2020 | Statistic.
- Vaccaro, A., & Lovell, C. (2010). Inspiration from home: Understanding family as key to adult women's self-investment. *Adult Education Quarterly*, 60(2), 161–176.
- Valentine, T. (1997). United States of America: The current predominance of learning for the job. In P. Belanger & S. Valdivielso (Eds.), *The emergence of learning societies: Who participates in adult learning*. New York: Elsevier.
- Warburton, E. C., Bugarin, R., & Nuñez, A.-M. (2001). *Bridging the gap: Academic preparation and postsecondary success of first-generation students* (NCES 2001–153). U.S. Department of Education, NCES. Washington, DC: U.S. Government Printing Office.
- Wilde, J. B., & Schau, C. G. (1991). Mentoring in graduate schools of education: Mentees' perceptions. *Journal of Experimental Education*, 59, 165–179.
- Williams, M., & Winston, Jr., R. B. (1985). Participation in organized student activities and work: Differences in developmental task achievement of traditional aged college students. *NASPA Journal*, 22(3), 52–59.

York-Anderson, D. C., & Bowman, S. L. (1992). Assessing the college knowledge of first-generation and second-generation college students. *Journal of College Student Development, 32*, 116–122.

Zwerling, L. S. (1992). First-generation adult students: In search of safe havens. *New Direction for Community Colleges*. No. 80, Winter.

APPENDIX A

MOTIVATIONS AND BARRIERS TO COMMUNITY COLLEGE STUDENTS

Questionnaire

Explanation

This is a questionnaire designed to assist in gathering data relating to the barriers and motivating factors associated with community college attendance for adult learners. It will take about 15 minutes to complete. Your participation is voluntary, confidential, and very important to the success of this project. You may refuse to complete the questionnaire at any point.

Results will be aggregated and reported at group levels. At no time will individual responses be reported. The researchers thank you for your participation. If you have questions about the research or would like to receive a copy of the executive summary of the completed project, please write to: Tracy P. Kyser, 308 Pinehurst Dr., Enterprise, AL 36330.

Instructions

There are four sections of the questionnaire. Please complete all items. In the first section, titled *Demographics*, please mark the response that best describes you. In the second and third sections, titled *Motivations* and *Barriers*, please mark the response that best describes your level of agreement with the item listed in the far left column. Responses range from “Strongly Disagree” to “Strongly Agree”. If an item does not apply to you, please mark “Not Applicable.” In the fourth section, titled *Additional Remarks*, please write any additional information that you feel would be helpful to the researchers.

Location

Please indicate the name of the institution where you are currently enrolled, your location, the level of degree you are seeking (Associate, Bachelor, Graduate), and your course of study (Accounting, Biology, Business, etc.)

1 _____ 2 _____ 3 _____

Name of Institution

Location (City)

Location (State)

4 _____ 5 _____ 6 _____

Level of degree you seek _____ Course of Study (Major) _____

Are you a first-generation college student? _____

Section 1: Demographics. Please mark the response that best describes you.

#	Item	1	2	3	4	5
7	Your Gender	Female _____	Male _____			
8	Your Age	24 or under _____	25-34 _____	35-44 _____	45-54 _____	55 or over _____
9	Your Race/Ethnicity	White _____	Black or African American _____	American Indian or Alaska Native _____	Asian _____	Other _____
10	How would you describe your total annual household income?	\$0 – \$24,999 _____	\$25,000 – \$49,999 _____	\$50,000 – \$74,999 _____	\$75,000 – \$99,999 _____	\$100,000 and over _____
11	Are you of Hispanic or Latino origin and race?	Yes _____	No _____			

#	Item	1	2	3	4	5
---	------	---	---	---	---	---

12	Do you have a child/children at home under the age of 12?	Yes _____	No _____			
13	Do you have a child/children at home between the ages of 12-18?	Yes _____	No _____			
14	Do you have a spouse who lives with you?	Yes _____	No _____			
15	Do you have other relatives who live with you?	Yes _____	No _____			
16	Do you have nonrelatives who live with you?	Yes _____	No _____			

#	Item	1	2	3	4	5
17	Did you apply to other institutions before selecting this one?	Yes _____	No _____			
18	Are you employed fulltime (40 hours or more each week)?	Yes _____	No _____			
19	Are you employed parttime (under 40 hours weekly)?	Yes _____	No _____			

Section 2: Motivators. Please mark your level of agreement with each of the following statements in your decision to enroll for the degree you are currently seeking. If the item does not apply to you, please mark “not applicable.”

