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LOYOLA MARYMOUNT UNIVERSITY

Factors Impacting Persistence for African-American and
Latino Community College Students

by

Amy Radovčić

A dissertation presented to the Faculty of the School of Education,

Loyola Marymount University,

in partial satisfaction of the requirements for the degree

Doctor of Education

Factors Impacting Persistence for African-American and
Latino Community College Students

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by

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This dissertation written by Amy Radovcic, under the direction of the Dissertation Committee, is approved and accepted by all committee members, in partial fulfillment of requirements for the degree of Doctor of Education.

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ACKNOWLEDGEMENTS

To Antonette and Milutin Radovčić: Thank you and hvala lijepa for your love and multiple levels of support throughout my entire life. I am blessed to have you as my parents. To my Mother, thank you for being my best friend and my mentor. To my Tata (father), thank you for teaching my brother and me the meaning of hard work and the importance of family. To my Dida (grandfather) Thomas Yelovich, who makes me laugh with just his big, happy, smile: Thank you for all the fun times and singing sessions. To my Uncle, John Yelovich for your quiet yet constant backing and support.

To the brother I love, Michael Radovcic, thank you for always being so competitive with me: We became a lawyer and a counseling professor, all because *anything you can do, I can do better*. To my sister Amanda, welcome to the family and thank you for making me an Aunty. To my best friends Mia J. Ciketic and Jennifer Kimura-Samson, thank you and Mahalo for your love, support and encouragement at all times, no matter what. You are my 'ohana too!

Thank you to my dissertation chair Dr. Elizabeth Stoddard for the time and energy you have invested in me for the past three years. Your wisdom and advice are priceless. Thank you to my committee members Dr. Karie Huchting and Dr. Refugio Rodriguez. A special thank you to Dr. Mary McCullough for accepting me into the doctoral program and believing in me from the very beginning.

Thank you to Dr. Robert Richards for your research assistance and encouragement during this entire process. Thank you to Joy Fisher for your helpfulness. Thank you to my friend and mentor Dr. Kristi Blackburn for believing in me.

All that I have achieved is because of every single one of you!

DEDICATION

In memory of my beautiful and loving Baba (grandmother), Marija Lakoš: She prayed for me everyday and believed in me always. She was ready at any time to help me in anyway she possibly could. I love and miss you Baba, and will remember you always.

In memory of my beautiful and loving adopted grandmother, Gigi Ann Werhas: She treated me like family and made sure I was taken care of during my undergraduate years of college. Thank you Gigi for giving me the greatest gift: Daryl & Joan Olsen and family. I love you Gigi and will never forget you and our wonderful conversations.

To any student struggling to persist, especially at the community college level, do not give up, believe in yourself and ignore ill advice. Become resilient and you will persevere. There is no time limit on your academic success. You can do it!

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ABSTRACT

Factors Impacting Persistence for African-American and Latino Community College Students

By

Amy Radovčić

Persistence of African-American and Latino community college students has lagged behind other ethnic groups. The longitudinal study covered three years that included four semesters. Data from aggregated records of a community college in Southern California were analyzed to gain better understanding of factors that could explain varying rates of persistence. The data represented 609 African-American and Latino community college students who enrolled for the first-time in the fall 2006 semester. In addition to descriptive analysis, the data were subjected to t-tests, Pearson correlation, and multiple regression.

These findings revealed that access to a college counselor (p < .01) and offers of financial aid assistance (p < .01) and services from EOPS (p < .05) significantly and positively influenced persistence. The impact of age and SES differed by ethnicity. Older African-American students (p < .01) and younger Latino students (p < .01) were more likely to persist. Socioeconomic status (p < .01) was found to significantly influence persistence for African-American students. SES was not found to be significant in Latino community college student persistence. Age, gender, and completing a personal

development course did not significantly influence African-American or Latino community college student persistence.

The findings can help educators understand African-American and Latino community college student persistence. Community college counselors can facilitate persistence and can have the greatest impact when their contact with students occurs early in the college experience. Further, high schools and community colleges need to work together to disperse information and encourage students to plan for their college education.

CHAPTER 1

INTRODUCTION

Background of the Problem

Over the past two decades, student persistence relating to advancing students in their educational programs has become an area of concern for all institutions at all levels. Historically, California has been a leader in higher education. In recent years, the State of California has failed to provide new generations of low-income, heavily Latino and immigrant students with the college opportunities equivalent to those their parents and grandparents' generations were afforded (Holland, 2009). It is an objective of educators to facilitate social justice by educating members of diverse groups within society.

California had been ranked first on many economic measurements in the United States and in the world. However the State has not responded well to the drastically changing demographics and economic alterations that have occurred over the past 20 years (National Center for Public Policy and Higher Education, 2009). California ranked 40th in the nation in the percentage of high school graduates who went directly to college and near the bottom in the percentage of students who earned college degrees and certificates (Holland, 2009). California ranked 29th on people between 25 and 34 years of age earning an associate's degree (National Center for Public Policy and Higher Education, 2009). If the State does not increase the number of its educated population, the State will risk a shortage of educated and skilled workers, and could fall short in competing in a global economy (Holland, 2009).

Community colleges confer the majority of associate's degrees awarded in the United States. In 2005-06, community colleges conferred 498,229 associate's degrees, accounting for 70% of all associate's degrees awarded that year (National Center for Education Statistics [NCES], 2005). The degrees earned at community colleges are important because many of them are awarded to students of color and first-generation college students. They provide students opportunities for better paying jobs or to transfer to four-year universities.

This study explored the factors that impact persistence for African-American and Latino community college students. Latino and African-American community college students are not persisting through community college at the same rates as their classmates (Gill & Leigh, 2004; Dougherty & Kienzl, 2006). Thirty-five percent of White community college students drop out of college before earning a degree or certificate (NCES, 2009). Forty percent of Latino community college students drop out of college before earning a degree of certificate (NCES, 2009). Forty-five percent of African-American community college students drop out of college before earning a degree or certificate (NCES, 2009). This study was designed to examine the factors that impact persistence at a California community college.

A community college student must persist longer to earn a bachelor's degree than a student who goes directly to a four-year university. Students who begin at a community college take sixteen months longer to complete a bachelor's degree than students who begin at a four-year university (71 versus 55 months). This may be due to matriculation issues when students transfer to another institution to complete a four-year degree. There

are other factors related to the time needed to complete a degree. NCES (2003) found that the higher the level of parents' educations, the more likely that students persisted. Community college students whose parents had earned advanced degrees were persisting at a rate of five to one compared to students whose parents had a high school diploma or less (NCES, 2007). Community college students who did not delay postsecondary enrollment after high school earned 21% of all associate's degrees and students who delayed postsecondary enrollment earned 14% of all associate's degrees (NCES, 2007).

According to NCES, in the 2002-03 academic year, 67% of all degrees were earned by White, non-Hispanic students, 22% were earned by groups other than White (includes Black, non-Hispanics, Hispanics, Asians/Pacific Islanders, and American Indians/Alaska Natives), 5% by nonresident aliens, and 5% by students whose race/ethnicity was unknown. Non-white students earned 27% of all associate's degrees, 22% of all bachelor's degrees, 17% of all master's degrees, 14% of all doctoral degrees, and 24% of professional degrees (NCES, 2003).

More females than males are enrolled at community colleges. Women earned 67% of degrees granted to African-Americans, 63% of degrees granted to American Indians/Alaskan Natives, 61% of degrees granted to Latinos, 58% of degrees granted to Whites, and 55% of degrees granted to Asians/Pacific Islanders (NCES, 2005). Women earned 58% of all college degrees, 60% of all associate's degrees, 58% of all bachelor's degrees, and 59% of all master's degrees (NCES, 2005).

The State of California, with 111 community colleges, has the largest community college system in the United States. California enrolls approximately 1.4 million students

each fall (California Community College Chancellor's Office[CCCCO], 2009). Twenty-three percent of the nation's community college students were in California (NCES, 2008). California also had the largest ratio (5.2%) of community college enrollment to adult population (NCES, 2008).

The study examined the persistence of 455 new Latino students and 154 new African-American students at Kendall Community College (KCC), a pseudonym, in the fall of 2006. The overall student body of KCC is 45% Latino and 17% African-American. The district of which KCC is a part of educates three times the number of Latino community college students than any other district and four times as many African-American college students than all the University of California campuses combined (KCC, 2009). Community colleges play a central role in providing educational and vocational opportunities for students of color by admitting more students of color than any other type of postsecondary institution (NCES, 2009). We need to pay particular attention to African-American male students in community colleges because they have disproportionately underachieved on all academic outcome measures (McJunkin, 2005). "African-American men throughout California's community college system are the lowest performing subgroup when one considers: percentages of degrees earned, persistence rates, and average cumulative grade point average" (McJunkin, 2005, p.362).

The academic goals of a community college student vary from taking a course to earning a technical certificate, to earning an Associate's Degree, and to completing the required courses and credits to transfer to a four-year university. These goals impact the definition of persistence because students tend to stay at a community college to meet

varying goals. Thirty-one percent of community college students reported that they enrolled in order to transfer to a four-year college, 43% reported enrolling to seek an associate's degree, 17% reported enrolling to seek a certificate, 42% reported they were seeking job skills, and 46% reported enrolling for personal interest (NCES, 2008).

Age can determine whether a student is independent from or dependent upon his or her parents. Forty percent of community college students in 2003-04 were dependent students who received financial support from a parent. Twenty-six percent were 24 years old or older and financially independent from their parents. Twenty percent were independent and married with children. Fifteen percent were independent, single parents (Horn & Nevill, 2006).

Many community college students are older, non-traditional students. In 2003-04, the median age of community college students was 24 years versus the median age of 21 years for both public and private four-year institutions (NCES). Thirty-five percent of community college students were 30 years old or older, compared to only 13% at public or private four-year institutions (NCES, 2008).

Ethnicity can lead a student to attend community college to a greater extent than any other type of institution. Latino students tended to enroll at a community college regardless of family socio-economic status (NCES, 2008). They generally enrolled at higher rates in community colleges than their peers of other ethnicities (NCES, 2008).

NCES (2008) studied enrollment status and found that students who attended community college full time were more likely to persist versus students who attended part time. However, students who alternated between full time and part time attendance

had even higher persistence rates than students who only attended full time (NCES, 2008). The rate of persistence was higher for students who attended college full time and for students who alternated between full time and part time attendance because their educational goals remained a strong priority in their lives.

KCC was selected for this study because although the student body was diverse, similar to many of the 111 public two-year California community colleges, KCC had a relatively small student enrollment: 8,500 students. KCC is a designated Hispanic Serving Institution. Forty-five percent of the total enrollment at KCC is Latino. KCC is fully accredited by the Western Association of Schools and Colleges. Similar to other California community colleges, KCC offers a wide range of Associate degree subject-area concentrations that facilitate transferring to University of California and California State University campuses. KCC offers 22 Associate degrees in such majors as liberal arts, accounting, administration of justice, architectural technology, biological science, business, child development, computer applications and office technology, computer information systems, drafting, engineering, physical science, social behavioral sciences, and offers two-semester Career Certificates.

Services offered to students at KCC include orientation, placement testing, academic advisement, individual counseling, career counseling, honors program, tutoring, student government, student activities, and clubs. Extracurricular programs include a jazz band, choral groups, theater productions, television broadcast productions, and intercollegiate sports in soccer, basketball, baseball, and softball.

Statement of the Problem

This study aimed to bring additional and deserved attention to the matter of community college student persistence of African-American and Latino community college students. A focus was on reviewing factors that might be causing a dilemma related to social justice: students of color are persisting at a lower rate than their White classmates (Gill & Leigh, 2004; Dougherty & Kienzl, 2006). Forty-one percent of White community college students finished a degree or certificate (NCES, 2007). Thirty-four percent of Latino community college students finished a degree or certificate (NCES, 2007). Twenty-eight percent of African-American community college students finished a degree or certificate (NCES, 2007). The researcher who authored this study believes that more can be done to help African-American and Latino community college students enroll in consecutive semesters to earn a vocational degree, an Associate's degree, or to transfer to a four-year university. This study, conducted at KCC, examined issues related to the persistence of African-American and Latino students. The researcher hoped to find ways to increase persistence of students representing both ethnicities.

The community colleges in California have attempted over time to meet the needs of their communities and students by adjusting their enrollment capacities, the degrees and certificates offered, and their curriculum. Public community colleges award associate's degrees and certificates; in addition, they offer a wide range of services in their local communities. Community colleges are a vital force in the fight for social justice because they enroll 41% of nontraditional, low income students, and students of color (NCES, 2008). Many students use community colleges as a stepping stone in

pursuing a bachelor's degree, a graduate degree or a professional degree. According to the Community College League of California (2009) enrollment in California community colleges included 818,988 Latino and 208,924 African-American students.

This study was performed at Kendall Community College (KCC), which is a designated Hispanic Serving Institution (HSI). A college is designated as an HSI when it has a minimum of 25% Latino college students enrolled; KCC's student population is 44% Latino. The study examined the extent to which the 455 newly enrolled Latino KCC students persisted within the four semesters researched.

