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# The Relationship of Three Financial Aid Appeal Interventions with Academic Progress and Student Persistence

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**The Relationship of Three Financial Aid Appeal Interventions with  
Academic Progress and Student Persistence**

by

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A Dissertation Submitted to the Faculty of  
Old Dominion University in Partial Fulfillment of the  
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## ABSTRACT

### THE RELATIONSHIP OF THREE FINANCIAL AID APPEAL INTERVENTIONS WITH ACADEMIC PROGRESS AND STUDENT PERSISTENCE

Jeannetta Lynn Hollins  
Old Dominion University, 2015  
Director: Dr. Dana Burnett

Poor academic performance can result in financial aid suspension and can decrease the opportunity or likelihood of students continuing their college education. The objective of this preliminary quantitative study was to investigate an under-researched area of financial aid, and Satisfactory Academic Progress (SAP) appeal interventions, to determine whether any of the three approaches studied influenced student academic outcomes. This study was confined to one large, multi-campus community college institution. The study was conducted *ex post facto*, using binary logistic regression to analyze data collected over a period of four consecutive semesters.

The interventions were designed to provide an academically struggling population with an opportunity to overturn their financial aid suspension with strategies designed to meet minimum federal academic criteria and to persist to graduation. The financial aid appeal interventions consisted of workshops, academic advising, credit enrollment restrictions and writing appeal letters.

Students were compared according to the intervention type while covariates such as race, gender and developmental education placement were considered. Student outcomes included measures of course completion rates, GPA thresholds, and persistence. The relationship between the treatment (appeal interventions) and student

outcomes was determined through the use of logistic regression analysis. Results showed that participation in the three-pronged appeal intervention consisting of workshops, advising and enrollment restrictions was associated with significant positive community college course completion and persistence rates. Correlations between a one-pronged (writing an appeal letter) and two-pronged intervention (advising and workshops), with and without the race, gender and developmental education placement covariates included in the model, were not statistically significant with the course completion rate rule, GPA conditions and persisting the next semester.

This thesis is dedicated to my son Bryce James Hollins you are the greatest gift that God has blessed me with among all other things. You are the joy of my life and you inspired me to push forward through this journey and achieve a goal, which at one point in life I never imagined could be possible for me to accomplish. You have taught me more than you know, with the most important and greatest lesson being that of unconditional love!

It was only the grace of God and your support that allowed me to achieve the unconceivable. I love you more than you'll ever know! Bryce, dare to be different and never be afraid to go after what you want in this life. Do not follow the trend - be the trend setter. Always do your best and never settle for the bare minimum because God called you to be a great man. Remember you can do all things through Christ who strengthens you.

#### In Loving Memory

To my father James Edward Hollins, who was my superman on earth, and taught me to be different and never to accept less than, nor tolerate those who will not respect me. Thank you for loving me and showing me that I was worth it. I wish you were still here, but I believe you are watching over me from heaven.

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It was an unforgettable journey! I have never wanted to give up on anything in life, but this doctoral program challenged me every step of the way. This process questioned my strength and will to work through the trenches. However, there was this fight deep inside of me that kept me going. It was only possible to travel the long road to completing this doctoral program because of my Redeemer, my Lord and Savior! He kept me and gave me the courage and strength to not give up, to keep going and to see it through to the end. My background did not call for me to further my education beyond high school to become Dr. Jeannetta Hollins. However, despite my socioeconomic status, my race and all of my other at-risk characteristics, God carried me through it all and allowed me to earn the highest academic degree in the nation. Thank You God for loving me and showing me you are able!

I want to thank my son Bryce for hanging in there with me. It has always been us and I know I sacrificed so much to get here, but I hope you know you are most important to me. Bryce, this is for you. This is an example of what you can accomplish – which is anything, even when all odds are against you. You believed in me and I will always remember you had my back and your encouragement along the way.

Among my family and friends, my sincerest appreciation and gratitude is to my mother, Mary Newring and my sister, Tracey Hollins, who have always been my supporters. Their reassurance was more than an inspiration. I am indebted to my mother and sister for their unconditional love. I am grateful for their understanding, the emotional support, and their confidence in my abilities to achieve my heart's desire. My mother has always supported my dreams and her consistent guidance and support showed

me I was capable of achieving beyond my circumstances. My mother has been my model of perseverance, respect, high morals and standards, and forgiveness. My sister Tracey has been my biggest cheerleader. I am deeply grateful for her optimism, especially during the frustrating and wearisome times. The back and forth avatar voice messages were such a comic relief and allowed me to laugh from the heart when I wanted to throw in the towel. Thank you for taking care of your nephew during the summers so I could complete my coursework. I know in my heart, if I cannot depend on anyone else in this world, I can count on my mother and my sister to be there for me and my son.

For their guidance, insight and assistance I want to extend my sincerest gratitude to my dissertation committee: Dr. Dana Burnett, Dr. Shana Pribesh and Dr. Kellie Sorey. Most of all, I want to thank my dissertation chairperson, Dr. Burnett, for taking a chance on me by approving my admission into the program. His knowledge, wisdom and dedication to higher education is just a few of his undoubtedly admirable characteristics which led me to ask him to ride this long ride with me. I consider myself truly fortunate to have had the opportunity to work under the guidance and direction of Dr. Burnett, a scholar who is genuinely compassionate and a talented educator. I am grateful for the challenge and support provided by my committee.

I toyed with the idea of earning a Ph.D. for years, but I was afraid of the journey that involved tackling statistics for the third time and writing a dissertation. Unsure if I possessed the intelligence and stamina to come out the victor on the other side. It always bothered me that I allowed my fear to make a decision regarding my future. After discovering my passion to be that of higher education and improving practices for at-risk students, I began to dismiss my fears and carry out a higher purpose. However, it was

after attending the Pennsylvania Black Conference on Higher Education and interfacing with professionals who looked like me and shared my same story that I knew that I not only wanted to earn my doctorate, but I was capable of doing so.

I was a low-income, first-generation and unprepared college student, but now preparing to defend a dissertation. My story contradicts the literature which shows a lower likelihood for someone like myself and with my characteristics to persist in college and earn a degree. Earning my PhD will not only serve as an example to others with similar backgrounds, but this degree will hopefully position me to give back to students like myself. I believe in higher education and value every experience that has allowed me to grow and develop into the professional that I am in today. However, I cannot simply earn my degree, forget my struggle and bask in my own glory. I believe that I am responsible for reaching back to other students and provide them with same accountability and opportunity to be successful. Yes, I made it, but my work is not over, and in many aspects, it is just beginning. I am committed to further develop and maintain a higher education system that meets the diverse and in some cases, complicated needs of students who may have otherwise not enrolled in college and completed a degree. It was because of the Community College Leadership program, the Old Dominion University faculty and staff, along with a support system and my unyielding motivation that will give me an opportunity on another level to touch and impact the lives of students. Thank you to all who helped me to reach my goal and potential.



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## CHAPTER 1

### INTRODUCTION

This chapter introduces the under-researched topic of financial aid Satisfactory Academic Progress (SAP) appeal interventions. Revisions in 2010 to the regulations that govern SAP (NASFAA, 2012; U. S. Department of Education, 2010) permit institutions to develop programs and implement interventions for students falling below the minimum academic standards. This is an important topic to address due to the significant impact of the availability of financial aid on a student's decision to enroll and persist in college (Cohen & Brawer, 2003).

This study took place at a large, multi-campus community college, where there are different campus approaches to addressing the groups of students who fail to meet Satisfactory Academic Progress (SAP) standards. This preliminary study examined the effectiveness of financial aid appeal models to assess usefulness of the programs to improve academic progress and student persistence among community college students. This chapter will include background information, significance of the study, the purpose statement and the research questions that guided the study. Overview of the methodology is introduced, followed by a discussion of delimitations, assumptions and limitations, and the chapter closes with important definitions.

#### **Background**

##### **Financial Aid**

Financial aid provides a means of access to higher education, in turn, creating an opportunity for a diverse student population to earn a college degree. Parent and student annual income, number of household members, number of people attending college, etc.

are assessed to determine if students initially qualify to receive federal financial aid (i.e., grants, loans, work-study, and scholarships). Standards of Satisfactory Academic Progress (SAP) require students to meet certain academic requirements to sustain continued financial aid eligibility. Otherwise, students may be ineligible to continue to receive federal financial aid (NASFAA, 2012).

Standards of Satisfactory Academic Progress (SAP) requirements are critical to the federal financial aid program, and were established to ensure that students are able to complete their academic program in a timely manner (NASFAA, 2012). Students who receive federal financial aid assistance must meet and maintain: (1) a minimum 67% course completion rule; (2) a minimum cumulative grade point average (GPA) in non-remedial attempted courses; (3) the maximum time limit rule; and (4) the developmental credit rule. These standards determine continued financial aid eligibility, regardless of financial need.

Financial aid consists of federal and state grants, the Federal Work-Study (FWS) program, as well as student loans and scholarships (NASFAA, 2009) - all of which are available to community college students. The Pell Grant is a federal grant program that serves the neediest students and has been in existence since 1972. It was designed to help offset the cost of college tuition, and to support the educational pursuits of students who qualify on the basis of financial need. The maximum annual Federal Pell Grant for the 2013-2014 academic year was \$5,550 for qualifying students (students living near the poverty threshold) (Baime & Mullin, 2010); it increased to \$5730 for the 2014-2015 academic year.

Another major form of financial aid consists of student loans, which require repayment with interest included (FINAD, 2013). Many middle to high-income students may not qualify to receive federal or state need-based grants, instead they rely on loans to cover the cost of their tuition. Common federal loan programs are subsidized and unsubsidized Stafford loans.

The availability of financial aid has had a significant impact on the decisions of students to enroll and persist in higher education (Baime & Mullin, 2010; Cohen & Brawer, 2003; ICAS, 2008). A substantial number of students, particularly those from at-risk populations, depend on financial aid to attain their educational goals (Baime & Mullin, 2010; Herrschaft, 2012) but at-risk students are also at greater risk of poor academic performance, loss of financial aid eligibility and failure to complete a college degree than students with resources. If a student is eligible to receive financial aid, the amount a student stands to lose including their ability to continue enrollment as a result of not meeting SAP requirements is considerable.

### **Retention and Persistence**

Fewer than half (45%) of students who enter a community college with the goal of earning a degree or certificate have met their goal six years later (Center for Community College Student Engagement, 2009). The literature points to the possibility that disappointing completion rates are attributable to various at-risk characteristics of the different student populations attending two-year institutions. For instance, the community college students represent a wide-range of at-risk student groups with low persistence and graduation rates, which include a large proportion of first-generation college students (neither their mothers nor their fathers attended college) (AACC, 2011; CCCSE, 2010;

Prospero & Vohra-Gupta, 2007), low-income learners (Baime & Mullin, 2010; ICAS, 2009), African Americans, (Hagedorn, Maxwell, & Hampton, 2002; JBHE, 2010), and students who test into developmental courses (Bailey & Cho, n.d.; Daiek, Dixon, & Talbert, 2012). These students represent a large percentage of the community college population receiving financial aid and who are most likely impacted by SAP regulations given their educational outcome track record as at-risk learners (Baime & Mullin, 2010; Bailey & Cho, n.d.; Chen, 2005; Choy & Carroll, 2003; Fike & Fike 2008; Kezar, 2011; Kurlaender & Howell, 2012; Russell, 2008; Whissemore, 2010).

Financial support is critical to the education of students from low-income families – even though students from low-income families are less likely to persist and graduate from college (Kezar, 2011). The parameters defining students as hailing from low-income families are flexible and draw on multiple variables (i.e. annual income, number of members in household, number of people attending college, etc.). Students from low income families have historically demonstrated lower retention, persistence and graduation rates (Boyer, 2007; Engstrom & Tinto, 2008; Hagedorn, Maxwell, & Hampton, 2002; Jensen, Moore & Shulock, 2009; Kezar, 2011). According to Kezar (2011) and Mortenson (2007), students from low-income families who enroll in college are less likely to persist and graduate, when compared to students from higher family income levels. Engle & Lynch (2011) found that only 12 percent of students from low-income backgrounds will earn a bachelor's degree by age of 24 years, compared with 73 percent of their higher-income peers. Kezar (2011) pointed out that the higher attrition rate among students from low-income families is primarily due to factors intertwined



with poverty including inadequate preparation from primary and secondary schools, lack of an academic support system, and additional work/family responsibilities.

College enrollment for minority students has increased over the years, specifically among African American students. Black student enrollments in higher education across the United States have reached an all-time high over the past decade (Ezeala-Harrison, 2014). While the growing enrollment rates for African American students are a positive development, minorities continue to attrite from college at a higher rate than non-minorities (Seidman, 2005). The black student college graduation rate is about 20 percentage points lower than the rate for whites (Attewell et al., 2006; Bailey et al., 2005; Cooper, 2009; JBHE, 2010; USDOE, 2006).

Low retention and degree completion rates for African American students attending community colleges may be attributed to a number of factors (Boyer, 2007; Engstrom & Tinto, 2008; Jensen, Moore & Shulock, 2009; Kezar, 2011). Researchers point to structural factors such as economic conditions, relationships with faculty/staff, racism and institutional climates with unwelcoming environments, lack of academic preparedness for college curriculum, first-generation, as well as lack of social contact with other members of the college community contributes to poor retention (Cross & Slater, 2004; Cuyjet, 2006; Hagedorn, Maxwell, & Hampton, 2002; Larose, Gisele, 2010; Satterfield, 2008; Strayhorn, 2012). If low community college graduation rates for African Americans is attributable to falling below the minimum SAP standards, an exploration of the group's academic outcomes after participating in an appeal program may offer an avenue to increase minority academic progress and persistence.

Males are also less likely to demonstrate satisfactory academic performance and earn a college degree when compared to female counterparts. Today women outnumber men in higher education (Provasnik & Planty, 2008), demonstrate a greater level of success than their male counterparts, and graduate from both two-year and four-year colleges at higher rates than males (Arbona & Nora, 2007; Bailey et al., 2005; Cooper, 2009; Gonzales, 2007). One possible cause for the disparity in success rates is due to reports of females being more engaged in their college education (CCSSE, 2014). Although females are more engaged than African American males, African American males are more engaged than White males, who are the least engaged (CCSSE, 2014). However, academic outcomes comparing Black and White males show Black men have the lowest student success outcomes, while White males hold the highest successful outcomes (CCSSE, 2014). Credits earned and GPA show female students are progressing and moving successfully through the educational pipeline at a higher rate than males (Borego et al, 2005; CCSSE, 2014) and the black female college graduation rate is at 47 percent compared to black males at 36 percent (JBHE, 2010).

Sixty percent of entering community college students place into one or more developmental courses (Bailey & Cho, n.d.; Daiek, Dixon, & Talbert; 2012). This is of significance because those students graduate at much lower rates than students who do not place into developmental courses (Baime & Mullin, 2010; Chen, 2005; Choy & Carroll, 2003; Kezar, 2011). Less than one quarter of students who must enroll in developmental education courses complete a degree or certificate within eight years of college enrollment (Bailey & Cho, n.d.; Kurlaender & Howell, 2012). Addressing the needs and improving degree completion rates for these developmental students is one of

the most difficult and most important problems facing community colleges (Bailey & Cho, n.d.; Whissemore, 2010).

Many students, especially African American males who test into developmental education will depend upon financial aid to enroll in a post-secondary institution and obtain a college degree or certificate. Explorations of SAP appeal programs may potentially impact the academic outcomes among at-risk college students. With the demographics of the workforce changing, there is a growing importance for the completion of a post-secondary education in order to succeed in the labor market. The nation's ability to compete in the global economy will depend on having significant numbers of workers with post-secondary credentials. It is projected that the majority of new jobs will require some education beyond high school (AACC, 2012; Symonds, Russell, 2008; Schwartz, and Ferguson, 2011). Symonds, Schwartz, and Ferguson (2011), estimated that the U.S. economy would create some 47 million jobs over the 10-year period ending in 2018 and nearly two-thirds of these jobs will require at least some post-secondary education. Millions of students depend on community colleges to access a post-secondary education and prepare themselves for the workforce (American Association of Community Colleges, 2011).

### **Early Departure From College**

Regardless of race, gender or academic level, failure to complete a post-secondary education will have widespread economic effects. Most students who do not earn a degree earn less compared to what they would have earned as graduates (Schneider & Yin, 2012). Persistence to a degree is of concern to society at large because college-

educated citizens contribute in many ways to the social good and are less likely to engage in harmful behaviors (Barton, 2002, Carey, 2004; Fiske, 2004).

The outcome of early college departure is multifaceted, and may not only impact the student's future, but the institution's as well. For instance, when a student leaves college prematurely, any debt incurred must be repaid, despite the failure to graduate, and the college loses future funding in the form of tuition and fees and auxiliary services (bookstore, food service, and so forth) generated over time (Seidman, 2005). The gap between the underrepresented minority students and other groups is particularly detrimental because it affects individuals' long-term social mobility. The attainment of any postsecondary degree (particularly a baccalaureate degree) often results in a greater net dividend for minority populations (Malveaux, 2003). College graduates earn more money over a lifetime, incur fewer health problems, suffer less penal involvement, and live longer than non-college graduates (Seidman, 2005). Other advantages to degree completion, according to the Pascarella and Terenzini (2005), consist of cognitive gains, especially in verbal ability; gains in knowledge and critical thinking; greater ability to deal with complexity; increases in tolerance, aesthetic sensibility, moral development; increases in the amount of time devoted to children; and an improved sense of psychological well-being. If SAP appeal interventions are established and regarded as effective approaches that increase the likelihood of academic progress and persistence, students who once demonstrated poor academic performance have an opportunity to regain financial aid eligibility and improve their future options to sustain their quality of life.

There are several reasons the researcher examined financial aid SAP appeal interventions for community college students who failed to meet satisfactory academic progress guidelines: (1) Related research indicates that the persistence of at-risk community college students (African Americans, males and students who test into developmental courses) are among the lowest persisters among all students attending institutions of post-secondary education (Hagedorn, Maxwell, & Hampton, 2002; Harper, 2005; JBHE, 2007 & 2010; Kezar, 2011; Zamani, E. M., 2000; Zhai, L., & Monzon, R. 2001). Few authors linked persistence with the ability of at-risk students to demonstrate federal financial aid satisfactory academic progress (Herrschaft, 2012; Neel, 2004); (2) Although the literature speaks to low persistence and degree completion rates among at-risk groups (CCCSE, 2009; Hagedorn, Maxwell, & Hampton, 2002; Kezar, 2011; Larose, n.d.; Schneier & Yin, 2012; U.S. Department of Education, 2008a), no existing studies, that specifically addressed demographic characteristics, such as race, gender and developmental education placement of students who failed to maintain federal financial aid (SAP) requirements, were found; and (3) very limited literature exists that references the impact of institutional practices specifically designed to improve the success of students who lost their financial aid eligibility due to unsatisfactory academic performance.

A focus on the efficacy of SAP policies, especially the practice related to these policies, may be important to student persistence, institutional completion rates, and the economy. This subject area requires further research to adequately meet the needs of financial aid students who are experiencing academic difficulty. A key factor for improving graduation and transfer rates may be to support students and ensure they are

eligible to continue receiving financial aid while they make progress toward the completion of their academic goals (Herrschaft, 2012).

### **Significance of the Study**

This study is unique because it examines the extent to which three different financial aid appeal interventions influenced academic progress (course completion and GPA standards) and student persistence rates. The study reviewed the outcome in each of the three campus appeal interventions. Each intervention attempted to engage students who lost their financial aid eligibility due to unsatisfactory academic progress towards degree completion in a different way. The students in this study were those who lost their financial aid, engaged in an approved appeal process and overturned their suspension as a result. The decision to approve an appeal is reviewed on a case-by-case basis, but, in general those students whose appeals are approved: (1) successfully completed all attempted credits during the 'Warning' semester; (2) met or nearly met the GPA requirements (1.5, 1.75, or 2.00); (3) a course completion rate between 50 and 66% at the time of the appeal; (4) write a letter specifically outlining the reasons for any and all semesters they received non-passing grades; and (5) completed and submitted any pertinent supporting documents (i.e. Appeal Application, Academic Advisement Transcripts, etc.).

The results of this study: (1) may serve as a framework for designing a program to support students with suspended financial aid, and thus improve their academic performance and opportunity to regain their financial aid eligibility, and progress towards degree completion; and (2) may encourage financial aid administrators to incorporate an

aggressive early intervention policy to prevent or decrease the number of financial aid suspensions among those who are at risk of losing their eligibility.

If the results show that academic progress was achieved among one or more of the intervention models, this may suggest a return on investment to include a variety of positive outcomes for the student, institution and the economy. The higher a person's educational attainment, the more likely he or she is to be gainfully employed, pay taxes, volunteer, participate in the democratic process, and be capable of taking care of the health and educational needs of his or her children (Center for Community College Student Engagement, 2010).

Students who consistently demonstrate academic performance below the federal requirements, are confronted with financial aid suspension. In an attempt to reinstate financial aid resources (grants and loans), students must pay for college credits or appeal their ineligible financial aid status and overturn the suspension. An analysis of three financial aid appeal interventions occurred to determine whether the appeal interventions showed a relationship between academic progress and student persistence for financially needy students attempting to regain financial aid eligibility (see Appendix A).

### **Purpose Statement**

The purpose of this research study was to examine the extent to which different types of financial aid appeal interventions correlated with academic progress and student persistence. In addition, this quantitative research study investigated the relationship of three financial aid appeal models to examine the extent different financial aid appeal interventions influenced academic progress and student persistence among a specific

demographic characteristic of students who failed to meet the institutional Standards of Satisfactory Academic Progress (SAP).

Listed below are the research questions which guided the study.

### **Research Questions**

1. To what extent was there a difference in the likelihood of course completion (as measured by grades of 'S,' 'P,' 'C' or better during the appeal semesters) among students who participated in one of the three differently designed financial aid appeal interventions?
  - a. To what extent was there a difference in the likelihood of course completion as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
  - b. To what extent was there a difference in the likelihood of course completion as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
  - c. To what extent was there a difference in the likelihood of course completion among students who place into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
  - d. To what extent was there a difference in the likelihood of course completion as mediated by race, gender and developmental education



placement, among students who participated in one of the three differently designed financial aid appeal interventions?

2. To what extent was there a difference in the likelihood of meeting the GPA requirements among students who participated in one of the three differently designed financial aid appeal interventions?
  - a. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
  - b. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
  - c. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
  - d. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race, gender and developmental placement, among students who participated in one of the three differently designed financial aid appeal interventions?
3. To what extent was there a difference in the likelihood of persistence (as measured by subsequent semester enrollment) among students who

participated in one of the three differently designed financial aid appeal interventions?

- a. To what extent was there a difference in the likelihood of persistence as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
- b. To what extent was there a difference in the likelihood of persistence as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
- c. To what extent was there a difference in the likelihood of persistence among students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
- d. To what extent was there a difference in the likelihood of persistence as mediated by race, gender among students who participated in one of the three differently designed financial aid appeal interventions?

### **Overview of the Methodology**

This study examined ex post facto data with quantitative methods to examine the results of three different financial aid appeal interventions for community college students who were academically ineligible to receive financial aid because they fell below the minimum satisfactory academic progress standards. Academic progress and persistence are dependent variables determined by successful completion of all attempted courses with a letter grade of 'S,' 'P,' 'C' or better, meeting Satisfactory Academic Progress GPA standards, and next semester enrollment beyond the census date.

In this study, participants were restricted to a convenience sample of community college students who failed to maintain satisfactory academic progress (SAP) for two or more semesters. Participants included students of different racial backgrounds, gender, and developmental education student placement who attended a multi-campus, metropolitan community college located in the Southeastern U.S.

Data were evaluated by using logistic regression as the method of statistical analysis, since this technique allows for the prediction of categorical outcomes. In this case - it predicts academic progress and persistence based on the appeal interventions. The effect of the appeal interventions as related to academic progress (course completion and GPA status) and persistence was determined and tested for statistical significance. A more detailed description of the study's methodology is provided in chapter three.

#### **Delimitations, Assumptions and Limitations**

The study was delimited to federal financial aid recipients who attended a large multi-campus community college located in the Southeastern U.S. The participants failed to meet satisfactory academic progress and experienced a loss of financial aid eligibility. The participants included students who did not meet the 67% course completion rule and/or GPA requirements, and who subsequently satisfied requirements to overturn their suspension status. Students with denied appeals were excluded from this study. The research was delimited to the data available at the institution.

There are two assumptions: (1) the information obtained from the institution and the students was accurate; and (2) students intended to persist and complete a degree, certificate or career studies certificate.

A major limitation of this study is that the literature indicates various barriers influence persistence and academic progress among at-risk populations; thus the results may not account for other factors that may or may not affect the students' ability to persist and demonstrate academic progress. The results may indicate that students successfully completed all attempted credits and maintained the GPA requirements as a result of the appeal intervention(s); however, the students may have participated in other interventions and programs such as tutoring, meetings with the instructor, study groups, etc., and/or eliminated other external issues which allowed the student to be successful with their endeavors.

### **Definition of Terms**

For the purpose of this study, the following are terms and acronyms that guide the study:

*Academic Progress:* Academic progress is determined by a final 'S,' 'P,' or 'C' grade or higher in all attempted credits during each semester for the length of the appeal in order to meet the course completion rule and the cumulative GPA requirements of 1.5, 1.75, or 2.00.

*Academic Plan:* Probation program for students who require multiple semesters to meet SAP standards.

*Estimated Family Contribution (EFC):* An amount a family can reasonably be expected to contribute for tuition, but not what the family will pay to the college; Calculated using a federal form and formula; There are two components which make up the EFC (1) Parent contribution (2) Student contribution (NASFAA, 2009).

*Financial Aid:* Need-based monetary aid available to eligible students to assist with the cost of college tuition and other associated fees (NASFAA, 2009).

*Free Application for Federal Student Aid (FAFSA):* This form is used to determine the amount of money a family is expected to contribute to the price of attending a postsecondary institution. The results of the FAFSA are used in determining student grants, work study, and loan amounts.

*One-Semester Probation:* Probation program for students who can meet all SAP standards in one semester. Based on the credit restriction intervention of 6 – 8 credits, students enrolled in the One-Semester Probation will need eight credits or less to comply with SAP requirements.

*Persistence:* Continued enrollment through the institution's census date ('Drop/Add' period) during the appeal semesters and the semester following the appeal term

*Standards of Satisfactory Academic Progress (SAP):* Established minimum academic criteria that all financial aid recipients of federal financial aid must meet each semester to continue financial aid eligibility. There are four components of SAP. For the purpose of this study, I focus on two: 67% course completion rate and GPA requirements (U. S. Department of Education, 2010).

1. *67% Course Completion Rate Rule:* This is a review of course completion rates, which calculates the total number of **attempted** credits (developmental, college-level and transfer credits) vs. the total number of **completed** credits (developmental, college-level and transfer credits). This rule requires that a student receiving financial aid to successfully complete at least 67% of the courses attempted. A course completion rate of anything less than 67%, results in financial aid suspension.
2. *Grade Point Average (GPA):* To remain eligible for financial aid, students must meet minimum cumulative grade point average requirements based on a progressive scale. Only college-level courses with grades of 'A,' 'B,' 'C,' 'D,' or 'F' are included in this calculation.
3. *150% Maximum Hours Rule:* A student must complete his/her program of study before attempting 150% of the credits required for the program. In other

words, the number of credits for any major determines the maximum financial aid limit. For instance, the college's Associate of Science Degree in Social Science program is 60 credits, so the allowable financial aid will cover 90 attempted credits.

4. *Developmental Credits*: Federal regulations state that students may only receive financial aid for a maximum of 30 credit hours of developmental course work. Students who wish to take developmental courses beyond the 30 credit hour maximum will not receive financial aid for those additional developmental courses.

### **Summary**

The availability of financial aid has a significant impact on the decisions of students to enroll and persist in higher education (Cohen & Brawer, 2003). Revised SAP regulations can result in a loss of financial aid eligibility after two semesters if a student fails to meet minimum academic standards. Very limited literature was found referencing the impact of institutional practices to improve academic progress and increase persistence rates among students who lost their eligibility after they failed to maintain satisfactory academic progress (SAP). Therefore, this study is significant since it examined the extent to which three different financial aid appeal interventions predicted the likelihood of academic progress and student persistence. This study is also noteworthy as it may set a precedent or framework for designing an appeal program which may meet the needs of SAP students and improve the likelihood of their academic success.

This study used a quantitative design and logistic regression analysis to answer the research questions. This statistical technique is an extension of regression that

allowed the researcher to predict categorical outcomes based on predictor variables (Field, 2009).

The next chapter will review selected studies related to financial aid suspension SAP appeal interventions.

## CHAPTER 2

### LITERATURE REVIEW

This study investigated three different appeal interventions designed to improve academic progress and student persistence among qualifying financial aid students who are ineligible to receive financial assistance due to their academic performance. This research seeks to provide an assessment of these programs. An analysis of the data suggested whether the appeal interventions showed a relationship between academic progress and student persistence for financially needy students as they attempted to regain their financial aid eligibility.

The related literature serves as a basis to determine what research exists that could be useful in the design and implementation of this investigation. The chapter begins with a background on financial aid and the satisfactory academic progress program, followed by related research connecting financial aid and persistence. The theoretical framework for this study relies on major persistence theories and particular attention is given to literature examining the reasons why students do not persist in higher education, particularly in the community college setting. The effectiveness of workshops and academic advising is reviewed. Since this study seeks to influence educational outcomes, a review of institutional programs designed to meet the needs of disadvantaged student populations and improve student success was undertaken and may identify models and implications for structuring and restructuring community college student service programs. Lastly, the chapter concludes with a depiction of the community college, while exploring the typical student populations that attend two-year institutions and the retention and graduation outcomes for these students. Informed by several areas of



research, this study seeks to understand the need to increase student persistence and produce more positive educational outcomes at community colleges.

### **Financial Aid**

Financial aid is a grant or scholarship, loan or paid employment that pays for college expenses. Eligibility is determined by completing the Free Application for Federal Student Aid (FAFSA) application (New York State Financial Aid Administrators Association Inc., 2013; National Association of Student Financial Aid Administrators, 2009). The goal is to provide a higher education opportunity through monetary assistance to students who demonstrate financial need as determined by an approved need-analysis system. Financial aid awards can consist of federal, state, institutional or local funds (NYSFAAA, 2013; NASFAA, 2009).

Pell Grants, in particular, are designed to help offset the cost of college tuition and support the educational pursuits of low-income students (Baime & Mullin, 2010). Although methods for determining the extent of financial need are complex, as a general rule, family income characteristics can be used to estimate student financial need, i.e. the lower the family income or socioeconomic status, the greater the need (Hansen & Lampman, 1983; Jensen 1981, Baum, 1987). Grants include aid that does not require repayment; the amounts are dependent on: the student's expected family contribution Estimated Family Contribution (EFC); the cost of attendance (as determined by the institution); the student's enrollment status (full-time or part-time); and whether the student attends for a full academic year or less (NYSFAAA, 2013; NASFAA, 2009). Student loans are educational loans in the form of financial aid which must be repaid with interest (FINAD, 2013). The availability of financial aid has had an increasingly

significant impact on the decisions of students to enroll and persist in higher education (Cohen & Braver, 2003; Baime & Mullin, 2010; ICAS, 2008).