#	Item	1 Strongly disagree	2 Disagree	3 Agree	4 Strongly Agree	5 Not applicable
20	A desire for personal accomplishment motivated me to enroll.					
21	A desire to finish a degree that I began but did not complete earlier motivated me to enroll.					
22	A desire for knowledge/skills in this degree field motivated me to enroll.					
23	Reports that people with this degree have greater opportunity for advancement motivated me to enroll.					
24	The assurance of a pay increase at work motivated me to enroll.					

25	The assurance of a promotion at work motivated me to enroll.					
26	The need to keep my current job motivated me to enroll.					
27	The desire to begin a new career motivated me to enroll.					
#	Item	1 Strongly disagree	2 Disagree	3 Agree	4 Strongly Agree	5 Not applicable
28	Encouragement from my spouse or significant other motivated me to enroll.					
29	Encouragement from my children motivated me to enroll.					
30	Encouragement from my parent/s motivated me to enroll.					
31	Encouragement from my supervisor or employer motivated me to enroll.					

32	Encouragement from friends who have their degrees motivated me to enroll.					
33	A desire to be a role model for my children motivated me to enroll.					
34	A desire for more respect from my peers motivated me to enroll.					

Section 3: Barriers. Please mark your level of agreement with each of the following statements, in your decision to enroll in your current degree program. If the item does not apply to you, please mark “not applicable.”

#	Item	1 Strongly disagree	2 Disagree	3 Agree	4 Strongly Agree	5 Not applicable
35	A lack of confidence in my ability was a barrier to my enrollment.					
36	Concern about attending school with younger or older students was a barrier to my enrollment.					

37	Lack of technological skills was a barrier to my enrollment.					
38	The lack of grants and scholarships for education was a barrier to my enrollment.					
39	The lack of personal funds to pay for college was a barrier to my enrollment.					
40	Concern about paying back student loans was a barrier to my enrollment.					
#	Item	1 Strongly disagree	2 Disagree	3 Agree	4 Strongly Agree	5 Not applicable
41	Discouragement by a spouse/significant other was a barrier to my enrollment.					
42	Discouragement by a parent/s was a barrier to my enrollment.					

43	Discouragement by my employer was a barrier to my enrollment.					
44	Time away from my job was a barrier to my enrollment.					
45	Time away from my family was a barrier to my enrollment.					
46	Lack of childcare for my minor child/children was a barrier to my enrollment.					
47	Lack of funds for childcare for my minor child/children was a barrier.					
48	My role as primary caregiver for an elder was a barrier.					
49	Lack of classes at a convenient time was a barrier to my enrollment.					
50	Lack of personal time was a barrier to my enrollment.					

Section 4: Additional Remarks. Are there additional motivations you had or barriers that you faced (or currently face) in your decision to enroll in college for the degree you currently seek? If so, please tell us in the space provided.

APPENDIX B

AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL



AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

INFORMATION LETTER

for a Research Study entitled

“Community College Students in Alabama: An examination of the association between the barriers to graduation and the motivating factors”

You are invited to participate in a study to examine the association of barriers to attendance and the motivating factors prompting participation in post-secondary community college programs in the State of Alabama. The study is being conducted by Tracy Patrick Kyser under the direction of Dr. James Witte, Professor, in the Auburn University Department of Educational Foundations, Leadership, and Technology. You are invited because you are a student of an Alabama Community College. The sample includes both male and female graduates in the southeast region of Alabama, who are 19 years of age or older.

If you decide to participate in this research study, you will be asked to complete a questionnaire relating to your experiences as a community college student. The survey will be administered in print form, it will be distributed in person to each participant, and it will take approximately thirty minutes to complete. Each participant will volunteer to complete survey. No remuneration will be provided. All safeguards will be taken to insure no coercion to participate is expressed or implied. No instructional time will be used in completion of this instrument.

You should not encounter any reasonable risks if you decided to participate in this research study because there are no known reasonable risks or discomforts.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University.