Community colleges enroll many low-income students by making postsecondary education affordable. The average annual tuition and fees for a full-time, California student attending a community college were \$2,017 (NCES, 2008). The average annual tuition and fees at a public four-year college were \$5,685. The average annual tuition and fees at a private four-year college were \$20,492 (NCES, 2008). In recent years, the increase in tuition and fees at community colleges has been lower than at public four-year institutions (NCES, 2008). Twenty-six percent of community college students were in the lowest income category, compared to 20% of students in public and private four-year institutions (Horn & Nevill, 2006). The use of financial aid and the extended opportunity program and services at the community college makes college accessible for students that need the most affordable college opportunity.

Community colleges employed a greater percentage of African-American and Latino faculty members than public or private four-year institutions, although 80% of faculty members at community colleges are White (NCES, 2008). The likelihood of a

student of color having a college professor of color is higher at the community college. Having a professor of color has the potential to help students of color adapt and feel more comfortable, thus positively impacting students' persistence for students of color at the community college level (Grant-Thompson & Atkinson, 1997; Jackson, 2003; Harper & Quaye, 2007).

Community colleges are accessible to more students than the four-year universities are. Most community colleges have an open admissions policy. Open admission means that any student can submit an application. Students do not need a high school diploma to enroll at a community college as long as they are at least 18 years of age or are concurrently enrolled in middle or high school. Students whose high school grade point average was 2.5 or below were more likely to enroll at a community college than any other institution (NCES, 2008). Researchers believe that additional studies should examine the potential for remedial Math and English courses to affect student persistence (Gill and Leigh, 2004). A smaller percentage of community college students had completed mathematics coursework more advanced than Algebra II than had completed less academically challenging mathematics (NCES, 2008). A smaller percentage had completed foreign language coursework more advanced than the second year than had completed less academically challenging foreign language coursework (NCES, 2008).

Purpose of the Study

This study explored the factors that impacted persistence of African-American and Latino community college students at KCC. The study compared African-American

Community colleges students within their own ethnic group and, similarly, compared Latino community college students within their own ethnic group. The researcher of the study believes it is ethically wrong and socially unjust to compare ethnic groups to each other. Variables examined in the study were: completing Personal Development 20, meeting with an academic counselor, gender, being offered financial aid, being offered services from Extended Opportunity Program and Services (EOPS), age, and socioeconomic status (SES).

By identifying factors that impact community college student persistence, institutions can encourage educators to help African-American and Latino community college students adapt to college life immediately upon their first enrollment. Community college students need encouragement and support in order to develop and participate in positive relationships with others on campus. The more immediate and direct the effort a community college gives to its students, particularly students of color, the more the students will feel part of campus life, be content with themselves, and be ready to persist in achieving their particular academic goals. Community colleges can welcome new students by having an orientation meeting at a time when most of the students can attend. Community colleges can help students persist by having programs on campus that can help new community college students acclimate to college life. Community college counselors can make the effort to meet with as many new students as possible, as soon as possible within their first semester of enrollment and attempt to make a valuable connection with students needing support. The college can give special incentives to new students who enroll in Personal Development 20, a college skills course, during their first semester of enrollment in order to promote the importance of academic success at the beginning of students' academic careers. Outreach at the beginning of students' academic careers is vital to increasing persistence rates.

Significance of the Study

As educators, we need to be concerned with the reasons why students leave college before they have met their academic goals. For every student that does not persist, an educational dream is unfulfilled. For every unfulfilled dream, a long-term impact affects the student as well as society.

The student population entering community colleges will peak in 2015 and will be more racially and ethnically diverse than the college populations we have seen thus far (Rendon, Garcia, & Pearson, 2004). Students of color are statistically less likely to complete a college degree compared to their White classmates (Gill & Leigh, 2004; Dougherty & Kienzl, 2006). One-half of undergraduates who enrolled at a community college with the intention of continuing their education to obtain a bachelor's degree and about one-fourth of those who started with an associate's degree goal transferred to a four-year institution within six years (NCES, 2003). California, as well as many other states, has developed matriculation agreements with four-year institutions to facilitate such transfers (Wellman, 2002).

This study is crucial because postsecondary educators need to do more to help students of color succeed in order for our society to be competitive in an ever-increasing global economy. The study is significant because it can contribute to increasing the rate of completion of African-American and Latino community college students. The study

may also benefit the students themselves, as well as creating a more socially just society, by retaining more college students across ethnicities, genders, and levels of socioeconomic status.

The opportunity to attend college and earn a degree needs to be equitable, not simply equal. Being equitable means giving financial, academic, and emotional assistance to students who because of their backgrounds have not had an equal chance to attend college and to experience academic success. Financial aid and EOPS are good examples of trying to be equitable. Financial aid gives tuition money to students who need assistance to survive while attending college. EOPS gives more academic and emotional support to students who qualify for further assistance.

It has been asserted that the key to the future of the American economy is tied to the postsecondary education of students of color (Rendon et al., 2004). Compared to White community college students, African-American community college students are 20% less likely to complete college with in a six-year period (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999). According to the National Center for Educational Statistics (2008) students of color comprised 32% of all students enrolled in two-year colleges, but only received 23% of the Associate's degrees conferred.

Education leads to stronger moral and ethical debates that help shape our values, behaviors, and treatment of others. Pascarella (1996) suggested that it is during college that students tend to become more open minded and tolerant of diversity than at any other time in their lives. The study hopes to discover factors that affect student persistence and

learn about their impact on academic self-concept, level of self-efficacy, and social integration.

It is an issue of social justice that African-American and Latino community college students have not persisted through community college at the same rates as their classmates (Gill & Leigh, 2004; Dougherty & Kienzl, 2006). Forty percent of Latino college students who enrolled in college stopped attending before completing an Associate's degree or a vocational certificate (NCES, 2009). Forty-four percent of African-American college students who enrolled at a college stopped attending before completing an Associate's degree or a vocational certificate (NCES, 2009). These outcomes represent both an issue of social justice and a concern for educating members of society.

Organization of the Dissertation

The purpose of this study was to research the factors impacting the persistence of African-American and Latino students at KCC. This study was designed to increase the reader's understanding regarding their persistence. Chapter 1 provides an overview of the study.

Chapter 2 briefly reviews the history of community colleges in America and specifically in California. The historical and theoretical work on college student persistence by Tinto and Bean is presented. Chapter 2 examines the literature on college student persistence and concludes with a discussion on student persistence through the following lenses: academic self-concept, self-efficacy, and social integration.

Chapter 3 discusses the methodology used in the research. Data were analyzed from the fall 2006, spring 2007, fall 2007, and spring 2008 semesters. The analysis included factors that impacted student persistence by studying the following variables: completing Personal Development 20, meeting with an academic counselor, gender, being offered financial aid, being offered services from Extended Opportunity Programs and Services, age, and socio-economic status. The students identified themselves by race on their admissions applications. All students in the study entered KCC in fall of 2006.

Chapter 4 presents the study's findings. Descriptive information, t-tests, Pearson's correlations, and multiple regression analyses were carried out. A t-test compared the dependent variable: persistence with the independent variables: completing Personal Development 20, meeting with an academic counselor, gender, being offered financial aid, being offered services from EOPS, age, and SES. Pearson's correlations examined the strength and direction of the relationship among variables. Post hoc analyses also examined the data. A multiple regression test was used to examine the relationships between several independent variables and the dependent variable: persistence. The multiple regression analysis examined which of the seven independent variables in combination or alone best-predicted student persistence at KCC.

Chapter 5 shares and discusses the results, implications, findings of the study, and offers suggestions for further study.

Theoretical framework

Tinto and Bean have dominated the field of study on student persistence for the last three decades. Tinto's (1975) Student Integration Model and Bean's (1982) Student

Attrition Model are frameworks still used in current research. Both models commonly viewed attrition from college as a longitudinal process. Students' decisions to persist are determined by the quality of interactions between student characteristics and institutional environments (Johnson, 2006). Tinto's model has been validated many times in studies of full-time students at four-year colleges. However, questions regarding extending the model to part-time, commuter, and non-traditional students, including students of color at community colleges, still exist (Dowd & Coury, 2006).

Academic self-concept is the way a student views his or her academic ability compared to other students. Academic self-concept includes attitudes, feelings, and perceptions of one's academic skills and intellect (Cokley, 2000). A strong academic self-concept has been found to significantly predict academic success among college students of color and those from low SES families (Gerardi, 1990; Newman & Newman, 1999). Community college students who interact with others on their college campuses often have an increased intellectual disposition, a clearer sense of career identity, and a more positive attitude about their college education than those who interact with others on college campus less (Pascarella & Terenzini, 2001). The study examined factors that may impact student persistence, including a possible connection that could be shown through analysis of data on spending time with a counselor, spending time with classmates or a Personal Development 20 professor, interacting with caring staff from the financial aid office, or building rapport with EOPS representatives.

Self-efficacy has consistently been found to be a strong predictor of achievement (Hsieh, Sullivan, & Guerra, 2007). Self-efficacy refers to people's judgment of their

capabilities to organize and successfully complete a task (Bandura, 1997). Students with a higher sense of self-efficacy were found to be more motivated, harder working, put forth a great amount of effort to reach their personal goals, and persist when their classes were difficult (Bandura, 1997; Hsieh et al., 2007). Research regarding self-efficacy has shown that in addition to a student being academically capable and sufficiently skilled to complete work correctly, a student also needs to develop a strong sense of self and belief in his or her capability to complete the given task (Newman & Newman, 1999). The study examined factors that might affect student persistence and the possible connections with self-efficacy.

It is known that social integration within community colleges has a direct impact on student persistence (Fleming, 1984; Moffatt, 1989; Astin, 1993; Alford, 1995).

Students learn through life experiences how to dispel stereotypes, break down barriers, and create new perspectives. Cross-communication skills could positively aid students of color to communicate more effectively with faculty, staff, and other students in college and thus could contribute to student persistence at an increased rate in their institutions (Grant-Thompson & Atkinson, 1997; Jackson, 2003; Harper & Quaye, 2007). A further benefit could be a more socially integrated society (Harper & Quaye, 2007). Being academically and socially integrated into college life are two strong predictors of persistence and academic success (Newman & Newman, 1999; Strage, 1999). The study examined factors that influence student persistence and possible connections that might be found between social integration and other variables.

Research Questions

This study investigated the factors that impact persistence for African-American and Latino community college students. A driving force behind the study is a conclusion that more needs to be done to help African-American and Latino community college students persist for as many consecutive semesters (excluding summer and winter terms) as needed in order to complete the planned-for degree or certificate. The variables studied to determine their effect on persistence were: completing Personal Development 20, meeting with an academic counselor, gender, being offered financial aid, being offered services from EOPS, age, and SES.

Definitions of Terms

Dependent variable: Student persistence.

Independent variables: Completing Personal Development 20, meeting with an academic counselor, gender, being offered financial aid, being offered services from EOPS, age, and SES.

Age: Chronological age self-reported in the data by date of birth. KCC students range in age from eleven years to ninety years old (KCC, 2008).

Extended Opportunity Program and Services (EOPS): A government-funded program designed to recruit and retain educationally and economically disadvantaged students. The program provides services over and above those offered by financial aid. To qualify for EOPS, a student must have low English or Math placement scores or not have earned a high school diploma or GED or is a first generation college student or comes from a household where English is not the primary language or is an emancipated foster youth.

Financial aid: Any federal, state, or special grants monies.

First-generation college student: An undergraduate student whose parents never enrolled in postsecondary education.

Historically oppressed: A term given to people of non-white ethnicities who were socially and politically marginalized in pre-civil rights movement structures (Gorski, 1999).

Non-traditional college student: Sometimes referred to as an adult learner, is a student 25 years of age or older. This population differs from traditional college students not only in terms of life stage, but also in family demands and life experiences.

Persistence: A student continuing from one semester to the next semester. For the purposes of the study, persistence is from fall to spring semester, and from spring to fall semester; winter and summer semesters are excluded. Students need to complete all four semesters without a break to be considered as persisting.

Personal Development 20: This three-unit course provided students with information to make appropriate educational, career, and lifestyle choices. Topics examined include educational programs and their requirements, career resources and the career decision-making process, study skills and the elements of a healthy lifestyle. Students design their own academic plans.

Social Justice: A continuous objective to provide equality of opportunity to all people without considering gender, race, or social class (Gale & Densmore, 2000). "The vision of justice is a vision grounded in a sense of solidarity, mutual responsibility, and joint benefit," (Lebacqz, 1986, p.71). Social Justice is concerned with equal justice in all

aspects of life. Social Justice demands that all people from the poorest to the richest have equal rights and opportunities; they deserve an even playing field in society (Ellis-Christenson, 2010).

Socioeconomic status (SES): The annual median household income created by the U.S. Census and distributed by zip code. The data are from Census 2000. The zip codes used by KCC students on their admissions applications have an annual median household income ranging from \$20,015 to \$117,979. This does not guarantee that the student's income or their family's income is similar to the annual median household income as the zip code they recorded on their application.