### **The History of Financial Aid**

The earliest recorded efforts of student financial support seems to have begun in 1643 with a scholarship donated from Lady Anne Radcliffe Mowlson to support needy scholars attending Harvard University (FinAid, 2013; Franklin & Marshall College, 2013). In 1944, access to federal financial aid funds was requested, administered, and collected by university officials. Earlier programs were designed for specific student populations, somewhat different than what financial aid is known for today. For instance, the *Serviceman's Readjustment Act of 1944*, more commonly known as the GI Bill, was designed specifically for returning veterans of World War II (as cited by Neel U.S. Department of Education, 2004a) and enacted to transition veterans back into the workforce by providing a financial incentive to pursue a post-secondary education (FinAid, 2013). While many events occurred throughout the evolution of financial aid, only a few noted significant events that expanded financial aid programs available to students are highlighted throughout this chapter.

**The National Defense Education Act of 1958.** This act expanded financial aid programs to fund the National Defense Student Loan program, which targeted students in the field of education (FinAid, 2013; Mumper, 1996) to improve the teaching of science, mathematics, and “modern foreign languages (U.S. Department of Education, 2004a). This legislation created and authorized the first available loan, known as the National Defense Student Loan (NDSL). Ninety percent of this loan was supported by federal funding, while the remaining 10% was sustained by institutional funds. The loan program

was later renamed the Perkins loan, which is a revolving loan program set up for colleges to loan and collect funds and recycle the principle and interest (FinAid, 2013).

**The Economic Opportunity Act of 1964.** This act established the federal Work-Study Program for financially needy students and authorized the Head Start program, Upward Bound and VISTA. The College Work Study Program is a federally-funded employment program that allows colleges and universities to create campus-based work opportunities for financial aid recipients (FinAid, 2013; FAO, 2013). This program is part of the financial aid package, which provides part-time jobs for undergraduate, graduate, and professional students with financial need, (Federal Student Aid, 2013), thus allowing them to earn money to help pay for expenses.

**Higher Education Act of 1965.** Another major evolution in federal financial aid for higher education included the adoption of the *Higher Education Act of 1965*. The primary driving forces behind this legislation were the civil rights movement and President's Johnson's war on poverty (Hannah, 1996). The Higher Education Act of 1965 authorized various assistance programs, such as the Educational Opportunity Grant Program (EOG), for low-income students, which was renamed in 1972, Supplemental Educational Opportunity Grant (SEOG). Also authorized by the Act of 1965 was the Guaranteed Student Loan Program (GSL), later renamed the Stafford Loan Program. Since its inception in 1965, the *Higher Education Act* has been reauthorized and amended several times: (1) the adoption of SAP requirements and state loan-guarantee agencies in 1976; (2) renaming the Basic Educational Opportunity Grant (BEOG) to the Pell Grant in 1980; (3) supplemental loans for graduate students; (4) mandating the FAFSA to be free; (5) suspending aid due to drug convictions; (6) In 1987 the GSL program was renamed to

Stafford Loan Program; and (7) introduction of *FAFSA on the Web* (fafsa.ed.gov) was revised as an online version of the Free Application for Federal Student Aid (FinAid, 2013).

**Federal student services programs.** In the early 1970s, a set of federally-funded college student services programs, known as TRIO were established to motivate and support students from disadvantaged backgrounds in their pursuit of a college degree (COE, 2013). TRIO federal programs were designed to increase access to higher education for low-income students, first-generation students and students with disabilities – from sixth grade through college graduation. These were important innovations in that Congress recognized that money was not the only issue that contributed to the success of economically disadvantaged students (Kezar, 2011). The 70s decade, included the establishment of Sallie Mae as a Government-Sponsored Enterprise (GSE) targeting education (FINAID, 2013), and the Family Education Rights Privacy Act, which protects students’ privacy for educational records (Peebles, n.d., FINAID, 2013).

Table 1 highlights other significant programs which had a significant impact on the expansion and increased access to financial aid for qualifying financial needy students (FINAID, 2013):

Table 1

*Financial Aid Timeline*


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1982	“I Have a Dream” project, created by Eugene Lange
1983	Selective service registration required for financial aid eligibility
1994	U.S. 4th District Court of Appeals decision in Podberesky v. Kirwan required that evidence of past discrimination must be clearly evident in a case involving a race-based scholarship.
1996	California voters adopted Proposition 209, banning the use of race in college admissions and financial aid at California public colleges and universities,
1998	-Renaming of SSIG (State Student Initiative Grant) as LEAP -Created GEAR UP -Suspended student aid eligibility for drug convictions
2010	The Health Care and Education Reconciliation Act of 2010, signed into law by President Obama, which eliminated the federally-guaranteed student loan program (FFELP), and all new federal education loans made through the Direct Loan program starting July 1, 2010. The savings are redirected to the Pell Grant program, deficit reduction, improvements in income-based repayment and a variety of smaller programs (FINAID, 2013). Top of Form

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**Financial aid processes at the institutional level.** Early financial aid processes involved allocating funds directly to institutions at the request of trained institutional staff. However, Cohen & Brawer (1996) point out that there were limited requests on behalf of two-year institutions because few community college presidents believed adequate officials staffed their institutions' to administer financial aid. These limited requests were due to common misconceptions that community college students did not need financial aid due to low tuition costs (Neel, 2004). Apparently, former community college administrators were unaware of what more recent studies show; Pell Grants play a far more significant role in community college student financing than for other sectors of higher education (Baime & Mullin, 2010). The total educational costs for attending two-year institutions are still significant to low SES students (ICAS, 2009) and many struggle with the cost of attending community college. Previous community college officials may have failed to recognize that their student population typically came from low-income backgrounds and that even the relatively lower educational costs still created a financial hardship for many students (Neel, 2004).

In later years the federal government provided funding directly to needy students in a "portable" fashion. The goal was to increase access and choice, which involved awarding the grant to an individual student and not in the form of an allocation to a particular campus (U.S Department of Education, 2004a). Institutions were still required to administer the funds to the students, however, it was for that reason community colleges began to organize financial aid offices within their institutions. By the early 1980s, most community colleges had adequate staffing to administer grants, loans, and work-study funds to students (Cohen & Brawer, 1996).

**Pell Grant**

This federal resource is a need-based grant, designed to help offset the cost of college tuition for low-income students (U.S. Department of Education, 2012; Calhoun, 2013). This grant seeks to ensure that degree-seeking students from different financial backgrounds have an opportunity to attend college.

The annual Pell grant has increased dramatically since its inception. In 2010-11, the maximum annual amount was \$5,550 (Baime & Mullin, 2010; Calhoun, 2013) and reached a high of \$5730 for the 2014-2015 academic year. Pell grants play a significant role in community college student financing. As seen in a report from the U. S. Department of Education, a projected 8.74 million students received Pell Grants in the 2011-12 award year and approximately one-third (nearly 3 million) of these students attended community colleges (Baime & Mullin, 2010).

Awarded on a need-basis, the Pell Grant, unlike loans, does not require repayment (U.S. Department of Education, 2012; Calhoun, 2013). However, financial aid recipients must demonstrate academic progress and meet the minimum academic standards to ensure continued aid eligibility.

**Satisfactory Academic Progress Policy**

Enrollment and retention are currently critical areas of discussion for higher education. Since more students, particularly those attending community colleges, rely upon financial aid to meet their educational needs, institutions must take an active role in examining the effectiveness of financial aid programs and policies. The satisfactory academic progress review process can result in a loss of federal financial aid funding.

Amendments to the *Higher Education Act* in 1976 required students to meet certain criteria for continued federal financial aid eligibility. The Standards of Satisfactory Academic Progress (SAP) mandate that students maintain certain academic standards when receiving financial aid; otherwise a loss of financial aid will occur due to unsatisfactory academic performance. These requirements were established to ensure that students complete their academic program and in a timely manner. In an age of increasing accountability for the use of federal, state, and institutional student aid funds, institutions of higher education *and* their students must demonstrate that financial aid funds are being used to assist students in efficiently completing their academic goals (NASFAA, 2012).

Two guiding federal principles undergirding the laws and policies which govern federal financial aid are: (a) college officials determine institutional procedures for awarding financial aid are regulated, and (b) both schools and students must be held accountable for the use of public funds (as cited by Neel, 2004). According to NASFFA (2012), the Standards of Satisfactory Academic Progress are as follows:

“Financial aid recipients are required to successfully complete at least 67% of all attempted credits to maintain financial aid eligibility. Successful completion is defined as receiving a grade of ‘A,’ ‘B,’ ‘C,’ ‘D,’ ‘S,’ or ‘P.’ (During an approved appeal, students were considered in violation of their contract if they earn a ‘D’ letter grade). Grades consisting of ‘W,’ ‘R,’ ‘U,’ ‘F,’ ‘I,’ or ‘X’ are considered non-passing. Attempted credits compared to credits earned are calculated at the end of each semester.”

The grade point average (GPA) standard defines the quality of the student’s academic work. A GPA is typically a numerical equivalent based on a formal definition



of grades at the institution. If a school uses a 4.0 GPA scale, it could require students to have a 2.0 average by graduation but allow a lower average earlier in the student's program. The data used in this study were obtained from an institution which incorporates a financial aid GPA requirement as shown in Table 2.

Table 2

*SAP Grade Point Averages Requirements*

Total number of college-level credits attempted	GPA requirement
1–15	1.5
16–30	1.75
31+	2.00

The maximum time limit rule regulation requires program completion within a time frame not to exceed 150% of the published length of the program credit hours (NASFAA, 2012). For undergraduate students, federal student aid funds cannot be paid to a student who exceeds 150 percent of the published length of the degree program. The maximum time frame allowable will be 150% of the required credit hours in the recipient's current academic program. Students who reach the maximum time frame will automatically be placed on financial aid suspension. Students must complete their degree or certificate within a maximum time frame measured by attempted credits equal to 150 percent of the number of credits required for their primary degree program.

Federal regulations state that students may only receive financial aid for a maximum of 30 credit hours of developmental course work. Students who wish to take developmental courses beyond the 30 credit hour maximum will not receive financial aid for those additional developmental courses (U. S. Department of Education, 2010).

Institutions are required to establish policies and monitor, measure and ensure that students who are receiving federally funded financial aid are progressing toward their educational goals (IFAP, 1998; U. S. Department of Education, 2010). This academic requirement establishes a standard which communicates that sponsoring entities (U.S. Department of Education and title IV institutions) are seeking a return on their investment. For students, it creates a direct relationship between financial aid and student persistence.

In 2010, the regulations were revised, requiring institutions to establish SAP policies that comply with new federal regulations, effective July 2011 (NASFAA, 2012; U. S. Department of Education, 2010). For instance, at the U.S. Southeastern community college where this study occurred, previous practices consisted of reviewing SAP standards annually. In response to the new federal regulations, the college adopted a policy to assess compliance at the end of each semester. Failure to meet any of the listed standards may result in financial aid suspension. Given the historically low graduation rates of minority and at-risk populations, the recently revised SAP policies may have significantly impacted the continued enrollment and success rates of at-risk groups who seek to receive financial aid to support their endeavors and complete a post-secondary degree. According to Eller et al., (1998), many low-income students have dropped out of college as a result of the satisfactory academic progress regulations that terminate financial aid support for underachieving students.

Since a multitude of factors and stressors can increase the likelihood of unsatisfactory academic performance, institutions are required to adopt and incorporate

an appeal process into the SAP policies. This policy affords students the opportunity to receive financial aid on a probationary basis, if extenuating circumstances affect their ability to successfully complete attempted credits.

Students rely heavily upon federal financial aid to meet their educationally-related financial needs (Baime & Mullin, 2010). However, many of the students who demonstrate financial aid need are also confronted with challenges that serve as barriers to degree attainment. It may be worthwhile for post-secondary officials to take an active role in examining the effectiveness of the SAP policy within their institutions, since satisfactory academic progress can have a significant impact on the students' ability to be successful at the community college level. This study examined the effectiveness of three financial aid appeal models on the impact of student persistence and academic progress for students who have experienced financial aid suspension due to poor academic performance.

### **The Appeal Process**

Federal regulations allow an institution to use professional judgment on a case-by-case basis if the financial aid administrator determines that an unusual or extraordinary situation affected the student's progression toward the successfully completing his or her program of study. Consequently, many institutions have established an appeal mechanism through which personal mitigating circumstances can be evaluated, and when appropriate, exceptions can be made to the institution's SAP policy for individual situations. It is totally within the purview of the institution whether to permit the opportunity for an SAP appeal to be approved (NASFAA, 2012).

Federal regulations require institutions to include an appeal process in their satisfactory academic progress policy that allows students who have been placed on financial aid suspension to appeal their status in an attempt to regain their financial aid eligibility. SAP standards were revised effective July 1, 2011 (U. S. Department of Education, 2010). “The policy must describe how the student may reestablish his or her eligibility to receive Title IV aid and the basis on which a student may file an appeal (such as the death of a relative, an injury or illness of the student, or other special circumstances). The institution's policy must also describe the information the student submits to support the appeal, including why the student failed to make satisfactory academic progress, and what may have changed in the student’s situation that will allow the student to demonstrate SAP at the next evaluation.”

Although it is at the discretion of the college to create an infrastructure for its institutional appeal program, federal regulations have established a framework in which all appeals must adhere:

“The financial aid probation status can be used by any school. Financial aid probation can be granted only after the student has appealed and has had eligibility for aid reinstated based on the appeal. The decision to permit appeals and the methods involved in reviewing appeals is up to each institution, but these must be clearly outlined in the institution’s SAP policy. If a school permits appeals, and if a student is successful in the submission of a SAP appeal (meaning that the institution accepted the student’s appeal and has decided to grant continued financial aid eligibility), then the student must be placed on financial aid probation for a period not to exceed one payment period, unless the school

develops an academic plan for the student that covers a longer period of time. For institutions which only monitor SAP once per year, they must have the methods in place to monitor the students who are placed on financial aid probation at the conclusion of the probationary payment period, not at the next scheduled annual review” (NAASFA, 2012).

Students who have an appeal denied must be informed of such, as well as, the ways in which they can regain financial aid eligibility. Reinstatement is often contingent upon self-pay or an external third-party to assume tuition cost for an undetermined amount of credits. Institutions have the flexibility to develop and adopt different appeal policies to meet the needs of the institution. This means the appeal process can differ between institutions. The appeal policy at one U.S. Southeastern community college includes the following (Institution’s Policy Manual, 2013):

- (1) The student is notified via email from the institution’s Financial Aid Department that they have been placed on financial aid suspension after final grades are reviewed at the end of the Warning semester. Note: Any student not meeting satisfactory academic progress at the end of one semester is notified via email and placed on a ‘Warning’ prior to suspension. During the ‘Warning’ semester, students continue to receive financial aid; however, if a review of their grades at the end of this semester continues to show unsatisfactory academic progress, aid is then suspended.
- (2) Students seeking to appeal their financial aid suspension, increase the chances of an approved appeal if they meet the following criteria (the decision to approve is reviewed on a case-by-case basis): (1) Successfully complete all attempted credits during the ‘Warning’ semester; (2) Meet or nearly meet the GPA requirement; (3) Course completion rate is between 50 and 66% at the time of initiating the appeal; (4) Write a letter specifically outlining the reasons for any and all semesters they received non-passing grades; (5) Complete and submit any pertinent supporting documents (i.e. Appeal Application, Academic Advisement Transcripts, etc.); (6) All documents are collected by an SAP advisor and submitted to the campus Financial Aid Director for review; (7) Review of all appeal applications generally occur prior to the start of a semester; (8) Appeal decisions are communicated to students via telephone and/or email; and (9) Approved appeals had a ‘Hold’

on the students' account, preventing them from making any changes to their approved schedule. This also prevents them from withdrawing from a course without seeking approval from the Financial Aid Coordinator and/or SAP advisor.

Regardless of the appeal procedures implemented at an institution, the appeal process can be viewed as a tool to engage and enhance student success. Such a process may prevent financial aid students from dropping out; thus diminishing the "revolving door" syndrome with which community colleges are often characterized, by removing the financial aid barriers that exist for low-income students (Eller et al., 1998).

### **Financial Aid and Persistence**

There are many existing studies to support the correlation between financial aid and student persistence. For example, Terkla's (1985) empirical investigation of national financial aid policies consisted of 343 high-need financial aid recipients. These students attended a large urban commuter campus, and the results indicated that all federal campus-based aid programs had a positive effect on persistence. After cumulative grade point average the receipt of the National Direct Student Loans, work-study, and grants had the highest correlation with persistence. Another study (Singell, 2002) revealed similar findings.

Other supporting research connecting persistence patterns and federal financial aid recipients revealed that financial aid students who received a grant and who were characterized by persistence risk factors (no high school diploma, delayed postsecondary part-time enrollment, full-time employment, single parents, etc.) persisted at the same rates as those students who did not receive the grant (Wei and Horn, 2002). Wei and Horn (2002) used data obtained from the first follow-up study in 1998 of the National Center of Education Statistics' 1995-96 Beginning Postsecondary Students (BPS)

Longitudinal Study and the results showed that financial aid only addresses one barrier to success by overcoming the immediate financial obstacle that low-income students face when pursuing a college degree. However, other risk factors may affect the ability of students to persist.

In 1989, St. John performed one of the first studies of financial aid and persistence using national survey data. The sample was from the National Longitudinal Study of the High School class of 1972 (National Longitudinal Study: 72). In this study, financial assistance was correlated highly with a student's choice to remain in college. Only high-school GPA and degree goals (aspirations) had higher correlations. Furthermore, he examined (1990a, 1990b) enrollment and persistence at all institutions of higher education in a series of two studies using HSB: 82 and NLS: 72. The research examined the additional premise that price-response coefficients changed over time as the result of changing financial aid policies. The authors concluded that students were influenced more by the financial aid they received than the tuition they were charged, although it was not determined that one type of financial aid was more effective than another. Tuition was negatively associated with enrollment decisions, but was not significant for first-to-second year persistence. Rogers (2005) examined the impact of federal, state, and institutional student aid programs on associate's degree and certificate attainment of low-income students and adult learners within-year and year-to-year persistence. This study confirmed previous findings of a positive relationship between student persistence and financial aid. The results of this logistic regression analyses suggested that the receipt of grant aid early in college has a significant positive effect on the Associate's Degree credentialing of both low-income students and adult learners.

A few studies have utilized more rigorous methods to provide an estimate of the impact of aid on college persistence. For example, Dynarski (2008) found that the state merit-based aid programs of Arkansas and Georgia reduced the college dropout rate. Scott-Clayton (2009) supported such findings when examining the West Virginia PROMISE Scholarship and found that it had positive effects on a range of outcomes, including credit accumulation. Richburg-Hayes et al. (2009) focused on community colleges and examined the effects of a scholarship provided to low-income students in reward for reaching minimal course-related benchmarks. The researchers found this had positive and significant effects on credit accumulation and full-time enrollment.

Additional studies show a positive correlation between financial aid and persistence (Cabrera, Stampen, and Hansen, 1990; Singell, 2004, St. John, 1989; and Voorhees, 1985). After conducting a study and examining first year attrition rates at a four-year institution, McGrath and Braunstein (1997) found that the receipt of financial aid resources was the second best predictor of persistence. This finding supported the rationale that students with financial hardship may spend more time and effort on their financial situation, rather than focusing on their studies. These findings further support the idea that financial aid assistance correlates with persistence.

While there are ample findings to conclude that the awarding of financial aid is associated with student retention, there are also studies that have not found a relationship between financial aid and student persistence. For instance, St. John (1989) conducted another longitudinal analysis of persistence, and used NLS: 72, the High School and Beyond Senior Cohort of 1980 (HSB: 80) and the High School and Beyond Sophomore Cohort of 1982 (HSB: 82) to examine the role of financial aid and persistence. The



results were consistent with Astin (1975), in that loans were negatively associated with persistence in the first-to-second year of attendance.

Various studies have indicated a negative correlation between loans and persistence. According to Singell (2002), non-need-based (or unsubsidized) loans such as the Stafford Unsubsidized loans were not significant in predicting students' retention. This was also conclusive with Astin's (1975) findings, which suggested loans were not positively correlated with persistence, but it is unclear if Astin's (1975) study included students with financial need and/or non-need students, as it was specified in Singell's (2002) study. Dowd & Coury (2006) used a logistic regression, which analyzed the National Center for Education Statistics' Beginning Postsecondary Students (BPS 90/94) to predict persistence to the second year of college and associate's degree attainment over five years. The findings concluded that loans did not contribute to higher persistence and attainment rates. Loans were observed to have a negative effect on persistence and no effect on degree attainment. An earlier study concluded similar findings for student loan borrowers who enrolled in postsecondary institutions. More than 20% dropped out with significant debt. Many of these students were unemployed in 2001 and defaulted on their student loans (Gladieux & Perna, 2005). Borrowing, combined with other risk factors associated with not completing higher education (working excessive hours, lack of adequate college preparation, and part-time attendance), places many students, especially low-income and first-generation students at a particular disadvantage (Ruiz, 2008).

Contrary to Terkla's (1985) findings that all federal campus-based aid programs had a positive association with persistence, McGarth and Braunstein (1997) reported that campus-based aid programs had a negative association with student persistence. The

study examined the federal work-study program and its relationship to persistence. The results contradicted those of past researchers, in that this study found the work location (on or off-campus) had no significant relationship to student persistence.

### **Persistence Models**

The theoretical foundation for this study is anchored in major persistence theories. These theories support the rationale to examine the interventions utilized by the three appeal interventions in this study. The implications that may be drawn from the results of this and previous research may assist with structuring and restructuring financial aid appeal programs within community colleges which, in turn may improve the retention of community college students.

Student retention is of particular interest and of great concern for both 2 and 4-year college administrators. Persistence is one of the most extensively used measures to assess educational outcomes in higher education. It can be used to inform college officials and political leaders about how well an institution is serving and meeting the needs of students, especially at-risk populations. Persistence rates serve as both a convenient and sometimes meaningful measure of the effectiveness of a college or university (Leppel, 2001). While there is earlier existing work which examined retention, the ideas of Spady (1970, 1971), Tinto (1975, 1987, & 1993), Astin (1984), Bean (1980), Pascarella (1980), and Pascarella & Terenzini (1991) created groundbreaking models.

#### **The Spady Dropout Process**

Spady (1970) used Durkheim's social theory on suicide as the basis for his retention model. Although dropping out of school does not take on the same level of seriousness as suicide, he believed there are parallels between the conditions that relate to

both outcomes. Spady took the thoughts of Durkheim's about how the lack of integration can cause an individual to sever ties with a social system and applied that theory to higher education. There were two major concepts that Spady took from Durkheim's version of social integration. The first component involves two ways to have success in the academic system-extrinsic and intrinsic rewards. Grades are extrinsic rewards, while intellectual development is an intrinsic reward. In the social system, academic success is determined when attitudes and interests are compatible with educational institutions. The second major component is described as "friendship support" (Spady, 1970). This concept describes how closely a student has established relationships with others in the academic system. The two components connect Spady's model to Durkheim's theory.

In 1971 Spady tested his model with a longitudinal study using a sample of 683 freshmen attending the University of Chicago. Surveying perceptions about environmental and social influences, he combined the results with GPA and retention data from the institution. He then revised the model, adding structural relationships as a factor and making friendship support part of a subset directly dependent on elements in both the family background and normative congruence clusters (p. 58). This is defined as the degree to which one's personality matches one's behavior in a particular situation or one achieves success when attitudes and interests are compatible with the academic environment.

Spady found that formal academic performance is the dominant factor in accounting for attrition among men and women (p. 38). His model emphasized the important role that student characteristics and actions play in educational development. The interaction between the student and institution form a dynamic relationship creating

an environment necessary for student development and intellectual growth. Student involvement and effort are critical to success.

### **Astin's Student Involvement Model**

Astin's Student Involvement Model (1984) is based on the idea that retention increases when students become physically and emotionally invested or involved in the campus environment. This model discusses the many demands that compete for a student's time, such as work, family, friends, activities, academics, etc. A student actively chooses to spend time on academic and social activities in which they are involved. This model suggests that activity programs or curricular pursuits must draw enough effort from students in order for them to learn and develop. According to Astin (1984), effort is not merely a psychological state, but instead "the behavioral manifestation of the state" (p. 301).

One of the key factors for involvement reported in Astin's model is employment. Astin (1984) found that part-time on-campus employment improves involvement and thus retention. The longer students are on campus and interacting with peers and faculty, and relying on the college for income, the greater the institutional attachment. This would be one reason to support reinstating financial aid on a probationary basis. One non-negotiable requirement for the federal Work Study program (on-campus employment) is financial aid eligibility. In turn, reinstatement of federal aid on a probationary basis increases the opportunity of obtaining campus-based employment and retaining financial aid students. A limitation to this idea is that the student will have less time to devote to their studies. This limitation cannot be taken lightly, given that the students included in this study have experienced academic difficulty.

### **Tinto's Integration Model**

Tinto's Integration Model is one of the most commonly referenced persistence models. A majority of student retention studies stem from earlier findings of Tinto (1975, 1987, & 1993). Prior work of Spady (1971) and Astin (1975) explored issues of college dropout, which led researchers such as Tinto to expand those findings. Tinto designed this model to explain how the contact between students and institutions affect dropout behavior. Tinto's integration model describes and expands upon our understanding of undergraduate persistence by designing a model to help institutional leaders understand why students leave, so they can design activities to better serve the needs of students and thereby increase retention and graduation rates.

The central idea of 'integration' holds that student persistence is strongly predicted by the degree of academic integration and social integration into an institution (Draper, 2002). This model emphasizes the importance of social and academic integration. The transition to the academic environment entails a series of interactions between the student and college systems (1993). Tinto hypothesizes that a series of interactions between the student and an institutional system is necessary for successful transition to the academic environment. He theorized that the more students feel integrated into the institution, the less likely they are to drop out. However, students bring different experiences with them, such as family background and pre-college school experience which may impact the academic and social systems, as well as influence commitment to education. As students interact with the various aspects of college, such as, student and academic services and co-curricular activities, integration with these systems will be influential on student goals and their decision to persist or leave (Tinto,

1975). Academic integration is measured in two ways: grade performance and intellectual development. This supports the rationale of this study to monitor student academic progress and implement student focused services (workshops and academic advising) to engage and retain financial aid students.

In a comprehensive review of retention programs, Myers (2003) asserted that the institutional environment has a powerful impact on students' satisfaction with and success in an institution. He elaborated that the institutions that are successful in retaining students are those that are responsive to the academic, social and cultural needs of their students. Tinto (1993) concludes that successful retention programs are longitudinal, are tied to the admissions process, and involve a wide range of institutional actors.

### **Bean's Model of Student Attrition**

Bean's (1980) first conceptual model borrowed ideas from Price's study of employee turnover because it explored the things that affect satisfaction which in turn affects dropout. He hypothesized that grades would be a strong indicator of remaining in school. His findings were that GPA is significantly related to student satisfaction, and institutional commitment was the most significant of all variables.

Bean later expanded his Model of Student Attrition to include a framework specifically for nontraditional students at four-year commuter colleges. Bean's model incorporated four sets of variables – academic performance, intent to leave, background, and environmental factors. It discussed how psychological, environmental, and academic variables interact to determine whether students remain in college (Bean and Metzner, 1985). Variables include factors such as finances, hours of employment, support systems, goal commitment, family responsibilities, satisfaction, and stress.

Bean and Metzner (1985) identified two compensatory interaction effects, with environmental variables defined as more important than academic variables. Therefore, the former can compensate for the later, but strong academic support cannot compensate for weak environmental support (Pietras, 2010). Environmental variables are thought to be so influential that even if all other variables are negative, but all environmental variables are perceived as positive, students will persist in college (Pietras, 2010). If a student cannot pay for college, he/she will not continue no matter how much encouragement he receives (Pietras, 2010). Not only does this information convey the importance of a nurturing academic environment, but it reinforces the importance of financial aid.

The other compensatory interaction effect in Bean's model is between GPA and psychological outcomes. This involves psychological factors compensating for low academic achievement, but high academic success cannot compensate for low satisfaction (Bean & Metzner, 1985). One might interpret Bean's conclusion to mean that if a student connects with the institution and enjoys it, he/she will persist, despite unsatisfactory grades. If such an interpretation is valid, current SAP regulations would prohibit financial aid eligibility if such students failed to satisfy federal course completion and GPA standards.

Bean's nontraditional student attrition model includes psychological outcomes in addition to academic ones. Psychological outcomes, include sense of utility, satisfaction, goal commitment, and stress, are a result of the interaction between academic and environmental variables. Although the nontraditional student attrition model emphasizes environmental factors which may be beyond the influence of most institutions, two

variables are within institutional control: academic advising and course availability (Bean & Metzner, 1985).

### **Pascarella's Conceptual Model for Research on Student-Faculty Informal Contact**

Pascarella's Conceptual Model is also a form of an attrition model. It involves informal contact between students and faculty. It stresses the importance of student-faculty interactions and that those exchanges occur informally or outside of the classroom (Pascarella, 1980).

This model seeks to understand the unique influence of student-faculty non-classroom contact on educational outcomes and student persistence (p. 568). Pascarella (1980) first acknowledged that a number of variables such as: student and college experiences, background characteristics, and institutional factors, influence the amount of contact with faculty. Factors such as culture, size, residency, reward structure, policies, and advising programs contribute to the faculty's willingness to spend time interacting with students outside the classroom. Pascarella & Terenzini (1977) tested Tinto's (1975) model through a longitudinal study of year-to-year persistence of 1,008 freshmen at Syracuse University. The results indicated persistence was highest when interactions concentrated on intellectual and academic matters, with somewhat lesser correlation with career discussions and academic advising.

In 1983, Pascarella and Chapman examined persistence at 11 four-year and two-year commuter and residential institutions. Goal and institutional commitment served as measures of integration and were precursors of persistence in this model. The results revealed that institutional commitment was a greater predictor of persistence in four-year residential and four-year commuter institutions than at two-year institutions. However,



goal commitment was a better predictor in two-year colleges and academic integration had an indirect effect on persistence.

One of the first long-term persistence studies focused on two-year college students, was conducted by Pascarella, Smart and Ethington (1986). They utilized data collected by the Cooperative Institutional Research Program. A sample of 825 students was drawn from 85 two-year institutions. The results revealed that 53% of the male and females completed their bachelor's degree within nine years of first enrolling at a community college. Academic integration, satisfaction with the last college attended and social integration were significant and positively correlated with male degree persistence. Academic and social integration had a significant and positive influence for males and females toward degree completion, in contrast to findings of earlier studies (Pascarella, Duby & Iverson, 1983) on year-to-year persistence in two/four-year commuter institutions.

Student persistence and retention are important factors to consider when implementing programs to help students attain their academic goals in college. This section included literature discussing different theoretical frameworks related to student retention. This body of research serves as a basis for developing appeal models for students who have demonstrated academic difficulty.

Little, if any, work provided an empirical look at interventions, academic progress, persistence, and financial aid. The focus of this research is to analyze the effectiveness of financial aid appeal interventions and determine whether there is an influence on academic progress and persistence for community college students receiving financial aid on a probationary basis.

## **Why Students Do Not Persist**

A large body of literature is devoted to discovering the reason(s) why students do not persist in higher education, but the results do not identify a single issue. Student retention research has been centered on theoretical concepts related to sociological interaction, institutional interaction, and psychological maturity of individual students (Tinto, 1987); economic climate and utility (Braxton & Mindy, 2002) and the organizational attributes of the institution's administration and students affairs (Berger & Braxton, 1998).