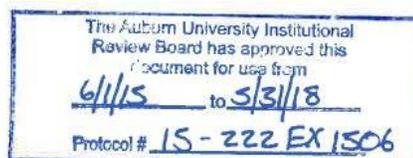
Any data obtained in connection with this study will remain confidential. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional meeting. If so, none of your identifiable information will be included. All data and participants will remain anonymous. Surveys will be destroyed upon completion of study. No participant will be asked to give their name. No measures will be taken that identifies any participant or their survey instrument or responses.

4036 Haley Center, Auburn, AL 3684-5221; Telephone: 334-844-4460; Fax: 334-844-3072

If you have questions about this study I invite you to ask them now. If you have questions later, contact Tracy Patrick Kyser at TPK0004@tigermail.auburn.edu or Dr. Maria M. Witte at wittemm@auburn.edu. A copy of this instrument is yours to keep.

For more information about your rights as a research participant you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334)-844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.



Tracy P. Kyser April 10, 2015
Investigator's signature Date

Tracy P. Kyser
Print Name

Co-Investigator Date

Printed Name

**AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS
REQUEST FOR EXEMPT CATEGORY RESEARCH**

For information or help completing this form, contact: **THE OFFICE OF RESEARCH COMPLIANCE**, 115 Ramsay Hall
Phone: 334-844-5966 **e-mail:** IRBAdmin@auburn.edu **Web Address:** http://www.auburn.edu/research/vpr/ohs/index.htm

Revised 2/1/2014 Submit completed form to IRBsubmit@auburn.edu or 115 Ramsay Hall, Auburn University 36849.
 Form must be populated using Adobe Acrobat / Pro 9 or greater standalone program (do not fill out in browser). Hand written forms will not be accepted.
Project activities may not begin until you have received approval from the Auburn University IRB.

1. PROJECT PERSONNEL & TRAINING

PRINCIPAL INVESTIGATOR (PI):

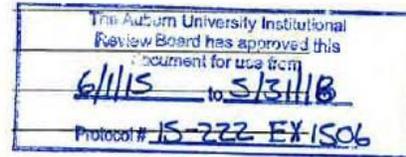
Name Tracy Patrick Kyser Title Graduate Student Dept./School EFLT-COE
 Address 308 Pinehurst Drive, Enterprise, Al 36330 AU Email TPK0004@tigermail.auburn.edu
 Phone (334)237-0110 Dept. Head Sherida Downer

FACULTY ADVISOR (if applicable):

Name James E. Witte Title Professor Dept./School EFLT-COE
 Address 4010 Haley Center, Auburn University
 Phone (334)844-3054 AU Email witteje@auburn.edu

KEY PERSONNEL: List Key Personnel (other than PI and FA). Additional personnel may be listed in an attachment.

Name	Title	Institution	Responsibilities



KEY PERSONNEL TRAINING: Have all Key Personnel completed CITI Human Research Training (including elective modules related to this research) within the last 3 years? YES NO

TRAINING CERTIFICATES: Please attach CITI completion certificates for all Key Personnel.

2. PROJECT INFORMATION

Title: An Examination of Barriers and Motivating Factors for Community College Students

Source of Funding: Investigator Internal External

List External Agency & Grant Number: _____

List any contractors, sub-contractors, or other entities associate with this project.

List any other IRBs associated with this project (including those involved with reviewing, deferring, or determinations).

FOR ORC OFFICE USE ONLY			
DATE RECEIVED IN ORC:	_____	by _____	APPROVAL # _____
DATE OF IRB REVIEW:	_____	by _____	APPROVAL CATEGORY: _____
DATE OF ORC REVIEW:	_____	by _____	INTERVAL FOR CONTINUING REVIEW: _____
DATE OF APPROVAL:	_____	by _____	
COMMENTS:			

3. **PROJECT SUMMARY**

a. Does the research involve any special populations?

- YES NO Minors (under age 19)
 YES NO Pregnant women, fetuses, or any products of conception
 YES NO Prisoners or Wards
 YES NO Individuals with compromised autonomy and/or decisional capacity

b. Does the research pose more than minimal risk to participants? YES NO

Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. 42 CFR 46.102(i)

c. Does the study involve any of the following?