African-American: An American of black African descent (Merriam-Webster's Collegiate Dictionary, 2009).

Latino: According to Professor Otto Santa Ana of the University of California at Los Angeles, Latino is more politically correct and timely than using the term Hispanic. In the 1960s the proper term was Chicano, after which came Spanish, then Hispanic, and now Latino (Santa Ana, 2002; Blackburn, 2008). Latino is the current term of choice. It symbolizes a cross-ethnic designation that distinguishes Latino from Anglo-American (Santa Ana, 2002; Blackburn, 2008). Latino is the preferred term because it is viewed as a self-identifying word, from a Latin American country, unlike Hispanic, which is the preferred term, used by the U.S. government for census and other purposes (Casanas, 2005). Hispanic is an adjective, whereas, Latino can be either a noun or an adjective (Casanas, 2005). However, the KCC admission forms have not been changed to reflect

new terminology. Students in this study designated as Latino marked their ethnicities on the admission forms as one of the following: Mexican, Chicano, Mexican-American, Central American, South American, and other Hispanic.

For the purposes of this study, the terms students of color, minority and minorities are only referring to African-American and Latino community college students.

The term first-generation refers to undergraduates whose parents never enrolled in postsecondary education and is used to identify students of color. Both college students of color and first-generation college students face additional hardships while trying to persist through school. Both groups encounter challenges if they were from a lower socioeconomic level, came from non-White ethnicities, and spoke a language other than English in the home (Bui, 2002; Ramos-Sanchez & Nichols, 2007).

Limitations, Delimitations, Assumptions

The data used in this study are from one community college. The data on gender, age, and SES were self-reported by students on their applications for admission. The data on completion of Personal Development 20, meeting with an academic counselor, being offered financial aid, and being offered services from EOPS were reported by the community college.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction and Overview

The chapter reviews the history of community colleges in America and specifically in California. The retention theories of Tinto and Bean are reviewed before discussing the variables of the study: completing Personal Development 20, meeting with an academic counselor, gender, being offered financial aid, being offered services from Extended Opportunity Program and Services (EOPS), age, and socio-economic status (SES). The variables are then interpreted through the lenses of academic self-concept, self-efficacy, and social integration.

History of the Community College

In the late 1800's, the average American had no more than a fifth grade education (Brink & Karabel, 1989). The community college is an American creation (Brint & Karabel, 1989; Dougherty, 1994). "The belief that America was and should remain a land where individuals of ambition and talent could rise as far as their capacities would take them has been central to the national identity" (Brint & Karabel, 1989, p.3). Initially referred to as a two-year college or a junior college, the community college was created to help the working class learn and develop skills in order to find employment.

In 1892, the president of the University of Chicago, William Rainey Harper, created a division of instruction at the university. The first two years of study were basic instruction (later to be known as the lower division general education). This allowed for the creation of the Associate's degree in 1900 (Brint & Karabel, 1989). In 1901, Joliet

Junior College opened in Illinois as the first public community college in the United States (Brint & Karabel, 1989; Dougherty, 1994).

It has been suggested that in order to propagate elite status, some members of society had to be excluded from earning a four-year degree. Therefore, community colleges were instructed to create vocational programs that were designed to recruit the academically average- to less-than-average student and encourage them, as well as students not interested in attending college, to gain a marketable skill (Brint & Karabel, 1989; Dougherty, 1994). Vocational programs would grow to be a solid part of the curriculum of the community college because they offered a marketable skill at affordable fees in exchange for a reasonable amount of invested time.

California was the next state to establish community colleges, having received encouragement from the presidents of the University of California, Berkeley and Stanford University. In 1910, the first California public junior college opened in Fresno (Brint & Karabel, 1989; Dougherty, 1994). California had 35 community colleges by 1930, which enrolled over half of the total public college students in the state (Brint & Karabel, 1989). For many, community colleges represented the only opportunity to attend college.

At a conference in St. Louis, Missouri in 1920, the American Association of Junior Colleges (AAJC) was founded to establish a permanent organization to provide leadership and support exclusively to community colleges (Brint & Karabel, 1989).

The AAJC is now the American Association of Community Colleges. According to the AACC, community colleges educate 54% of the nation's undergraduate students (American Association of Community Colleges [AACC], 2009). Community colleges

provide access to postsecondary education by making college affordable. Thirty-nine percent of all community college students in the United States were first-generation college students (AACC, 2009). Forty-six percent of African-American undergraduate students attended a community college (AACC, 2009). Fifty-five percent of Latino undergraduate students attended a community college (AACC, 2009). The average age of community college students was twenty-nine years (AACC, 2009). Two-thirds of students attended community college on a part time basis (AACC, 2009). Half of all students who received a baccalaureate degree had attended community college at some point in their undergraduate careers (AACC, 2009).

Community colleges offer postsecondary academic opportunity to students from lower socio-economic levels (NCES, 2008). Due to the large number of community colleges and their openness to students of color and nontraditional students, community colleges are a vital component of higher education in California and in the United States (Dougherty, 1994). Anyone who is at least eighteen years of age or is concurrently enrolled in middle school or high school is eligible to enroll at a community college in California.

The California community college system is the largest higher educational system in the nation. It is composed of 72 districts and 111 colleges with more than 2.6 million students per year (CCCCO, 2009). Community colleges supply workforce training, basic skills education, prepare students for transfer to four-year institutions, and offer opportunities for personal enrichment and lifelong learning (CCCO, 2009). According to the California Master Plan of 1960, University of California institutions are to enroll the

top 12% of high school graduates, California State Universities are to enroll the top 33% and the community colleges are to enroll all high school graduates and non-graduates over age eighteen (Piland, 2004). The California system became the envy of higher education across the country (Piland, 2004). Community colleges have a disproportionately higher number of students of color, of the working class, who are female, and are older than traditional students in four-year universities (Dougherty, 1994; NCES, 2008). This is particularly true in California because one out of every five adults in the state is enrolled in college (NCES, 2009). "The community college is the most effective democratizing agent in higher education. It has opened college opportunities to those who would otherwise be unable to attend, either because of poverty, poor high school records, or vocational interests" (Dougherty, 1994, p.6).

KCC, the site of the current study, opened in 1949. It began as a technically oriented college and has evolved into a comprehensive institution of higher learning. It offers transfers to four-year universities, vocational degrees or certificates, and community service programs. It is a relatively small community college, enrolling approximately 8,000 students each semester. The student body reflects the diverse ethnic composition of the surrounding communities. Student demographics for the fall of 2007 indicate that the total student body was: 16% African-American, 44% Latino, 18% White, 20% Asian, and 2% other.

KCC is one of nine community colleges that make up the largest community college district in the United States. KCC takes pride in being a leader among community colleges in educational applications of modern technology. KCC is working to implement

techniques and programs to educate its students for the ever-changing workplace. KCC believes in building partnerships with local businesses and civic organizations in the surrounding community in order to create and maintain high quality in their educational programs.

Conceptual Framework

Research by Tinto and Bean has dominated the field of study on student persistence for the last thirty years. Tinto's (1975) Student Integration Model and Bean's (1982a) Student Attrition Model are frameworks still used in current research. Both models commonly view attrition from college as a longitudinal process. Students' decisions to persist are determined by interactions between student characteristics and institutional environments (Johnson, 2006). Tinto's model has been validated many times in studies of full-time students at four-year universities. However, questions have arisen concerning whether the model extends to part-time, urban, and non-traditional students at community colleges (Dowd & Coury, 2006).

Though it costs more to recruit new students than it does to retain current students, colleges and universities often focus on recruitment instead of student retention (Tinto, 1993). Additional studies of ways for colleges and universities to improve student retention could relieve pressures on recruitment (Tinto, 1993). Recruitment is expensive and an institution's financial stability is vital in sustaining academic programs (Fike & Fike, 2008). The goal of a college or university should be to foster positive student experiences that encourage them to complete their academic careers with an earned

degree or certificate, allowing students to enter the workforce as productive members of society (Fike & Fike, 2008).

Bean and Metzner (1985) developed a model that placed more emphasis on environmental variables such as finances, hours worked, outside encouragement, and family responsibilities. These factors were considered to play a role in the persistence of older, part-time, and employed college students (Dowd & Coury, 2006).

A more recent model integrates factors related to student persistence. The integrated model recognizes the connection and interrelatedness among financial circumstances, academic experiences, students' expectation about whether they will complete the college program, environmental factors, and social support from family, friends, and the community (Beekhoven, De Jong, & Van Hout, 2002; Nora, 2002). Social activities have much less bearing on the persistence of community college students because many students have extensive social and family commitments off campus (Dowd & Coury, 2006). Only in the last ten years have theoretical models focused on the college persistence of students of color (Rendon, Jalomo, & Nora, 2000). Theoretical models of student persistence recognize the interrelatedness of many factors in a student's life (Dowd & Coury, 2006). Financial circumstances, academic experiences, students' perceptions of their likelihood of program completion, environmental variables, and social support from family, friends, and others in the community all play vital roles in student persistence (Beekhoven et al., 2002; Nora, 2002). "Student commitment to a college and 'fit' in the college environment are understood to be influenced by all these factors and to, in turn, determine persistence" (Dowd & Coury, 2006, p.36).

Personal Development Course

The data were analyzed to determine whether student persistence increased after completing a college skills course called Personal Development 20. This college skills course provided students with information to make appropriate educational, career, and lifestyle choices. Topics examined included educational programs and their requirements, career resources, the career decision-making process, study skills, and the elements of a healthy lifestyle. Student persistence is positively impacted when in addition to academic skills, students possess skills in time management, are able to apply themselves, are able to focus on goals, and have the skills to advocate for themselves as college students (Byrd & Macdonald, 2005). Enrolling in a personal development course can improve class attendance, stimulate collaboration with classmates, and increase the utilization of campus resources and materials (Byrd & Macdonald, 2005). Personal development courses teach academic skills and time management; they focus on creating and maintaining goals, and self-advocacy, which can lead to improved student persistence. Taking a personal development course can increase college readiness by improving one's skills within the context of college (Byrd & Macdonald, 2005).

During the semester of a personal development course, students are encouraged to explore a study field in which they are interested and if possible to declare a major. The major or college program community college students choose affects persistence, their academic success, and likelihood to transfer. Students who choose vocational subjects are likely to persist but considerably less likely to transfer to four-year universities (Dougherty & Kienzl, 2006). Community college students who declare an academic

major, rather than an occupational major are more likely to persist and transfer to fouryear universities (Newman & Newman, 1999; Dougherty & Kienzl, 2006).

Academic preparation and social background influence the likelihood of community college student persistence and transfer to four-year universities (Newman & Newman, 1999; Dougherty & Kienzl, 2006). Other variables to consider that affect the likelihood of community college student persistence and transfer to a four-year university include: feeling of being academically capable, earning of a regular high school diploma, and taking remedial math or reading courses in community college (Newman & Newman, 1999; Dougherty & Kienzl, 2006). Students who feel academically capable are more likely to persist through school and thus more likely to transfer. Students who took remedial math courses were more likely to persist and to transfer to four-year universities. Perhaps the remedial math course was beneficial and thus skill improvement occurred (Dougherty & Kienzl, 2006).

Meeting with an Academic Counselor

The data were analyzed to determine whether student persistence increased after meeting with an academic counselor. First-generation community college students and students of color face unique issues that are accompanied by emotional distress that requires purposeful, consistent, and student-centered interventions (Gary, Kling, & Dodd, 2004). Counselors can offer emotional support for community college students of color and play a role in student persistence (May, 2000). Peer groups help students of color cope by decreasing levels of anxiety about academics and also by providing a community of support that validates their thoughts and emotions and helps them feel less isolated and

more accepted on campus. Interactions with peers and counseling support services nurture a comfortable environment that can reduce emotional distress, increase self-efficacy, and promote student persistence (Wu & Carter, 1999). Carney-Crompton and Tan (2002) reported that the academic achievement of first-generation, non-traditional college students, including students of color, was higher than the academic achievement of non-first-generation, traditional college students when relevant support services were offered to non-traditional students, including students of color.

The limited availability of college counseling for all students creates difficulty for students who come from disadvantaged backgrounds (Zeidner, 2006). Researchers have suggested that counselors could serve as the bridge in communicating between K-12 and higher education by supporting students and informing them of necessary college information and curricular opportunities in high school that are needed for college admission, thereby increasing the rates of student persistence in college (Kirst & Bracco, 2004). When college campuses are student-centered and specifically support students of color, postsecondary education can become a reality for them (Gary et al., 2004). However, future research, including a more diverse sampling of students specifically from African-American and Latino subgroups, is needed to verify the factors that promote student persistence and academic success (Gary et al., 2004).

Zeidner (2006) defined parents, counselors, teachers, and friends as positive determinants of persistence. One way a community college counselor can increase student persistence is by assessing students during their first semester of enrollment and identifying the at-risk students (Johnson, 2006). For example, findings have indicated that

the higher a student's level of self-efficacy at the beginning of the academic year, the better he or she will adjust to college in later semesters (Ramos-Sanchez, & Nichols, 2007). This has implications for counseling interventions. Counselors who can meet with students in their first semester of enrollment can identify at-risk students by assessing their level of self-efficacy.