Reports capturing the attrition and degree completion data for community colleges reveal statistics that college officials may find alarming. Retention and degree completion data for community colleges are typically below 60%. Community colleges suffer from some of the lowest rates of student persistence in post-secondary education. The most recent available data from the U. S. Department of Education indicate that 59% of first year first-time, full-time (FTFT) community college students enroll for their second year; and 40% of first-time, part-time students are enrolled for a second year (2008a). These results echo the findings of Larose (n.d.), Schneier & Yin (2012) who concluded that nearly 50 percent of community college students who enroll will not persist towards graduation and earn a college degree. The Center for Community College Student Engagement found fewer than half (45%) of students who enter community college with the goal of earning a degree or certificate have met their goal six years later and 28% of first-time, full-time, associate degree-seeking community college students graduate with a certificate or an associate degree within three years (2009).

Overall, the retention and degree completion rates for community colleges are presumably disturbing to a variety of stakeholders. As millions of dollars are invested into federal aid programs (Baime & Mullin, 2010), policymakers and employers seek a return on investment to include qualified college graduates. With the demographics of the workforce changing, there is a growing importance of a post-secondary education in order for citizens to succeed in the labor market (Future Ready Project, 2013). Many (AACC, 2012; Symonds, Schwartz, and Ferguson, 2011; Russell, 2008) indicate that the nation's ability to compete in the global economy depends on having unprecedented numbers of workers with postsecondary credentials. The majority of new jobs will require some education beyond high school. The U.S. economy will create some 47 million jobs over the 10-year period ending in 2018 and nearly two-thirds of these jobs will require that workers have at least some post-secondary education (Symonds, Schwartz, and Ferguson, 2011). Most community college students do not complete their studies and suffer economic losses compared to what they would have earned as graduates (Schneier & Yin, 2012).

According to one study conducted by The American Association of State Colleges and Universities (AASCU) (2005), this pattern of poor educational outcomes in two-year institutions has remained fairly constant for more than three decades. Retention and degree completion results only strengthen the arguments of postsecondary education critics and raise concern among community college officials (AASCU, 2005). In order to develop effective student support service programs, it is important to understand the characteristics of students attending community colleges and the impact of institutional policies as they affect retention rates.

The literature identifies a variety of factors related to the retention rates of community college students. Some literature (Boyer, 2007; Engstrom & Tinto, 2008; Jensen, Moore & Shulock, 2009; Kezar, 2011;) speaks to student characteristics and deficiencies as contributing factors to poor attrition, such as failing high schools, a lack of consensus to define and measure standard college-readiness, and a lack of student engagement in the college process (Hagedorn, Maxwell, & Hampton, 2002; Larose, Gisele, 2010). These widespread reasons connected to poor attrition rates only add to the complexity of the efforts needed to effectively address the issue of needed improvements in student persistence.

Few existing studies (Herrshcraft, 2012 and Neel, 2004) were found investigating financial aid SAP and student retention. Given the limited literature, as well as the results and limitations of existing studies, it is not at all possible to determine that students that fail to maintain satisfactory academic progress (SAP) as defined by federal guidelines, students are the primary culprits contributing to the low community college persistence statistics. But given that most low persistence rates are found among at-risk populations receiving financial aid (Boyer, 2007; Kezar, 2011; Engstrom & Tinto, 2008; Hagedorn, Maxwell, & Hampton, 2002; Jensen, Moore & Shulock, 2009), developing programs to address their needs may result in higher degree attainment rates for two-year institutions. This study seeks to analyze appeal interventions based on persistence theories and other models to increase academic progress and persistence among financial aid students, who do not meet academic policies to maintain financial aid eligibility.

## **Intervention Models and Best Practices**

The next section will review workshops, academic advising models and institutional programs and investigate the extent of the relationship between existing appeal interventions and student retention and persistence.

### **Workshop Models**

While Astin's model (1984) connected attrition to a student's institutional involvement in college, Tinto attributed student departure to lack of social and academic integration. These findings led researchers and higher education administrators to employ various interventions to engage college students to meet their unique learning styles to persist towards graduation. The following section examines the effectiveness of workshops and academic advising models, since these are strategies used within the proposed study to engage students who have lost their financial aid eligibility.

### **Workshop Framework and Models**

The identification of a target population is one of the most important steps in designing a career course or workshop (Halasz & Kempton, 2000). Limited research was uncovered to support the rationale to include workshops as a tool to increase student success for students failing to meet satisfactory academic progress. However, while some of the referenced research may not directly relate to this study, other research is applicable and all share a common purpose of increasing academic progress and student success. In an attempt to provide a correlation between workshops and increased academic progress and student persistence, the research provided an overview of research related to this intervention as it has been implemented in educational settings.

Although the research related to workshop models and student engagement is limited, the narrow findings revealed a related approach known as the Treisman's Model (Fullilove & Treisman, 1990). Originally designed to improve academic performance in a first-year calculus course, this educational intervention has been adapted over the years by various disciplines to meet specific curriculum and student needs. In response to a high failure rate of minority students in undergraduate calculus courses, Uri Treisman designed intensive workshops in which students collaborated in small groups to solve problems. Treisman recruited mostly African American and Latino students with relatively high SAT mathematics scores and developed the Math Workshop Program (MWP) and Emerging Scholars Program (ESP) to increase the success rate of underrepresented student groups. The workshops were scheduled four to six hours per week; and a key element was to focus on helping minority students excel, rather than merely avoid failure. The results indicated that this intervention was effective and increased the academic success of participants (Fullilove & Treisman, 1990). The intended purpose was achieved, as black student participants with Math SAT scores in the low-600s demonstrated academic progress, performing comparably to those of White and Asian students whose Math SAT scores were in the mid-700s.

The success of the programs based on the Treisman model spread to other colleges and universities, with various disciplines replicating and modifying the program to increase student success. For example, one institution with a large number of non-traditional students adapted the Treisman Model program and used a multiple regression analysis to assess the effectiveness of the workshop model to improve student performance, as measured by grades. These workshops shared the same ideas as

Treisman, which promoted collaboration, increased problem-solving skills, and the proper use of a discipline's language (Chinn, D., Martin, K. and Spencer, C., 2007). The results validated the Treisman Model and the effectiveness of the workshop model. The study provides evidence that a workshop model can be an effective learning environment for students.

The Treisman Model spawned a series of additional studies, which further tested the effectiveness of the model. Moreno & Muller (1999) devised a series of assessments of the model to understand the effects of workshops on different student groups (women, African-American, Latino) enrolled in Calculus I. A significant finding was that students who participated in the workshops earned a full grade point higher (on a 4-point scale) over those who did not participate in the workshops. Other models concluded similar results of increased student satisfaction and higher grades (Adair et al., 2001; Duncan & Dick, 2000).

It can be argued that the success of Treisman Model is due to higher level academic functioning of the participants. The SAT scores for the students in the proposed study is unknown and may differ significantly from those in the Treisman model, which is a variable to consider when assessing effectiveness. In addition, the Treisman program facilitated workshops four to six hours per week, whereas the frequency and length of time in this study is less, also impacting the efficacy of the workshops in this study.

Although the workshops for this study a college course, such as calculus or psychology, active learning was the goal. Active learning is an extension of the ideas of constructivism, experiential education, and adult learning. This is captured in the following statement concerning active learning and adult students' needs from

Chickering & Gamson (1987) “They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives” (p. 4). The more effort a student invests in their learning by asking questions, discussing, and engaging in a topic, the more likely they are to learn. Participating in discussion, presentations, and asking questions have been correlated with higher levels of comprehension, critical thinking and subject knowledge (Connor-Greene, 2005; Finkel, 1999). Active learning in the classroom has been shown to decrease student departure and improve persistence (Braxton et al., 2000; Pascarella & Terenzini, 2005).

Brown (2011) conducted a preliminary quantitative study involving 19 students who attended a mid-sized, suburban, multi-campus community college. The study’s goal was to assess the effectiveness of a web-based career development workshop designed to support the career decision making of undecided community college distance learners. The authors hoped to utilize the results to determine the feasibility of incorporating the workshop into academic advising, career advising, and the curriculum of a College Success Course (CSC). Analysis of the workshops revealed that those students who completed the workshop intervention found the strategy to be more helpful in assisting with career decision making than those who did not participate in the workshop. However, in both groups, those who participated and those who did not participate reported satisfaction with their intervention. The final results indicated that there was no statistical significance with change in career decision making difficulty after completing the interventions.



## **SAP Workshop Models**

Only two studies which examined the demographic characteristics of students with financial aid suspension and institutional policies were found in the peer-reviewed literature (Herrschaft, 2012; Neel, 2004). Only one included a student development approach to assist students with regaining aid eligibility after failing to meet satisfactory academic progress standards (Herrschaft, 2012).

Herrschaft (2012) examined the effectiveness of a voluntary workshop program for academically ineligible students who did not maintain satisfactory academic progress at a large urban Southern California community college. The study used quantitative and qualitative methods to understand whether and how an intervention program influences community college students' sense of self-authorship, academic progress and progress towards financial aid eligibility. Herrschaft assessed how participation in the workshops influenced students' knowledge of financial aid policies, academic skills, and academic progress. The study included three workshops for one semester, and the workshops addressed subject areas of financial aid policy and strategies for academic success. Only 4 students completed the workshops, while 18 did not. Although the results were inconclusive due to the small number of participants and the restricted timing of the workshops, those in the treatment group were retained at higher rates for subsequent semesters, improved their course completion and had a graduation rate approximately 20 percentage points higher than that of the matched comparison group. The implications clearly spoke to the need for student-focused services to help students understand basic policies. Mandatory workshops should also be considered since many of the students included in Herrschaft's study were not motivated to attend (Herrschaft, 2012).

Another study (Neel, 2004) examined the relationship between the federal financial aid appeal process and student persistence. The author investigated within-year and year-to-year student persistence at the community college, seeking to evaluate whether or not students who failed to meet institutional satisfactory academic progress standards regained their eligibility for federal financial aid by appealing their suspension status (Neel, 2004). The goal of the study was to determine whether the persistence of students who appealed their loss of eligibility to receive federal financial aid, and whose appeals were approved, was greater than those whose appeal was denied, and those who did not appeal. The ex post facto data analysis for this quantitative study indicated that a higher percentage of students whose appeals were approved (73%) persisted as compared to those whose appeals were denied (41%). The study's results demonstrated a positive relationship between appeals that were approved and persistence.

Two limitations were associated with this study: lurking variables and causation. According to Moore (2001) the other limitation is the non-experimental design, which does not allow for causation to ever be proven, thus fostering disagreements among researchers regarding whether or not financial aid affects persistence (as cited by Neel, 2004).

Although Neel (2004) was unable to find widespread literature related to the effectiveness of workshops, his findings concluded that this intervention can be an effective approach to engage students and increase academic performance. The results from the proposed study may result in more knowledge about whether or not an intervention such as those studied can serve as an effective means to positively impact academic success, particularly for at-risk students eligible to receive financial aid.

The next section offers a brief history of academic advising. A framework for advising and the effectiveness of this support service as intervention for students not demonstrating academic progress is reviewed

### **Academic Advising**

Academic Advising is a planning process that helps students to approach their education in an organized and meaningful way (Noel-Levitz, 1985). This student support service place in “situations in which an institutional representative gives insight or direction to a college student about an academic, social or personal matter. Advising is a process that involves teaching and the nature of this direction might be to inform, suggest, counsel, discipline, coach, or mentor students how to make viable academic decisions (Noel-Levitz, 1985). In summary, academic advising is an interactive process in which the adviser helps the student set and achieve academic goals, acquire relevant information and services, and make responsible decisions consistent with interests, goals, abilities, and degree requirements.

### **Academic Advising History**

In 1841, Rutherford Hayes attended Kenyon College and wrote home about a new program which required each student to choose a member of the faculty to serve as an advisor and friend (Crockett, 1978b; Raskin, 1979; Titley & Titley, 1982). Subsequently, systems of advising were in place in most colleges by the 1930s. Throughout and after World War II a growth of interest occurred in the use of measurement to classify one’s interest and aptitudes (Zunker, 2001) and developmental issues then followed.

## **A Framework and Model for Academic Advising**

Perhaps the most crucial aspect of a student's interaction and engagement with an institution of higher learning is the relationship between the student and advisor. According to Light (2001), "Academic advising is the single most underestimated characteristic of a successful college experience." Academic advising encompasses an increasing level of presence and involvement in the development of college students and the educational paths they choose. According to the literature, there is evidence that academic advising is an essential element of a student's collegiate experience, especially when referring to serving the needs of at-risk college and university students (Bahr, 2008; CAS, 2009; Heisserer & Parette, 2002; Sayles and Shelton, 2005).

The primary purpose of academic advising programs is to assist students in the development of meaningful educational plans (CAS, 2011). It is a process in which faculty and staff interact with students as they develop, helping them realize what decisions they should make and what subsequent actions are necessary to achieve their educational and career goals (Roberts & Styron, 2009).

Pascarella and Terenzini (2005) stressed that advising plays a major role in students' decisions to persist and it also affects their chances of graduating. Many students who prematurely leave college often report of poor academic advising experiences. A main component of any retention program is an excellent advising program (Tuttle, 2000). Academic advising is much more than just scheduling courses and registering students for classes. Academic advising might possibly be as Hunter and White (2004) suggest, the only organized and structured attempts, other than the classroom, in which university faculty or staff, have sustained interactions with students.

### **Developmental Advising**

Developmental advising is characterized by the ongoing relationship between a student and advisor that goes beyond simply giving information (King, 2005). It involves helping the student become more aware of his or her values, personal characteristics, and needs. This is indicative of Crookstone's (1972) statement, "developmental academic advising is concerned not only with a specific personal or vocational decision, but also with facilitating the student's rational processes, environmental and interpersonal interactions, behavioral awareness, and problem-solving, decision-making, and evaluation skills. According to Raushi (1993), this particular form of advising consists of viewing students at work on life tasks in the context of their whole life settings. This model generally involves the emphasis of goal setting, problem-solving, and educational planning (Gardiner, 1994).

### **Prescriptive Advising**

In contrast to developmental advising, prescriptive advising (Crookston, 1972; Fielstein, 1989) is an advisor-student relationship described as more hierarchical and authoritarian in nature, and characterized by a one-way flow of communication with minimal student involvement (Church, 2005). The techniques are considered more directive and logistical than the developmental approach, when the advisor prescribes a solution to students' problem and the student complies. While some researchers have suggested that prescriptive advising is sometimes more helpful with students of color and first-year students (Brown & Rivas, 1994; Chando, 1997; Smith, 2002), most authors advocating for a particular approach to academic advising have used developmental advising as the prevailing paradigm. Studies which support this form of advising have

found that students prefer it (Fielstein, 1989; Filstein & et al., 1992) since at certain times information is what the student needs most.

One of the most common organizational structures for community college counseling programs is to centralize counselors on campus where they wait for students to initiate contact through appointments (Gordon et al., 2008). Centralization has been shown to work best with students who are motivated and show initiative (Bailey & Alfonso, 2005; Grubb, 2006). However, given the demographic backgrounds of the many at-risk population of students who typically attend community colleges, this approach may have minimal effectiveness. A centralized approach may neglect community college students who could benefit from counseling services (Levin et al., 2008; Maxwell, 1997). Counseling approaches that work best for at-risk students are proactive, directive, and focus on outreach (Maxwell, 1997). A counseling approach with these elements is referred to as intrusive counseling. The technique of this approach focuses on creating open and supportive environments for students who may tend to see higher education as alien, and overwhelming (Levin et al., 2008).

### **Intrusive Counseling**

According to Earl (1988), intrusive advising is action oriented to involve and motivate students to seek help when needed. This proactive and direct approach involves getting to the root of the problem, or as Earl (1988) pointed out, intrusive advising is about getting to the heart of what is causing difficulty for a student and recommending the appropriate intervention. Although responsive in nature, intrusive advising as defined in this study refers to (Upcraft & Kramer, 1995) a willingness to assist students in exploring services and programs to improve skills and increase academic motivation.

This takes on an action-oriented approach that may influence the student to become involved and seek the necessary help needed to be successful. This is particularly true for the population who were participants in this study, since their future financial aid is dependent upon complying with the advising intervention. Given that the students in this sample received financial aid on a provisional basis due to financial aid suspension, the SAP Advisor had an active role in communicating with the student and faculty, providing personal and academic counseling, monitoring grades, tracking attendance, etc. All of which is indicative of what Glennen (1995) described as using a variety of interventions when the advisor is more involved in the affairs of the student.

### **Effectiveness of Academic Advising**

There is conflicting research regarding the effectiveness of advising. Several studies indicate advising is not significant in improving retention and grade point averages (Aitken, 1982; Bean, 1980), while others report it to be critical for both (Crockett, 1978a; Habley, 1981; Pascarella & Terenzini, 1978; Tinto, 2000; Wilder, 1981;). Many studies measured student perceptions of advising (Nadler & Nadler, 1999; Pietras, 2010; Raskin, 1979). Only two were discovered which used the objective measures of GPA and retention to show a significant impact from increased frequency of advising (Morehead & Johnson, 1964; Rossman, 1967), I was unable to find studies which used objective measures that examined advising quality.

While there is evidence to support the positive impact of academic advising and counseling services on student success (Campbell & Nutt, 2008), only a few community college students actually utilize such services. This is evident based on the results from the 2008 College Student Report generated by the Community College Student Survey of

Engagement (CCSSE), indicating 90% of students believed academic advising is important, but only 13% utilized the services (CCSSE, 2009).

In spite of the scarcity of conclusive research, authors and institutions of higher education repeatedly stress the significance of academic advising for improving retention (Habley & McClanahan, 2004; Habley 1981; Metzner, 1989; Jones, 1986; Tinto, 2000; Wilder, 1981). Chickering & Reisser (1993) reported that educating the whole student involves institutions hiring staff members with knowledge of student development and how to foster it. Tinto (1993) noted that academic and counseling services are more effective when students are required to participate, and the experience is integrated into the educational process. Academic advisors are in a unique position to help students blend educational experiences with career goals (Gordon, Habley, Grites, & Associates, 2008). Researchers agree that academic advising is an important source of informal faculty contact and academic integration (Crookston, 1972; Nadler & Nadler, 1999; Pascarella & Terenzini, 1976; Raskin, 1979). When students participate in advising services, they feel better about their advisors and, their institution (Nadler & Nadler, 1999; Peterson, Wagner, & Lamb, 2001; Wilder, 1981). Sessions with faculty advisors improve retention (Gerdes & Mallinckrodt, 194; Grites, 1998; McArthur, 2005; McLaren, 2004; Sayles 2005; Thompson, Orr, Thompson, & Grover, 2007; Titley & Titley, 1982). Students who do not seek or receive advising services may be disappointed in how their classes transfer, may take additional time to graduate, or have lower GPAs because they lack knowledge of campus resources (Flaga, 2006; Gelwick, 1974; Hunter & White, 2004).



## **Institutional Models**

Tinto's Model of Student Persistence identifies five conditions that must be met in order to create an optimal learning environment for students—regardless of individual background. First, employees of the institution must communicate to the student through verbal and non-verbal cues that the student can be successful. Second, students must be guided through a process to help them define their personal goals, match skills and interests to career majors leading to career goals, and understand institutional policies that may affect their time-to-degree completion. Third, institutions must find a way to blend academic, social and personal support through formal means such as mentoring, and informal means such as in-class socials. Fourth, students must somehow connect with others—be it faculty, staff or other students. Lastly, students must be actively engaged as learners through hands-on activities and projects that allow them to interact with others (Engstrom & Tinto, 2008).

One public university study analyzed various factors that may affect persistence rates among freshmen students (Sabharwal, 2005). A survey response of 4,010 respondents revealed that students who socially and academically integrated into the system are more likely to persist than those who did not feel a part of the university system. The study revealed that 78.5% persisted into their second year, while 21.5% did not persist. Secondly, 42.5% of the students who fell into the 'continued enrollment' category felt very academically prepared to succeed at the university versus 33% of the non-persisters. In addition, 65% who persisted were extremely or very confident in their ability to earn good grades while 55% of those who did not persist. The ASU study found that students who had close to 50% of their tuition paid for in the form of scholarship or

grants were more likely to continue their education than were students who had less than half of their tuition costs covered. Lack of finances is often a real problem that discourages persistence and is the main reason students often give for dropping out (Sabharwal, 2005).

Sabharwal (2005) reported failure to become integrated and to establish competent membership in either the social or academic life of the campus can lead to non-persistence among students. This study found that matching student needs, interests, and skills with other incoming freshmen can help ease the process of integration. Although Tinto's model validates the need for schools to assume a proactive role in the student integration process and this study is reactionary in nature, the underlying idea is the same goal of increasing student persistence.

Based on a line of thinking of earlier researchers (Astin, 1993; Nora, Attinase, & Matonak, 1990; Tinto, 1993), Ziskin, Gross, & Hossler (2006) conducted a study, the goal of which was to understand how campus practices at individual institutions influenced student persistence. By doing so, they used a logistic regression model to explore how actionable institutional practices and structures, combined with student behaviors, played a role in students' institutional commitment and intent to persist at the end of the first year of college. This model considered categorical variables of student characteristics, such as gender and race. Social integration and academic integration were categorized as ordinal variables in the study. Examples of these variables included "participation in student organizations" and "perceptions of advising practice." Data were collected on full-time, first-time, first-year students at four four-year colleges and universities in three states. The institutions consisted of a public, private, residential, and

historically Black colleges and universities. The results of the regressions showed that the model works differently when applied to different types of institutions. Although the response rates varied across gender and socioeconomic status low, the outcome for all four institutions included high rates of retention ranging from 74 to 92%, indicating intent to enroll at the same institution.

An ex post facto study collected data over six consecutive semesters at a large, urban community college designated as both a Minority-Serving and Hispanic-Serving Institution. The study focused on examining the effects of academic student outcomes as related to a comprehensive support and access intervention program. Low-income and working poor sub-group were the target population of the study that examined the effects of the program on academic student outcomes on a treatment group of 198 students (Saltiel, 2011). The author concluded that the treatment group maintained higher rates across semester-to-semester retention, semester and cumulative GPA, and graduation when compared to the group that did not participate in the intervention. After six semesters, students in the treatment group had a graduation rate approximately 20 percentage points higher than that matched comparison group. The logistic regression results show that the treatment had a significant positive effect on students' semester-to-semester educational outcomes and graduation, even after controlling for other covariates.

### **The Community College**

Without community colleges, millions of students and adult learners would not be able to access the education they need to enter and/or advance in the workplace (American Association of Community Colleges, 2011). Meeting diverse developmental

needs of college students remain a priority for two-year institutions. Community colleges are guided by a mission to provide accessible, quality education with a commitment to serve the community with open-access admissions, comprehensive educational programs, teaching, and lifelong learning (Vaughn, 2006).

### **Brief History**

Community colleges are a vital entity in the post-secondary education system. With nearly 1,200 regionally accredited community and technical colleges in the United States (AACC, 2010) the two-year institution has evolved into comprehensive unit which provides a wide range of educational and training services to meet the needs of the labor force and local communities at a fraction of the cost (Darby-Hudgens, 2012). Programs include associate degrees, certificate programs, developmental courses, distance learning opportunities, veteran resources, advising, and vocational programs to meet economic and workforce needs (AACC, 2010; Hugo, 2007; Darby-Hudgens, 2012). The purpose of the community college is to provide students with an opportunity to attain their goals and learn in an engaging environment (Herrschaft, 2012; Shannon & Smith, 2006). Most likely known and attractive because of the open admission policy and low cost tuition, community colleges provide universal access to a post-secondary education that may not otherwise have been afforded to many at-risk populations.

### **Community College Enrollment & Growth**

Nearly half (44%) of U.S. undergraduates are enrolled at a community college (AACC, 2012; Larose, n.d.). More than 6 million students enroll annually for credit and another 5 million for non-credit courses (Darby-Hudgens, 2012; Larose, n.d.). If millions of additional jobs are created over the next 10-year period, and at least some post-

secondary education required for employment, this may be one reason why enrollment has increased among two-year institutions. Even during an unstable and uncertain economy, since 2008 community college enrollment has increased by approximately 15% (American Association of Community Colleges, 2011), and continues to increase due to the growing demands for workers with some postsecondary education. Baum, Little, & Payea (2011) reported that total fall enrollment in community colleges increased from 5.7 million in 2000 to 6.2 million in 2005 and 7.1 million in 2009. This enrollment increase will include those of non-traditional backgrounds, and students from ethnically and racially diverse populations. African-American and Hispanic first-time undergraduates are more heavily concentrated in two-year rather than four-year institutions (Perna, 2006); only 40% of White non-Hispanic undergraduate students are enrolled at community colleges (U.S. Department of Education, 2007).

### **Community College Demographics**

Community college enrollments are typically diverse. The enrollment profile includes first-generation college students (AACC, 2011; CCCSE, 2010; Prospero & Vohra-Gupta, 2007), low-income learners (Baime & Mullin, 2010; ICAS, 2009), minority groups, such as African Americans (AACC, 2010; Ellison & Martin, 1999) and students who place into one or more basic skills courses (developmental education), a growing national number of 60% (Bailey & Cho, n.d; Daiek, Dixon, & Talbert; 2012;.). Many of these characteristics are known to correlate negatively with student persistence. Community college students have a tendency to attend part-time, stop out and then return (Coley, 2000, Horn & Carroll, 1998); hold part/full-time work responsibilities (Choy 2002; McSwain & Davis, 2007; Zizkin, Torres, Hossler, & Gross, 2010); be socio-

economically disadvantaged (Kezar, 2011; McSwain & Davis, 2007; Terenzini et al., 2001); and/or exhibit other risk-factors which have been correlated with poor academic performance and attrition (Boyer, 2007; Engstrom & Tinto, 2008).

Since half of the community college population is characterized as non-traditional, it is important to understand the research surrounding the demographics of two-year institutions. While every non-traditional and 'at-risk' community college student cannot be captured within the scope of this work due to the narrow focus of this study, only those student groups consistently highlighted throughout the literature as typical recipients of financial aid, are provided.

Community colleges serve a more ethnically and racially diverse population of students than their public or private four-year counterparts (Benitez & DeAro, 2004). A study by Bailey et al. (2005) concluded that minority students from low-income households, first-generation enrollees, and immigrants attending community colleges are overrepresented in the community college population when compared to the general population. African-American and Hispanic first-time undergraduates are concentrated in two-year rather than four-year institutions (Perna, 2006). In fact, only 40% of White non-Hispanic undergraduate students are enrolled at community colleges; community colleges enroll 52% of all undergraduate Hispanic students and 47% of all undergraduate Black non-Hispanic students (U.S. Department of Education, 2007). The literature suggests these minority groups are at greater risk for poor academic performance and not completing a college degree, due to academic and non-academic stressors, such as low socioeconomic status, inadequate college preparedness, lack of a support system, and additional work/family responsibilities (Boyer, 2007; Engstrom & Tinto, 2008;

Hagedorn, Maxwell, & Hampton, 2002; Jensen, Moore & Shulock, 2009; Kezar, 2011). These stress factors translate into overall poor educational outcomes for students enrolled at two-year institutions. Studies show a significant number of students, particularly those of the 'at-risk' population, will depend on financial aid to attain their educational goals (Baime & Mullin, 2010; Herrschaft, 2012), and that these financial aid recipients also struggle academically. Underachieving academic performance of financial aid students may result in a variety of adverse effects and quickly impact their continued access to a post-secondary degree.

In fall 2007, the U. S. Department of Education (2008a) reported that, just over half (54.4%) of all adult students attended community colleges. Adult students represented 35% of full-time-equivalent (FTE) enrollments at two-year public colleges versus 15% of FTE enrollments at four-year institutions (U. S. Department of Education, 2008a). Many adult students enrolling in a community college are attending college for the first time and tend to be inadequately prepared both academically and psychologically, for college-level learning (Grimes & David, 1999; Howell, 2001). Also, 71% of students with disabilities at the postsecondary level attend two-year colleges (Barnett, 1996).

Community college enrollment consists of approximately 40 to 44% first-generation students (AACC, 2011; CCCSE, 2010; Prospero & Vohra-Gupta, 2007), low-income learners (Baime & Mullin, 2010; ICAS, 2009), first-time freshmen, and minority groups, such as African American students (AACC, 2010; Ellison & Martin, 1999). More than 50% of the community college student population places into one or more developmental education courses (Bailey & Cho, n.d.; Daiek, Dixon, & Talbert; 2012).

## **Students From Low-Income Families and Persistence**

Forty percent of low-income learners who demonstrate financial need attend community colleges (Baime & Mullin, 2010; ICAS, 2009). In addition, Baime and Mullin (2010) reported that the low-cost tuition offered at two-year institutions provides access to a post-secondary education because on average, community college students have lower incomes. They also reported that Pell Grants play a far more significant role for community college student financing than is the case for other sectors of higher education (Baime & Mullin, 2010). Despite the lower tuition, the total costs are still significant to low SES students (ICAS, 2009) and many struggle with the cost of attending community college. A 2009 report from The Institute for College Access and Success calculated that the national average expense for tuition, fees, textbooks, transportation, room and board and other education-related totaled \$10,392. This is important to note because it provides an estimate of associated educational costs, which may not otherwise be considered by a student who receives sufficient financial aid to cover the full cost and may only become a reality if financial aid is suspended. Grimes and David (1999) revealed degree-seeking community college students' family incomes averaged between \$25,000 and \$29,000 per year. Baime & Mullin (2010) elaborated on these income averages and reported that 71% of Pell Grant funds are awarded to dependent students (those who rely upon their families for support) with family incomes of \$30,000 or less while 56 percent of all independent student recipients (those who support themselves) have incomes of \$15,000 or less. The previously referenced study from the Institute for College Access & Success (2009) reported that 83% of community college students have documented need for financial aid, compared to 81% of public



four-year college students because they have fewer resources at their disposal. Based on these reported statistics, it may be safe to assume that students must take into account the cost of a college degree and make reasonable educational choices without sacrificing and compromising their basic living needs. Students from low socioeconomic status (SES) determine their post-secondary institution based on cost and available financial aid (Rowan, 2007).

Educational outcomes for community college students from low-income families are found in the low retention and degree completion rates. More than half of community college populations are low-income and rely on financial aid. Federal regulations require satisfactory academic progress for all financial aid recipients (Hagedorn, Maxwell, & Hampton, 2002), without regard to socioeconomic status. Failure to progress satisfactorily will result in a loss of financial aid entitlement (IFAP, 1998; NASFAA, 2012; U.S. Department of Education, 2010).

### **Race, Academic Success, and Persistence**

Rising community college enrollment reflecting a more racially diverse student population (AACC, 2012; AACC, 2011), will include half of the undergraduate population consisting of more students of color than ever before will pass through the gates of the nation's colleges and enter the educational pipeline over the next decade (Hoover, 2013; Zamani, 2000). The minority student enrollment rates within the community colleges are generally higher than at 4-year institutions (Fike & Fike, 2008). Students who start out at a 2-year institution with plans to complete a bachelor's degree are 15-20% less likely to do so than students starting their postsecondary education at a 4-year institution (Fiske, 2004). Nationally, 31% of African American students in

comparison to 28% white students begin at community colleges (National Center for Public Policy and Higher Education, 2011, p. 3). However, the black student college graduation rate is about 20 percentage points lower than the rate for whites (JBHE, 2010).