- YES NO Procedures subject to FDA Regulation Ex. Drugs, biological products, medical devices, etc.
 YES NO Use of school records of identifiable students or information from instructors about specific students
 YES NO Protected health or medical information when there is a direct or indirect link that could identify the participant
 YES NO Collection of sensitive aspects of the participant's own behavior, such as illegal conduct, drug use, sexual behavior or use of alcohol
 YES NO Deception of participants

If you checked "YES" to any response in Question #3 STOP. It is likely that your study does not meet the "EXEMPT" requirements. Please complete a PROTOCOL FORM for Expedited or Full Board Review. You may contact IRB Administration for more information. (Phone: 334-844-5966 or Email: IRBAdmin@auburn.edu)

4. **PROJECT DESCRIPTION**

a. Subject Population (Describe, include age, special population characteristics, etc.)

Participation in this study requires being over 19 years of age and current enrollment in an Alabama community college.

b. Describe, step by step, all procedures and methods that will be used to consent participants.

N/A (Existing data will be used)

A paper copy of the survey will be provided to willing participant's who meet the above criteria. Permission will be obtained from the appropriate authority in each community college selected for survey. Survey's will be solicited at Enterprise Community College first. If additional survey responses are needed, then additional survey's will be provided at George C. Wallace Community College and then Lurleen B. Wallace Community College.

- c. **Brief summary of project.** (Include the research question(s) and a brief description of the methodology, including recruitment and how data will be collected and protected.)

The purpose of this research is to examine the barriers and motivating factors prompting participation in post-secondary community college programs within the State of Alabama.

Research Questions:

1. What barriers do community college students in Alabama experience?
2. What motivating factors impact the community college student in Alabama?
3. What is the relationship between barriers and motivating factors for community college students?

APPENDIX C

CURRICULUM VITAE

TRACY PATRICK KYSER

308 Pinehurst Drive

Enterprise, AL 36330

(334)237-0110-Cellular (334)347-2640-Work

Tracykyser32@yahoo.com

OBJECTIVE:

To obtain a challenging position in higher education which utilizes my personal and organizational skills, along with my previous leadership, education and planning experience to positively impact the lives of adult students.

EDUCATION:

AUBURN UNIVERSITY Proposed Degree Completion: December, 2015

Auburn, Alabama

Doctor of Philosophy in Adult Education

TROY UNIVERSITY June 1991

Troy, Alabama

Master of Science in Secondary Education

TROY UNIVERSITY June 1986

Troy, Alabama

Bachelor of Arts in Secondary Education/Social Sciences
ENTERPRISE-STATE JUNIOR COLLEGE June 1984
Enterprise, Alabama
Associate in Arts

CAREER SUMMARY

31 years of diverse and progressive teaching experience at Enterprise High School, grades 7-12, ranging in size from 1,000 to 1,800 students. Extensive background in student involvement, leadership development, retention, counseling, student development, classroom management, lesson planning, methods, evaluation, remediation and conferencing. Experience and knowledge in many areas of student services, student activities, orientation, development and community service.

Numerous semesters of instruction at the community college level, with classes taught at Enterprise-Ozark Community College and Wallace Community College, with an emphasis on social science. Students at these institutions were adults ranging in age from 18-93. Classes taught included western civilization to 1600s, western civilization 1877-present, American government, United States history beginning to 1877, American history 1877-present, American geography.

Instructor of adult continuing education at Troy University at Dothan. Classes taught included Alabama Auction Law, Contract law, bankruptcy law.

AWARDS

Recipient, Most Outstanding Social Science Major for Academic Year 1984, ESJC.

Recipient, Renaissance Man Award, 1984, ESJC

Recipient, Presidents List, 8 consecutive quarters, 1982/1984

Recipient, Teacher of the Month Award, Enterprise City Schools, 1994

Recipient, Teacher of the Year Award, Enterprise City schools, 1996

ACTIVITIES

Member, ESJC Student Government Association

Member, Phi Theta Kappa

Member, Phi Beta Kappa

Member, Phi Beta Lambda

Member, National Education Association

Member, National Social Studies Teachers Association

Member, Alabama Education Association

Member, Enterprise Education Association

INSTITUTIONAL SERVICE

Sponsor, Enterprise High School Student Government Association

Chair, Social Studies Department, EHS

Sponsor, Close-Up Program, EHS

Sponsor, National Honor Society, EHS

REFERENCES AVAILABLE UPON REQUEST