Knowledge of the community college system and the degree requirements and having personal support such as an academic counselor are important factors in student persistence (Byrd & Macdonald, 2005). "Good advising may be the single most underestimated characteristic of a successful college experience" (Light, 2001, p.81). Counseling is even more important in assisting community college persistence for students of color. It is especially important for students under the age of 29 (Byrd & Macdonald, 2005). Ramos-Sanchez & Nichols (2007) stated that specific services should be created to meet the needs of first-generation college students. Assisting first-generation community college students, including students of color, in developing a strong sense of self may increase their motivation to persist in their academic careers (Ramos-Sanchez & Nichols, 2007). "The greatest benefits for explaining college success of first-generation students result from thorough examination of both pre-college attributes of students and the quality of their interactions with institutions of higher education" (Ishitani, 2006, p.865).

Community college counselors assist students in obtaining baccalaureate degrees by providing initial guidance during the first stages of a college education and assisting students in transferring to four-year universities (Dougherty & Kienzl, 2006). Students of

color rely on community college counselors to guide them in earning a baccalaureate degree (Dougherty & Kienzl, 2006). The number of students enrolling in American colleges is growing steadily and the confidence level of first time college students is at an all-time high (Dougherty & Kienzl, 2006). However, the number of students of color graduating from college is decreasing (Pascarella & Terenzini, 1991; Newman & Newman, 1999; NCES, 2008). Counselors are needed more than ever to assist the increasing number of high school graduates who seem unprepared or unmotivated to attend a two-year college (Strage, 1999; Pascarella & Terenzini, 2001).

Gender

The data were analyzed to determine whether student persistence depended on gender. Women have been found to have a higher sense of school belonging and are thus more likely to persist (Pittman & Richmond, 2007). The character of departure from college is different for males and females. "The departure of females is, relative to that of males, more determined by social forces than academic ones" (Tinto, 1993, p.73). The added familial responsibility of women perhaps explains why Ishitani (2006) found women were more likely than men to drop out of college in the second year rather than in the first year of college. However, Ishitani (2006) also found women were 56% more likely than men to finish a college degree within four years.

The term educational pipeline is of importance to this study because African-American males are not persisting through the K-12 system, hindering them from enrolling or persisting in community college. The educational pipeline refers to beginning school in the first grade and continues through grade fourteen (two years of college). In education, students of all cultural and ethnic backgrounds enter first grade. Something causes many African-American and Latino students to leave before completing either high school or the first two-years of college. African-American male students are of particular concern. Many students are getting left behind; they never make the successful transition from high school to college.

Improved interventions are needed to prevent African-American males from dropping out of school and to increase their attendance and participation in the K-12 system as well as in the postsecondary system. It is imperative to support and guide more African-American males at the beginning of the educational pipeline in order for the academic gap to close and to increase school retention (Jackson, 2003). Colleges and the African-American community need to focus on increasing college participation of African-American male students. Both the colleges and the African-American community would benefit by encouraging more African-American male students to enroll in their first semester of college immediately after high school (Jackson, 2003). Increasing the number of African-American male students with college degrees would begin to close the academic achievement gap; it would enhance the business world by having a more diverse group of employees, and it would make the population of the business sector more reflective of our actual society (Jackson, 2003).

Financial Aid

The data were analyzed to determine whether student persistence increased when financial aid was offered. Research has shown that students who are offered financial aid are more likely to persist (Johnson, 2006). Community college students usually need

financial assistance. Some researchers have argued that students' decision-making process centers on money, both how much school is going to cost and how much a school degree or certificate will be worth over the course of their lives (Zeidner, 2006). Students react differently to financial aid in the form of grants versus loans, according to their economic background (St. John & Starkey, 1995).

Many students of color and first-generation community college students are from families in lower socioeconomic levels. A student of color or a first-generation community college student is more likely to attend college if he or she has a grant rather than a loan. Grants are preferred because they do not have to be paid back, whereas loans do have to be paid back (St. John & Starkey, 1995; Johnson, 2006). A grant is an award of financial assistance from a federal agency to a recipient to carry out a public purpose of support or stimulation authorized by a law of the United States (Johnson, 2006).

Two main types of grants are used by California community college students. The first grant, called a Pell Grant, is federally funded. To be eligible, an applicant must be an undergraduate student who can demonstrate financial need. The grant is usually based on the prior year's income and current asset information provided in the application. The student does not have to pay the money back.

The second grant is called a Cal Grant. It is a state funded program through the Student Aid Commission. To be eligible, an applicant must be a California resident, be a U.S. Citizen or permanent resident, obtain a social security number, and attend or plan to attend an eligible school or college in California. A student can receive only one Cal Grant, either Cal Grant A, B, or C.

Cal Grant A is for students at a four-year university. Cal Grant A helps low and middle-income students with tuition costs. Cal Grant A recipients are selected on the basis of financial need and grade point average.

Cal Grant B provides a living allowance for first-year college students who come from very low-income families. Cal Grant B is intended for students who would be unable to attend college without financial help. The award is available only for students who have completed no more than one year of full-time college work.

Cal Grant C is intended for students who desire to train for specific occupations, vocations or technical careers, but who do not have the financial resources to enter training programs because they are from low to middle income families. Grants are limited to \$530 at community colleges for programs ranging in length from four months to two years. Students must be enrolled in at least six units and demonstrate occupational achievement or aptitude in the chosen field.

A loan provides college students with funds they need to repay. Students of color and first-generation community college students are apprehensive about receiving loans because they are unsure about the cost of college compared with the time involved and the benefit in terms of their incomes over their lifetimes (Zeidner, 2006). To be eligible for a loan a student must be enrolled in at least six units. Repayment begins six months after a student withdraws or graduates from college. The interest rate of these loans is variable with a cap of 8.25%.

Direct loans are of two types: subsidized and unsubsidized. The federal government pays the interests on subsidized loans while the student is in college and

during deferments. Students must show financial need to receive subsidized loans. The federal government does not pay the interest on unsubsidized loans while the student is in college or in deferment. Students can get unsubsidized loans regardless of financial need.

Paulsen (2001) found that lower income students lacked knowledge about the return on investment for baccalaureate degrees. This indicates a possible inequity in the way information about higher education opportunities and outcomes are conveyed (Paulsen, 2001; Zeidner, 2006). "The financial aid system has become more complex and difficult to understand" (Hearn, 2001, p. 446). Students from lower SES levels and their families need to be better informed regarding the average earnings of college graduates, as well as about loans and grants (Zeidner, 2006). Information on financial aid could influence the choice of investment in higher education. It might be advantageous to provide financial counseling as early as the seventh grade to raise the aspirations of many students (Zeidner, 2006).

Many families are unaware of various forms of financial aid. Further, many students and their families who are aware of financial aid have difficulty filling out the applications (Zeidner, 2006). The lack of ability to pay for college is a contributing factor to the growing gap between low-income students and others (Zeidner, 2006). The lack of academic preparation may lead to the need to take remediation classes that in turn create a heavy financial burden for the already at-risk student. "As unprepared students discover that they are often one year into college coursework while showing little advancement toward a degree, resolves to persist toward a degree are greatly diminished" (Kirst & Bracco, 2004, p.15).

Studies have concurred that financial aid is positively associated with student persistence (DesJardins, Ahlburg, & McCall, 2005). Financial aid in the form of grants had the most positive effect on student persistence and loans had the second most positive effect on student persistence (Johnson, 2006). However, "When students receive financial aid but continue to have unmet financial need, the receipt of aid will have a negative effect on persistence due to dissatisfaction with those financial circumstances" (Dowd & Coury, 2006, p.36). Having to pay back loans after attending college with or without an earned degree can have negative effects and may cause psychological stress (Dowd & Coury, 2006). The decision to stop attending community college is affected by the student's assessment of financial costs and an estimation of future benefits, as well as the potential risks of loan default and the accruing of debt (Dowd & Coury, 2006). Dependent students who have loans have a higher rate of college persistence than independent, non-traditional students (Dowd & Coury, 2006). Independent students with higher incomes are the sole group that experiences a positive effect in community college persistence as the amounts of their loans increase (Dowd & Coury, 2006).

Attention should be given to financial advising to help students better understand the benefits and risks of various financial options (Johnson, 2006). Borrowing in combination with reduced work hours constitutes the optimal financial plan for community college student persistence because it allows for full-time studying (Dowd & Coury, 2006; King, 2002). Community colleges are affordable when students take loans to assist with school fees and life expenses (Kipp III, Price, & Wohlford, 2002).

The researcher of this study further investigated the role of financial aid in student persistence. Research has provided minimal data on the effects of loans on persistence at the community college level and findings have been mixed (Dowd & Coury, 2006). Atrisk students are less likely to know the requirements in terms of grades, competencies, entrance exams, financial aid, and the process of applying to college (Zeidner, 2006). The difference in persistence between community college students who have grants and students who have loans is believed to vary among income groups, but the discrepancies between the two types of aid is unknown (Dowd & Coury, 2006). Little is known about the effect of borrowing on community college student persistence as well as degree attainment (Dowd & Coury, 2006). Borrowing has become more common among community college students especially among students who enroll full-time and are financially independent (Berkner, 2000). Zeidner (2006) calls for research that fuses the postsecondary access literature with persistence literature in a holistic approach to measure the collective impact of preparatory information and financial assistance in contributing to higher education achievement.

Disagreement has surfaced in the field of student persistence. Kane (1999) and Davis (2000) proposed that students should be given grants in the first two years of college and then students should take out loans in their third and fourth years in the hopes that students would gain academic confidence as they persisted through school. Dowd and Coury (2006) proposed an adjustment schedule to the repayment amount of loans after college that would vary according to the student's actual income. Repayment adjusted to income level could decrease students' stress about loan repayment and shift

the balance toward a more positive view of the economic returns of degrees. The impact of more students using loans to pay for college should be better understood before student borrowing is accepted as a dominant financial aid option for community college students (Dowd & Coury, 2006). Other researchers believe making more financial aid available and helping community college students learn how to access financial assistance may improve student persistence (Zhai & Monzon, 2001).

Extended Opportunity Program and Services (EOPS)

The data were analyzed to determine whether student persistence increased when students were offered services from EOPS. EOPS was created in 1969 as a social reform program of the California Community Colleges. The program's initiating legislation, Senate Bill 164, encouraged the State's community colleges to develop programs and services to meet the unique educational needs of "students handicapped by language, social, and economic disadvantages;" programs and services "over, above, and in addition to" the regular educational programs of the college (CCCCO, 2009). The purpose of these services was to promote the growth and development of students as individuals and their successful participation in college life.

EOPS was designed to serve the community college population of non-traditional, first-generation college students, including students of color. EOPS' primary goal was to encourage the enrollment, retention and transfer of students who came from homes where the main language spoken was not English, had lower SES status, were academically unprepared, and to facilitate the successful completion of student goals and objectives. EOPS offers academic and support counseling, financial aid, and other support services

(CCCCO, 2009). EOPS can work to assist "students who lack the basic and fundamental skills, especially in mathematics and writing, and are finding it difficult to cope with the normal course workload" (Lau, 2003, p.2). EOPS supports continuous enrollment of first-generation college students and students of color. Continuous enrollment has been found to be a significant factor in community college student persistence and has an impact on the length of time students take to graduate (Belcheir, 2000).

Student departure or degree attainment is influenced by changes in family status, the amount of financial aid available, and knowledge about academic skills and career interests that fluctuate during the first year of college (Dowd & Coury, 2006). Many community college students are not traditional college students. Therefore, the students need various forms of support to aid in student persistence and academic success. It is imperative to recognize and understand that the typical community college student possesses different characteristics than the traditional university student (Fike & Fike, 2008). Many community college students are older, have more life experiences, have more familial duties, and have more work responsibilities (Fike & Fike, 2008). Institutional programs such as first-year workshops and summer orientations before their first semester of enrollment have been positively associated with college student persistence (Ishitani, 2006).

Age

The data were analyzed to determine whether student persistence was dependent on age. A sense of belonging has been found to be a key component of persistence in college students over 29 years of age (Pittman & Richmond, 2007). A non-traditional

student is an adult learner who is 25 years of age or older. This population differs from traditional college students not only in terms of life stage but also in family demands and life experiences (Ishitani, 2006). Whatever the reason, non-traditional students have delayed beginning their postsecondary careers and did not enroll in college immediately after high school. It has been asserted that delayed enrollment postpones the economic and social advantages of higher education (Horn, 1998; Johnson, 2006), and decreases persistence (Ahlburg, McCall, & Na, 2002; Johnson, 2006). However, life experiences, including work and family experience, as well as being older than many students, contributes to the development of skills seen as essential for college persistence (Byrd & Macdonald, 2005).

Community college students are usually not new adults (NCES, 2008). These students are returning to the academic environment after being out of school for five to ten years (Pascarella & Terenzini, 2001). Forty percent of community college students are between the ages of 22 and 39 years (AACC, 2009). Seventy-seven percent of full time community college students work at least part time (AACC, 2009). Eighty-three percent of part time community college students have jobs (AACC, 2009).