There is a gap between ethnic minority students and ethnic majority students in the attainment of higher education degrees (Allen, 1992; College Board, 2010, p.18; DesJardins, Ahlburg, and McCall, 2002; Hatch and Mommsen, 1984; Mehan, Hubbard, and Villanueva, 1994; Myers, 2003; Pathways to College Network, 2003). In 2011, Lee & Ransom reported only 30% of African Americans and 20% of Latinos ages 25 to 34 had attained an associate degree or higher in the United States, compared to 49% for White Americans and 71% for Asian Americans (p. 9). Data indicates that the nationwide college graduation rate for black students is about 43 percent, and stands at 20 percentage points below the 63 percent graduation rate reported for white students (JBHE, 2010). The Pathways to College Network (2003) reported that when groups in their late twenties were compared, more than one-third of whites have at least a bachelor's degree, but only 18% of African Americans and 10% of Hispanics have attained bachelor's degrees. A 1994 study conducted by Townsend indicated that 32% of African American students on several majority campuses graduated, compared to 56% of majority of students on those same campuses.

An analysis of the literature reveals that most programs and retention strategies are aimed at correcting or changing African American students, while failing to address environmental or campus issues involved (Love, 1993). Reasons for low college graduation rates among African Americans and the large black-white gap in college completions cuts across socio-economic status, sociological, psychological and

physiological lines (JBHE, 2010; Love, 1993). These findings are relevant as they may support a charge for higher education officials to create new programs and redesign current programs to meet diverse students opposed to changing the student.

Finances are a significant predictor of the probability for the retention and graduation of African American students (JBHE, 2010; Pathways to College Network, 2003; St. John, 1994). For African Americans, a group with a high percentage of low-income students, all types of packages that included grant aid and loans were positively associated with persistence (Carter, 2006; St. John, et. al, 2006). Low-income and working-class students of all races were more likely to drop out if their levels of grant aid were insufficient and their amounts of work-study and loans were not adequate (Paulsen and St. John, 2002). Previous analyses of differences among racial groups with regard to student aid indicated that African Americans were less likely to persist if financial aid levels were not adequate (Kaltenbaugh, St. John and Starkey, 1999). Financial aid may serve as a lifeline to degree attainment for many of these students because they most likely have low-socioeconomic backgrounds (Fike & Fike, 2008). Academic and non-academic variables such as faculty/student interactions, racial & institutional climate, limited or inadequate college-readiness skills, motivation and self-perception, and family history or first-generation college student are a few commonly identified daunting challenges used to generalize the reasons for attrition rates among African American students (Hagedorn, Maxwell, & Hampton, 2002; JBHE, 2007 & 2010; Love, 1993; Zhai, L., & Monzon, R. 2001; Zamani, E. M., 2000).

The interaction between students and faculty emerged from several studies as having an impact on the retention of African American students (Christiansen &

Sedlacek, 1974; JBHE, 2010; Love, 1993; NSSE, 2001; Townsend, 1994). Studies of first-year attrition have indicated that minority students leave college due to lack of social contact with other members of the college community (Strayhorn, 2012). Survey results obtained from the National Survey of Student Engagement (2001) revealed that African American and Asian-American students are less positive about their relationships with other students and with faculty members (p. 3); whereas African American students enrolled at HBCUs “emphasize feelings of engagement, connection, acceptance, and encouragement” (Allen, 1992), p. 39). Relationships and interaction with faculty can impact the retention of African American students. An initiative aimed at building an understanding of men of color, CCCSE (2014) conducted more than 30 student focus groups with Black men, Latinos and White men at community colleges and six focus groups with faculty and staff, and clear themes emerged to indicate personal connections matter. A recurring theme among students, particularly among African American students, indicated the power of having strong relationships and the value of “*someone believes in me-*” someone who makes time when the student needs help, a mentor and faculty or staff members of color who uses every contact they have with students to identify and address obstacles to success (CCCSE, 2014).

The literature also suggests inadequate academic preparedness for college-level curricula as another contributing variable to poor attrition among African American students. Poor preparation in K-12 education leaves many black students without a sufficient academic foundation to succeed in college, resulting in poor academic performance which leads to frustration, and increases the likelihood college dropout (JBHE, 2010). Lavin and Crook (1990) examined ethnic differences in long-term

educational attainment and found that minority students demonstrated less academic success all along the way and were far more likely than whites to leave college without any degree. They concluded that a process of cumulative disadvantage is occurring that is partially derived from differences in high school experiences and success. African Americans and Hispanics reported receiving lower grades in high school and more often came from nonacademic high school tracks. The phenomenon of low attrition rates among African Americans necessitates immediate attention since Blacks and Latino students are likely to arrive at colleges with greater needs for academic skill development. For example, students of color are dramatically less likely to meet ACT college-readiness benchmarks-the scores that indicate about a 50% chance of earning a B or higher, or about a 75% chance of obtaining a C or higher, in corresponding credit-bearing first-year college courses (ACT, 2013). Furthermore, 16% of Blacks meet the benchmark in reading, compared to 29% of Latino students and 54% of White students. Similarly, 14% of Black students meet the benchmark in math, compared to 30% of Latino students and 53% of White students (CCCSE, 2014).

**First-Generation Students.** First-generation college status is another student characteristic linked to academic success and retention among minority students. College attendance among parents proves to have significant effects on whether a student encounters a pathway to college and how the student copes once in college (Woosely & Shelper, 2011). A first-generation college student refers to an undergraduate student whose parents never enrolled in postsecondary education (AACC, 2011; CCCSE, 2010; Prospero & Vohra-Gupta, 2007; U. S. Department of Education, 1998). Students typically first in the family to attend college lack sufficient familial support (Saenez &

Barron, 2007) since parents have not attended college themselves, lack college-related knowledge and have less information to pass onto their children. According to the Journal on Blacks in Higher Education 2010, many black students come from families that have no tradition of higher education, which correlates with a lack of necessary support and understanding for nurturing the black student's effort to succeed in higher education. First-generation African American students are at an educational disadvantage and at greater risk for not completing a college degree because on average they are less prepared for the academic rigors of college due to a less rigorous high school curricular (Engle, Berneo, & O'Brien, 2006), have conflicting obligations to work part-time (Chen, 2005), and are less likely to have the social support network that proves to be helpful transitional periods (Bradbury & Mather, 2009).

### **Gender, Academic Success, and Persistence**

Of the 21 million students enrolled in American colleges and universities, 38% are Black males, compared to 45% White males (National Center for Education Statistics, 2014). Black men in community colleges are more likely to be older, classified as low-income, have dependents (e.g. children), married, and have delayed higher education enrollment (Wood & Williams, 2013, p. 3) – all of which, in addition to other variables suggested by literature are risk factors to degree completion for African Americans.

Although black student enrollment in higher education across the United States has reached an all-time high over the past decades, research shows that 68% of black men who start college do not graduate within six years and they have the lowest college completion rate among both sexes and all racial/ethnic groups (Hagedorn, Maxwell, & Hampton, 2002; Harper, 2006, p. viii; JBHE, 2010). The nationwide college completion

rates for African American males have improved by 4 percentage points over the past five years to slightly increase the relatively low national graduation rate to 43 percent (Ezeala-Harrison, 2014).

Completion rates for black females, on the other hand, reveals a different picture, in comparison to black males. African American women appear to have less difficulty moving through the educational pipeline. The growing gap between the educational attainment of African American women and African American men is seen as a serious problem (Harvey-Smith, 2000). The black female college graduation rate stands at 47 percent, having increased steadily over the past two decades from 34 percent in 1990 to 47 percent in 2010 (JBHE, 2010).

Comparison of academic outcomes show women graduate with more frequency than males. Quantitative and qualitative data from CCSSE (2014) consistently showed that women are more engaged in college than men, as demonstrated by student success measured by student reports, credits earned and GPA. Black females are the most engaged of all student groups on all but one benchmark (support for learners), and White males are least engaged of all student groups on all benchmarks (CCSSE, 2014). Furthermore, data for men reveal that Black males are the most engaged and White males are least engaged, but the academic outcomes compared between the two show Black men have the lowest student success outcomes compared to White males, who hold the highest successful outcomes (CCSSE, 2014).

With females more engaged than males, this may offer one possible reason for higher degree completion rates for women. In a study using Virginia Polytechnic University data, Borego et al (2005) concluded that the graduation rates both within

engineering and elsewhere in the university were higher for female students than for males. According to Slater (1994), the growing difference between African American men and women is likely to erode the earning power of African American men and undermine their status in the African American family.

African male and female students are faced with hurdles related to, but not limited to lack of college readiness skills, low parental support, and lower economic conditions (Seidman, 2005). To overcome some of these challenges, a few environmental issues and useful interventions may positively affect African American college retention.

Interpreting these results, Peltier, Laden, and Matranga (1999) suggested African American roommates and grade point averages show a positive relationship for black men, whereas academic performance was enhanced for African American women when they were rooming with academically successful students. Campus support programs such as, mentoring (Landry, 2003; Seidman, 2005), athletic academic support programs (Carr, 1992) and historically Black fraternities (McClure, 2006) contributed to and yielded African American male academic success. Appropriate teaching practices, promoting differences, including a safe space for the expression of personal experiences, and exploring issues related to Black masculinity enhances vocational identity and leads to an increase in interaction and builds relations among African American college males (Strayhorn, 2010).

### **Developmental Education Students, Academic Success, and Persistence**

Students who place into developmental courses are more likely to enroll in community colleges, representing a significant percentage of students that Jensen, Moore & Shulock (2009) and Noel, Levitz and Saluri (1985) describe as academically



underprepared to manage college-level coursework. Enrollment in remedial coursework indicates a lack of preparation for college. Existing data indicate that students who place into developmental education courses are less likely to achieve and persist in community colleges (Garcia, 2001; Martinez, 2003). The numbers of students who must take developmental courses is growing (Bailey, 2009; Bailey & Cho, n.d.; Daiek, Dixon, & Talbert; 2012; Jenkins, et al., 2009). After tracking fall 2001 to fall 2004 data from first year community college students, Fike and Fike (2008) found that 65% of the students in their study were enrolled in developmental math and 54% were enrolled in developmental writing. A similar finding of remedial coursework enrollment was discovered among first-generation students. A descriptive longitudinal study examined the postsecondary experiences of first-generation college students, and the findings indicated they were more likely enrolled in remedial classes in comparison to non-first-generation students (NCES, 2009). Chen (2005) reported that 55% of the participants in his study enrolled in remedial coursework when attending both 2-year and 4-year colleges. However, one contrasting study from Wirt et al. (2004) indicated only 18% of students who first attended public two-year institutions enrolled in a remedial reading course, while 16% enrolled in one or two remedial mathematics courses. This same study found similar results when reviewing college transcripts of 12<sup>th</sup> graders, revealing almost two-thirds (61%) of students who first attended a public two-year college completed at least one remedial course at the postsecondary level, compared with only one-quarter (25%) of students who had first attended a four-year institution. Many of these students belong to the lowest socioeconomic group and/or self-identified as African American or

Hispanics race (Colorado Community College System, n.d.; Kurlaender & Howell, 2012; Russell, 2008).

While students of all backgrounds require developmental coursework, this requirement is more prevalent among non-White students (Martorell & McFarlin, 2007). This disproportionate enrollment of non-Whites is particularly evident in developmental mathematics courses (Alliance for Excellent Education, 2011; Bettinger & Long, 2005; Stewart, 2010; Zhu & Polianskaia, 2007). Research studies (Atwell et. al., 2006; FLDOE, 2011a; Gonzales, 2007) suggest that Blacks are more likely than White students with similar backgrounds to enroll in developmental courses. According to Alliance for Excellent Education (2011), one possible reason African American students require developmental education at higher rates than other racial groups is due to limited access to high-quality secondary education compared to their White peers. Bettinger and Long (2005) examined 13,000 community college students in Ohio and found that over 75% of Black and Hispanic were placed into developmental courses compared to the 55% of White students who were placed in developmental courses. In addition, after review of over 100 community colleges focusing on students who took part in the Achieving the Dream grant program, Cho (2011) found that more than half of the students tested into developmental education courses were either Black or Hispanic.

While women outnumber men in higher education, a greater proportion of women require developmental education courses than men (Bettinger & Long, 2005; FLDOE, 2011a) and demonstrate a greater level of success in these courses than their male counterparts (Cho, 2011; Corey Legge, 2010; Fike & Fike, 2007; Gonzales, 2007; Roksa et al., 2009).

These particular student groups are highlighted because they represent a large proportion of the community college population receiving financial aid and who are most likely impacted by SAP regulations given their educational outcome track record of at-risk learners attending community colleges (Baime & Mullin, 2010; Bailey & Cho, n.d.; Choy & Carroll, 2003; Chen, 2005; Fike & Fike 2008; Kezar, 2011; Kurlaender & Howell, 2012; Russell, 2008; Whissemore, 2010).

### **Purpose Statement**

The purpose of this research study was to examine the extent to which different types of financial aid appeal interventions correlated with academic progress and student persistence. In addition, this quantitative research study investigated the relationship of three financial aid appeal models to examine the extent different financial aid appeal interventions influenced academic progress and student persistence among a specific demographic characteristic of students who failed to meet the institutional Standards of Satisfactory Academic Progress (SAP).

### **Research Questions**

1. To what extent was there a difference in the likelihood of course completion (as measured by grades of 'S,' 'P,' 'C' or better during the appeal semesters) among students who participated in one of the three differently designed financial aid appeal interventions?
  - a. To what extent was there a difference in the likelihood of course completion as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?

- b. To what extent was there a difference in the likelihood of course completion as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
  - c. To what extent was there a difference in the likelihood of course completion among students who place into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
  - d. To what extent was there a difference in the likelihood of course completion as mediated by race, gender and developmental education placement, among students who participated in one of the three differently designed financial aid appeal interventions?
2. To what extent was there a difference in the likelihood of meeting the GPA requirements among students who participated in one of the three differently designed financial aid appeal interventions?
- a. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
  - b. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?

- c. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
    - d. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race, gender and developmental placement, among students who participated in one of the three differently designed financial aid appeal interventions?
3. To what extent was there a difference in the likelihood of persistence (as measured by subsequent semester enrollment) among students who participated in one of the three differently designed financial aid appeal interventions?
  - a. To what extent was there a difference in the likelihood of persistence as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
  - b. To what extent was there a difference in the likelihood of persistence as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
  - c. To what extent was there a difference in the likelihood of persistence among students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?

- d. To what extent was there a difference in the likelihood of persistence as mediated by race, gender among students who participated in one of the three differently designed financial aid appeal interventions?

### **Summary**

The literature reviewed in this chapter revealed few existing studies related to the loss of financial aid and how institutions may influence and foster success among academically ineligible students who are seeking financial aid reinstatement to persist towards degree completion. Many students at the community college come from populations are at-risk, and/or lack the academic preparedness for college. These students may lose financial aid due to other academic and non-academic factors which may impact their academic performance. Reviewing financial aid appeal models, as suggested in this current study, may suggest policies that may have the potential to improve student persistence, retention and graduation. Financial aid is an important factor in the success of many community college students, which is why it is important to understand how to support these students academically graduate and obtain gainful employment and secure a place in the workforce.

The next chapter outlines an organizational context examining ex post facto data and how the implemented appeal interventions to regain financial aid eligibility may influence student persistence and academic progress. It includes the research design, the population and sample, data collection procedures and analysis, as well as, limitations of the study.

## CHAPTER 3

### METHODOLOGY

This chapter begins with a brief overview of the subject matter, including a list of the research questions which guided this study. Next, the researcher provides a framework that describes the research design, the population and sample. Following this segment is an outline of the measures, with subsequent sections outlining specific data collection and analysis procedures. Lastly, the chapter concludes with limitations of the study.

#### **Introduction**

Financial aid is an important component for access to higher education for qualifying students. A significant number of students demonstrate a need for financial support and rely heavily upon Pell grants to attain their educational endeavors (Baime & Mullin, 2010; Herrschaft, 2012). In addition to federal income guidelines which determine financial aid eligibility, students are also required to meet Satisfactory Academic Progress (SAP) standards for continued eligibility. However, mitigating circumstances can affect a student's ability to meet SAP standards and progress towards degree or certificate completion. This is particularly relevant given that the community college student population includes a high percentage of at-risk student groups with reportedly poor educational preparation (Bailey & Cho, n.d.; Baime & Mullin, 2010; Boyer, 2007; Chen, 2005; Choy & Carroll, 2003; Eller et al., 1998; Engstrom & Tinto, 2008; Fike & Fike, 2008; Hagedorn, Maxwell, & Hampton, 2002; Jensen, Moore & Shullock, 2009; Kezar, 2011; Kurlaender & Howell, 2012; Russell, 2008; Whissemore, 2010). In some cases, financial aid suspension may occur due to failure to meet financial

aid satisfactory academic progress standards (SAP); in turn, redirecting the financial responsibility of tuition and other educational costs to the student.

There are several reasons why the researcher sought to conduct a study related to satisfactory academic progress (SAP): (1) Research findings have indicated the retention and degree completion rates at community colleges are relatively low (Hagedorn, Maxwell, & Hampton, 2002; Harper, 2005; JBHE, 2007 & 2010; Kezar, 2011; Zhai, L., & Monzon, R. 2001; Zamani, E. M., 2000). While the researcher was unable to find literature identifying SAP standards as the exclusive reason for community college attrition and graduation rates, others who have investigated the persistence of at-risk populations have found that these populations face barriers and are more likely confronted with mitigating circumstances that impact their ability to demonstrate satisfactory academic progress (Boyer, 2007; Engstrom & Tinto, 2008; Jensen, Moore & Shulock, 2009; Kezar, 2011); (2) Although the literature speaks to the low persistence and degree completion rate among underserved groups (CCCSE, 2009; Hagedorn, Maxwell, & Hampton, 2002; Kezar, 2011; Larose (n.d.), Schneier & Yin, 2012; U.S. Department of Education, 2008a), the researcher was unable to find existing studies specifically addressing the demographic characteristics of students who most likely fail to maintain satisfactory academic progress (SAP); (3) It was equally difficult to uncover a large or even a sufficient body of literature referencing the impact of institutional practices specifically designed to improve student success of students who lost their financial aid eligibility due to unsatisfactory academic performance; (4) During the 2011-2012 academic year, the federal regulations that govern SAP were amended and the community college under study revised the appeal policy and implemented various



appeal interventions to improve student academic progress. The goal of these appeal programs was to incorporate an institutional response that engages students.

Federal regulations require institutions to include an appeal process in their satisfactory academic progress policy to allow students who have been placed on financial aid suspension to appeal their status and attempt to regain their financial aid eligibility if mitigating circumstances exist (U. S. Department of Education, 2010). However, it is at the discretion of each institution to determine the procedures for implementing the appeal program.

At the metropolitan community college under study, there were different approaches to implementing the SAP appeal program for students enrolled on each campus. Three financial aid appeal interventions were analyzed to determine whether the appeal interventions showed a relationship between academic progress and student persistence for financially needy students to regain financial aid eligibility.

### **Purpose Statement**

The purpose of this research study was to examine the extent to which different types of financial aid appeal interventions correlated with academic progress and student persistence. In addition, this quantitative research study investigated the relationship of three financial aid appeal models to examine the extent different financial aid appeal interventions influenced academic progress and student persistence among a specific demographic characteristic of students who failed to meet the institutional Standards of Satisfactory Academic Progress (SAP).

### Research Questions

1. To what extent was there a difference in the likelihood of course completion (as measured by grades of 'S,' 'P,' 'C' or better during the appeal semesters) among students who participated in one of the three differently designed financial aid appeal interventions?
  - a. To what extent was there a difference in the likelihood of course completion as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
  - b. To what extent was there a difference in the likelihood of course completion as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
  - c. To what extent was there a difference in the likelihood of course completion among students who place into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
  - d. To what extent was there a difference in the likelihood of course completion as mediated by race, gender and developmental education placement, among students who participated in one of the three differently designed financial aid appeal interventions?

2. To what extent was there a difference in the likelihood of meeting the GPA requirements among students who participated in one of the three differently designed financial aid appeal interventions?
  - a. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
  - b. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
  - c. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
  - d. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race, gender and developmental placement, among students who participated in one of the three differently designed financial aid appeal interventions?
3. To what extent was there a difference in the likelihood of persistence (as measured by subsequent semester enrollment) among students who participated in one of the three differently designed financial aid appeal interventions?

- a. To what extent was there a difference in the likelihood of persistence as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
- b. To what extent was there a difference in the likelihood of persistence as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
- c. To what extent was there a difference in the likelihood of persistence among students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
- d. To what extent was there a difference in the likelihood of persistence as mediated by race, gender among students who participated in one of the three differently designed financial aid appeal interventions?

### **Research Design**

This study evaluated the effects of different financial aid appeal interventions on academic progress and persistence rates of students who failed to demonstrated satisfactory academic progress.

Federal Satisfactory Academic Progress regulations were revised in July to include the following:

The policy must describe how the student may reestablish his or her eligibility to receive Title IV aid and the basis on which a student may file an appeal (such as the death of a relative, an injury or illness of the student, or other special circumstances). The institution's policy must also describe the information the student must submit to support the appeal, including why the student failed to make satisfactory academic progress, and what may have changed in the student's

situation that will allow the student to demonstrate SAP at the next evaluation. (NASFAA, 2012; U. S. Department of Education, 2010)

The importance of investigating the relationship of various financial aid SAP appeal interventions for community college student success and degree completion rates can be related to the following: (1) tax dollars support the allocation of financial aid; (2) the availability of financial aid has had an increasingly significant impact on the decisions of students to enroll and persist in higher education (Baime & Mullin, 2010; Cohen & Brawer, 2003; ICAS, 2008); (3) community college students rely heavily upon financial aid to meet their educationally-related financial needs (Baime & Mullin, 2010); and (4) nearly half of the community college enrollment consists of low-income learners who demonstrate financial need (Baime & Mullin, 2010; ICAS, 2009). The focus is on students from low-income families because of their higher attrition rate.

The research framework for this study was quantitative. It emphasized the analysis of objective measures, and numerical analysis of data collected by examining the relationship between independent and dependent variables (Creswell, 2009; University of S. Carolina, 2013). As an analytic approach, this study used logistic regression to analyze the data and determine the effectiveness of the intervention. Logistic regression determines the impact of different independent variables presented individually and simultaneously to predict membership of one or two of the dependent categories (Logistic Regression, n.d). Quantitative research is a type of educational research in which the researcher decides what to study, with a specific plan and a set of detailed and narrow questions, with numeric (numbered) data from participants. The analysis is conducted in an unbiased and objective manner (Creswell, 2005; Roberts, 2010). The philosophical assumption of a quantitative approach involves a logical/post-positivist worldview

(Creswell, 2009; Roberts, 2010) as it seeks facts and causes of human behavior (Roberts, 2010), tests or verifies theories or explanations (Creswell, 2009), and identifies variables to study so differences can be identified (Creswell, 2009; Roberts, 2010). Such a method uses standards of validity and reliability, uses unbiased approaches, collects data that are primarily numerical resulting from surveys, test, experiments, etc. and employs statistical procedures (Creswell, 2009; Roberts, 2010).

A quantitative design was the selected approach in this study because the purpose of this study was to examine the extent to which the financial aid appeal interventions were related to academic progress and student persistence rates. It investigated the correlation of three different financial aid appeal interventions on student persistence and academic progress among financially needy students. A quantitative design provides an explanation of whether or not an intervention influences an outcome for a group intervention as opposed to another group intervention (Creswell, 2005).

To determine whether a specific appeal program was related to academic progress and student persistence, this study examined *ex post facto* data among three financial aid appeal models. This research method looks at conditions that have already occurred and examines collected data to investigate a possible relationship between condition and subsequent characteristics or behaviors (Leedy & Ormrod, 2005). In this case, the data were collected and maintained by financial aid offices of a multi-campus community college for the period of Summer 2013 through Summer 2014. An analysis of the outcomes of the three models was undertaken to determine the extent to which each correlated with the academic progress and persistence of students who participated in a specific appeal procedure. This provided an alternative means to investigate the extent to

which specific independent variables are related to the dependent variables under study (Leedy & Ormrod, 2005).

In this study, the independent categorical variables were identified as the following: appeal intervention, race, gender and developmental education placement. Academic progress (course completion and GPA) and persistence were the categorical dependent variables. *Ex post facto* research involves the process of beginning with a phenomenon and going backward in time to identify possible related factors (Leedy & Ormrod, 2005). In this study, educational outcomes and possible relationships for each appeal program were the potential related variables (Leedy & Ormrod, 2005). The *ex post facto* design can show the extent of correlation between student participation in a particular intervention and student persistence, but it cannot conclusively demonstrate that the outcome is due to the prior experience/condition in question (Leedy & Ormrod, 2005).

The course completion rate, GPA and persistence rates were compared among the students who participated in each of the three appeal programs. The results of three student groups (race, gender, and developmental education placement) were also examined and compared according to the appeal interventions. A review of academic records at the end of the appeal semester determined whether a difference in persistence and academic progress existed. This strategy allowed the researcher to compare the groups and determine if there was a significant difference in course completion, GPA and persistence rates between the treatment groups and among the demographic groups.

### **Description of the Appeal Interventions**

A student reaches the appeal level after his/her financial aid has been suspended. Students receive an email notification indicating that their financial aid will be suspended if final grades at the end of the 'Warning' semester indicate the course completion rate and/or GPA are below the minimum SAP standards, or if attempted credits exceed the SAP 150% rule; or if 30 or more developmental credits have been attempted. It is optional for students to appeal their financial aid suspension; however, the decisions to approve or deny requests are based on the appeal criteria and professional judgment of the financial aid coordinators. This study only included students who completed the specified interventions.

Each campus financial aid office of the multi-campus community college where the study took place varies in the design of its appeal program. However, all campuses required the same official documents to indicate and record a student's request for an appeal review. It is the Financial Aid Coordinator's decision to approve or deny the appeal. All relevant appeal documents submitted and signed by the student were collected by the SAP Advisor and scanned into an Image Now program, which is a college-wide system that store files for record-keeping purposes and copies information to Financial Aid staff access to read and review of all documents. The documents included a student's appeal letter addressing the reasons which led to the financial aid suspension and how those reasons have been resolved and/or managed to prevent future reoccurrence. In addition, students were required to write a success plan indicating specific strategies for semester-to-semester progress towards degree completion. Table 3 provides a framework of the appeal criteria.



Table 3

*Appeal Criteria Framework*

Number	Requirement
1	Must successfully complete all attempted credits during the 'Warning' semester
2	A course completion status range between 50% to 66%
3	Must demonstrate ability to GPA requirements within one semester of meeting
4	A written letter explaining the reason for not meeting satisfactory academic progress
5	Comply with the conditions of the appeal interventions

**One-Pronged Appeal Intervention**

The one-pronged appeal intervention employed an appeal program that required students interested in overturning their financial aid suspension status to sign specific forms indicating their understanding of SAP standards and write an appeal letter and success plan. Decisions to approve or deny an appeal were based on signed documents, the appeal letter and success plan. However, it is at the discretion of the campus Financial Aid Coordinator to implement appeal conditions on a case-by-case basis. This campus financial aid office did not require workshops and advising sessions.

**Two-Pronged Appeal Intervention**

**Workshops.** The two-pronged appeal intervention utilized preventative and reactionary workshops to engage students. The topics were specifically designed to meet diverse student needs, such as SAP and other financial aid-related matters, as well as additional relevant student-related issues to increase financial aid and academic

awareness. Unlike the three-pronged intervention, workshop participants in the two-pronged intervention included an array of students, who may or may not have been faced with financial aid and institutional suspension/dismissal. Students attended multiple workshops. While some workshops were facilitated by Financial Aid Advisors, other workshops were conducted by campus counselors.

**Advising/counseling sessions.** An advisor played an instrumental role in assisting students with preparing their appeal application (writing appeal letters and a success plan). If the appeal was approved, students received an introductory letter from the advisor, with instructions to schedule three individual advising/counseling sessions (career planning, academics, personal counseling, career coaching, financial guidance, and social enrichment) during the semester.

### **Three-Pronged Intervention**

The three-pronged SAP intervention consisted of (1) workshops, (2) individual advising sessions, and (3) course restriction (9 credits). The workshop topics included essential areas of SAP policies and academic success. The individual sessions may overlap areas of student success; however the sessions were tailored to meet students' individual personal and academic needs, which included specific topics related to the students' circumstances, program of study, study habits, class attendance, progress reporting, academic planning, etc. The course restriction limited the students to a maximum of 9 enrolled credits for the length of the appeal. Prior to the workshop, each student met with an advisor to review the student's academic standing in relation to the SAP standards and to confirm their financial aid status. During this brief meeting, the advisor provided an abbreviated overview of SAP, calculated the course completion rate,

and reviewed the student's GPA. The next step was the workshop, which provided more in-depth SAP information.

**Workshops.** Formal workshops served as one component of the three-pronged intervention. Workshop attendance was the initial requirement, but did not constitute guaranteed appeal approval. The purpose of the workshop was to educate students about SAP requirements and provide academic success strategies to improve academic performance in order to meet institutional and financial aid academic standards. The length of the workshops was approximately two hours. The first hour addressed SAP policies, while the second hour focused on academic success. The content of the first hour entailed a thorough review of federal and institutional SAP policies. Steps for submitting a complete appeal application and continued approval conditions were also reviewed. The students received instructions on the required information to include in an appeal letter and in their success plan. In addition, other pertinent documents requiring student signatures were reviewed to acknowledge student awareness and record understanding of all applicable guidelines and policies relative to the SAP standards and appeal process.

The second hour of the workshop consisted of an academic success component. Students were instructed about effective learning strategies, such as study habits, learning styles, balancing course schedules, communicating with instructors, etc. In addition, campus resources were reviewed to increase student awareness of support services to meet their different needs.

The workshop seminars were designed to engage a larger audience and inform the participants of critical financial aid information, SAP policies, as well as strategies to

achieve academic success. The length of workshops was approximately 2 hours and offered on various days and times throughout the semester to accommodate student schedules.

**Advising/counseling sessions.** Individual advising/counseling sessions served as another aspect of the three-pronged intervention program. Each semester students were required to attend three advising sessions for the length of their appeal. For example, if the length of a student's provisional period was two semester, the student was required to attend three sessions each semester, with a total of six sessions for the length of the appeal. Subsequent sessions were required and occurred during the semester to continue to receive financial aid on a probationary basis.

The first session was scheduled during the institution's 'Drop/Add' period, which is generally during the first two weeks of class. The rationale for this session was to provide the student with an opportunity to adjust their class schedule, if needed, without academic or financial aid penalty. If a student foresaw difficulty managing their course load, he/she could drop and/or adjust their schedule to increase the chances of successfully completing attempted courses without receiving a non-passing grade. However, if a student decided after the Drop/Add period to discontinue attending a class, they received a non-passing grade ("W", "I," "R", "U," "D," or "F). Less than satisfactory grades earned during the appeal (provisional) period was a violation of the contract (appeal) agreement. In such an instance, the probation was then terminated, requiring the student to self-pay for credits until they met all SAP minimum standards.

The second session occurred mid-semester. The purpose of this session was to gather information regarding the student's academic status in each enrolled class. The

advisor and student reviewed the student's success plan to find out if the he/she implemented their plan as initially intended, and if such strategies were effective. The advisor inquired about class attendance, study habits, use of campus resources, time management skills, etc. At the end of the session, students were provided with a homework assignment for the third session, which consisted of completing an enrollment sheet for next semester and an academic planning form for the next six semesters. Students were informed of the requirement to present 6 completed documents for the next session.

The final session of the semester involved reviewing the homework assignments (enrollment sheet and academic planning form). If such documents were not completed for the third session, this was an automatic cancelation of the meeting and the student was required to reschedule within a specified timeframe with a complete enrollment sheet and academic planning form. After a review of the documents, students were directed to the Enrollment Office to enroll in the courses for the next semester. During the session, the advisor revisited previously discussed topic areas, such as: class attendance, time management, barriers, anticipated final grades, etc. If the third session occurred in the final and/or only appeal semester, the student was encouraged to continue use any strategies which contributed to their success; they were reminded of SAP implications for earning passing and non-passing grades; they were instructed to balance school/work responsibilities; encouraged to meet with a counselor as they continue to progress towards degree completion. The third session occurred prior to the posting of final grades. At this time, neither the advisor nor student had confirmation the student successfully completed all attempted courses. However, at the end of each semester, the

Central Financial Aid Department conducted a college-wide SAP report, which showed if financial aid students demonstrated academic progress and if they met SAP standards.

The purpose of the advising sessions was to develop advisor-student rapport, and provided resources and served as a support service for the learner. In addition, this intervention offered a direct pipeline and access to the advisor to discuss confidential matters, which may have created a sense of comfort that workshops did not. The sessions occurred during specific weeks of the semester. All approved appeal students were required to schedule their appointments during these specific weeks in order to remain in compliance with the conditions of the appeal.

**Course restriction.** Course restriction was the third and final prong of the intervention. Students with an approved appeal were permitted to enroll in a maximum of 9 credits per semester. All enrolled courses must meet program requirements. To ensure students remained within the credit limit requirements, this intervention was managed by the use of an institutional hold, which was placed on the students' accounts to prevent adjusting the class schedule without SAP Advisor approval. For example, if the student wanted to change course sections, drop, add or withdraw from courses, this 'hold' prevented them from doing so, without the approval of the SAP advisor. This restriction also limited the amount of financial aid allocated to the student to prevent excessive aid allocated to students if they earn non-passing grades.

### **Setting**

The study accessed data from three campuses of a multi-campus community college. This large, public two-year institution is located in the Southeastern area of the U.S., serving a metropolitan area of four major cities. With an annual enrollment rate of

nearly 45,000 students, the institution offers both associates degrees and certificates and is accredited by the Commission on Colleges in Southern Association of Colleges and Schools. The interventions reported in this study occurred in designated areas. For instance, the workshops occurred in classrooms and conference meeting areas, while advising sessions occurred in the private offices to provide privacy and a confidential area.

### **Population and Sample**

The student participants were part of a college-wide 2013 annual headcount of approximately 42,000 students with enrollment of nearly 30,000 during fall 2013. These figures included a diverse range of students. Approximately 54% of the student population was identified as White (15,731), with the second highest racial group consisting of 35% African Americans (10,133) and 11% were listed as 'other' minorities (3,135). During this same time, there was a reported female headcount of 17,162 outnumbering the population of 11,837 of men who enrolled. Lastly, a significant representation of the student population included 15,907 students receiving financial aid.

Participants were deemed academically ineligible to receive financial aid (grants and loans) because they failed to maintain satisfactory academic progress (SAP) and as a result were placed on financial aid suspension. This study included a sample of students with the following profile: (1) did not meet the course completion standard and/or GPA requirements; and (2) participated in the appeal interventions. Subsequent semester appeal approval (if applicable) was contingent upon earning a grade of a 'S,' 'P,' 'C' or better in all attempted courses and meeting the GPA threshold.

There were various groups within the population of students who failed to maintain satisfactory academic progress (SAP); who, were not included due to the focus of the study. Students who appealed their SAP 150% status were excluded due to the logistical inability to examine the specific dependent variables of this study. Students who only failed to comply with the Developmental Credit rule were also excluded from this study because they were only ineligible to receive financial aid beyond 30 attempted developmental credits. These students remained academically eligible to receive financial aid for credit-bearing courses and did not require an appeal to do so, since the financial aid was suspended for developmental credits only. Lastly, students with denied appeals were excluded since the purpose of the study was to examine the effectiveness of the SAP appeal interventions for those with approved appeals.

### **Measures**

The independent variables in this study consist of the appeal intervention, race, gender, and developmental education placement. Academic progress, as determined by 'course completion rate' and 'GPA,' and persistence are considered dependent categorical variables. The educational outcomes of each group were analyzed to determine the outcomes of the appeal models and the relationship among the variables. In addition, the researcher examined the covariance of race, gender and placement in developmental courses as they related to the dependent variables. The dependent variables were reviewed for one calendar year (summer 2013 through summer 2014).

### **Academic Progress**

***Course completion rate rule.*** Academic progress was determined by the course completion rate. The successful completion of all attempted courses at the end of each



semester for the length of the appeal demonstrates academic progress. Successful completion was based upon final grades of 'S,' 'P,' 'A,' 'B,' or 'C.' These grades indicated compliance with the 67% course completion rule, while grades of 'W,' 'R,' 'U,' 'I,' 'D,' or 'F' were non-compliant. Transfer credits were included in calculation of the course completion rate.

**Grade point average.** Meeting the cumulative SAP grade point average (GPA) threshold requirements based on a progressive scale also denoted academic progress. Only non-remedial courses with grades of 'A,' 'B,' 'C,' 'D,' 'F,' 'W,' or 'I' were included in this calculation, but only 'A,' 'B,' or 'C' grades were considered as successful completion during an appeal. Any grades consisting of 'W,' 'R,' 'U,' 'I,' 'D,' or 'F' were considered non-passing. The GPA requirement may vary between students because this regulation is based on the number of attempted college-level credits. Attempted credits ranging between 1 – 15 credits required a minimum 1.5 GPA, 16 – 30 attempted credits required a 1.75 GPA, and 31 or more college-level credits necessitated a minimum 2.00 GPA of 2.00. Transfer credits were excluded from the calculation.

The categorical dependent variables consisted of two values – 'yes,' the students successfully completed all attempted courses as indicated by final grades of 'A,' 'B,' 'C,' and/or 'S' at end of the appeal semester(s), which demonstrated academic progress towards the course completion rule; or 'no,' the students did not successfully complete all attempted courses as indicated by final grades of 'W,' 'I,' 'R,' 'U,' 'D,' or 'F' at the end of the appeal semester(s), which did not demonstrate academic progress towards the course completion rule. The course completion rate variable was measured as the following: 'S,' 'P,' 'A,' 'B,' 'C' = 1 and 'W,' 'R,' 'U,' 'I,' 'D,' 'F' = 0.

Academic progress was also designated by meeting the minimum cumulative GPA standards – ‘yes,’ the students met the GPA threshold as demonstrated by a cumulative grade point average of ‘1.5,’ ‘1.75,’ or ‘2.00,’ at the end of the appeal semester(s) (depending on the number of attempted credit-bearing courses) or ‘no’ the students did not meet the GPA threshold. A cumulative grade point average less than the required standards did not define academic progress in this study. The GPA dependent variable was measured as the following: ‘1.5,’ ‘1.75’ or ‘2.00,’ = 1 or GPA less than the minimum standards = 0.

**Persistence variable.** Persistence was another categorical dependent variable defined by subsequent enrolled semesters beyond the institution’s census date. Academic records through the census date were reviewed to determine if there is a difference in persistence between the groups.

As with the course completion and GPA dependent variables, the persistence category had two values - ‘yes,’ they did persist or ‘no,’ they did not. The following was designated to identify persistence: Subsequent enrolled semester = 1 and unenrolled = 0. It was possible for a student to demonstrate academic progress, by completing all attempted courses with grades of ‘S,’ ‘P,’ ‘C,’ or better, to improve their course completion rate, as well as, meet the GPA threshold, but not persist to the next semester. It was possible for a student to not meet the minimum course completion and GPA standards, but persist to the next semester. Unsatisfactory grades earned during the appeal term(s) was considered a violation of the appeal agreement and resulted in financial aid suspension for future semesters until they met SAP standards. Persisting to the next semester after such an instance, could occur without the assistance of financial aid. In

such a case, the student would self-pay or rely upon a third party payer to cover tuition costs due to violation of the appeal contract. Table 4 outlines the coded descriptions to categorize the financial aid appeal interventions, race, gender and developmental education placement - independent variables and the outcome categories – course completion rate, GPA and persistence.

In order to draw a conclusion regarding the correlation of the appeal interventions, educational records were reviewed at the end of each semester and assessed to determine whether the students demonstrated academic progress based on the students' course completion rate, GPA and persistence (next semester enrollment). Attempted and completed credits, as well as the cumulative GPA were calculated and reviewed at the end of the appeal semester(s) in relation to the 67% course completion rule and GPA policy to determine whether the students met or progressed towards the institution's SAP standards. The academic records were compared to determine if a difference existed among the overall academic progress and persistence rates between the different groups. The effectiveness of the appeal interventions was determined by academic progress according to the students' course completion rate, cumulative GPA and continued (semester-to-semester) enrollment. An evaluation of the three groups can effectively test for the relationship of the appeal interventions to educational outcomes under certain conditions. This strategy allowed the researcher to compare the groups and determine whether there was a significant difference in course completion, GPA and persistence rates between the groups.

### **Data Collection Procedures**

The community college's Office of Institutional Effectiveness provided data indicating the demographic characteristics of students who failed to meet satisfactory academic progress and participated in one of the three appeal programs. The demographic characteristics included race, gender and developmental educational placement. The data was collected and student academic records were reviewed to identify the targeted student population.

#### **Academic Records**

PeopleSoft, the college's Student Information Systems (SIS) maintained student information, such as demographics, academic status, financial aid, class schedule, enrollment status, etc. It also included student academic records, course completion rates, GPA data, and developmental educational placement. Any changes with the student's academic status was be found in the SIS.

#### **Data Analysis**

The analysis of this study was quantitative and used logistic regression to answer the research questions. This statistical technique is an extension of regression which allowed the researcher to predict categorical outcomes based on predictor variables (Field, 2009). There were two main uses for this analytical procedure: (1) the prediction of group membership - it calculated the probability of success over the probability of failure, the results of the analysis are in the form of an odds ratio; and (2) it provides knowledge of the relationships and strengths among the variables (Logistic Regression, n.d). Logistic regression was used in this study because a participant may have possessed one or all three of the demographic characteristics and the outcome and predictor

variables were categorical. In addition, the dependent variable was binary, with only two possible outcomes.

The logistic regression model predicts the probability of an event occurring, based on observations of whether the outcome did or did not occur (Field, 2009). In this case, either the students demonstrated academic progress or did not, or they persisted or did not persist. This particular analysis means that the researcher can predict which of the two categories a person is likely to belong to given certain other information (Field, 2009). Using the logistic regression model by itself to examine the data may have more robust results since the students can belong to any or all of the categories. Table 4 outlines a summary of the classification table identifying the independent and dependent categories within the logistic regression model.

Table 4

*Logistic Regression Variable Coding Description Used in Data Analysis*

Research question	Independent variable Coding	Dependent variable coding
1	1 = One-pronged Appeal intervention  2 = Two-pronged Appeal intervention  3 = Three-pronged Appeal intervention	Course completion  1 = yes 0 = no
1a	Race  1 = Blacks 0 = Other	Course Completion  1 = Yes 0 = No
1b	Gender  1 = Male 0 = Female	Course Completion  1 = Yes 0 = No
1c	Developmental education placement  1 = Developmental 0 = Non-developmental	Course Completion  1 = Yes 0 = No
1d	African American Males in Developmental Educ.  1 = African American males in Developmental education 0 = Non- African American Males in developmental educ.	Course Completion  1 = Yes 0 = No
2	1 = one-pronged Appeal intervention  2 = two-pronged Appeal intervention	GPA threshold  1 = yes 0 = no

Research question	Independent variable Coding	Dependent variable coding
	3 = three-pronged Appeal intervention	
2a	Race	GPA threshold
	1 = Blacks 0 = Other	1 = Yes 0 = No
2b	Gender	GPA threshold
	1 = Male 0 = Female	1 = Yes 0 = No
2c	Developmental education placement	GPA threshold
	1 = developmental 0 = non-developmental	1 = yes 0 = no
2d	African American Males in Developmental Educ.	GPA Threshold
	1 = African American males in Developmental education 0 = Non- African American Males in developmental educ.	1 = Yes 0 = No
3	1 = one-pronged Appeal intervention	Persisted
	2 = two-pronged Appeal intervention	1 = yes 0 = no
	3 = three-pronged Appeal intervention	
3a	Race	Persisted
	1 = Blacks 0 = Other	1 = Yes 0 = No

Research question	Independent variable Coding	Dependent variable coding
3b	Gender 1 = Male 0 = Female	Persisted 1 = Yes 0 = No
3c	Developmental education placement 1 = developmental 0 = non-developmental	Persisted 1 = yes 0 = no
3d	African American Males in Developmental Educ. 1 = African American males In developmental education 0 = Non- African Americans males In developmental education	Persisted 1 = Yes 0 = No



### **Outliers and Missing Cases**

A diagnostics check examined the possible presence for outliers or any cases that were not well explained by the model. Since the results detected no outliers, transforming the data or removing data was unnecessary. While no outliers were found, missing cases were identified, but not deleted because missing cases would potentially impact the sample size.

### **Linearity**

Another preliminary step consisted of testing for linearity. The assumption of linearity assumes a linear relationship between any continuous predictors and the logit of the outcome variable (Field, 2009). The outcome variable for the study was categorical and not continuous.

### **Independence of Errors**

Logistic regression requires that each observation be independent. Due to the institution's policies involving the appeal program, the same participants were not permitted to participate in various appeals at the same time. Participation in any of the appeal programs was verified through review of the electronic filing system.

### **Multicollinearity**

Logistic regression is sensitive to high correlations among predictor variables. In order to prepare the data for logistic regression, steps were taken to assess the multicollinearity assumption based upon the tolerance and VIF measure. Tolerance levels less than .01 and VIF scores greater than 10 indicate collinearity. Although the tolerance levels were greater than .01 and the Variance Inflation Factor (VIF) was less than 10 for this study, collinearity between the predictor variables for the course completion rate and

GPA outcome variables were identical, while a marginal difference in the collinearity between the predictor variables and the “persisted” dependent variable resulted. Test for multicollinearity between the independent variables with the course completion rate and GPA outcome indicated that a very low level of multicollinearity was present (Tolerance = .899, VIF = 1.113 for the campus; Tolerance = .943, VIF = 1.060 for race; Tolerance = .996, VIF = 1.004 for gender, and Tolerance = .929, VIF = 1.077 for placement level).

Despite the marginal collinearity difference between course completion and GPA compared to the persisted outcome variable, the test for multicollinearity between the predictor and persisted outcome variable was not a concern (Tolerance = .898, VIF = 1.114 for the campus; Tolerance = .921, VIF = 1.085 for race; Tolerance = .997, VIF = 1.003 for gender, and Tolerance = .947, VIF = 1.056 for placement level. In aggregate, therefore, the evidence suggested noncollinearity and the data met the assumption and no issues with collinearity existed between the predictor variables (campus, race, gender, and placement level) and the dependent variable (course completion).

Table 5

*Multicollinearity Course Completion*

Model	Collinearity statistics	
	Tolerance	VIF
Campus	.899	1.113
Race	.943	1.060
Gender	.996	1.004
Placement level	.929	1.077

*Note.* Dependent variables: Course completion and GPA.

Table 6

*Multicollinearity Persistence*

Model	Collinearity statistics	
	Tolerance	VIF
Campus	.898	1.114
Race	.921	1.085
Gender	.997	1.003
Placement level	.947	1.056

*Note.* Dependent variable: Persisted.

### **Limitations**

1. The study is limited to one community college. Results cannot be generalized past this one institution.
2. Since this was not a study that utilized randomized trials the researcher could not draw any conclusions about cause and effect.
3. There was no control for confounding variables that may provide alternative explanations for any group differences that are observed (Leedy & Ormrod, 2005).
4. Another limitation involves the numerous variables, which increases the complexity of interpreting the results. There are alternative ways to simplify the approach to gathering and analyzing the data. A solution to this limitation would involve focusing on students who only possess all of the identified independent categories, or narrowing the focus, to include only two independent categories. A major disadvantage to using the logistic regression model is that it requires much more data to achieve stable and meaningful results.

### **Threats to Validity**

#### **Internal Validity Threats**

Threats to internal validity are related to procedures, treatments, and/or experiences of the participants which threaten the ability to draw correct inferences from the data about the population (Creswell, 2009). The following are identified threats to internal validity found within this study: (1) Maturation: Participants in the study may have matured or changed between the time of earning any non-satisfactory grades and

appealing the financial aid suspension status, thus influencing the results. Given that some students may not have continuous enrollment, students in this study may have been required to undergo the appeal program, but life experiences may have influenced the decision making skills prior to returning to school and participating in the interventions;

(2) Mortality: Participants stop out of school for many possible reasons. The outcomes are unknown for these individuals. This is applicable to this student group found in the study because some may not enroll the next semester due to personal issues, as opposed to an ineffective appeal program. In addition, a student may earn unsatisfactory grades due to exceptional situations (death of a family member, birth of a child, illness, etc.) and such situations may trump any intervention and the ability to perform academically.

### **External Validity Threats**

Other threats may arise due to the characteristics of the individuals selected in the sample, the uniqueness of the setting, and the timing of the experiment (Creswell, 2009). Interaction of setting and treatment is a possible threat. Due to the characteristics of the participants in the study, the researcher could not make generalizations to individuals who did not have the same characteristics of participants in this study (Creswell, 2009). This was addressed by restricting claims about groups to which the results cannot be generalized.

Interaction of setting and treatment is another external validity threat. Due to the characteristics of the setting of participants, a researcher cannot generalize to individuals in other settings (Creswell, 2009).

## Summary

The results of this study present an opportunity for educators and practitioners to observe the impact of SAP policies on the institution's retention rate, especially as it relates to at risk populations. While these appeal interventions may serve as a reactionary approach to supporting students after their financial aid has been suspended, the findings may elicit more proactive policies that could include mandatory interventions after the first semester of failing to meet to satisfactory academic progress to deflect factors which impede student persistence.

The chapter provided an explanation for the selected research design, a description of the population and sample, measures, an outline of data collection procedures and data analysis, and closing with the limitations of the study. The next chapter will describe the results of the study.

## CHAPTER 4

### RESULTS

#### **Introduction**

The focus of this study was to examine an under-researched area of financial aid known as Satisfactory Academic Progress (SAP) (Herrschaft, 2012; Neel, 2004). A significant number of students who depend on financial aid are at risk of poor academic performance and financial aid suspension (Herrschaft, 2012; Baime & Mullin, 2010). Therefore, additional research is needed to identify viable and practical ways to assist students who wish to regain their eligibility after financial aid suspension. Such practices may serve as strategies to retain more community college students, reduce student drop out and ultimately increase persistence towards graduation.

The objective of this preliminary study was to evaluate and assess the extent to which three different financial aid SAP appeal interventions (one-pronged, two-pronged and three-pronged) (Appendix A) influenced academic progress among a group of students who previously demonstrated unsatisfactory academic performance. Specific demographic variables (race, gender and developmental education placement) were also examined to determine the effectiveness of the appeal interventions for particular at-risk student groups. This quantitative analysis was conducted ex post facto, using student records data.

Three main research questions were tested during the data analysis process:

1. To what extent was there a difference in the likelihood of course completion (as measured by grades of 'S,' 'P,' 'C' or better during the appeal semesters) among

students who participated in one of the three differently designed financial aid appeal interventions?

- a. To what extent was there a difference in the likelihood of course completion as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
  - b. To what extent was there a difference in the likelihood of course completion as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
  - c. To what extent was there a difference in the likelihood of course completion among students who place into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
  - d. To what extent was there a difference in the likelihood of course completion as mediated by race, gender and developmental education placement, among students who participated in one of the three differently designed financial aid appeal interventions?
2. To what extent was there a difference in the likelihood of meeting the GPA requirements among students who participated in one of the three differently designed financial aid appeal interventions?
- a. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race among students who



participated in one of the three differently designed financial aid appeal interventions?

- b. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?
  - c. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
  - d. To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race, gender and developmental placement, among students who participated in one of the three differently designed financial aid appeal interventions?
3. To what extent was there a difference in the likelihood of persistence (as measured by subsequent semester enrollment) among students who participated in one of the three differently designed financial aid appeal interventions?
- a. To what extent was there a difference in the likelihood of persistence as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?
  - b. To what extent was there a difference in the likelihood of persistence as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?

- c. To what extent was there a difference in the likelihood of persistence among students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?
- d. To what extent was there a difference in the likelihood of persistence as mediated by race, gender among students who participated in one of the three differently designed financial aid appeal interventions?

Descriptive statistics were produced and reported for each data analysis. Binary logistic regression was used to test the effect of the independent variables upon the various outcome variables.

### **Sample**

Data were collected from a large, public multi-campus community college consisted of appeals approved from summer 2013 through summer 2014. The population included full and part-time students who appealed their financial aid suspension, received because they failed to meet one of the SAP requirements. Table 7 shows the number of appealed participants ( $N = 334$ ) and the number of community college students ( $N = 259$ ) included in the analysis. The table displays the number of missing cases ( $N = 75$ ) not included in the analysis because these appeals were still ongoing at the time of the data collection and data analysis. The demographic variables of interest were race, gender and developmental education placement.

Table 7

*Study Sample Size*

<i>N</i>	Campus	Course completion	GPA	Persisted
Valid	334	259	259	259
Missing	0	75	75	75

Table 8 shows a demographic comparison of the 259 students in this study by appeal type, who appealed their financial aid suspension. The table displays the number of males in this study in relation to women, students who tested into developmental courses compared to those who did not test into developmental courses, and the race of study participants. A large proportion of the sample consisted of one and two-pronged appeal participants, with 47% being those in the one-pronged intervention, 43% in the two-pronged and 10% of the participants were students in the three-pronged appeal intervention.

Table 8

*Demographic Characteristics of the Study Sample*

Characteristic	One-Pronged Appeal Intervention		Two-Pronged Appeal Intervention		Three-Pronged Appeal Intervention		Total	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
<b>Race</b>								
Black	97	80%	67	60%	13	52%	177	68%
Other	25	20%	45	40%	12	48%	82	32%
Total	122	100%	112	100%	25	100%	259	100%
<b>Gender</b>								
Male	31	25%	35	31%	6	24%	72	28%
Female	91	75%	77	69%	19	76%	187	72%
Total	122	100%	112	100%	25	100%	259	100%
<b>Placement Level</b>								
Developmental	109	89%	96	86%	12	48%	217	84%
Non-Developmental	13	11%	16	14%	13	52%	42	16%
Total	122	100%	112	100%	25	100%	259	100%
<b>Interaction Terms</b>								
Black males in developmental courses	22	18%	20	18%	1	4%	43	17%
Non-Black males in developmental courses	100	82%	92	82%	24	96%	216	83%
Total	122	100%	112	100%	25	100%	259	100%

### Statistical Analyses of the Research Questions

A binary logistic regression analysis was completed to evaluate the association between the outcome variables (course completion, GPA, and persistence) and the predictor variables (appeal intervention, race, gender and developmental education placement). This was the most appropriate statistical test to employ as it predicts the probability that an observation falls into one of two categories of a dichotomous dependent variable or the likelihood that participants will have group membership in the category based on one or more independent variables that can be continuous or categorical (Lared statistics, 2013).

Statistical analyses were conducted to address the following research questions.

### Course Completion

#### SAP Appeal Interventions and Course Completion

**Research question 1.** To what extent was there a difference in the likelihood of course completion (as measured by grades of ‘S,’ ‘P,’ ‘C’ or better during the appeal semesters) among students who participated in one of the three differently designed financial aid appeal interventions?

Table 9 shows 141 out of 259 students met the 67% course completion rate rule at the end of the appeal term. Fifty-four percent of the total sample met the criterion of course completion and of that population, 25% were one-pronged appeal participants, 22% were those in the two-pronged program and 7% in three-pronged appeal intervention. A course completion comparison among the three different appeal interventions revealed that 54% of the participants met the course completion rate rule and 45% did not meet the criterion at the end of the appeal period (Table 9).

Table 9

#### *Course Completion Outcomes Compared Among SAP Appeal Interventions*

Variable	Met Course Completion Requirement (N)	Did Not Meet Course Completion Requirement (N)	Total (N)
1-Pronged Intervention	65	57	122
2-Pronged Intervention	57	55	112
3-Pronged Intervention	19	6	25
Total	141	118	259

A logistic regression was performed to ascertain the relationship of appeal interventions, race, gender and developmental education placement to the likelihood that the participants would meet the 67% course completion rate rule at the end of the appeal term. The model explained approximately 3% (Nagelkerke's  $R^2 = .029$ ) of the variance in the course completion outcomes and correctly classified 54% to 58% of the cases (141 met course completion standards as opposed to 118 that did not meet the course completion standards). The logistic regression model was statistically significant,  $X^2(2) = 5.619, p < .0005$ . Sensitivity was 100%, specificity was 0, positive predictive value was 54.4% and the negative predictive value was 0. Of the three different appeal models, the three-pronged intervention was the only statistically significant variable.

The three-pronged appeal intervention had a Wald  $X^2$  statistic equal to 4.136, which was significant at the .05 level ( $p = .042$ ) (as shown in Table 10). The odds ratio statistic, which is similar to a measure of effect size, showed the odds for the three-pronged intervention coefficient was 2.77 with a 95% confidence interval of [1.038, 7.431]. This suggested three-pronged appeal participants had 2.77 times higher odds to meet the 67% course completion standard than those in the one-pronged appeal intervention.

The relationship between the one and two-pronged appeal interventions and the 67% course completion rate rule were not statistically significant. Table 10 indicates the one-pronged intervention had a significance level of .084 and the two-pronged intervention had a significance level of .715 - both of which were above the .05 level and did not indicate a correlation with academic progress as demonstrated by meeting the course completion standard. Two-pronged appeal participants were not more or less

likely than one-pronged appeal participants to meet the minimum course completion standards at the end of the appeal term.

Table 10 shows the contribution of each appeal intervention (independent variables) to the logistic regression model and the statistical significance of each intervention.

Table 10

*Logistic Regression Analysis of SAP Appeal Interventions and Course Completion Outcomes*

	<i>B</i>	<i>SE</i>	Wald <i>X</i> <sup>2</sup>	<i>df</i>	<i>p</i>	Exp( <i>B</i> ) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged ( <i>omit</i> )			4.950	2	.084			
2-pronged	-.096	.262	.133	1	.715	.909	.544	1.519
3-pronged	1.021	.502	4.136	1	.042	2.777	1.038	7.431
Percentage of cases correctly classified	54.4%							
Nagelkerke <i>R</i> <sup>2</sup>	.029							

Note. One-pronged intervention is the reference category compared to the two and three-pronged interventions

In summary, participating in the three-pronged appeal intervention was a significant predictor of whether students demonstrated academic progress by meeting the 67% course completion standard; whereas participating in the two-pronged intervention was not a significant predictor when compared to the one-prong intervention.

### **SAP Appeal Interventions, Race and Course Completion**

**Research question 1a.** To what extent was there a difference in the likelihood of course completion as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?

Table 11 illustrates a course completion comparison between blacks and other races according to the appeal intervention types. Blacks represented less than half of the population that met the course completion rule. Within the population that met the course completion standard, 40% were Black in the one-pronged appeal intervention, nearly 20% in the two-pronged intervention and less than 5% in the three-pronged appeal intervention. Table 11 also shows black students represented 36% of the total sample that successfully met the criterion; whereas 18% of the population who met the course completion standard were students of other races.

Table 11

*Course Completion Outcomes Compared Between Blacks and Other Races*

Variable	Met 67% course completion (N)	Did not meet 67% course completion (N)	Total (N)
1-pronged			
Black	58	39	97
Other	7	18	25
Subtotal	65	57	122
2-pronged			
Black	28	39	67
Other	29	16	45
Subtotal	57	55	112
3-pronged			
Black	8	5	13
Other	11	1	12
Subtotal	19	6	25
Total	141	118	259

The relationship between the appeal interventions and the 67% course completion rule were not statistically significant. Race, in the presence of each treatment (appeal



interventions) was not a significant variable for predicting the likelihood of course completion at the end of the appeal term, but the three-pronged appeal intervention was close at .052. In the case of SAP appeal interventions, race and course completion, Blacks were not significantly more or less likely to meet the minimum course completion standards after participating in one of the appeal interventions when compared to other races in the study. Table 12 displays the logistic regression model, showing that race was not a significant predictor of course completion. The coefficient for the race variable had a Wald  $X^2$  statistic equal to .215, which was not significantly associated ( $p = .643$ ) with meeting the 67% course completion rule for students of a particular race.

Table 12

*Logistic Regression Analysis of Race and Course Completion Outcomes*

	<i>B</i>	<i>SE</i>	Wald $X^2$	<i>df</i>	<i>p</i>	Exp( <i>B</i> ) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged			4.816	2	.090			
2-pronged	-.121	.268	.205	1	.651	.886	.524	1.498
3-pronged	.987	.508	3.777	1	.052	2.682	.992	7.255
Blacks ( <i>other races omit</i> )	-.130	.280	.215	1	.643	1.138	.658	1.971
Percentage of cases correctly classified	58.7%							
Nagelkerke $R^2$	.030							

*Note.* Blacks are compared to other races.

**SAP Appeal Interventions, Gender and Course Completion**

**Research question 1b.** To what extent was there a difference in the likelihood of course completion as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?

Table 13 illustrates a course completion comparison between males and females according to the appeal type. Within each appeal intervention, males represented less than 15% of the population that met the course completion rule. Secondly, Table 13 shows 11% of the one-pronged appeal participants that met the course completion rule were male students. Of those in the two-pronged appeal intervention, nearly 15% of the male participants met the outcome criterion and less than 5% were males who met the 67% course completion condition in the three-pronged model.

Table 13

*Course Completion Outcomes Compared Between Males and Females*

Variable	Met 67% course completion (N)	Did not meet 67% course completion (N)	Total (N)
<b>1-pronged</b>			
Male	16	15	31
Female	49	42	91
Subtotal	65	57	122
<b>2-pronged</b>			
Male	21	14	35
Female	36	41	77
Subtotal	57	55	112
<b>3-pronged</b>			
Male	5	1	6
Female	14	5	19
Subtotal	19	6	25
<b>Total</b>	<b>141</b>	<b>118</b>	<b>259</b>

Although the three-pronged model was practically significant at .051, the SAP appeal interventions were not significant with the course completion outcome when the gender variable was included in the model. The logistic regression model indicates the

coefficient for the gender variable had a Wald  $X^2$  statistic equal to .794, which was not significant at the .05 level ( $p = .373$ ) (Table 14). This is interpreted to mean that males were not more or less likely than females to meet the course completion condition as a result of participating in one of the appeal interventions.