Older students sometimes are more comfortable in community college courses because they can relate more with the instructor (Byrd & Macdonald, 2005). An older student is not afraid or intimidated to approach a professor or to seek assistance from others, which can aid in persistence. These interactions are important because they aid in the development of academic self-concept and of being capable college students (Byrd & Macdonald, 2005). An older student (25 years and above) is more likely to act as a self-

advocate and navigate through the college system, thus increasing the likelihood of persistence (Byrd & Macdonald, 2005).

Socioeconomic Status (SES)

The data were analyzed to determine whether student persistence depended on socioeconomic status (SES). Community college students with a higher socioeconomic status have a significantly higher rate of transfer due to advantages in pre-college academic preparation and educational aspirations (Dougherty & Kienzl, 2006).

"The Golden State's promise of unparalleled access to community colleges and universities is fast becoming a tarnished relic of the past. And this state of affairs is occurring at a time when the demand for higher education has never been greater" (Piland, 2004, p.24). President Lyndon B. Johnson said in his 1964 "Great Society" speech, "Poverty must not be a bar to learning, and learning must offer an escape from poverty" (U.S. Office of the Federal Register, p.704). Community college students with a low socioeconomic status are generally students of color, first-generation students, immigrants, and special needs students. Ishitani (2006) found college students from families with incomes ranging between \$20,000 and \$34,999 were 72% more likely not to persist than college students from families with incomes of \$50,000 or more. Yet the students from lower income families are the very students who have been historically oppressed from postsecondary education (Piland, 2004).

One of every four community college students in the United States is enrolled in California (Piland, 2004). More than two million undergraduate students are enrolled in postsecondary education in California (Piland, 2004). Until recently, California had been

known for its inexpensive education, a community college or state university within driving distance of the state population, and a research university system (Piland, 2004). Now it appears the state is moving backwards and is not providing low socioeconomic students with access to its comprehensive community college system (Piland, 2004). This can affect enrollment significantly because many community college students come from the lowest income groups (Piland, 2004). "It is telling that the state appears to be losing its commitment to access at precisely the time when the majority college population will comprise people of color" (Piland, 2004, p.23).

Fees are subject to change by the California Legislature. As stated in the *KCC Factbook* (Kendall Community College, 2009), California residents pay \$20 per unit per semester. Out of state students pay \$173 per unit and an enrollment fee of \$20 per unit for a total of \$193 per unit. All community college students must pay a mandatory health fee of \$11 per semester and a \$1 student representative fee. A full time student enrolled in 12 units would pay \$252 per semester to register, not including the cost of books and parking. Annually, this would be a cost of over \$1,000, a price difficult for low-income students.

California community colleges have been regarded as the most efficient higher education institutions in the United States from the classroom perspective with 90-95% of seats filled per subject course (Piland, 2004). Yet, this is still not enough for all students of all income categories to have access and the opportunity to enroll in a community college course of their liking. The problem is twofold. First, much of the State budget is spoken for through voter initiatives, and the remainder that is designated to fund higher

education is constantly shrinking. Second, community colleges are usually allocated their legislated share after the large K-12 system and two university systems are funded (Piland, 2004). California stands at a crossroad: California citizens have attended community colleges and have been well-educated through the diverse setting of academic programs and continue to be assisted by the supportive student services offered to them. These benefits can only be realized if the citizens of California have the knowledge and determination to keep alive the historic promise of college opportunity for future generations (Piland, 2004).

First-generation community college students are less likely to persist through college because their parents' educational attainment is lower than most other students' parents (Ishitani, 2003). Johnson (2006) found that household income was a positive variable for the likelihood of fall-to-spring persistence. Overall, students from low-income families (\$25,000 or less annually) were less likely to persist through college (Johnson, 2006).

Community college students vary regarding the extent to which they have external demands. The lower these demands, the more likely community college students are to persist and transfer to four-year universities. Community college students are more likely to transfer if they have fewer work obligations while in school because work competes for time in a student's already hectic workload and schedule (Newman & Newman, 1999; Dougherty & Kienzl, 2006). Community college students who do not work or who work fewer than 40 hours per week have a strong rate of persistence and a strong rate of transfer (Dougherty & Kienzl, 2006). Also, community college students

who work fewer than 20 hours per week have a higher rate of persistence and a higher transfer rate than community college students who do not work at all. Perhaps these students realize their hard-earned money and precious time is valuable to them and they are committed to attending college (Dougherty & Kienzl, 2006).

Academic Self-Concept

The data were analyzed to determine whether student persistence depended on the level of academic self-concept. It is the belief of the researcher of this study that a student's academic self-concept can be heightened when a student completes Personal Development 20 or meets with an academic counselor. Students with strong levels of academic self-concept interact with others on campus, have an increased intellectual disposition, possess a clearer sense of career identity, and maintain a more positive attitude about their college education than those who participate less on their college campus (Pascarella & Terenzini, 2001). A student's view of his or her academic ability also affects the level of academic self-concept. This includes attitudes, feelings, and perceptions of one's academic skills and intellect (Cokley, 2000). A strong academic self-concept has been found to significantly predict academic success among minority and low-socioeconomic college students (Gerardi, 1990; Newman & Newman, 1999). A connection appears to exist between the way a student feels at his or her institution and academic success. What happens to students after they arrive at school seems to have a greater influence on their academic success and sense of self than on the type of institution they attend (Pascarella & Terenzini, 1991; Newman & Newman, 1999). The

way a student feels about the community college environment is essential in helping or hindering a student to adapt to college life and thus persist.

It is important to possess self-regulating behavior to persist academically (Ley & Young, 1998; Byrd & Macdonald, 2005). Students who persist believe they have control over the outcomes of their lives. This belief is central to the ability to advocate for one's self (Ochroch & Dugan, 1986; Byrd & Macdonald, 2005). Self-advocacy is an important skill for first-generation students to possess in order to counterbalance their lack of knowledge regarding the community college system and its requirements (Byrd & Macdonald, 2005). Self-advocating students are able to make connections with counselors, professors, and financial aid officials (Byrd & Macdonald, 2005). College students who have a strong academic self-concept have a greater sense of school belonging and have a stronger level of persistence because they are more likely to have had better grades, scholastic self-competence, work orientation, and psychological adjustment (Pittman & Richmond, 2007).

Self-Efficacy

The data were analyzed to determine whether persistence depended on the student's level of self-efficacy. The researcher of this study has concluded that a student's self-efficacy can be heightened when a student completes Personal Development 20 or meets with an academic counselor. Self-efficacy occurs when a student has strong school relationships which lead to a heightened sense of belonging in college, which in turn leads to persistence through positive beliefs and emotions about one's learning (Roeser, Midgley, & Urdan, 1996; Ramos-Sanchez & Nichols, 2007). As defined by Bandura

(1997), self-efficacy refers to people's judgment of their capabilities to organize and successfully complete a task. Self-efficacy has consistently been found to be a strong predictor of academic achievement (Hsieh et. al., 2007). Bandura (1997) and Hsieh, Sullivan, and Guerra (2007) found that students with a higher sense of self-efficacy were more motivated, worked harder, put forth a greater amount of effort to complete their personal goals, and persisted when their academics were difficult. The research regarding self-efficacy has shown that in addition to being academically capable and skilled, students also need to develop a strong sense of self and the belief that they are capable of completing the given task (Newman & Newman, 1999).

Research has indicated that first-generation college students and students of color encounter more challenges than non first-generation college students (Riehl, 1994; Bui, 2002). First-generation college students and students of color experience difficulties before and during their college experience that make them vulnerable to poorer academic performance and thus to non-persistence (Bui, 2002). The challenges that first-generation college students and students of color face include being in a lower socio-economic grouping, being a member of an underrepresented ethnic group, and speaking a language other than English in the home (Bui, 2002). Differences are apparent in the college experiences among first-generation college students, students of color, and non-first-generation college students (Ramos-Sanchez & Nichols, 2007). Compared with traditional college students, first-generation college students, including students of color, took fewer humanities courses, studied fewer hours, took fewer credits, worked more

hours, and were less likely to enroll in honors courses (Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996; Pascarella, Wolnick, Pierson, & Terenzini, 2003).

Despite the added obstacles that first-generation community college students and students of color face, many do graduate (Ramos-Sanchez & Nichols, 2007). Strong levels of self-efficacy strengthen the likelihood of community college persistence. Selfefficacy is believed to influence behavior and outcomes, and subsequently increase persistence (Bandura, 1997). Self-efficacy is related to whether or not a person engages in a particular behavior or activity (Ramos-Sanchez & Nichols, 2007). Students avoid or give less effort in situations where they have lower levels of self-efficacy. The opposite is also true; high levels of self-efficacy may increase performance and students' willingness to persevere and thus persist (Bandura, 1997). Students with higher levels of self-efficacy may not perceive obstacles as insurmountable and may exert greater effort to persist (Ramos-Sanchez & Nichols, 2007). Studies have suggested that non-first-generation college students perceive themselves as more capable and thus are more confident in academic arenas and persist in college (Ramos-Sanchez & Nichols, 2007). Since nonfirst-generation college students have an easier time acclimating to the college environment than first-generation college students and students of color, their attitudes about their abilities to perform and persist are stronger (Ramos-Sanchez & Nichols, 2007).

Self-efficacy has been found to directly relate to academic performance of college students in their first year, which is the year students are faced with the most trying issues related to transition and academic success (Chemers, Hu, & Garcia, 2001). It is

reasonable to conclude this would also extend to students of color and first-generation college students because of the connection between self-efficacy and performance outcomes (Ramos-Santos & Nichols, 2007). Having a high level of self-efficacy can improve community college student persistence for students of color and first-generation college students. Phinney and Haas (2003) examined self-efficacy and coping techniques of first-generation college students, but did not research their connection to academic performance or college adjustment. Researchers are calling for additional studies to examine the relationship between self-efficacy, academic outcomes, and the adjustment of first-generation college students (Ramos-Sanchez & Nichols, 2007).

A possible intervention by community colleges to assist with the academic success and persistence of students of color and first-generation college students would be to pair a first time student with an advanced college student of similar background and with a higher sense of self-efficacy; this pairing could help the first time student persist through their first semester of college. The advanced college student could model appropriate college behavior as well as give encouragement to the first time college student regarding his or her capabilities to persist and academically succeed (Ramos-Sanchez & Nichols, 2007). The community college could provide workshops for faculty that discuss the relationship between self-efficacy and college adjustment of students.

Drawing faculty attention to the issues of students could aid in student persistence (Ramos-Sanchez & Nichols, 2007). Professors need to be informed because they spend more time with students than any other staff on campus. Faculty members are in an

advantageous position to assist by discussing proper referrals and support services. (Ramos-Sanchez & Nichols, 2007).

College is an important time in the lives of students. In addition to academics, college can teach students to acculturate to the world, encourage new thoughts and ideas, develop interpersonal skills and critical thinking skills, discover a sense of self and career identity, and clarify values (Pascarella & Terenzini, 2001). However, students leave college for many reasons. When students are tested by academic challenges, their life skills as well as their study skills play a role in determining their academic success. College success requires student initiative and self-monitoring. Adapting to the lifestyle of a college student can be challenging and stressful for inexperienced students (Bryde & Milburn, 1990; Pascarella & Terenzini, 2001). Students of color and first-generation community college students may demonstrate resilience and determination. However, feelings of frustration, isolation, confusion, and bitterness have the potential to block student persistence (Newman & Newman, 1999). Further investigation is warranted to develop the interventions necessary to ensure a more smooth transition to college and to improve persistence for students of color and first-generation college students who are having academic difficulties.

Social Integration

The data were analyzed to determine whether student persistence depended on the level of social-integration. The researcher of this study believes that a student's social integration increases when a student completes Personal Development 20, meets with an academic counselor, and is of similar age to his or her classmates. According to Bradburn

and Carroll (2002), of the estimated one-third of entering college students who left higher education without obtaining a degree, most left during their first year. Researchers have suggested that attachment to college, defined as the degree of affiliation the student feels toward the college, is linked to social adjustment (Tao, Dong, Pratt, Hunsberger, & Pancer, 2000). A student feels as if she or he belongs when a connection has been made to the college through interactions with others on campus (Pittman & Richmond, 2007). Researchers have concluded that the construct of a sense of belonging must also have a sense of commitment to the college, a commitment to work in this setting, and a sense that one's abilities are recognized by others (Hagborg, 1994; Smerdon, 2002). A sense of belonging goes beyond friendships to a more global sense of belonging and feeling connected to a larger college community (Pittman & Richmond, 2007). Students who do not have a sense of connection to a larger college community are not as likely to persist, and they experience an increase in stress and emotional distress (Pittman & Richmond, 2007).

Students of color and first-generation college students may experience more difficulties in their first year than do traditional students. Students of color and first-generation college students also appear to have more problems in adapting to college life. They report lower levels of social adjustment to the college than do second-generation college students (McGregor, Mayleben, Buzzanga, Davis, & Becker, 1991; Terenzini, 1996; Hertel, 2002). Further research at the community college level may help educators understand better ways to assist students who enroll at community colleges with limited

support services and programs that encourage students in adjusting and persisting in earning a postsecondary degree (Pittman & Richmond, 2007).