Table 14

*Logistic Regression Analysis of Gender and Course Completion Outcomes*

	<i>B</i>	<i>SE</i>	<i>Wald</i> <i>X<sup>2</sup></i>	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged			4.970	2	.083			
2-pronged	-.138	.269	.263	1	.608	.871	.514	1.476
3-pronged	.991	.508	3.808	1	.051	2.695	.996	7.296
Males (females omit)	-.253	.284	.794	1	.373	.776	.445	1.355
Percentage of cases correctly classified	57.1%							
Nagelkerke $R^2$	.034							

Note: Males are compared to females

### **SAP Appeal Interventions, Developmental Education and Course Completion**

**Research Question 1c.** To what extent was there a difference in the likelihood of course completion among students who place into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?

Forty-one percent of the students in the one-pronged appeal model tested into developmental education courses and met the standard for course completion. Participants from the two-pronged appeal program represented 32% of course completers in the sample and 7% of the three-pronged developmental education students met the criterion. Table 15 shows the course completion outcomes between students who tested

into developmental courses compared to students who did not test into developmental education courses according to the appeal interventions in which they participated.

Overall, the sample included 44% of developmental education students who met the course completion rate rule and 10% were not developmental education students who complied with the requirement.

Table 15

*Course Completion Outcomes Compared Between Developmental and Non-Developmental Education Students*

Variable	Met 67% Course Completion ( <i>N</i> )	Did Not Meet 67% Course Completion ( <i>N</i> )	Total ( <i>N</i> )
1-pronged			
Developmental	59	50	109
Non-Developmental	6	7	13
Subtotal	65	57	122
2-pronged			
Developmental	46	50	96
Non-Developmental	11	5	16
Subtotal	57	55	112
3-pronged			
Developmental	10	2	12
Non-Developmental	9	4	13
Subtotal	19	6	25
Total	141	118	259

The SAP appeal interventions were not significant for the course completion outcome when the developmental education placement variable was included in the model. The coefficient for the developmental education placement variable among the interventions had a Wald  $X^2$  statistic equal to .084, which was not a statistically

significant ( $p = .772$ ) for the course completion rate rule. In this case, students who tested into developmental education courses were not more or less likely than those students who did not test into developmental courses to meet the 67% minimum course completion standards at the end of the appeal session because of the treatment in which they participated. Table 16 shows the developmental education and appeal interventions variables did not have a statistically significant effect on course completion in the logistic regression model.

Table 16

*Logistic Regression Analysis of Developmental Education and Course Completion Outcomes*

	<i>B</i>	<i>SE</i>	Wald <i>X</i> <sup>2</sup>	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged			4.327	2	.115			
2-pronged	-.140	.269	.271	1	.603	.869	.513	1.473
3-pronged	.950	.527	3.248	1	.072	2.586	.920	7.267
Developmental Educ. ( <i>not placed omit</i> )	.107	.370	.084	1	.772	1.113	.539	2.300
Percentage of cases correctly classified	57.1%							
Nagelkerke <i>R</i> <sup>2</sup>	.034							

Note: Developmental education placement is compared to students not in developmental courses

**SAP Appeal Interventions, Race\*Gender\*Developmental Education and Course**

**Completion**

**Research Question 1d.** To what extent was there a difference in the likelihood of course completion as mediated by race, gender and developmental education placement, among students who participated in one of the three differently designed financial aid appeal interventions?

Table 17 illustrates a course completion outcome comparison between black males in developmental education and group members who were not African American male students who tested into developmental courses. Of the black male students who tested into developmental courses 9% from the one-pronged intervention met the course completion outcome, 5% in the two-pronged and less than 1% from the three-pronged appeal intervention. Eight percent of the sample who met the course completion criterion were black male students who tested into developmental courses versus 45% were not black males in developmental courses.

Table 17

*Course Completion Outcomes Comparing Between Black Male Students in Developmental Courses and Non-Black Male Students in Developmental Courses*

Variable	Met 67% Course Completion (N)	Did Not Meet 67% Course Completion (N)	Total (N)
1-pronged			
Black males in developmental courses	13	9	22
Non-Black males in developmental courses	52	48	100
Sub-Total	65	57	122
2-pronged			
Black males in developmental courses	8	12	20
Non-Black males in developmental courses	49	43	92
Sub-Total	57	55	112
3-pronged			
Black males in developmental courses	1	0	1
Non-Black males in developmental courses	18	6	24
Sub-Total	19	6	25
Total	141	118	259

In the case of SAP appeal interventions and race\*gender\*developmental education placement interaction at  $p > .05$  the interaction variable was not a likely practical predictor to meet the course completion standard at the end of the appeal term. Table 18 shows that the model explained approximately 4% (Nagelkerke's  $R^2 = .042$ ) of the variance for the outcome. Table 18 further illustrates a non-statistically significant relationship between the predictors and the course completion results with a coefficient for the interaction variable to include a Wald  $X^2$  statistic equal to 1.449, which was not significant at the .05 level ( $p = .229$ ). From this we can conclude that it is not more or less likely for Black males who tested into developmental courses than for those students who were not Black, male in developmental courses to meet the minimum course completion rule. Therefore the interaction term did not improve the overall fit of the model.

Table 18

*Logistic Regression Analysis of Black Males in Developmental Education and Course Completion Outcomes*

	<i>B</i>	<i>SE</i>	Wald $X^2$	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged			4.354	2	.113			
2-pronged	-.150	.270	.310	1	.577	.860	.507	1.460
3-pronged	.964	.530	3.311	1	.069	2.622	.928	7.405
Race	.027	.293	.009	1	.926	1.028	.578	1.826
Gender	-.312	.289	1.166	1	.280	.732	.415	1.290
Developmental	-.147	.422	.121	1	.728	.863	.377	1.975
Race*Gender*Developmental (omit Non - Race*Gender*Developmental)	.991	.823	1.449	1	.229	2.694	.537	13.520
Percentage of cases correctly classified	57.5%							
Nagelkerke $R^2$	.042							

Note: Race\*gender\*developmental is an interaction term for black male students who placed into developmental courses compared to other races who were not black male students in developmental courses

## Grade Point Average (GPA)

### SAP Appeal Interventions and GPA

**Research Question 2.** To what extent was there a difference in the likelihood of meeting the GPA requirements among students who participated in one of the three differently designed financial aid appeal interventions?

Table 19 shows 204 out of 259 students met the minimum GPA requirements at the end of the appeal term. Nearly 80% of the total sample met the GPA thresholds and of that population, the one and two-pronged appeal models individually accounted for approximately 45% of the participants who met the GPA conditions at the end of the appeal term. Only 10% of the three-pronged appeal program contributed to the sample that met the GPA thresholds. Table 19 illustrates the GPA comparison among the appeal interventions and shows that 79% of the participants met the criterion compared to the 21% of the sample that did not meet the GPA requirement at the end appeal term.

Table 19

#### *GPA Outcomes Compared Among SAP Appeal Interventions*

Variable	Met GPA Threshold ( <i>N</i> )	Did Not Meet GPA Threshold ( <i>N</i> )	Total ( <i>N</i> )
1-Pronged Intervention	93	29	122
2-Pronged Intervention	90	22	112
3-Pronged Intervention	21	4	25
Total	204	55	259

A logistic regression was performed to ascertain the effects of appeal interventions, race, gender and developmental education placement on the likelihood that the participants would meet the GPA threshold at the end of the appeal term. The model explained Nagelkerke's  $R^2 = .006$  variance in the GPA outcomes and correctly classified



79% of the cases (204 met the GPA threshold opposed to 55 that did not meet the GPA threshold). The logistic regression model was statistically significant,  $X^2(2) = 1.067, p < .0005$ . Sensitivity was 100%, specificity was 0, positive predictive value was 78.7% and the negative predictive value was 0. The three different appeal interventions were not significant for predicting the chances of meeting the GPA threshold at the end of the appeal period.

The appeal intervention variables were all above the .05 level and did not indicate a relationship with demonstrating academic progress by meeting the GPA requirements. The coefficient on the reference category (one-pronged intervention) ( $p = .594$ ) had a Wald  $X^2$  statistic equal to 1.041; the two-pronged ( $p = .445$ ) had a Wald  $X^2$  statistic equal to .582; and the three-pronged intervention ( $p = .400$ ) variable had a Wald  $X^2$  statistic equal to .709. In this case, neither the two nor three-pronged interventions was related to the outcome of meeting the GPA threshold when compared to participants in the one-pronged intervention. Hence, the outcome of meeting the minimum financial aid GPA standard was not more or less statistically significant among the participants in any of the appeal interventions. Table 20 displays the results which indicate that none of the appeal interventions contribute to the model.

Table 20

## Logistic Regression Analysis of SAP Appeal Interventions and GPA Outcomes

	<i>B</i>	<i>SE</i>	Wald <i>X</i> <sup>2</sup>	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged ( <i>omit</i> )			1.041	2	.594			
2-pronged	.243	.319	.582	1	.445	1.276	.520	5.158
3-pronged	.493	.586	.709	1	.400	1.637	.683	2.384
Percentage of cases correctly classified	78.8%							
Nagelkerke <i>R</i> <sup>2</sup>	.006							

Note: 1-pronged intervention is the reference category compared to the two and three-pronged interventions

### SAP Appeal Interventions, Race and GPA

**Research Question 2a.** To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?

Table 21 illustrates a GPA comparison between blacks and other races according to the appeal intervention types. Within the population that met the GPA standards, 36% were black students in the one-pronged appeal intervention, 25% in the two-pronged intervention and less than 5% of the black population characterized the three-pronged appeal intervention. Table 21 also shows Blacks consisted of 52% of the sample that met the thresholds and other races in the study defined 26% of the sample that met the GPA conditions.

Table 21

*GPA Outcomes Compared Between Blacks and Other Races*

Variable	Met GPA Threshold (N)	Did Not Meet GPA Threshold (N)	Total (N)
1-pronged			
Black	74	23	97
Other	19	6	25
Sub-Total	93	29	122
2-pronged			
Black	52	15	67
Other	38	7	45
Sub-Total	90	22	112
3-pronged			
Black	10	3	13
Other	11	1	12
Sub-Total	21	4	25
Total	204	55	259

In the case of SAP appeal interventions, race and GPA, the appeal formats did not reach significance when race was included in the model. Race in the presence of each treatment was not a significant variable for predicting the likelihood of meeting the GPA requirements at the end of the appeal term. Table 22 displays the coefficient for the race variable which had a Wald  $\chi^2$  statistic equal to .836, which was not significantly associated ( $p = .361$ ) with predicting the GPA criterion according to a student's racial background and the appeal intervention in which they participated.

Table 22

*Logistic Regression Analysis of Race and GPA Outcomes*

	B	SE	Wald $X^2$	df	p	Exp(B) odds ratio	95% CI for odds ratio	
							Lower	Upper
1-pronged			.631	2	.729			
2-pronged	.183	.326	.316	1	.574	1.201	.634	2.274
3-pronged	.409	.593	.475	1	.491	1.505	.471	4.811
Blacks (other races omit)	.322	.352	.836	1	.361	1.380	.692	2.751
Percentage of cases correctly classified	78.8%							
Nagelkerke R <sup>2</sup>	.011							

Note: Blacks are compared to other races

**SAP Appeal Interventions, Gender and GPA**

**Research Question 2b.** To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?

Table 23 illustrates a GPA comparison between males and females according to the different appeal interventions. Males were a small percentage of students who complied with the GPA requirements (1.5, 1.75, or 2.00 contingent upon the number of attempted credit-bearing credits). Of the population that met the GPA thresholds, 11% were males in the one-pronged appeal intervention, 13% in the two-pronged and less than 5% were from the three-pronged intervention. Table 23 shows the majority of the population that met the GPA standards were represented by females at 57% compared to 21% of males who met the GPA requirement.

Table 23

*GPA Outcomes Compared Between Males and Females*

Variable	Met GPA Threshold ( <i>N</i> )	Did Not Meet GPA Threshold ( <i>N</i> )	Total ( <i>N</i> )
1-pronged			
Male	24	7	31
Female	69	22	91
Sub-Total	93	29	122
2-pronged			
Male	28	7	35
Female	62	15	77
Sub-Total	90	22	112
3-pronged			
Male	4	2	6
Female	17	2	19
Sub-Total	21	4	25
Total	204	55	259

In the case of SAP appeal interventions, gender and GPA, the logistic regression model indicates the appeal interventions were not significantly associated with the GPA outcome when gender was included in the model. Table 24 shows the coefficient on the gender variable had a Wald  $X^2$  statistic equal to .060, which was not significant at the .05 level ( $p = .807$ ). This is interpreted to mean that males were not more or less likely than females to meet the GPA threshold at the end of the appeal term.

Table 24

*Logistic Regression Analysis of Gender and GPA Outcomes*

	<i>B</i>	<i>SE</i>	Wald			Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
			<i>X</i> <sup>2</sup>	<i>df</i>	<i>p</i>		Lower	Upper
1-pronged			.641	2	.726			
2-pronged	.189	.326	.333	1	.564	1.207	.637	2.290
3-pronged	.407	.593	.471	1	.492	1.503	.470	4.806
Males (females omit)	.083	.338	.060	1	.807	1.086	.560	2.107
Percentage of cases correctly classified	78.8%							
Nagelkerke <i>R</i> <sup>2</sup>	.012							

Note: Males are compared to females

**SAP Appeal Interventions, Developmental Education and GPA**

**Research Question 2c.** To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?

One-pronged appeal intervention participants who tested into developmental education courses represented 40% of the students who met the GPA rule, 36% were those in the two-pronged intervention, while less than 5% of the three-pronged developmental education students met the GPA outcome criterion. Table 25 shows the GPA outcomes between students who tested into developmental courses compared to students who did not test into developmental education courses according to the appeal interventions in which they participated. Sixty-five percent of the sample were students who tested into developmental education courses complied with the GPA standards and

13% of the sample were those who did not test into one or more developmental education courses.

Table 25

*GPA Outcomes Compared Between Developmental and Non-Developmental Education Students*

Variable	Met GPA Threshold (N)	Did Not Meet GPA Threshold (N)	Total (N)
1-pronged			
Developmental	83	26	109
Non-Developmental	10	3	13
Sub-Total	93	29	122
2-pronged			
Developmental	74	22	96
Non-Developmental	16	0	16
Sub-Total	90	22	112
3-pronged			
Developmental	12	0	12
Non-Developmental	9	4	13
Sub-Total	21	4	25
Total	204	55	259

The SAP appeal interventions were not significant for the GPA outcomes when the developmental education placement variable was included in the model. The coefficient on the developmental education placement variable among the interventions had a Wald  $X^2$  statistic equal to .275, which was not a statistically significant ( $p = .600$ ) predictor of the likelihood of meeting the GPA requirements. In this case, students who tested into developmental education courses were not more or less likely than those students who did not test into developmental education courses to meet the GPA standards at the end of the appeal session because of the appeal model in which they

participated. Table 26 shows the developmental education and appeal interventions variables did not have a statistically significant effect on GPA outcomes in the logistic regression model.

Table 26

*Logistic Regression for Developmental Education and GPA Outcomes*

	<i>B</i>	<i>SE</i>	Wald		<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
			<i>X</i> <sup>2</sup>	<i>df</i>			Lower	Upper
1-pronged			.463	2	.793			
2-pronged	.185	.326	.322	1	.570	1.204	.635	2.282
3-pronged	.314	.618	.258	1	.611	1.369	.408	4.595
Developmental Educ. (not placed omit)	.246	.469	.275	1	.600	1.279	.510	3.209
Percentage of cases correctly classified	78.8%							
Nagelkerke R <sup>2</sup>	.014							

Note: Developmental education placement is compared to students not in developmental courses

**SAP Appeal Interventions, Race\*Gender\*Developmental Education and GPA**

**Research Question 2d.** To what extent was there a difference in the likelihood of meeting the GPA requirements as mediated by race, gender and developmental placement, among students who participated in one of the three differently designed financial aid appeal interventions?

Table 27 illustrates a GPA comparison between black males in developmental education courses and students who were not black male in developmental courses according to the appeal intervention. Of the population that met the minimum financial aid GPA condition, approximately 7% were one-pronged appeal participants, 6% were in the two-pronged intervention and roughly 1% were those of the three-pronged appeal program. In summary, 11% of the sample were black males who tested into



developmental courses satisfied the GPA requirements compared to the 67% who were not black males in developmental courses who met the criterion.

Table 27

*GPA Outcomes Comparing Black Male Students in Developmental Courses and Non-Black Males in Developmental Courses*

Variable	Met GPA Threshold (N)	Did Not Meet GPA Threshold (N)	Total (N)
1-pronged			
Black males in developmental courses	16	6	22
Non-Black males in developmental courses	77	23	100
Sub-Total	93	29	122
2-pronged			
Black males in developmental courses	13	7	20
Non-Black males in developmental courses	77	15	92
Sub-Total	90	22	112
3-pronged			
Black males in developmental courses	1	0	1
Non-Black males in developmental courses	20	4	24
Sub-Total	21	4	25
Total	204	55	259

In the case of SAP appeal interventions and race\*gender\*developmental education placement interaction – there were non-significant score statistics at  $p > .05$  and suggests the interaction variable is not a likely practical predictor to meet the GPA thresholds at the end of the appeal term. Table 28 shows the model explained approximately 3% (Nagelkerke's  $R^2 = .030$ ) of the variance in the outcome. Table 28 further illustrates a non-statistically significant relationship between the predictors and the course completion results with a coefficient on the interaction variable to include a Wald  $X^2$  statistic equal to .405, which was not significant at the .05 level ( $p = .525$ ). This

finding suggested the slope of the relationship between the outcome and the interaction was not significantly more or less likely for Black males who tested into developmental courses than for students who were not black, male and tested into developmental courses to meet the minimum GPA standards.

Table 28

*Logistic Regression Analysis of Black Males in Developmental Education and GPA Outcomes*

	<i>B</i>	<i>SE</i>	Wald <i>X</i> <sup>2</sup>	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
One-Pronged			.449	2	.799			
Two-Pronged	.180	.327	.304	1	.581	1.197	.631	2.271
Three-Pronged	.314	.619	.257	1	.612	1.369	.407	4.600
Race	.239	.363	.434	1	.510	1.270	.624	2.586
Gender	.059	.343	.029	1	.864	1.060	.542	2.075
Developmental	.098	.509	.037	1	.847	1.103	.407	2.991
Race*Gender*Developmental (omit Non- Race*Gender*Developmental)	.755	1.187	.405	1	.525	2.129	.208	21.810
Percentage of cases correctly classified	78.8%							
Nagelkerke <i>R</i> <sup>2</sup>	.016							

Note: Race\*gender\*developmental is an interaction term for black male students who placed into developmental courses compared to other races who were not black male students in developmental courses

## Persistence

### SAP Appeal Interventions and Persistence

**Research question 3.** To what extent was there a difference in the likelihood of persistence (as measured by subsequent semester enrollment) among students who participated in one of the three differently designed financial aid appeal interventions?

Table 29 illustrates persistence among the three appeal interventions. The one and two-pronged appeal intervention participants individually accounted for 43% of the group

that persisted while 13% of the students were those in the three-pronged intervention who persisted the next semester following the appeal term. In addition, Table 29 shows 52% of the sample that persisted, whereas 47% did not enroll the following semester after the appeal term.

Table 29

*Persistence Compared Among SAP Appeal Interventions*

Variable	Persisted ( <i>N</i> )	Did Not Persist ( <i>N</i> )	Total ( <i>N</i> )
1-Pronged Intervention	59	63	122
2-Pronged Intervention	59	53	112
3-Pronged Intervention	19	6	25
Total	137	122	259

A logistic regression was performed to ascertain the effects of appeal interventions, race, gender and developmental education placement related to the likelihood that the participants would persist to the next semester. The model explained approximately 3% (Nagelkerke's  $R^2 = .034$ ) of the variance in the persistence outcomes and correctly classified 54% to 58% of the cases (78 persisted compared to the 63 that did not persist). The logistic regression model was statistically significant,  $X^2(2) = 6.687, p < .0005$ . Sensitivity was 56.9%, specificity was 51.6%, the positive predictive value was 56.9% and the negative predictive value was 51.6%. Of the three different appeal models, the three-pronged appeal intervention was the only statistically significant variable, but the one-pronged was close at .053.

The three-pronged appeal intervention had a Wald  $X^2$  statistic equal to 5.887, which was significant at the .05 level ( $p = .015$ ) (as shown in Table 30). The odds ratio statistic, which is similar to a measure of effect size, indicated the odds for the three-

pronged intervention coefficient was 3.381 with a 95% confidence interval of [1.264, 9.047]. The results indicated that students in the three-pronged appeal intervention had 3.38 times higher odds of persisting to the next semester compared to one-pronged appeal intervention participants.

Conversely, the relationship between the one and two-pronged appeal interventions and persistence outcome to the next semester were not statistically significant. Although the one-pronged appeal intervention predictor variable was not statistically significant, the value was practically significant and shy of demonstrating significance with a value of .053. Table 30 shows the one-pronged intervention had a Wald  $X^2$  statistic equal to 5.890 and a significance level of .053 and the two-pronged intervention had a Wald  $X^2$  statistic equal to .435 with a significant level of .509 - both of which were above the .05 level and did not show a correlation with persistence. The two-pronged appeal participants were not significantly more or less likely than one-pronged appeal participants to persist to the next semester after the end of the appeal term.

Table 30 shows the contribution of each appeal intervention (independent variables) to the logistic regression model and the statistical significance of each intervention. The table displays the results which indicated that the three-pronged appeal intervention was the only variable that added significantly to predicting the likelihood of persisting beyond the appeal term; whereas the one-pronged and two-pronged interventions did not contribute to the outcome.

Table 30

*Logistic Regression Analysis of SAP Appeal Interventions and Persistence*

	<i>B</i>	<i>SE</i>	Wald <i>X</i> <sup>2</sup>	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged ( <i>omit</i> )			5.890	2	.053			
2-pronged	.173	.262	.435	1	.509	1.189	.711	1.986
3-pronged	1.218	.502	5.887	1	.015	3.381	1.264	9.047
Percentage of cases correctly classified	54.4%							
Nagelkerke <i>R</i> <sup>2</sup>	.034							

Note: One-pronged intervention is the reference category compared to the two and three-pronged interventions

**SAP Appeal Interventions, Race and Persistence**

**Research question 3a.** To what extent was there a difference in the likelihood of persistence as mediated by race among students who participated in one of the three differently designed financial aid appeal interventions?

Table 31 illustrates a persistence comparison between blacks and other races according to the appeal intervention types. Black students in the one-pronged appeal intervention represented 37% of the population that persisted while 23% of the persisters were two-pronged intervention participants and approximately 5% were black students in the three-pronged appeal intervention. In summary, black students defined 35% of the sample that persisted and 17% of the sample that enrolled the semester following the appeal term were students of another race.

Table 31

*Persistence Compared Between Blacks and Other Races*

Variable	Persisted ( <i>N</i> )	Did Not Persist ( <i>N</i> )	Total ( <i>N</i> )
<b>1-pronged</b>			
Black	52	45	97
Other	7	18	25
Sub-Total	59	63	122
<b>2-pronged</b>			
Black	32	35	67
Other	27	18	45
Sub-Total	59	53	112
<b>3-pronged</b>			
Black	8	5	13
Other	11	1	12
Sub-Total	19	6	25
<b>Total</b>	<b>137</b>	<b>122</b>	<b>259</b>

The relationship between the one and two-pronged appeal interventions and persistence was not statistically significant. The three-pronged appeal format maintained significance at .017 and the one-pronged was close at .057. Race, in the presence of each treatment (appeal interventions) was not significant for predicting the likelihood of persisting to the following the semesters. However, the model showed the three-pronged intervention maintained significance when the race variable was included in the model and participants of the three-pronged intervention were 3.75 times higher odds of persisting the next semester after the appeal term. Table 32 displays the coefficient on the race variable with a Wald  $X^2$  statistic equal to .001, which was not significantly associated ( $p = .981$ ) with predicting persistence according to the students' racial background. The three-pronged appeal model had a Wald  $X^2$  statistic equal to 5.887,

which was significant at the .05 level ( $p = .017$ ) (as shown in Table 32) when race was included in the model.

Table 32

*Logistic Regression Analysis of Race and Persistence*

	<i>B</i>	<i>SE</i>	Wald <i>X</i> <sup>2</sup>	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged			5.736	2	.057			
2-pronged	.172	.268	.411	1	.522	1.187	.702	2.006
3-pronged	1.216	.508	5.736	1	.017	3.375	1.247	9.134
Blacks (omit other races)	.007	.279	.001	1	.981	1.007	.582	1.740
Percentage of cases correctly classified	54.4%							
Nagelkerke <i>R</i> <sup>2</sup>	.034							

Note: Blacks are compared to other races

### SAP Appeal Interventions, Gender and Persistence

**Research question 3b.** To what extent was there a difference in the likelihood of persistence as mediated by gender among students who participated in one of the three differently designed financial aid appeal interventions?

Less than 20% of the persisting population were males. Table 33 illustrates persistence comparison among males and females according to the appeal interventions. Among the male population that persisted, 8% belonged to the one-pronged intervention, 16% were in the two-pronged and only 2% in the three-pronged appeal intervention that persisted the semester following the appeal term.

Table 33

*Persistence Compared Between Males and Females*

Variable	Persisted ( <i>N</i> )	Did Not Persist ( <i>N</i> )	Total ( <i>N</i> )
<b>1-pronged</b>			
Male	12	19	31
Female	47	44	91
Sub-Total	59	63	122
<b>2-pronged</b>			
Male	23	12	35
Female	36	41	77
Sub-Total	59	53	112
<b>3-pronged</b>			
Male	4	2	6
Female	15	4	19
Sub-Total	19	6	25
<b>Total</b>	<b>137</b>	<b>122</b>	<b>259</b>

Gender, independent of the three different interventions was not statistically significant for predicting persistence. Table 34 shows the coefficient for the gender variable had a Wald  $X^2$  statistic equal to .082, which was not significant at the .05 level ( $p = .775$ ). The three-pronged appeal intervention was significant with a Wald  $X^2$  statistic equal to 5.744 at the .05 level ( $p = .017$ ) (as shown in Table 34) when gender was included in the model. This is interpreted to mean that males were not more or less likely than females to persist the next semester following the appeal term, but three-pronged participants are 3.37 times higher odds of persisting the next semester after the appeal term, even when gender is included in the model.



Table 34

*Logistic Regression Analysis of Gender and Persistence*

	<i>B</i>	<i>SE</i>	Wald <i>X</i> <sup>2</sup>	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged			5.745	2	.057			
2-pronged	.166	.268	.385	1	.535	1.181	.698	1.998
3-pronged	1.217	.508	5.744	1	.017	3.378	1.248	9.141
Males (omit females)	-.081	.282	.082	1	.775	.923	.531	1.604
Percentage of cases correctly classified	52.5%							
Nagelkerke <i>R</i> <sup>2</sup>	.034							

Note: Males are compared to females

### **SAP Appeal Interventions, Developmental Education and Persistence**

**Research Question 3c.** To what extent was there a difference in the likelihood of persistence among students who placed into developmental education courses and who participated in one of the three differently designed financial aid appeal interventions?

Table 35 shows the persistence outcomes between students who tested into developmental education compared to students who did not test into developmental courses according to the appeal interventions in which they participated. When persistence rates were calculated among the developmental education group, one and two-pronged appeal participants consisted of approximately 37% of students who persisted, while 5% were three-pronged appeal students who tested into developmental education courses.

Table 35

*Persistence Compared Between Developmental and Non-Developmental Education Students*

Variable	Persisted (N)	Did Not Persist (N)	Total (N)
1-pronged			
Developmental	52	57	109
Non-Developmental	7	6	13
Subtotal	59	63	122
2-pronged			
Developmental	50	46	96
Non-Developmental	9	7	16
Subtotal	59	53	112
3-pronged			
Developmental	8	4	12
Non-Developmental	11	2	13
Subtotal	19	6	25
Total	137	122	259

The SAP appeal interventions were not significant for persistence when the developmental education placement variable was included in the model, but the three-pronged appeal intervention retained significance at .037. According to the logistic regression results, the developmental education variable as independent of the three different interventions was not a statistically significant predictor with persistence. Table 36 shows the coefficient on the developmental education placement variable had a Wald  $X^2$  statistic equal to .745, which was not significant at the .05 level ( $p = .388$ ). However, the three-pronged appeal format remained significant with a Wald  $X^2$  statistic equal to 4.355, significant at the .05 level ( $p = .037$ ) (as shown in Table 36) when developmental education was included in the model. This is interpreted to mean that students who tested

into developmental education courses were not more or less likely than those who did not test into developmental education courses to persist, but three-pronged participants have 2.99 times higher odds of persisting the next semester after the appeal term when the developmental education placement variable was included in the model.

Table 36

*Logistic Regression Analysis of Developmental Education Placement and Persistence*

	<i>B</i>	<i>SE</i>	Wald <i>X</i> <sup>2</sup>	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged			4.356	2	.113			
2-pronged	.160	.269	.356	1	.550	1.174	.693	1.988
3-pronged	1.097	.526	4.355	1	.037	2.996	1.069	8.396
Developmental Educ. ( <i>not placed omit</i> )	.321	.372	.745	1	.388	1.378	.665	2.856
Percentage of cases correctly classified	54.8%							
Nagelkerke <i>R</i> <sup>2</sup>	.038							

Note: Developmental education placement is compared to students not in developmental courses

### **SAP Appeal Interventions, Race, Gender, Developmental Education and Persistence**

**Research question 3d.** To what extent was there a difference in the likelihood of persistence as mediated by race, gender among students who participated in one of the three differently designed financial aid appeal interventions?

Of the African American male students who tested into developmental courses and persisted the semester, only 6% were in the one-pronged, 8% in the two-pronged and students who met this demographic criteria was not identified in the three-pronged appeal intervention. Table 37 illustrates a persistence outcome comparison between Black males in developmental courses and group members who were not black males that tested into developmental courses. Only 8% of the sample were black male students who tested into

developmental courses and persisted after the appeal term; whereas 44% of the remaining persisting population were participants other than black males in developmental education placement.

Table 37

*Persistence Comparing Black Male Students in Developmental Courses and Non-Black Males in Developmental Courses*

Variable	Persisted ( <i>N</i> )	Did Not Persist ( <i>N</i> )	Total ( <i>N</i> )
<b>1-pronged</b>			
Black males in developmental courses	9	13	22
Non-Black males in developmental courses	50	50	100
Sub-Total	59	63	122
<b>2-pronged</b>			
Black males in developmental courses	12	8	20
Non-Black males in developmental courses	47	45	92
Sub-Total	59	53	112
<b>3-pronged</b>			
Black males in developmental courses	0	1	1
Non-Black males in developmental courses	19	5	24
Sub-Total	19	6	25
<b>Total</b>	<b>137</b>	<b>122</b>	<b>259</b>

In the case of SAP appeal interventions and race\*gender\*developmental education placement interaction – there were non-significant score statistics at  $p > .05$  and suggests the interaction variable is not a likely practical predictor to persist the next semester after the appeal term. However, in the presence of an interaction term, the three-pronged appeal model was significant at .036. Table 38 shows the model explained approximately 4% (Nagelkerke's  $R^2 = .040$ ) of the variance in the outcome. Approximately 96 percent of the variance is unexplained. Table 38 further illustrates a

non-statistically significant relationship between the one ( $p = .111$ ) and two-pronged ( $p = .540$ ) predictors and the persistence results when the interaction effect was added to the model. The coefficient on the interaction variable included a Wald  $X^2$  statistic equal to .348, which was not significant at the .05 level ( $p = .555$ ). This finding suggested the slope of the relationship between the outcome and the interaction was not significantly more or less likely for black males who tested into developmental courses than for students who were not black males in developmental courses to persist the next semester following the appeal term. Yet, three-pronged participants are likely to persist, even when the interaction term was included in the model.

Table 38

*Logistic Regression Analysis of Black Males in Developmental Courses and Persistence*

	<i>B</i>	<i>SE</i>	Wald $X^2$	<i>df</i>	<i>p</i>	Exp(B) odds ratio	95% <i>CI</i> for odds ratio	
							Lower	Upper
1-pronged			4.359	2	.113			
2-pronged	.159	.269	.350	1	.554	1.172	.692	1.986
3-pronged	1.097	.526	4.357	1	.037	2.996	1.069	8.396
Race	-.028	.293	.009	1	.924	.972	.548	1.727
Gender	-.075	.288	.068	1	.794	.928	.538	1.631
Developmental	.282	.426	.437	1	.509	1.325	.575	3.057
Race*Gender*Developmental	.145	.782	.034	1	.853	1.156	.250	5.349
Percentage of cases correctly classified	54.8%							
Nagelkerke $R^2$	.038							

Note: Race\*gender\*developmental is an interaction term for black male students who placed into developmental courses compared to other races who were not black male students in developmental courses

### Summary

Chapter 4 presents the three research questions along with the sub-related questions. The statistical test and data analysis are provided with tables for a visual

depiction. The three-pronged appeal intervention was the only statistically significant predictor variable in the study. It was significant for the prediction of the course completion outcome, and the likelihood of persisting to the next semester following the appeal term. However, the remaining interventions and other demographic predictor variables were not significant for predicting 67% course completion, the GPA threshold and persisting to the next semester. The final chapter summarizes and interprets the findings and conclusions based upon the analysis. Study limitations and recommendations for future research are also presented in Chapter 5.

## CHAPTER 5

### CONCLUSIONS

In this chapter, a summary of the study is provided. A discussion of the findings and conclusions drawn from the analysis of the results are also included. Implications are offered, followed by the contributions of the study, and recommendations for future research.

#### **Summary of the Study**

Standards of Satisfactory Academic Progress (SAP) are critical to the federal financial aid program as they determine continued eligibility based on minimum academic measures. The requirements ensure that students finish their academic program in a timely manner (NASFAA, 2012). Students who receive federal financial aid assistance must meet and maintain the following minimum requirements: (1) 67% course completion rule; (2) cumulative grade point average (GPA) of 1.5, 1.75 or 2.00; (3) earn a degree or certificate within the maximum time limit rule of 150%; and (4) meet the developmental credit rule by satisfying all required developmental education courses within 30 attempted credits. These standards determine continued financial aid eligibility, regardless of financial need.

Non-compliance with SAP regulations may cause financial aid suspension. Federal regulations require institutions to include an appeal process in their satisfactory academic progress policy and offer students who have been placed on financial aid suspension an opportunity to appeal their status in an attempt to regain their eligibility if mitigating circumstances exist (U. S. Department of Education, 2010).

Using *ex post facto* data from summer 2013 to summer 2014, this study examined the extent to which three different financial aid appeal interventions influenced academic progress of students, as demonstrated by meeting minimum course completion standards, GPA thresholds, and persistence rates. A binary logistic regression analysis was applied to the data to determine whether independent variables (appeal interventions, race, gender, and placement into developmental courses) predicted the likelihood of the outcome variables.

The population included students attending a multi-campus, metropolitan community college, who were deemed academically ineligible to receive financial aid (grants and loans) because of unsatisfactory academic performance, which resulted in financial aid suspension. Participants included students who did not meet the course completion and/or GPA requirement, received an appeal approval after petitioning their suspension, and completed the components of an appeal program. To measure the extent to which students met the criterion, each appeal intervention and specific at-risk groups within the different treatment programs was assessed to identify which student groups satisfied the financial aid academic requirements at the end of the appeal term.

Implications from this study may spur research focusing on developing strategies, institutional responses and/or student-centered programs to reduce the number of students with suspended financial aid; and therefore improve persistence and graduation rates. If budget allocations for two-year institutions transitioned to outcome-based funding, with emphasis on retention and graduation rates, higher education officials will likely refocus their attention and efforts towards creating programs to meet the needs of and retain its student population.



## **Discussion**

The findings from this study offer some practical approaches to engage a specific population to educate and support students as they work towards meeting satisfactory academic progress standards necessary to regain financial aid eligibility. The small sample size, convenience sampling to only one community college, lack of additional replicated and related research and unbalanced racial, gender and developmental education background of the sample, limits the ability to draw firm conclusions about the effects or predictability of the interventions. Therefore, the findings in this study should be interpreted with caution. The results offer implications and establish groundwork for additional research to improve practices for financial aid students who have experienced academic difficulty. This section describes the outcomes and conclusions drawn from the data analyses conducted to address the research questions of this study.

### **Course Completion Outcome**

Eighty percent of the sample appealed their financial aid suspension as a result of falling below the minimum course completion rate rule. At the end of the appeal term, 54% of the participants met the course completion conditions. Although the three-pronged appeal intervention was designed specifically for academically ineligible students to improve their academic progress, the results at one community college campus indicated the three-pronged SAP appeal intervention was only significant on the baseline model without control for other variables with predicting the likelihood of meeting the course completion standards. In other words, the intervention showed a relationship with the course completion criteria when covariates (race, gender, and developmental education placement) were excluded from the model. When the

demographic variables were included in the model, the three-pronged program was not a significant variable. This intervention consisted of workshops, academic advising and a credit restriction, which limited the number of credits to nine for which a student could enroll.

The workshop served as an educational component to explain SAP policies and how compliance or non-compliance with the requirements can impact future eligibility. In addition, the workshops offered critical thinking strategies and other various techniques (time management, study skills, balancing work, personal and academic life, etc.) to improve academic success, while reviewing the importance and benefits of persisting through higher education to earn a college degree. Prior research shows that workshops have been effective methods to engage and retain students, and to improve their academic success (Adair et al., 2001; Duncan & Dick, 2000; Brown, 2011; Chinn, D., Martin, K. and Spencer, C., 2007; Fullilove & Treisman, 1990; Halasz & Kempton, 2000; Herrschaft, 2012; Moreno & Muller, 1999). It is likely that due to workshop attendance, participants were more knowledgeable of SAP policies and gained effective strategies to improve their academic progress to continue their education when there was no control for variables. This interpretation is similar to the Herrschaft's (2012) study, which also connected the workshops to increased knowledge and academic success among students who experienced financial aid suspension.

The academic advising part of the three-pronged model consisted of regularly scheduled advising sessions, which included a minimum of three sessions each semester for the length of the appeal. This element of the intervention may have presented a window of opportunity for advisors and students to develop a rapport and discuss areas

which may impact academic success or interrupt enrollment. The advising sessions also introduced and reinforced academic success techniques. This approach possibly strengthened the students' connection to the institution and increased their desire to return the following semester. The significant results associated with the three-pronged appeal intervention without control for variables, were conceptually consistent with conclusions of prior research which supported the notion that academic advising and interaction with student counseling services were more effective when students were required to participate and the experience was integrated into the educational process (Brown, 2011; Crookston, 1972; Flaga, 2006; Gerdes & Mallinckrodt, 194; Grites, 1998; McArthur, 2005; McLaren, 2004; Nadler & Nadler, 1999; Pascarella & Terenzini, 1976; Peterson, Wagner, & Lamb, 2001; Raskin, 1979; Sabharwal, 2005; Sayles 2005; Thompson, Orr, Thompson, & Grover, 2007; Tinto, 1993; Titley & Titley, 1982; Wilder, 1981).

The three-pronged appeal intervention also included a maximum 9-credit enrollment condition. The relationship between an appeal program with a credit restriction (part-time or three-quarter time enrollment) and academic progress contradicts previous research and did not support the claim of part-time enrollment to be positively associated with academic success. According to Hamm (2014) attendance on a full-time basis increases the likelihood of academic success as measured by of GPA, retention, graduation, and transfer success. The findings from this study may warrant additional research to support or refute the likelihood that perhaps part-time enrollment increases the success among students who have demonstrated academic difficulty.

Incorporating academic advising and workshops into an appeal system may be supported by community college officials since the practices are focused on improving

academic success, which in turn contributes to college retention and perhaps higher graduation rates. However, some community college administrators may question, or even frown upon encouraging part-time enrollment since annual budgets are generated from FTEs. The U.S. Department of Education might applaud the efforts of such practices to educate and advise students on federal SAP policies, particularly as it relates to limiting the number of credits among a group who previously did not comply with federal mandates to maintain eligibility. In addition, a credit restriction limited to part-time enrollment saves federal educational funding, since the Pell Grant is also awarded according to the number of enrolled credits. If the three-pronged intervention participants earned non-passing grades during the provisional period, fewer federal grant dollars were disbursed, in turn saving federal subsidies for more deserving academically qualified students. Higher education officials may support such practices if students retained and eventually graduate.

The positive results associated with the three-pronged intervention could spearhead additional interventions to include effective strategies offering comprehensive services to improve the academic progress among academically ineligible community college students and regain their eligibility to persist towards graduation. Since 80% of the sample did not meet SAP requirements due to the course completion rule, institutional inquiries and research are warranted to explore underlying issues related to students falling below minimum financial aid academic standards. Surveying students may add richness to our current understanding of current practices that seek to increase student retention in community colleges. In addition, the significant finding of the three-pronged intervention may suggest the need to develop specific preventative and intervention

programs to reduce the total number of financial aid suspensions, and increase the number of students who regain their eligibility because of an appeal approval and later meet the eligibility criteria. Although the three-pronged model was only a significant predictor variable with successfully meeting SAP standards on the baseline model, this is one reason to further investigate institutional efforts which structure appeal programs with a student-centered focus and specific conditions intended to retain more students and increase student success among financial aid students.

Research shows African Americans and students who test into developmental education courses are more likely to depend on financial aid, but less likely to persist to graduation when compared to their counterparts (Baime & Mullin, 2010; CCSSE, 2014; College Board, 2010, p.18; Ezeala-Harrison, 2014; Fiske, 2004; Harper, 2006; ICAS, 2009; JBHE, 2010; Kurlaender & Howell, 2012; Lee & Ransom, 2011; Martinez, 2003; Rowan-Kenyon, 2007; Russell, 2008; Wood & Williams, 2013). As long as the retention and graduation rates between minorities and non-minorities remains contrasting and disproportionate, strategies to improve the success rates among certain demographics may be an ongoing effort, as seen in this study. The covariates in this research – race, gender and developmental education placement did not appear to have a significant impact on the course completion. It was comprehensible, perhaps even to be expected, that the demographic variables were not significant with the outcome variable due to the imbalanced and disproportionate number of race, gender or developmental education participants among the campuses and the sample. For instance, African Americans and students who tested into developmental education courses were over-represented in the

sample, representing 70 to 85% of the population, while males were under-represented compared to females, 28% as opposed to 72%.

When comparing the course completion outcome between African Americans and students of other races, African Americans met the course completion rule at a higher rate than those of other races. African Americans represented 67% of the population that met the course completion standard compared with other races who accomplished the same goal at a 33% success rate. While this finding implies some level of significance supporting the idea that the treatment was effective for African Americans, a two-way contingency table analysis for each intervention showed African Americans largely represented the population in this study, representing 177 of the 259 participants. Further examination, revealed 36% of the African American students in this study were among the total sample that complied with the course completion rule. These results support existing research which shows more than two-thirds of all African American males who begin college do not finish (Harper, 2005). Since African Americans were over-represented in this sample, this suggests that African Americans are not only showing academic difficulty, as findings show the attrition rate among African American males is the lowest of all ethnic groups nationally (Hagedorn, Maxwell, & Hampton, 2002; JBHE, 2010), but supportive preventive services are required to reduce financial aid suspension and improve academic progress among this group. Even if all other races in this study successfully met the desired or expected outcome, African Americans would have sustained a higher success rate simply because they outnumbered students from other races. Hence, one reason the logistic regression model showed a non-statistically significant result when the race variable was included in the model. It was only in the

three-pronged intervention (note: 25 participants) where a more racially balanced student population existed with 52% of the population consisting of African Americans.

The course completion outcome was considerably less for males when compared to females. One could argue this is partially due to the disproportionate number of males compared to females in this study. Males comprised of 72 participants of the sample and represented about 30% of the population who met the course completion rule. Females, on the other hand, represented 172 of the participants and defined nearly 70% of the sample that met the course completion requirement. The results of this study indicated at least 50% of the males in the one and two-pronged appeal interventions failed to meet the course completion standard at the end of the appeal term. This is a supportive finding of previous studies suggesting women may potentially have less difficulty than men moving through the educational pipeline and furthermore, may potentially support research indicating women graduate at a higher frequency rate than males (CCSSE, 2014; Harvey-Smith, 2000). Additional research consistently shows women are more engaged in college than men (CCSSE, 2014), with the black female college graduation rate at 47 percent, having increased from 34 percent in 1990 to 47 percent in 2010 (JBHE, 2010); whereas 68% of black men who start college do not graduate within six years and have the lowest college completion rate among both sexes and all racial/ethnic groups (Hagedorn, Maxwell, & Hampton, 2002; Harper, 2006, p. viii; JBHE, 2010).

Eighty percent (217 out of 259 students) of the sample were students who tested into developmental education courses, but at the end of the appeal term, only about 45% of the developmental education population met the course completion requirement. The significant number of developmental education students in this study is not only

indicative of this growing student population and the likelihood of enrolling in a community college, but the results of the course completion outcome also suggests that this population is academically under-prepared to manage college-level coursework and less likely to progress (Bailey, 2009; Bailey & Cho, n.d.; Daiek, Dixon, & Talbert; 2012; Garcia, 2001; Jenkins, et al., 2009; Jensen, Moore & Shulock, 2009; Martinez, 2003; and Noel, Levitz and Saluri, 1985). The 45% course completion outcome among the developmental education group suggests the need to assess their needs to create and implement programs to increase their success rate.

Because African American males who tested into developmental courses were an under-represented group in this study, with 43 across the three interventions, inferences are inconclusive due to the nominal number of participants, particularly in the three-pronged intervention, since only one participant fit the characteristic.

At first glance, these findings may present course completion outcomes at a higher rate for African American, female and developmental education students when compared to their counterparts. However, taking into consideration that these student groups were over-represented at the institution and in the sample, it is presumptuous and an unsupported claim to make a cause and effect or generalization statement regarding the success rate for the demographic characteristics described in this study. Although, with only 50% of each demographic group meeting the course completion outcome to maintain their financial aid eligibility, these results proposes the need to explore the SAP appeal models and the reasons why students fail to meet the academic requirements, even after interventions were implemented.



This study includes a significant percentage of at-risk groups with approved appeals to continue with their education after showing academic difficulty. However, an even larger group falling below the minimum financial aid academic requirements exists, but not included in the sample, as these students either opted not to appeal their suspension status, or they exercised their right to appeal but were denied. This implies a present fundamental issue underlying the academic progress of particular student groups receiving financial aid because a larger group falling below the minimum financial aid academic requirements exists, but not assessed in this study. This inference suggests an examination of current educational practices to produce more academically prepared students. African Americans, women and students in developmental courses largely represented the group that successfully met minimum financial aid academic standards when compared to others in this study. Inferences regarding the results should be interpreted with caution as to remember the disproportionate demographic characteristics of the sample. Analysis involving a more equally racially balanced and sufficient sample size is required to draw conclusions and validate direct claims correlating course completion outcomes among African Americans, males and developmental education students. The racial differences for the sample in this study replicated the ethnicity and other demographic differences of the institution, as African Americans represented 80% of the sample, while 32% were males, and 83% tested into developmental courses.

In summary, the three-pronged appeal intervention may serve as a useful method or approach to build future models with challenging, yet realistic college expectations for students, and help academically ineligible students meet course completion standards and regain their financial aid eligibility. The odds of meeting the minimum 67% course

completion requirement were 2.77 times higher for three-pronged appeal participants than those students who opted for the one-pronged appeal intervention. Upon further examination of the results, the differences were statistically significant but not practically significant. Perhaps other factors may have contributed to the outcome. The  $p$  value between the three-pronged intervention and the course completion variable was .042, which is very close to exceeding the set alpha level of .05, which demarcated statistical significance between the predictor and outcome variables. The results must be interpreted with caution due to the sample size differences and the likelihood that other external variables or any of the three-pronged appeal modules may have individually influenced academic progress. Due to the design and scope of the study, part-time enrollment and other outside influences were not explored separately. The three-pronged appeal intervention was small in total number and the appeal interventions sample sizes were unequal, which limits the ability to make generalizations and draw firm conclusions about the efficacy of the intervention among a student population. However, given the success rate among the three-pronged participants, this program may serve as a springboard for creating programs focused on improving academic progress among financial aid students. While the intervention may be a practical and useful strategy, the findings can be substantiated or refuted with replicated research including similar student groups across different community colleges.

### **GPA Outcome**

Grade point averages are generally used as a measure throughout college to determine continued enrollment and financial aid eligibility. However, in this study, the results showed that the majority of the sample met the GPA threshold. All predictor

variables were non-significant as they related to the GPA threshold. The lack of relationship between the predictor variables and the GPA outcomes may be attributed to the substantially large percentage of participants (90%) who met the GPA requirements at the time of their appeal approval. With the three-pronged appeal intervention, all participants were initially meeting the GPA conditions at the time of their appeal. Instead, their financial aid suspension was due to falling below the minimum course completion rule. As a result, a small fraction of study participants (14 from the one-pronged [11%] and 12 students [10%] from the two-pronged intervention) required improvement with their GPA as a condition of regaining financial aid eligibility. Nearly 80% of the sample met the GPA standards at the end of the appeal term. One inference from this finding suggests that aggressive efforts towards creating additional practices to improve GPA requirements among the appealing population may be misguided since they have a tendency to demonstrate compliance with GPA standards. Or, it is likely that GPA standards are too low for college students. Lastly, the findings may suggest further investigation to support, refute and/or reveal new findings about the relationship between predictor variables and the GPA threshold outcome.

Due to the under-researched area of SAP, further research is warranted to draw a conclusion or make more generalizable conclusions regarding why GPA rates seems to be less of a contributing factor to financial aid suspension rather than the 67% course completion rule. It may be premature to assume or suggest most SAP students have little difficulty meeting and/or maintaining financial aid GPA standards because perhaps the students in this study were enrolled in less than rigorous courses, which required little attention to detail and minimum effort to earn satisfactory grades. This may occur if

students are self-advising at an institution that pays little attention to monitoring enrolled courses, whereas such actions are less likely to occur at an institution with strict class monitoring practices to ensure students are enrolled in program proper courses.

### **Persistence Outcome**

Although the limited literature involving specific practices to regain eligibility after financial aid suspension was found, the findings of this study showed that even when other demographic variables are taken into account, the three-pronged appeal program was a significant predictor with persistence. This result may serve as a pioneering approach to reintegrate academically ineligible financial aid students into higher education and offer strategies to persevere each semester and eventually persist towards degree completion.

The results of this study revealed the three-pronged intervention was a statistically significant variable for the prediction of the likelihood of whether the participants persisted into the next semester. One interpretation is that the intervention is a useful tool or program to foster next semester enrollment after the appeal term and retain community college students. This supports the idea that the length of time students stay in college is synonymous with achievement and persistence (Spady, 1971).

Since the intervention had a statistically significant positive effect, with and without controlling for covariates, it is conceivable that each module likewise contributed to the successful outcome of the three-pronged intervention participants. However, it is also plausible that one element was more effective than another. Specifically with the two and three-pronged intervention, one distinct difference between the interventions was the credit restriction (maximum 9-credit enrollment) component in the three-pronged

intervention. The two-pronged appeal intervention coincidentally was not a statistically significant variable whereas the three-pronged intervention was statistically significant with persistence. The outcome of this study might support earlier research of a positive relationship between financial aid and persistence (Cabrera, Stampen, and Hansen, 1990; Rogers, 2005; Singell, 2004, St. John, 1989; and Voorhees, 1985). Prior studies show student enrollment and persistence at post-secondary institutions was influenced more by the amount of financial aid received rather than the cost of tuition and that such resources were the second best predictor of persistence (McGrath and Braunstein, 1997; St. John 1990a & b). As long as the financial aid covers educational costs, students are generally not as concerned with the tuition rates. This is important to note, given that federal Pell grants are determined based upon the number of enrolled credits, and student loans require a minimum of 6 credits.

The three-pronged intervention participants were 3.38 times more likely than participants in the one-prong appeal model to persist to the next semester. In this study design it was not possible to separate the effects of the intervention which limits the ability to confirm that all sections of the three-pronged intervention were necessary to assist student progress towards financial aid eligibility. Whether each module equally contributed to the successful outcome, or an element was more effective than another, the results in this study lead to one conclusion, and that is the potential effectiveness of the three-pronged intervention to increase retention rates among community college students.

Other factors may have influenced the persistence outcome. These external variables, such as tutoring, maturity, personal counseling, life altering events, etc. may have played an instrumental role in shaping the students' academic behaviors and driving

their motivation to continue on and move forward with pursuing their education regardless of their financial aid eligibility. These external forces may have worked single-handedly or in conjunction with the appeal program to result in student persistence. This interpretation would suggest that maybe the three-pronged intervention played a limited role, if at any role, with the decision of the students to persist.

The other appeal interventions were not significant as related to the persistence outcome variable. However, the one-pronged appeal intervention was just shy of showing a relationship with a  $p$  value persistence outcome with a value of .053. While this predictor variable was not statistically significant, it is important to note that the value was practically significant, which merits further investigation. If a study using an appeal system required writing an appeal letter and signing a few documents could yield a result that nearly met the criterion for statistical significance, studies that include a larger student population and/or that examine unanalyzed external factors that may contribute to a virtually positive persistence outcome may discover statistically significant effects that this study did not yield. The findings may challenge or refute the three-pronged intervention results since the sample size between the one and three-pronged groups were considerably disproportionate.

As seen with the course completion and GPA outcomes, the demographic variables of race, gender and developmental education placement were not significant predictor variables with persistence. As discussed earlier, the disparity within each group restricts generalizability concerning these specific populations. Such findings contradict prior research which indicates these students are less likely to achieve and persist in community colleges (JBHE, 2010; Garcia, 2001; Harper, 2005; Martinez, 2003).

This study did not show the persistence variable to be correlated with course completion and GPA. It is possible the persisters in this study enrolled the next semester, but did not meet the course completion or GPA standards at the end of their appeal. In such an instance, these students would be ineligible to receive financial aid if they violated the conditions of the appeal and earned non-passing grades. If so, this may speak to student motivation or other factors to continue college enrollment with or without the support of financial aid. This would align with the idea that psychological factors can compensate for low academic achievement, but high academic success cannot compensate for low satisfaction (Bean & Metzner, 1985). This is interpreted to mean that if a student connects with the institution and enjoys it, he/she will persist, despite unsatisfactory grades. Tinto (1975, 1987, and 1993) designed this model to explain how the contact between students and institutions affect dropout behavior. Tinto's integration model describes and expands upon our understanding of undergraduate persistence by designing a model to help institutional leaders understand why students leave, so they can design activities to better serve the needs of students and thereby increase retention and graduation rates. The transition to the academic environment entails a series of interactions between the student and college systems. In addition, the persistence outcome for three-pronged participants may suggest other resources (private loans, employer educational reimbursement programs, etc.) were available to assist with educational costs to allow students the opportunity to enroll, even if they did not meet the course completion and GPA standards or without the help of federal financial aid.

In summary, the logistic regression model suggested the three-pronged appeal intervention was the only useful and valuable tool for predicting the likelihood of

persistence among students who previously experienced financial aid suspension.

Although the intervention was significant with course completion on the baseline, it failed to show or maintain significance when controlling for demographic variables. In contrast, other appeal interventions and covariates did not show a significant relationship with predicting the likelihood of meeting course completion or GPA standards or persisting the semester following the appeal term.

Lastly, the reason(s) why the students in this study fell below the minimum course completion and GPA threshold nor persisted to the next semester are unknown. This is important to note, as the reasons are critical for not only shaping the framework for appropriate SAP appeal interventions and identifying effective institutional responses, but the reasons may also structure educational plans, and even more so, determine if a community college setting is the most appropriate educational placement. A student's academic history may have consisted of situations and issues beyond their control and/or extenuating circumstances that required immediate attention, therefore placing their education as a secondary or tertiary priority, if it retained any importance at all. One may conclude that the success or effectiveness of the three-pronged appeal intervention can be attributed to other external factors and the findings in this study can be further substantiated through assessing reasons which led to the poor academic history. If such scenarios or related circumstances inhibited academic progress, workshops related to SAP policies, the importance of a college degree, credit restrictions, etc. would be ineffective because the academic treatment would not meet the personal and academic need.



### **Contributions of the Study**

The current study was conducted at a single institution with an enrollment consisting, in part, of some of the most researched populations in post-secondary education - minorities, males and developmental education students. The institutional setting permitted control for time-dependent outcomes and provided a rich dataset for student-outcome comparison analysis. This study tested distinctly different appeal interventions and student demographic variables to create a level of reliability necessary to understand and evaluate course completion, GPA and persistence outcomes among financial aid students seeking to regain their eligibility in turn, contributing to the research literature on academic success and retention.

This research contributes to the few existing studies that have tested the effects of SAP appeal interventions and explored the effects of the interventions on specific at-risk demographics that historically had low rates of success in post-secondary education. This study used a student unit record to examine the relationship between student success and participation in the interventions after controlling for a set of covariates. The results of this study may serve as a basis to examine approaches to improve academic progress and persistence rates among students with SAP issues.

This study contributes to the literature on financial aid appeal interventions, at-risk financial aid students, academic progress, and persistence. This study may create a foundation of research to explore and name strategies to create preventative and intervention programs for community colleges and universities with similar profiles to those tested in this study. Prior research (Astin, 1999; Tinto, 1993; and Cabrera, Nora, and Castaneda, 1993) often concluded that because individual schools and students may

vary so widely, effecting meaningful changes to student outcomes requires tailor-made strategies: In other words, no one size fits all. This notion is particularly applicable to colleges like the institution examined here, where the student population is diverse and exhibits a wide-range of persistence risk-factors. This study shows that, in practice, a subset of the population can be identified and a program can be designed and implemented which will lead to improved academic outcomes for a specific student group. A high percentage of three-pronged appeal participants met the 67% course completion rule and/or persisted to the next semester, thus demonstrating they benefited from an intervention that fostered institutional involvement and promoted activities and support services which addressed internal and external pressures related to education and personal issues which may impact academic success.

While SAP literature is in its infancy stages of research, the collective results from this study, and other potential upcoming research may not only contribute to the literature, but these results may also prompt more discussion among tax-payers, policymakers and other stakeholders, and subsequently, urge the efforts of community college and other higher education leaders to carry out more stringent practices for students to receive tax-payers' dollars that support the federal financial aid program after falling below minimum academic standards. SAP appeal programs may support and build on recent research conducted on student loan default rates among community colleges. With a focus on retention and completion, the research concluded that those who did not complete a degree or certificate were closely associated with default. However, those who completed their program of study defaulted at a rate of 9 percent compared to students who did not complete their program, who defaulted at a 27 percent rate

(McKibben, 2014). The efforts of an SAP appeal intervention, such as the three-pronged intervention is one plausible way to support and engage a specific student group, which may lead to more re-established financial aid eligibility to increase the likelihood of becoming college graduates and contributing citizens. The success rate of the appeal interventions may assist with lowering the national loan default rates among previously academically ineligible student borrowers because they are more likely to stay in college due to the support of financial aid. If students stay in college and graduate, they are more likely to repay their student loans, which will impact the national economy, as opposed to discontinuing with their education because of suspended financial aid and becoming more likely to default on their student loans and therefore straining the national economy.

### **Implications for Practice**

The study carries implications for practitioners in community college settings. It shows that designated student groups with particular needs can benefit from tailored support services. Despite the non-statistically significant findings among certain predictor variables and the GPA outcome, there were implications for practice to move forward. The results of the study show the three-pronged appeal intervention at one community college offers students who fall below the course completion rate the opportunity to regain their financial aid eligibility. In addition, the three-pronged appeal program shows the effect of an intervention which could offer a positive momentum to influence academic progress and semester-to-semester persistence. Lastly, the study provides community college practitioners with an additional opportunity to view the student journey of the appeal process in a comprehensive way.

The sample population included 80% of students who appealed their suspension due to falling below the course completion rule; it may behoove financial aid departments to explore and analyze the reasons students fail to maintain the minimum course completion requirement by interviews and/or surveys to develop specific approaches based upon self-reported responses and outcomes. By doing so, college administrators may gain insight into the needs and various academic and non-academic barriers of the 21<sup>st</sup> century student. Students are attending college with more personal and psychological issues than ever before (Habley, 2004). Therefore, it is important that campus administrators are knowledgeable in developing programs and partnerships across departments to ensure students are receiving proper help to progress through their academic program.

The appeal interventions are approaches to assist academically ineligible students with regaining eligibility after financial aid suspension. However, some of these students are denied the opportunity to overturn their suspension, while others elect to discontinue their enrollment without attempting to appeal. More students could meet minimum financial aid academic standards and be retained for a longer time period and possibly finish their program of study if fewer were not faced with suspension. If proactive and preventative measures consisted of mandatory financial aid and academic advising at the first sign of academic difficulty - before suspension, institutions may retain more students who would have otherwise faced suspension, thus increasing the chances of a denied appeal or student drop out. Such an approach supports prior research which showed student counseling services were more effective when students were required to participate (Herrschaft, 2012; Hunter & White, 2004; Moreno & Muller, 1999; Tinto,

1993). Habley and McClanahan (2004) gathered survey responses from two-year and four-year public and private colleges. In the survey, college administrators were asked what practices had the greatest contribution to student retention, and academic advising was the top practice listed. Administration mentioned specifically that integrating academic advising into the freshmen orientation experience is the key factor for many schools. In the Habley and McClanahan survey, the repeated mention of advising as an important retention tool for college administrators may be a key consideration for post-secondary education policy-makers.

The appeal interventions at this one institution consisted of workshops and academic advising sessions, but did not include or incorporate mandatory tutoring. If non-passing grades lead to financial aid suspension, a more inclusive appeal program requiring academic tutoring to address variables which may inhibit academic progress, such as study habits, lack of understanding and limited ability to comprehend concepts, may better equip students with tools to successfully complete courses. A comprehensive model to improve retention and increase graduation rates among students who use federal funding to access higher education, but who did not meet financial aid academic standards, would consist of components involving workshops, academic advising, monitoring class attendance and mid-term grades, restricting credit enrollment, and tutoring. A comprehensive SAP program would create an opportunity for the student: (1) to develop a rapport with an advisor as they navigate through the various academic and personal systems; (2) offer lessons on developing academic skills and training on financial aid policies and how to apply such processes to their personal experiences; and (3) interact with advisors, financial aid staff and other community college staff members

to gain access to various departments relevant to needs. This is an important consideration for community college officials during an era of education reform where higher educational outcomes are a primary focus. The overall goal is to help students improve their understanding of financial aid policies, which in turn is expected to help them make informed decisions and maintain their eligibility to complete their program of study.