Social integration into the college community has an impact on student retention (Fleming, 1984; Moffatt, 1989; Astin, 1993; Alford, 1995). Academic and social integration into college life are two strong predictors of retention and academic success (Newman & Newman, 1999; Strage, 1999). For urban college students, the college experience can be difficult because it encompasses two worlds: the home community and the college community. Urban students have difficulty acclimating to college life because they remain strongly connected to the traditions of home. They do not relinquish the cultural values of the home community that often clash with the college community and may prohibit the growth and development of new and different relationships at college (Alford, 1998). Though urban college students do spend time at the college campus, family members and neighborhood peers remain the two most influential groups in their lives, which may hinder their social integration (Alford, 1998).

The familial ties may restrict development of collegial relationships and have a direct influence on the types of relationships developed while on the college campus (Tinto, 1987; Alford, 1995). Sometimes the familial environments of urban college students directly block the social integration necessary to be academically successful. Urban college students also struggle because of their low socio-economic status. They have multiple burdens from which to break free in order to enroll in school and persist. Urban high school students who are academically successful run the risk of being harassed and ostracized by peers (Fordham & Ogbu, 1986). African-American students

sometimes purposely fail from school as an act of bravery, a negative way to earn respect, and to increase their self-esteem, all of which are valued among urban youth (Miller, 1958; Anderson, 1994). Another way to gain respect is to give money to financially assist one's family. Being employed runs counter to college persistence due to lack of time to take one's studies seriously (Hernandez, 1995).

The community college needs to find ways to strengthen support to urban students; otherwise these students will seek support from friends who are unfamiliar with college requirements, who lack the knowledge needed for college success, and may even give inappropriate advice (Alford, 1998). Future research needs to acknowledge the difference between an urban college student and a traditional student. Programs need to be implemented to encourage urban students to persist in school and to give community college a chance in their lives.

The more units a college student enrolls in, the more likely he or she is to persist (Dougherty & Kienzl, 2006). Taking a full class load shows a commitment to college. Students improve academically and are more socially integrated. In addition, taking more classes places the students closer to the academic and social influences of faculty and classmates (Pascarella & Terenzini, 2001; Dougherty & Kienzl, 2006).

Community colleges need to increase the integration of students into college and campus life in order to improve student persistence (Pascarella & Terenzini, 2001). The interruptions and distractions of home and job can disrupt the acclimation of community college students to campus and college life (Pascarella & Terenzini, 2001). Community college students with employment off campus have less study time and less time to

& Terenzini, 2001). A possible solution for increasing social integration and persistence would be to increase the number of jobs for students on campus or to create paid academic work through off-campus internships (Pascarella & Terenzini, 2001).

Much is still unknown regarding the impact of internal and external influences on student persistence. Most retention efforts have been unsuccessful because we still do not fully understand why students leave school (Tinto, 1993; Pascarella & Terenzini, 2001). Lack of student emotional, intellectual, and social preparation; lack of faculty and staff interaction; and a lack of student diversity perceived by students of color all cause community college students to struggle to persist (Freeman, Hall, & Bresciani, 2008). Research has shown that almost every attribute of personality can cause a student to leave their institution prior to graduating (Tinto, 1993; Pascarella & Terenzini, 2001). Student satisfaction, emotional preparedness, stability, and connection with the college are the most significant variables impacting student persistence (Freeman et. al., 2008). A perceived lack of diversity by students is also a significant influence on students' decisions to leave their institution (Freeman et. al., 2008).

Attending community college can be a consciousness-raising experience for emerging and young adults because they encounter people with diverse perspectives (Syed & Azmitia, 2008). College students who are at risk of dropping out tend to have difficulties adjusting to college as indicated by their low academic standings (Hsieh et al., 2007). Factors contributing to student drop-out include academic un-preparedness, familial responsibilities, issues with cultural adjustment, and feelings of isolation and

alienation. All variables compromise the academic experience for students of color (Jackson, 2003).

The more a student is motivated to persist and academically succeed, the more likely he or she is to be socially integrated into college life (Pascarella & Terenzini, 2005). The student's level of motivation is a strong predictor of student achievement (Elliot, 1999). Motivation is a process in which a goal-oriented activity is initiated and sustained. It is connected to behaviors such as students' choice of tasks, initiative, persistence, commitment, and investment in effort (Pintrich & Schunk, 2002). In the college retention and student persistence literature, motivation has been measured by students' aspirations and the desire to finish college. It has also been identified as a form of goal commitment (Allen, 1999). It is the responsibility of educators to design an academic arena and a socially just environment in which activities are created to facilitate student motivation (Hsieh et al., 2007). This means encouraging all students to aspire to their fullest potential. The opportunity to transfer from a community college to a fouryear university is affected by social background, pre-college academic characteristics, external demands at college entrance, and experiences during college (Dougherty & Kienzl, 2006).

CHAPTER 3

METHODOLOGY

Introduction

The purpose of this longitudinal study was to examine factors that impact persistence of African-American and Latino community college students. Persistence is defined as maintaining continuous enrollment from one semester to the next semester. It is an issue of social justice that African-American and Latino community college students are not persisting at the same rate as their counterparts in the classroom (Gill & Leigh, 2004; Dougherty & Kienzl, 2006).

The students in this study began their college coursework at Kendall Community College (KCC) for the first time in the fall of 2006. The quantitative study analyzed data from fall 2006, spring 2007, fall 2007, and spring 2008 semesters. The study examined factors that impact persistence by analyzing the following variables: completing Personal Development 20 (a college skills course), meeting with an academic counselor, gender, being offered financial aid, being offered services from Extended Opportunity Program and Services (EOPS), age, and socio-economic status (SES). The students identified themselves by race on their admissions applications.

Research Questions and Hypotheses

Hola: There will be no significant difference in persistence for African-American students who completed Personal Development 20 compared to African-American students who did not complete the course.

Holb: There will be no significant difference in persistence for Latino students who completed Personal Development 20 compared to Latino students who did not complete the course.

Ho2a: There will be no significant difference in persistence for African-American students who met with an academic counselor compared to African-American students who did not meet with an academic counselor.

Ho2b: There will be no significant difference in persistence for Latino students who met with an academic counselor compared to Latino students who did not meet with an academic counselor.

Ho3a: There will be no significant difference in persistence for African-American students dependent on gender. Analyses examined whether females or males persisted in college longer.

H*o*3b: There will be no significant difference in persistence for Latino students dependent on gender. Analyses examined whether females or males persisted in college longer.

Ho4a: There will be no significant difference in persistence for African-American students who were offered financial aid compared to African-American students who were not offered financial aid.

Ho4b: There will be no significant difference in persistence for Latino students who were offered financial aid compared to Latino students who were not offered financial aid.

Ho5a: There will be no significant difference in persistence for African-American students who were offered services from EOPS compared to African-American students who were not offered services.

Ho5b: There will be no significant difference in persistence for Latino students who were offered services from EOPS compared to Latino students who were not offered services.

Ho6a: There will be no significant difference in persistence for African-American students dependent on age.

Ho6b: There will be no significant difference in persistence for Latino students dependent on age.

Ho7a: There will be no significant difference in persistence for African-American students dependent on SES.

Ho7b: There will be no significant difference in persistence for Latino students dependent on SES.

Methodology

The longitudinal study employed a quantitative design. The study involved collecting the following data related to students: completed Personal Development 20, met with an academic counselor, gender, being offered financial aid, being offered services from EOPS, age, and SES. The student recorded his or her race on the admissions application. The fall of 2006 was the students' first semester of enrollment at Kendall Community College (KCC). The researcher requested and received permission from KCC to use the institution's data. The Associate Dean of Research and Planning at

KCC provided the data in aggregated form. No individual student records were identifiable to any student; individual names and identification numbers were excluded. The data represented the following semesters at KCC: fall 2006, spring 2007, fall 2007, and spring 2008. The data was composed of 154 African-American students and 455 Latino students enrolled at KCC.

Validity and Reliability

KCC is one of nine community colleges that make up the largest community college district in the United States. The admissions application students completed to enroll in KCC offered strong validity because it is standardized across the district.

Students provided the data on ethnicity, gender, age, and SES. KCC provided the researcher with summary-level data on students who completed Personal Development 20, met with an academic counselor, were offered financial aid, and were offered services from EOPS.

Research Population

The community college district that includes KCC is the largest in the United States, covering over 882 square miles. KCC, one of nine two-year public community colleges in this district, is situated in a suburban area of Southern California and serves ten surrounding cities. This community college district educates almost three times as many Latino students and nearly four times as many African-American students as all the University of California campuses combined. More than half of the students in this community college system are older than 25 years of age, and more than a quarter are 35 years of age or older.

KCC has grown from a technically oriented community college since opening its doors in 1949 into a comprehensive community college. KCC offers twenty-two Associate degrees in such majors as liberal arts, accounting, administration of justice, architectural technology, biological science, business, child development, computer applications and office technology, computer information systems, drafting, engineering, physical science, social behavioral sciences, and offers two-semester Career Certificates. KCC has many academic options: transfer to a four-year university, vocational certificates, and community services programs. KCC serves approximately 8,000 students each semester. Eighty percent of KCC students are from underserved populations. The student body composition of KCC is 45% Latino, 20% Asian, 18% white, 15% African-American and 2% other. KCC is designated a Hispanic Serving Institution. Students at KCC range in age from eleven years to ninety years old. The study uses data from the following semesters at KCC: fall 2006, spring 2007, fall 2007, and spring 2008. The data is composed of 154 African-American students and 455 Latino students.

KCC's office of EOPS specializes in aiding students from lower socio-economic groups, students who come from households where English is not the main spoken language, and non-traditional students to further their achievement of academic goals. The office of financial aid assists qualified students. In 2008, over \$2 million dollars in financial aid was available to KCC students through federal, state, and special grant sources.

Data Collection and Methods

In making arrangements for collection of data, the Associate Dean of Research and Planning at KCC was contacted and invited to supply the data for the study. The researcher completed the Institutional Review Board process for Loyola Marymount University and obtained written permission from KCC as required in the Loyola Marymount University Institutional Review Board process. With the Associate Dean's assistance and support, KCC agreed to provide data drawn from admission applications and academic records that could not be identified with any individual student. The data included: completion of Personal Development 20, met with an academic counselor, gender, being offered financial aid, being offered services from EOPS, age, and SES. Students specified their ethnicity on their admissions application. Fall of 2006 was their first semester of enrollment at KCC. Data was reviewed for the following semesters: fall 2006, spring 2007, fall 2007, and spring 2008.

Sampling Method

The population studied was first time African-American and Latino students at KCC. The first semester of enrollment was fall of 2006. The Associate Dean of Research and Planning from KCC provided the data in aggregated form; no individual student records were identifiable. Names and identification numbers were excluded. For the purposes of the study, persistence is from fall to spring semester, and from spring to fall semester; winter and summer semesters are excluded. Students needed to complete all four semesters without a break to be considered as persisting.

Sample Size

The total number of new community college students who identified themselves either as African-American or Latino on their admission application was 609: 154

African-American and 455 Latino part-time and full-time students were included in the new student data from the fall of 2006. Two-thirds of all KCC community college students attended college part-time. Part-time status is defined as a student enrolled in a total of eleven units or less per semester.

Instrumentation

Three statistical tests were conducted: t-tests, Pearson's correlations, and multiple regression analysis. A t-test was used to compare the dependent variable persistence with the independent variables: completing Personal Development 20, meeting with an academic counselor, gender, being offered financial aid, being offered services from EOPS, age, and socio-economic status (SES). Correlations were run to examine the strength and direction of the relationship among variables. The study allowed for post hoc analyses. A multiple regression identified which of the seven independent variables together or alone best predicted student persistence at KCC.

Data Analysis

The data were subjected to statistical tests, namely, t-tests on continuous data to compare the dependent variable persistence with each of the independent variables: completing Personal Development 20, meeting with an academic counselor, gender, being offered financial aid, being offered services from EOPS, age, and socioeconomic status (SES). The researcher also applied Pearson's correlation and multiple regression

analysis on categorical and nominal data to determine the degree of association between persistence and each variable. Post hoc analyses examined the data using a multiple regression test. Multiple regression analysis examined the relationships between several independent variables and the dependent variable persistence. A multiple regression test examined which of the seven independent variables alone or in combination best predicted student persistence at KCC.

CHAPTER 4

RESULTS

Introduction

This chapter reports the findings from data that were collected to examine factors that impact persistence of African-American and Latino community college students. The researcher of this study believes the fact that African-American and Latino community college students are not persisting at the same rates as their counterparts in the classroom is an issue of social justice (Gill & Leigh, 2004; Dougherty & Kienzl, 2006). Persistence was defined as maintaining continuous enrollment from one semester to the next for four consecutive semesters over the 2006-2007 and 2007-2008 academic years. The researcher of this study anticipates that the study's findings can help educators understand the assistance needed to increase African-American and Latino community college student persistence.