If, or when community colleges were generally funded based upon their outcomes rather than enrollment, community college administrators, and tax payers would doubtlessly applaud institutional efforts designed to increase student accountability and improve academic success by reallocating financial aid resources after suspension to a specific student group who showed a renewed commitment to complete their education. This study showed higher course completion rates and persistence outcomes because of participating in the three-pronged appeal intervention, which over time may increase Full Time Enrollments (FTE), which currently generates most community college budgets. Higher education administrators may consider implementing a comprehensive SAP appeal program or reassessing current approaches to managing the Satisfactory Academic Progress program and discover the strength of the appeal program designed to improve academic progress.

As federal regulations change and the needs of students become more diverse, financial aid and other higher education administrators may need to test and re-evaluate the functionality and purpose of the financial aid department to accomplish more than the function of processing financial aid awards. Financial aid departments should be considered an integral part of the student services team, which can offer student-centered

approaches to foster student learning as it relates to developing students into independent learners. By redefining the financial aid office to include more student-focused services, the practices may prevent financial aid suspension and/or help academically ineligible students regain their eligibility and persist towards graduation.

Community college policy-makers should be encouraged by the results of this study; and replicate and expand upon it. Perhaps the underlying implication of this study is that it highlighted a small intentional financial and academic program to meet the needs of financial aid students with the goal of producing student success in the community college.

### **Recommendations for Future Research**

It should be noted that this study focused on one set of appeal interventions at one large multi-campus community college. While this study showed that an appeal intervention can offer significant and noteworthy results, the outcomes may not be generalized to all community colleges at large. Additional research on SAP appeal programs is needed to promote greater understanding of how interventions can most effectively be implemented. Future studies may build on these results to evaluate similar practices or to estimate the effect of comparable interventions when sample sizes are larger and program conditions are adjusted to meet diverse student needs. Perhaps a multi-institutional comparative study of SAP appeal interventions would offer more generalizable results for community colleges. Future research could include reviewing the effect of different appeal interventions on course completion, GPA and persistence outcomes. Regardless of how or when future studies are accomplished, continued research involving SAP appeal interventions, its service components, student outcomes

and involvement with particular at-risk groups (low-income, first generation, single parents college students, etc.) is warranted and necessary. Age, children, program of study, etc. are other areas that could strengthen the explanatory nature of the model.

To substantiate the effectiveness of SAP appeal interventions to generate more generalizable results and more in-depth research, a mixed methods approach including interviews, focus groups, case studies, program content analysis and creating a survey to examine participants' responses and educational outcomes may be a robust study to determine the impact, practicality and usefulness of a program. Survey data can be used in conjunction with the institutional student information tracking systems to access student records and cross reference the various services the student accessed and used on and off campus. The students' experience and perception may ascertain current practices, as well as direct future components of an appeal program to draw inferences regarding the role the program plays in improving financial aid course completion, GPA and persistence outcomes.

Another recommendation involves conducting a longitudinal study to assess whether students who appealed their suspension at some time during their college career persist towards graduation and become degree completers. This would be fertile ground for investigation and help college officials determine if it is worthwhile to approve financial aid appeals, particularly among special student groups. The results may particularly interest taxpayers, policymakers and the U.S. Department of Education to show whether tax dollars which support financial aid are not squandered, but used as intended.



Because community colleges are graduating fewer than half (45%) of the students within six years (CCCSE, 2009), there is a need to explore whether the number of students with suspended financial aid can be decreased by implementing an early intervention program. A pilot study which incorporates mandatory preventative practices, such as advising, tutoring and informational sessions, to avoid suspension and inform students who are at risk for financial aid suspension may reduce the number of students who are academically ineligible to continue to receive financial aid. The purpose of advising or informational sessions is to help students understand the importance of successfully completing courses and meeting GPA requirements and how failure to do so will undoubtedly result in suspension. In addition, the sessions would allow the students to meet with advisors to create a manageable schedule according to the program of study and discuss other potential barriers that previously and currently impact the student's ability to be successful. The tutoring program is a component to increase study habits and increase knowledge and understanding. This method can influence retention and persistence among financial aid students.

### **Conclusion**

The purpose of this dissertation was to examine the academic performance of academically ineligible students who appealed their financial aid suspension by participating in one of three appeal interventions at one multi-campus community college. This was accomplished by comparing the educational outcomes of three different appeal interventions from summer 2013 through summer 2014. Demographic and performance outcome variables and prediction models were of primary interest in the

study. Three main research questions guided the study, using a binary logistic regression analysis to examine the data.

The three-pronged appeal intervention had a statistically significant relationship with course completion and persistence outcomes. The one and two-pronged appeal interventions were not statistically significantly related to the outcome variables, or with race, gender and developmental education placement predictors.

Due to the inability to draw general conclusions, the study suggests that future research testing the effect of Satisfactory Academic Progress appeal interventions on student academic progress is important. Exploration of various methods to support different vulnerable populations could improve academic success and graduation prospects among community college students. However, there are reasonable implications for college officials and administrators to think about bridging the gaps between the student, financial aid offices and other student services areas and create support for financial aid students to progress towards degree completion.

It is reasonable to conclude the three-pronged appeal model influenced and increased the likelihood of the course completion and persistence outcome to occur as a result of the interventions. Clearly, more research is needed regarding SAP appeal programs for community colleges, but the results of this study suggest that academic progress occurred when specifically designed strategies to address poor academic performance among financial aid students is incorporated into the infrastructure of an appeal program. To improve retention among a specific financial aid student group, it may benefit all invested stakeholders to explore or consider the idea of restructuring financial aid offices to reflect a more student-focused entity with proactive practices to

reduce financial aid suspensions and implement effective interventions to increase academic progress among those who were deemed academically ineligible to regain their eligibility. Both an institution and the student have a shared responsibility in developing student skills necessary to become a successful independent learner. The institution has a responsibility to offer services to meet the diverse needs of the student body and adjust as the needs change. However, it is the responsibility of a student to access services and show a sincere commitment and investment in their education. SAP policies are a gatekeeper for retaining financial aid students because the standards require recipients to maintain academic progress; therefore community colleges and financial aid departments are in an authoritative position to direct practices to increase success among student groups with the odds against them to earn a college degree.

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## APPENDIX A

## “DESCRIPTION OF THE THREE FINANCIAL AID APPEAL INTERVENTIONS”

*One-Pronged Appeal Intervention*

The one-pronged appeal intervention employed an appeal program that required students interested in overturning their financial aid suspension status to sign specific forms indicating their understanding of SAP standards and write an appeal letter and success plan. Decisions to approve or deny an appeal were based on signed documents, the appeal letter and success plan. However, it is at the discretion of the campus Financial Aid Coordinator to implement conditions on a case-by-case basis. This campus financial aid office did not require workshops and advising sessions.

*Two-Pronged Appeal Intervention*

Workshops: The two-pronged appeal intervention utilized preventative and reactionary workshops to engage students. The topics were specifically designed to meet diverse student needs, such as SAP and other financial aid-related matters, as well as additional relevant student-related issues to increase financial aid and academic awareness. Unlike the three-pronged intervention, workshop participants in the two-pronged intervention included an array of students, who may or may not have been faced with financial aid and institutional suspension/dismissal. Students attended multiple workshops. While some workshops were facilitated by Financial Aid Advisors, other workshops were conducted by campus counselors.

Advising/Counseling Sessions: An advisor played an instrumental role in assisting students with preparing their appeal application (writing appeal letters and a success plan). If the appeal was approved, students received an introductory letter from



the advisor, with instructions to schedule three individual advising/counseling sessions (career planning, academics, personal counseling, career coaching, financial guidance, and social enrichment) during the semester.

### *Three-Pronged Intervention*

The three-pronged SAP intervention consisted of (1) workshops, (2) individual advising sessions, and (3) course restriction (9 credits). The workshop topics included essential areas of SAP policies and academic success. The individual sessions may overlap areas of student success; however the sessions were tailored to meet students' individual personal and academic needs, which included specific topics related to the students' circumstances, program of study, study habits, class attendance, progress reporting, academic planning, etc. The course restriction limited the students to a maximum of 9 enrolled credits for the length of the appeal. Prior to the workshop, each student met with an advisor to review the student's academic standing in relation to the SAP standards and to confirm their financial aid status. During this brief meeting, the advisor provided an abbreviated overview of SAP, calculated the course completion rate, and reviewed the student's GPA. The next step was the workshop, which provided more in-depth SAP information.

Workshops: Formal workshops served as one component of the three-pronged intervention. Workshop attendance was the initial requirement, but did not constitute guaranteed appeal approval. The purpose of the workshop was to educate students on SAP and provide academic success strategies to improve academic performance in order to meet institutional and financial aid academic standards. The length of the workshops was approximately two hours. The first hour addressed SAP policies, while the second

hour focused on academic success. The content of the first hour entailed a thorough review of federal and institutional SAP policies. Steps for submitting a complete appeal application and continued approval conditions were also reviewed. The students received instructions on the required information to include in an appeal letter and in their success plan. In addition, other pertinent documents requiring student signatures were reviewed to acknowledge student awareness and record understanding of all applicable guidelines and policies relative to the SAP standards and appeal process.

The second hour of the workshop consisted of an academic success component. Students were instructed on effective learning strategies, such as study habits, learning styles, balancing course schedules, communicating with instructors, etc. In addition, campus resources were reviewed to increase student awareness of support services to meet their different needs.

The workshop seminars were designed to engage a larger audience and inform the participants of critical financial aid information, SAP policies, as well as strategies to achieve academic success. The length of workshops was approximately 2 hours and offered on various days and times throughout the semester to accommodate student schedules.

Advising/Counseling Sessions: Individual advising/counseling sessions served as another aspect of the three-pronged intervention program. Each semester students were required to attend three advising sessions for the length of their appeal. For example, if the length of a student's provisional period was two semester, the student was required to attend three sessions each semester, with a total of six sessions for the length of the

appeal. Subsequent sessions were required and occurred during the semester to continue to receive financial aid on a probationary basis.

The first session was scheduled during the institution's 'Drop/Add' period, which is generally during the first two weeks of class. The rationale for this session was to provide the student with an opportunity to adjust their class schedule, if needed, without academic or financial aid penalty. If a student foresaw difficulty managing their course load, he/she could drop and/or adjust their schedule to increase the chances of successfully completing attempted courses without receiving a non-passing grade. However, if a student decided after the Drop/Add period to discontinue attending a class, they received a non-passing grade ("W", "I," "R", "U," "D," or "F). Less than satisfactory grades earned during the appeal (provisional) period was a violation of the contract (appeal) agreement. In such an instance, the probation was then terminated, requiring the student to self-pay for credits until they met all SAP minimum standards.

The second session occurred mid-semester. The purpose of this session was to gather information regarding the student's academic status in each enrolled class. The advisor and student reviewed the student's success plan to find out if the he/she implemented their plan as initially intended, and if such strategies were effective. The advisor inquired about class attendance, study habits, use of campus resources, time management skills, etc. At the end of the session, students were provided with a homework assignment for the third session, which consisted of completing an enrollment sheet for next semester and an academic planning form for the next six semesters. Students were informed of the requirement to present 6 completed documents for the next session.

The final session of the semester involved reviewing the homework assignments (enrollment sheet and academic planning form). If such documents were not completed for the third session, this was an automatic cancelation of the meeting and the student was required to reschedule within a specified timeframe with a complete enrollment sheet and academic planning form. After a review of the documents, students were directed to the Enrollment Office to enroll in the courses for the next semester. During the session, the advisor revisited previously discussed topic areas, such as: class attendance, time management, barriers, anticipated final grades, etc. If the third session occurred in the final and/or only appeal semester, the student was encouraged to continue use any strategies which contributed to their success; they were reminded of SAP implications for earning passing and non-passing grades; they were instructed to balance school/work responsibilities; encouraged to meet with a counselor as they continue to progress towards degree completion. The third session occurred prior to the posting of final grades. At this time, neither the advisor nor student had confirmation the student successfully completed all attempted courses. However, at the end of each semester, the Central Financial Aid Department conducted a college-wide SAP report, which showed if financial aid students demonstrated academic progress and if they met SAP standards.

The purpose of the advising sessions was to develop advisor-student rapport, and provided resources and served as a support service for the learner. In addition, this intervention offered a direct pipeline and access to the advisor to discuss confidential matters, which may have created a sense of comfort that workshops did not. The sessions occurred during specific weeks of the semester. All approved appeal students were

required to schedule their appointments during these specific weeks in order to remain in compliance with the conditions of the appeal.

Course Restriction: Course restriction was the third and final prong of the intervention. Students with an approved appeal were permitted to enroll in a maximum of 9 credits per semester. All enrolled courses must meet program requirements. To ensure students remained within the credit limit requirements, this intervention was managed by the use of an institutional hold, which was placed on the students' accounts to prevent adjusting the class schedule without SAP Advisor approval. For example, if the student wanted to change course sections, drop, add or withdraw from courses, this 'hold' prevented them from doing so, without the approval of the SAP advisor. This restriction also limited the amount of financial aid allocated to the student to prevent excessive aid allocated to students if they earn non-passing grades.

## VITA

**JEANNETTA L. HOLLINS****EDUCATION**

## OLD DOMINION UNIVERSITY

Degree: PhD - *Community College Leadership*

Anticipated Graduation: Spring 2015

## UNIVERSITY OF PITTSBURGH

Degree: Master of Education - *School Counseling*

Council for Accreditation of Counseling & Related Educational Programs (CACREP approved)

April 2001

## INDIANA UNIVERSITY OF PENNSYLVANIA

Bachelor of Science - *Rehabilitation Counseling*

December 1997

**HIGHER EDUCATION AND PROFESSIONAL EXPERIENCE**

Higher Education experience includes serving as a Financial Aid Coordinator, Financial Aid/SAP Advisor, Acting Director of state-funded grant program for traditionally under-represented students, Coordinator of Academic Advising, Alternative Education Program Supervisor, Professional School Counselor and an Academic Advisor.

Demonstrated strengths in leadership, supervision, and management of various student support services for diverse student populations in educational settings. Ability to manage student disciplinary matters and other highly confidential issues; program development and budgeting; designing and facilitating staff trainings; program evaluations and student/client assessments; partnership development and the ability to work collegially and collaborate across departments; teaching experience in K-12 and post-secondary settings; community

outreach, and several years of experience providing direct student contact in counseling, advising and academic programming.

## **PROFESSIONAL EXPERIENCE**

### *TIDEWATER COMMUNITY COLLEGE, CHESAPEAKE, VIRGINIA*

FINANCIAL AID COORDINATOR, CHESAPEAKE CAMPUS                      2014 - Present

Coordinate the implementation of federal, state and institutional regulations and policies and provide leadership for the comprehensive operations of a campus-based Financial Aid Department. Serve as campus administrator in the absence of the Dean of Student Services. Adjudicate financial aid appeals, manage internal and external grievances, rule on unusual and mitigating student circumstances and facilitate problem solving strategies with staff, students and parents. Oversee various programs and other areas of specialization, such as: Campus Work-Study, Scholarship, Satisfactory Academic Progress and Outreach programs; loans, grants, institutional grants, systems support, and customer service/consumer information. Direct college-wide and campus initiatives, as well as coordinate various financial aid and academic success workshops, and classroom/orientation presentations to increase financial aid awareness. Recruit, hire, train, supervise and evaluate assigned departmental staff according to college policy and procedures. Interact with federal and state agencies, lenders, guarantee agencies, loan servicers, employers, vendors, social service agencies, high schools, and post- secondary institutions. Collaborate with other campus offices. Serve on college-wide committees.

### *TIDEWATER COMMUNITY COLLEGE, CHESAPEAKE, VIRGINIA*

FINANCIAL AID/SAP ADVISOR, CHESAPEAKE CAMPUS                      2011 – 2014

Coordinated and implemented a new campus Satisfactory Academic Progress (SAP) program and policies. Evaluated academic performance of selected recipients to determine if they met satisfactory academic progress eligibility standards. Reviewed academic records for appropriate courses before disbursing

financial aid to probationary students. Analyze various system-generated reports such as grades, enrollment, and award status to verify continued compliance and eligibility under federal, state, and institutional guidelines. Conducted in-depth analysis of individual student need and review verification, mitigating circumstances, and other supporting documentation to determine eligibility for federal, state, and local financial aid awarding and/or adjustments. Implemented and maintained policies and procedures to ensure compliance with federal, state, and institutional laws and regulations. Reviewed Institutional Student Information Report (ISIR) transactions to ensure accurate reporting is reflective of the student and parental financial status. Reviewed National Student Loan Data System (NSLDS) records to ensure that applicants remain within annual and aggregate student loan borrowing limits. Monitored and followed up on pending student loans through the first disbursement. Developed a departmental referral process and co-facilitated training for Veteran's Affairs and Financial Aid staff regarding a referral system for Personal Counseling. Collaborated with student services division to resolve issues related to enrollment, admissions, VA benefits, retention, graduation, etc. Co-facilitated orientation sessions and facilitated financial aid workshops, classroom presentations, and informational sessions to students, parents, faculty, or community organizations and/or outside agencies. Assisted with managing the Student Online Services area and provided supervision to work study students. Provided Academic Advising to students with academic difficulty, as well as, enrolled and prospective students on Certificate, Career/Technical and Transfer Programs and process 'Curriculum Change Forms' via Student Information Systems (SIS). Collected and analyzed data, and counseled on financial aid eligibility, application procedures, aid programs, cost, indebtedness, and individualize information to the particular needs and situation of the student. Served as an Academic Alert Respondent to assist students who were experiencing academic difficulty. Represented administration in the absence of the Coordinator.



*TIDEWATER COMMUNITY COLLEGE, NORFOLK, VIRGINIA*

PSYCHOLOGY ADJUNCT INSTRUCTOR, NORFOLK CAMPUS 2010

Designed and delivered in-classroom and learning-centered instruction which covered conception to death from a life-span perspective on the development of physical, cognitive, and psychosocial growth. Developed and facilitated activities to meet auditory, visual, and kinesthetic learning styles. Designed a course syllabus, including instructional plans to meet the course competencies. Maintained accurate records for grade and other record-keeping purposes. Provided reasonable accommodations to students with documented learning and/or physical disabilities.

*SUFFOLK PUBLIC SCHOOLS, SUFFOLK, VIRGINIA*

SCHOOL COUNSELOR 2010 - 2011

Served as an itinerant school counselor for two Suffolk County Public Schools. Coordinated Standards of Learning (SOL) statewide standardized educational assessment tests for over 400 students. Redesigned and implemented new procedures to manage and facilitate 504 program and other school-wide conferences. Organized and oversaw the guidance curriculum and provided classroom instruction to address academic, personal, and social needs. Investigated and managed student disciplinary issues. Assumed building administration duties in the absence of the school principal. Facilitated in-service training for instructional staff regarding student behavior interventions and testing policies and procedures. Refined school-wide tracking system to monitor and address student attendance issues in accordance with school policy. Created programs and developed resource materials and informational network for students and parents. Developed 'Studying Skills' curriculum and taught numerous classes on organization, social skills and the importance of education in meeting life goals. Co-Managed and participated in remedial efforts to increase academic achievement. Coordinated and implemented the following school-wide programs: Anti-Bullying Program, Career Day, Peer Mentoring, Student Recognition

Ceremonies, Drug and Alcohol Awareness, and Parent-Teacher conferences.  
Counseled students in short-term crisis.

*COMMUNITY COLLEGE OF ALLEGHENY, PITTSBURGH, PENNSYLVANIA*

ACTING DIRECTOR/ACADEMIC ADVISOR, MAIN CAMPUS      2008-2009

Served as Acting Director of a state-funded grant program at the main campus of a large urban community college, servicing more than 500 inner-city students. Managed program budget and activities to ensure compliance with federal, state, and local regulations and statutes. Interpreted state mandates to compile data and generate reports while participating in the grant writing project for continued grant renewal. Provided leadership in planning, operating, and evaluating program outcomes to enhance intellectual, personal, social, and cultural development of students. Designed and coordinated Pre-College Summer Bridge Program for students who were economically disadvantaged and presented with other 'at-risk' demographic characteristics. Review academic performance to assess financial aid eligibility. Assisted students with the FAFSA application, while providing loan and budget counseling. Established partnerships and professional relationships with schools, local agencies and community groups. Tracked financial aid eligibility. Assisted students who had interruption in their educational program with any financial issues upon their return. Informed students of their financial obligation, the institution's financial options, and financial policies and procedures related to their educational expenses. Participated in student recruitment activities. Tracked and maintained file intake completion throughout the enrollment process for all students interested in applying for financial aid and provided follow up contact. Coordinated student orientations. Collaborated with administration to develop and carry out new initiatives regarding early intervention, curricula development, student retention, and outreach programs. Organized student recognition events to honor academic accomplishments. Provided academic, transfer, personal and career counseling, as well as, other student support services related to financial aid and transfer services. Instructed and continually revised Student Success course.

Administered and interpreted placement testing and other diagnostic standardized tests. Recruited students from local high schools and organizations. Created a database software program to manage student information.

*WAKE COUNTY PUBLIC SCHOOLS, RALEIGH, NORTH CAROLINA*

PROFESSIONAL SCHOOL COUNSELOR

2007 – 2008

Established and implemented a comprehensive school-wide counseling program for a new year-round school. Assumed administration duties in the absence of the principal and assistant principal. Assisted in the coordination and implementation of student services and committees: served as Testing Administrator and Proctor, Co-Leader of School Safety Plan, and a member of Positive Behavior Support Team. Facilitated and coordinated Student Support Team and Attendance Committee. Facilitated staff training in Student Suicide and warning signs to identify childhood depression. Assisted Special Education Department with accommodating students with disabilities and special needs. Provided individual/group counseling services in accordance with Individualized Educational Plans (IEP) to meet various developmental, preventive and remedial needs, in which the students met 90% of their guidance goals. Facilitated social skills lunch groups to encourage self-esteem. Designed behavioral plans for students with conduct issues. Participated in school leadership team meetings to collaborate on school-wide initiatives, such as student scheduling, open house and student mentoring programs. Developed and instructed classroom guidance lessons.

*UNIVERSITY OF PITTSBURGH MEDICAL CENTER (UPMC), PITTSBURGH, PENNSYLVANIA*

ALTERNATIVE EDUCATION PROGRAM SUPERVISOR

2006 - 2007

Oversaw the operations of an alternative education program in the Pittsburgh Public Schools, servicing middle/high school students with severely emotionally disturbed (SED) diagnoses. Supervised and coordinated program planning, operation, and

fiscal and personnel management. Conducted a program evaluation and redesigned policies and procedures to improve program quality. Oversight of long-term and Programs Improvement Plans to ensure all goals were met to maximize funding. Renegotiated partnership agreement and overall working relationship with Pittsburgh Public Schools. Coordinated and oversaw the mental health outpatient services, which included directing intensive individual/group counseling services, as well as, reviewing and approving the academic curriculum based on Individualized Education Plan (IEP). Outlined emergency strategy and behavioral plans for verbal/ physical aggressive student actions. With the use of DSM-IV manual, conducted psycho-social assessments to determine preliminary and secondary diagnosis for further medical evaluation with the program physician. Facilitated interagency and team meetings. Carried out hiring process and provided supervision, training and evaluation of classroom teachers, mental health workers and undergraduate and graduate professional staff, as well as, developed and managed annual operating program budget.

#### COORDINATOR OF ACADEMIC ADVISING

2004 -2006

Designed and coordinated an Academic Advisement Program for a fast-paced Post-Secondary Nursing School, servicing more than 400 students from diverse cultural backgrounds. Drafted, implemented, and administered student drug/alcohol policies and procedures, in accordance with the 'Student Conduct' policy. Assisted campus administration with the management of academic and non-academic violations of the Code of Student Conduct policy. Advised student of their financial obligation to provide accurate information and the potential consequences related to their application and funding status. Conducted financing and budgeting counseling with new, continuing, and returning students. Provided answers to student inquiries regarding financial aid programs and availability. Assisted and collaborated with administration to implement strategies to strengthen student affairs department. Provided direct and indirect academic and personal counseling to all prospective and enrolled students. Designed a syllabus and facilitated a

progressive, innovative and learning-centered “on-line” educational/advising pilot program focused on student needs and interests. Facilitated a counseling training program for the faculty and administration.

*URBAN LEAGUE OF PITTSBURGH CHARTER SCHOOL, PITTSBURGH, PA*

PROFESSIONAL SCHOOL COUNSELOR

2003 –2004

Designed and implemented a new comprehensive developmental guidance and counseling program for a charter school. Facilitated individual/group counseling sessions to address academic, career and personal/social goals. Provided remedial academic support services. Tracked and monitored attendance, academic performance and student behavior. Worked with classroom teachers to implement 504 and Individualized Educational Plans (IEP). Provided short-term counseling to students experiencing a crisis. Conducted Middle School Orientation for rising 6<sup>th</sup> graders. Served as a resource for students, faculty, and parents to address issues affecting the student’s academic and emotional well-being. Supervised student interns and provided in-service training for classroom teachers.

*UNIVERSITY OF PITTSBURGH MEDICAL CENTER (UPMC), PITTSBURGH, PENNSYLVANIA*

EVALUTOR CLINICIAN & DEVELOPMENTAL TEACHER 2002 -2003

Conducted intake and psycho-social assessments and performed other case management duties, which consisted of developing treatment plans, obtaining insurance authorizations for continued care, coordinated referrals, and participated in treatment team meetings. Directed and implemented milieu therapy activities and educated adults and children with chronic mental illness, self-injurious behavior, mood disorders, domestic violence, abuse, trauma, etc. Provided individual, group, and family counseling services to adolescents and their families using cognitive behavioral, reality, and person-centered approaches to address emotional and behavioral issues. Supervised student interns and managed the milieu in the absence of the director. Served as a Special Education Teacher and coordinated educational

assessments and interventions for adolescents with emotional, behavioral and social disturbances.

INTAKE DEPARTMENT COORDINATOR (formerly St. Francis Hospital) 2001 - 2002

Redesigned and coordinated the Intake Department while conducting intake assessments, crisis intervention and case management to meet the counseling needs of a high-risk population of clients with opiate and other substance addictions. Provided chemical dependency counseling to clients with chronic illnesses, dual diagnosis, and other diagnoses and addictions. Contacted insurance companies to submit insurance requests for approved outpatient care.

*FAMILY SERVICES OF WESTERN PENNSYLVANIA, PITTSBURGH, PA*

FOSTER CARE CASEWORKER 1997 –1999

Attended and participated in juvenile court motions, reviews, and emergency shelter hearings for children entering, and exiting foster care social services. Assisted Children Youth and Services and other child advocacy agencies with developing family plans and implementing other supportive services to determine permanency for children in the Pennsylvania welfare and foster care system. Monitored supervised visits with parents and other family members and facilitated parenting skills training courses to biological, foster and prospective adoptive parents. Conducted evaluations and provided case management duties of developing treatment plans and psychiatric evaluations. Conducted annual or 'as needed' in-home evaluations of foster homes. Collaborated with outside agencies to coordinate referrals and arrange services to support the well-being of children and their families. Provided on-going counseling to foster families, children, and biological parents, as well as, submitted quarterly and annual reports as required by Pennsylvania laws.

**INTERNSHIP EXPERIENCE***TIDEWATER COMMUNITY COLLEGE, CHESAPEAKE, VIRGINIA*

PROVOST, CHESAPEAKE CAMPUS

Fall 2012

Carried out internship requirements with the campus Provost as required by Community College Leadership doctoral program. Served as chair of a hiring committee. Other duties consisted of the following: Observed organizational techniques, budget management practices, and other day-to-day responsibilities. Analyzed data and interpreted the demographics affecting community colleges as they related Tidewater Community College. Attended Administrative Team Meetings and participated in discussions and decision-making processes related to overall management of the campus. Chair a hiring committee.

DEAN OF STUDENT SERVICES, CHESAPEAKE CAMPUS

Fall 2012

Carried out internship requirements with the campus Dean of Student Services as required by Community College Leadership doctoral program. Observed the overall leadership and operational management of the student services program. Discussed problem-solving techniques to various, and attended college-wide Dean and Vice President of Student Success meetings, as well as, on-campus meetings.

ACADEMIC DEAN, CHESAPEAKE CAMPUS

Spring 2012

Completed a one semester internship with the Academic Dean and attended various college-wide meetings. Collaborated with academic constituents on the redesign of developmental education courses. Under direction of the dean, reviewed course substitutions to fulfill graduation requirements. Reviewed previous enrollment data to create summer and fall course schedule. Discussed and reviewed job duties to create Developmental Education Manager position. Reviewed credentials for prospective new faculty in relation to state and institutional guidelines. Observed

and participated in meetings with faculty to address student and classroom concerns and issues. Attended Administrative Team meetings facilitated by the Provost and consulted the Business Office Manager to review campus budget.

*JOHNSTON ELEMENTARY SCHOOL, WILKINSBURG, PENNSYLVANIA* Spring 2000

School counseling internship involved providing individual and group counseling, crisis intervention, assisting with evaluation for Special Education placement. Organized weekly lesson plans according to Individualized Education Plan and developmental needs. Collaborated with teachers and assisted students with developing life skills.

*WESTINGHOUSE HIGH SCHOOL, PITTSBURGH, PENNSYLVANIA* Fall 2000

School counseling internship required offering individual and group counseling to high school students. Performed senior transcripts review to verify student eligibility for Pennsylvania graduation requirements. Developed materials and conducted small group senior meetings about standardized testing, college exploration tools, college applications, admissions process and financial aid. Co-facilitated college preparatory skills and used various career assessment tools for career planning. Scheduled courses based on Pittsburgh Public Schools academic degree requirements.

### **INSTRUCTIONAL EXPERIENCE**

Student Development (Freshmen Orientation)

Developmental Psychology

K – 12 Guidance Lessons (Academic, Personal and Social)



## INSTITUTIONAL ACTIVITIES

Member, Strategic Enrollment Management (Process Mapping) – 2014 to Present

Task Force Committee – 2013

Curriculum Committee – 2013 to present

First Year Success Committee – 2013

Developmental Education Committee – 2013

Commencement Committee – 2012 to present

Chair/Co-Chair, Peer Mentoring Program – 2011, 2010, 2009, & 2008

Chair, Search Committees

Financial Aid Advisors – 2013, 2014 & 2015

Provost & Dean of Student Services Administrative Assistant – 2012 & 2014

Departmental Administrative Assistant – 2009

Mental Health Clinician – 2006

Member, Search Committee

Academic Dean, Humanities and Social Science - 2015

Developmental Education Manager – 2012

Financial Aid Coordinator - 2011

Veteran's Affairs & Financial Aid Advisors – 2011 & 2014

## PRESENTATIONS

Tidewater Community College, Chesapeake Campus Convocation - *Financial Aid Satisfactory Academic Progress Policies and Strategies to Academic Success and Decrease Suspended Financial Aid*

## TECHNICAL/COMPUTER SKILLS

Microsoft (Word; PowerPoint; Excel; Publisher; Outlook); Blackboard;  
PeopleSoft Student Information Systems (SIS); SPSS; ADOBE Connect; familiar  
with Maxient Student Conduct Software

**PROFESSIONAL CERTIFICATIONS AND LICENSES**

Certified, K-12 School Counselor, Pennsylvania	2001
Licensed, K-12 School Counselor; North Carolina	2007
Certified, K-12 School Counselor; Virginia	2009