The factors examined included whether students complete Personal Development 20, meet with an academic counselor, were offered financial aid, and were offered services from Extended Opportunity Programs and Services (EOPS). Moreover, students' gender, age, and socioeconomic status (SES) were examined as factors influencing persistence. It was hypothesized that there would be no significant difference in persistence between students who completed Personal Development 20, met with an academic counselor, were offered financial aid, or were offered services from EOPS, compared to students who did not complete Personal Development 20, did not meet with an academic counselor, were not offered financial aid, and were not offered services from

EOPS. Moreover, it was hypothesized that there would be no significant difference in persistence between male and female students. Finally, it was hypothesized that age and SES were not related to persistence.

Several statistical tests were conducted and findings are presented as follows: descriptive information, t-tests, Pearson's correlations, and multiple regression analysis. Data are presented by ethnicity (first for African-American students and then for Latino students) because it is the belief of this researcher that diversity should be honored and two ethnic groups should not be compared. The researcher believes it is ethically wrong and perpetuates social injustice to compare ethnic groups to each other. Comparison of groups would not allow each ethnicity to be its unique self. The study's findings for African-American and Latino community college students will remain separate from one another in order to fully understand factors impacting persistence within each ethnicity.

The students in this study began their college coursework for the first time at KCC in the fall of 2006. KCC, one of the nine community colleges that make up the largest community college district in the United States, provided the researcher with its data for the purpose of this study. The data include information entered on applications completed by students when they applied for admission to KCC; data were provided in summary form and did not disclose the identity of any student. The application for admission is considered to possess high validity because it is a standardized application across the nine community colleges in the district. KCC students self-reported personal information and the data were assumed to be accurate. This quantitative study analyzed data from applications for admission for the fall semester 2006. Data were analyzed for

the same students over four semesters. The semesters were coded as follows: fall 2006 = 1, spring 2007 = 2, fall 2007 = 3, and spring 2008 = 4.

The dependent variable of persistence was defined as continuous enrollment throughout four semesters. As such, a student who enrolled in all four semesters was coded as persisting for four semesters, while a student who only enrolled in the fall 2006 was coded as persisting for one semester. A student who enrolled in fall 2006 but not the spring 2007, even if he or she re-enrolled in a later semester, was still defined as having persisted for only one semester.

The study encompassed several factors in relation to persistence including: completing Personal Development 20 (a college skills course; 0 = no, 1 = yes), meeting with an academic counselor (0 = no, 1 = yes), being offered financial aid (0 = no, 1 = yes), and being offered services from Extended Opportunity Program and Services (EOPS; 0 = no, 1 = yes). Students self-reported their gender (1 = male, 2 = female), age (continuous variable), and current zip code. The zip code data was used to determine SES, from the median household income reports by the U.S. Census (U.S. Census, 2007). These median household incomes provided an indicator of students' SES. To increase statistical power, age and SES remained as continuous variables. Financial aid and EOPS variables were defined as offers of assistance. Finally, the students identified themselves by race. For purposes of this study, only students who self-reported their ethnicity as African-American or Latino were included in this analysis.

Descriptive Information for All Students

Data from 609 African-American and Latino KCC students were analyzed for this study. There were 154 African-American and 455 Latino students in the sample. Of the 609 students, 284 were male and 325 were female. The mean age of the entire sample was 22.35 (SD = 7.15). The mean SES or income value was \$39,421 (SD = 11,511). Twenty-four students completed Personal Development 20; 291 students met with an academic counselor; 303 were offered financial aid; and 68 students were offered services from EOPS.

Results for African-American Community College Students

Data were collected to examine factors that impacted persistence of African-American community college students included in the study. The following section presents the findings for each hypothesis for African-American students. For each hypothesis the researcher anticipated there would be no difference in persistence based on the variable of interest.

Descriptive information.

Data from 154 African-American community college students (78 female and 76 male) are analyzed for this study. The mean age for the African-American students was 23.53 years (SD = 8.73). The minimum age was 17.4 years and the maximum age was 57.3 years. Eight African-American community college students completed Personal Development 20. Seventy-four African-American students met with an academic counselor. The mean SES for African-American students was \$38,900 (SD = 11,351).

Ninety-three African-American students were offered financial aid assistance. Twenty-five African-American students were offered services from EOPS.

Pearson's correlation coefficients.

To examine the relationship among all variables, Pearson's correlation coefficients were run on the data for African-American students (see Table 1). The table indicates the strength of the correlation and the direction of the relationship between two variables. Column 1 summarizes the degree of association between persistence and each variable examined.

Table 1

Correlations for African-American Students

Variables	1	2	3	4	5	6	7
1. Persistence							
2. Personal Development	.13						
3. Counselor	.42**	0.07					
4. Gender	.05	-0.06	.20*				
5. Financial Aid	.21**	-0.05	.27**	0.02			
6. EOPS	.17*	-0.02	.18*	0.15	0.32*	*	
7. Age	.21**	0.16	.32**	0.20*	-0.13	0.18*	
8. SES	.29**	0.07	.17*	0.04	-0.02	-0.02	-0.1

^{*} Correlation is significant at the 0.05 level

Hypothesis testing.

The first hypothesis stated that persistence would not significantly differ for African-American students who completed Personal Development 20 compared to African-American students who did not complete Personal Development 20 (see Table 2). This hypothesis was supported. African-American students who completed Personal

^{**} Correlation is significant at the 0.01 level

Development 20 (M = 2.63, SD = 1.41) persisted at the same rate as African-American students who did not complete Personal Development 20 (M = 1.71, D = 1.56).

Table 2

Persistence by Personal Development 20 for African-American Students (N = 154)

	Yes (1	Yes (N = 8)		No (N = 146)			
Variable	M	SD	M	SD	t	df	
Persistence	2.63	1.41	1.71	1.56	1.63	152	

It was hypothesized there would not be a significant difference in persistence of African-American students who met with an academic counselor compared to African-American students who did not meet with an academic counselor (see Table 3). This hypothesis was not supported. African-American students who met with an academic counselor (M = 2.43, SD = 1.52) significantly differed from African-American students who do not met with an academic counselor (M = 1.12, SD = 1.33); African-American students who met with an academic counselor were more likely to persist.

Table 3

Persistence by Counselor for African-American Students (N = 154)

	Yes (N = 74)		No (N	No $(N = 80)$		
Variable	M	SD	M	SD	t	df
Persistence	2.43	1.52	1.12	1.33	5.66**	146

^{**} Significant at the 0.01 level

It was hypothesized there would not be a significant difference in persistence of African-American students by gender. The hypothesis was supported. There was no significant difference in persistence for African-American students based on gender (see Table 4). African-American students persisted at rates with no significant difference: males (M = 1.67, SD = 1.54) and females (M = 1.83, SD = 1.60).

Table 4

Persistence by Gender for African-American Students (N = 154)

	Yes (N	Yes (N = 76)		No $(N = 78)$			
Variable	M	SD	M	SD	t	df	
Persistence	1.67	1.54	1.83	1.60	0.64	152	

It was hypothesized there would be no significant difference in persistence for African-American students who were offered financial aid compared to African-American students who were not offered financial aid (see Table 5). This hypothesis was not supported, such that African-American students who were offered financial aid (M = 2.02, SD = 1.53) persisted at a significantly higher rate (p < .01) than African-American students who were not offered financial aid (M = 1.34, SD = 1.54).

Table 5

Persistence by Financial Aid for African-American Students (N = 154)

-	Yes (N = 93)		No (N	No (N = 61)		
Variable	M	SD	M	SD	t	df
Persistence	2.02	1.53	1.34	1.54	2.68**	152

^{**} Significant at the 0.01 level

It was hypothesized there would be no significant difference in persistence between African-American students who were offered services from EOPS and those who were not offered services (see Table 6). This hypothesis was not supported. African-American students who were offered services from EOPS (M = 2.36, SD = 1.70) persisted at a significantly higher rate (p < .05) than African-American students who were not offered services from EOPS (M = 1.64, SD = 1.52).

Table 6

Persistence by EOPS for African-American Students (N = 154)

	Yes (N	Yes (N = 25)		No (N = 129)		
Variable	M	SD	M	SD	t	df
Persistence	2.36	1.70	1.64	1.52	2.14*	152

^{*} Significant at the 0.05 level

It was also hypothesized there would be no significant difference in persistence of African-American students related to age or SES. Correlations were conducted that examined these relationships. The hypothesis was not supported. As seen in Table 1, age was significantly and positively related to persistence (r = .21, p < .01). In other words, older African-American students persisted longer. SES was significantly related to persistence (r = .29, p < .01); as SES increased, so did persistence.

Results for Latino Community College Students

Data were collected to examine factors that impacted persistence for Latino community college students. The following sections present the findings for each hypothesis for Latino students. For each hypothesis the researcher anticipated there would be no difference in persistence based on the variable of interest among Latino students.

Descriptive information.

Data from 455 Latino community college students were analyzed for this study. Of the 455 Latino students, 247 were female and 208 were male. The mean age of Latino community college students was 22.0 years (SD = 6.50). The minimum age was 17.4 years and the maximum age was 54.9 years. There were 16 Latino students who completed Personal Development 20 and 217 Latino students who met with an academic

counselor. The mean SES for Latino students was \$39,595 (SD = \$11,571). There were 209 Latino students who were offered financial aid assistance and 43 Latino students who were offered services from EOPS.

Pearson's correlation coefficients.

To examine the relationships among all variables, Pearson's correlation coefficients were run on the data related to Latino students (see Table 7). The table indicates the strength of the correlation and in the direction of the relationship between the two variables. Column 1 summarizes the degree of association between persistence and each variable examined.

Table 7

Correlations for Latino Students

Variables	1	2	3	4	5	6	7
1. Persistence							
2. Personal Development	.01						
3. Counselor	.48**	04					
4. Gender	.02	06	.11*				
5. Financial Aid	.22**	.11*	.22**	.10*			
6. EOPS	.16**	.14**	.16**	.12*	.35**		
7. Age	17**	02	18**	.03*	10*	-0.04	
8. SES	00	07	08	08	06	-0.06	0.04

^{*} Correlation is significant at the 0.05 level

Hypothesis testing.

The first hypothesis stated that persistence would not be significantly different for Latino students who completed Personal Development 20 compared to Latino students who did not complete Personal Development 20 (see Table 8). This hypothesis was

^{**} Correlation is significant at the 0.01 level

supported; Latino students who completed Personal Development 20 (M = 2.00, SD = 1.46) were not significantly different from Latino students who did not complete this course (M = 1.95, SD = 1.47).

Table 8

Persistence by Personal Development for Latino Students (N = 455)

	Yes (N	Yes (N = 16)		No $(N = 439)$			
Variable	M	SD	M	SD	t	df	
Persistence	2.00	1.46	1.95	1.47	0.14	453	

It was hypothesized that there would be no significant difference in persistence for Latino students who met with an academic counselor compared to Latino students who did not meet with an academic counselor (see Table 9). This hypothesis was not supported. Latino students who met with an academic counselor (M = 2.68, SD = 1.32) significantly differed (p < .01) from Latino students who did not meet with an academic counselor (M = 1.28, SD = 1.26); Latino students who met with an academic counselor persisted at a higher rate.

Table 9

Persistence by Counselor for Latino Students (N = 455)

	Yes (N = 217)		No (N	No $(N = 238)$		
Variable	M	SD	M	SD	t	df
Persistence	2.68	1.32	1.28	1.26	11.54**	444

It was hypothesized there would not be a significant difference in persistence for Latino students by gender. The hypothesis was supported. There were no significant differences in persistence for Latino students based on gender (see Table 10). Latino students persisted at rates that were not significantly different: males (M = 1.91, SD = 1.47) and females (M = 1.98, SD = 1.47).

Table 10

Persistence by Gender for Latino Students (N = 455)

	Yes $(N = 208)$		No (N	No (N = 247)		
Variable	M	SD	M	SD	t	df
Persistence	1.91	1.47	1.98	1.47	0.48	453

It was hypothesized there would be no significant difference in persistence for Latino students who were offered financial aid compared to Latino students who were not offered financial aid (see Table 11). This hypothesis was not supported; Latino students who were offered financial aid (M = 2.30, SD = 1.44) persisted at a significantly higher rate (p < .01) than Latino students who were not offered financial aid (M = 1.65, SD = 1.42).

Table 11

Persistence by Financial Aid for Latino Students (N = 455)

	Yes (N	Yes $(N = 245)$		No $(N = 209)$		
Variable	M	SD	M	SD	t	df
Persistence	2.30	1.44	1.65	11.42	4.85**	452

^{**} Significant at the 0.01 level

It was hypothesized that there would be no significant difference in persistence for Latino students who were offered services from EOPS and those who were not offered services (see Table 12). This hypothesis was not supported. Latino students who were offered services from EOPS (M = 2.65, SD = 1.29) persisted at a significantly higher rate (p < .01) than Latino students who were not offered services from EOPS (M = 1.88, SD = 1.47).

Table 12

Persistence by EOPS for Latino Students (N = 455)

	Yes (N = 43)		No (N = 412)				
Variable	M	SD	M	SD	t	df	
Persistence	2.65	1.29	1.88	1.47	3.44**	453	

^{**} Significant at the 0.01 level

It was also hypothesized there would be no significant difference in persistence for Latino students related to age. Correlations were conducted that examined these relationships. The hypothesis was not supported. As seen in Table 7, age was significantly but negatively related to persistence (r = -.17, p < .01). In other words, younger Latino students were more likely to persist. SES was not significantly related to persistence (r = -.00).

Multiple Regression Analyses

In addition to examining the factors related to persistence for each ethnicity, a linear regression was conducted to examine whether taken together, the variables of ethnicity, Personal Development 20, academic counselor, gender, financial aid, EOPS, age, and SES predicted persistence (see Table 13). This analysis allowed for an examination of the predictive ability of all variables taken together. The literature highlighted that ethnicity is an important factor to consider when predicting persistence among community college students. While the researcher still advocates against comparing ethnicities, a multiple regression analysis allowed for such an examination in order for other researchers to extend this line of research. All variables were entered simultaneously on the same step of the equation predicting persistence.

The overall model was significant (F (8,593) = 35.68, p < .001), indicating that ethnicity, Personal Development 20, academic counselor, gender, financial aid, EOPS, age, and SES significantly accounted for approximately 33% of variance in student persistence over four continuous semesters of community college.

Table 13
Summary of Regression Analysis for Variables Predicting Persistence for all Students (African-American and Latino)

Variables	Persistence		
	В	SE B	В
1. Ethnicity	.24	.12	.07*
2. Personal Development 20	.19**	.27	.02
3. Academic Counselor	1.05	.11	.35***
4. Gender	10**	.10	03
5. Financial Aid	0.32	.04	.31***
6. EOPS	08	.18	.02
7. Age	17	.06	11**
8. SES	.12	.07	.06

^{*} Significant at the 0.05 level

Several variables in the model significantly predicted persistence. Specifically, ethnicity significantly predicted persistence (β = .07; t (593) = 2.02, p < .05) indicating that Latinos were more likely to persist than African American students. Furthermore, age also significantly predicted persistence (β = -.11; t (593) = 3.12, p < .01) indicating that younger students were more likely to persist. Meeting with an academic counselor (β = .35; t (593) = 9.51, p < .001) also significantly predicted persistence such that students who met with an academic counselor were more likely to persist. Finally, financial aid significantly predicted persistence (β = .31; t (593) = 7.87, p < .001), indicating that

^{**} Significant at the 0.01 level

^{***} Significant at the 0.001 level

students who were offered financial aid were more likely to persist. Other variables in the model, gender, Personal Development 20, SES, and EOPS were not significant predictors of persistence. Finally, multicollinearity was checked and all variables had adequate tolerance levels indicating that while the predictor variables may be related, this relationship did not overlap to violate the assumption of independence necessary for the regression analysis.

Summary

The study looked at aggregated data that prohibited disclosure of individual identities. Altogether, data from 609 African-American and Latino first-time students at KCC were analyzed. The study focused on the following seven variables and their influence on persistence: completing Personal Development 20, meeting with an academic counselor, gender, offered financial aid, offered services from EOPS, age, and SES. Persistence was defined as maintaining continuous enrollment for four consecutive semesters over the 2006-2007 and 2007-2008 academic years. The findings suggested that meeting with an academic counselor, age, being offered financial aid, and being offered services from EOPS for both African-American and Latino community college students significantly influenced persistence. In regard to age, younger Latino community college students were more likely to persist than older Latino students. However, older African-American community college students were more like to persist than younger African-American students. Findings also indicated that completing Personal Development 20 was not a significant factor in determining persistence for African-American and Latino community college students. Results of tests related to SES differed according to ethnicity. SES was not a significant influence on persistence for Latino community college students but did significantly influence persistence (p < .01) for African-American community college students.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

Introduction

Chapter 5 reviews the purpose of the study and the results of each of the seven research questions. The significance and implications of the study and its connection to issues of social justice are presented. A brief review of academic self-concept, self-efficacy, and social integration is included. Limitations of the study are stated. In addition, Chapter 5 makes recommendations for future research and program development to be pursued between K-12 schools and institutions of higher education.

Review of Research Questions and Purpose of the Study

This study analyzed aggregated data (individual identities not disclosed) from 609 African-American and Latino first-time community college students. The researcher was particularly concerned with the equality and equity of opportunity in post-secondary education for students of color. Social justice demands that all people, from the poorest to the richest, have equal rights and opportunities (Ellis-Christenson, 2010). The researcher examined the influence of seven variables on the persistence of first-time African-American and Latino community college students.

The purpose of this study was to bring additional and deserved attention to the persistence of African-American and Latino community college students. Students of color are not persisting at the same rates as their White classmates (Gill & Leigh, 2004; Dougherty & Kienzl, 2006). Forty-five percent of African-American community college students and 40% of Latino community college students stop attending community

college prior to completing an Associate's degree or a vocational certificate. Thirty-five percent of white community college students stop attending prior to completing a degree (NCES, 2009). In order to be prepared for professional opportunities, students of color must persist in community colleges.

Review of the Findings

Data were reviewed from 609 African-American and Latino KCC students who enrolled for the first-time in the fall 2006 semester. This study found meeting with an academic counselor (p < .01), being offered financial aid assistance (p < .01), and being offered services from EOPS (p < .05), significantly and positively influenced persistence. The impact of age and SES differed by ethnicity. The study found older African-American students (p < .01) and younger Latino students (p < .01) were more likely to persist. SES (p < .01) was found to significantly influence persistence for African-American students. SES was not found to be a significant factor in Latino community college student persistence. Age, gender, and completing a Personal Development 20 course did not significantly influence African-American or Latino community college student persistence.

Completing Personal Development 20.

Personal Development 20 is a three-unit course that provides guidance for students to make informed educational, career, and lifestyle choices. Eight African-American and 16 Latino KCC students completed Personal Development 20. T-tests, Pearson's correlations, and multiple regressions were used to analyze the data. All statistical analyses supported the null hypothesis on completing Personal Development

20. Students who completed Personal Development 20 did not persist at a higher rate than students who did not complete Personal Development 20.

The results of this study contrasted with the research of Byrd and Macdonald (2005) who demonstrated that student persistence was positively impacted when students possessed academic and time management skills, were able to apply themselves, focused on goals, and were able to advocate for themselves. These are the traits and topics reviewed and discussed in a Personal Development 20 course. One explanation of the differing results is that the study examined first-time college students of color at a community college, whereas, Byrd and Macdonald studied first-generation students at a four-year university. Though this study did not find completing Personal Development 20 to significantly influence persistence for African-American and Latino community college students, further research might prove otherwise.

Meeting with an academic counselor.

This study found that community college students of color who met with an academic counselor were more likely to persist than community college students of color who did not meet with an academic counselor. Persistence rates for African-American (p < .01) and Latino (p < .01) students who met with an academic counselor significantly differed from persistence rates of African-American and Latino students who did not meet with an academic counselor.

The findings illustrated the impact of community college counselors on student persistence. This study supported research completed by Johnson (2006) who found that when students met with counselors, they were more likely to persist because the

counselor-student relationship helped to strengthen the quality of students' on-campus interaction, positively influencing persistence. In addition, Pittman and Richmond (2007) found that students who did not meet with an academic counselor were more likely to experience heightened levels of stress and emotional distress, hindering their persistence. Dougherty and Kienzl (2006) stated that community college academic counselors who advised students during the first stages of a college education influenced students to earn baccalaureate degrees. Academic counselors first guide students in obtaining a two-year degree and then support and counsel students in transferring to four-year universities. Alford (1995), Strage (1999), Pascarella and Terenzini (2001), and Pittman and Richmond (2007) asserted that counselors need to assist an increasing number of high school graduates enrolling in and persisting at two-year colleges. This study further proved that counselors are a significant and positive influence on community college persistence for students of color.

This study's findings supported Light's (2001) statement: "Good advising may be the single most underestimated characteristic of a successful college experience" (p.81). This study reinforced research by Gary, Kling, and Dodd in 2004 who asserted that community college students of color face unique concerns accompanied by emotional distress that requires purposeful, consistent, and student-centered interventions such as counseling. When counselors offered emotional support to community college students of color, student persistence increased. Carney-Crompton and Tan (2002) stated the academic achievement of first-generation college students was higher than the academic achievement of non-first-generation and traditional college students when relevant

support services such as counseling were offered to first-generation students. Outreach by academic counselors at the beginning of students' academic careers is vital to increasing persistence. College is a time of self-discovery and self-construction, and both processes are positively supported when college students meet with an academic counselor. A college counselor is the ideal academic professional to provide guidance for community college students on the road to an adult identity (Luyckx, Schwartz, & Soenens, 2010).

Gender.

There was no significant difference in persistence of African-American or Latino students based on gender. This study was unable to support the work of Grant-Thompson and Atkinson (1997), Jackson (2003), Ishitani (2006), Pittman and Richmond (2007), and Harper and Quaye (2007) who found that women were more likely to persist than men.

One possible explanation for the contrasting results could be the current economic situation in California. Due to the State's high unemployment rate, more male students of color are enrolled in community college, potentially increasing persistence rates for male students of color (CCCCO, 2009).

Financial Aid.

The analysis revealed a strong link between students offered financial aid assistance and persistence of first-time community college students of color. African-American (p < .01) and Latino (p < .01) students who were offered financial aid persisted at a significantly higher rate than African-American and Latino students who were not offered financial aid.

Many community college students need financial assistance to enroll and persist (DesJardins et al., 2005; Dowd & Coury, 2006; Plecha, 2003; Snyder, 2003). Zeidner (2006) found students' decision-making processes regarding college enrollment concerned money: both how much college costs and how much a college education would be worth over the course of a lifetime. This study supported the research of Zeidner (2006) who also demonstrated a need to inform students and families from lower SES levels about the average earnings of college graduates, as well as provide information on loans and grants. As demonstrated in this study, Zhai and Monzon (2001) found that making additional financial aid available and helping community college students access financial assistance, increased student persistence. Financial assistance directly and positively affected persistence rates for students of color; it was found that students with financial aid, including community college students of color, tended to have stronger aspirations to persist and obtain their academic goals (Wei & Horn, 2009).

Thirty-nine percent of full-time community college students were offered and received some type of financial aid from federal, state, local or institutional sources (Snyder, 2003). Students were borrowing more money to meet living expenses because fewer grants and fellowships were available (Plecha, 2003; Strauss, 2001). Research by Merisotis and Wolanin (2000) and Plecha (2003) added that on average, community college students borrowed \$1.5 billion annually through federal loan programs. The average California community college student spent \$12,266, during the 2008-2009 academic year (The California Student Aid Commission, 2010). This is a large amount of money for low-income families. Kipp III, Price, and Wohlford (2002) demonstrated that

community colleges were affordable when students took advantage of loans to assist with school fees and living expenses. If more students needed financial aid and less financial aid were available, more students would choose not to attend college.

The California Community Colleges Student Financial Aid Administrators
Association (2010) reported:

The insufficiency of available aid for low-income students was the frustration most commonly expressed by college administrators. Maximum Pell and Cal Grants do not come close to covering even half of a typical cost of attendance for a full-time student, and income earned through a reasonable level of work will not cover remaining expenses. Few community college students take out federal loans, but those who do cannot cover all educational expenses with the maximum federal and state grant aid available and a modest amount of work. For community college students who are not low-income enough for Pell Grants, or who missed the application deadline for Cal Grants, there may be no federal or state grant aid available (p.8).

EOPS.

This study results demonstrated that students who received EOPS services were significantly more likely to persist than those who did not. The persistence rates of African-American and Latino students who were offered services by EOPS were significantly higher (p < .05 for African-American students and p < .01 for Latino students) than those of African-American and Latino students who were not offered EOPS services. Services offered by EOPS included financial, academic, and emotional

assistance for students who, because of their backgrounds, have not had an equal opportunity to attend college or experience academic success.

In order to qualify for assistance from EOPS, students need to prove financial and educational disadvantage and must be California residents. To remain eligible for the EOPS program, students must maintain full-time student status. EOPS assistance positively influences community college students of color (Wei & Horn, 2009). The assistance EOPS provides helps students overcome many of the academic and financial barriers.

Age.

Age was a significant factor in community college persistence for older African-American students (p < .01) and for younger Latino students (p < .01). Findings on the impact of age on student persistence were mixed. This study supported the work of Byrd and Macdonald (2005) and Ishitani (2006) who stated that life experiences, including full-time work, having a family of their own, and running a household, as well as being older than many students, increased older students' rates of persistence. These authors reasoned that older students had developed skills seen as essential for college persistence. Various types of aid, especially EOPS, allow older students, often with families, the opportunity to limit their work hours, meet their families' needs, and pursue their studies (Institute for College Access & Success, 2007). However, the findings of this study contrasted with the work of Horn (1998), Ahlburg, McCall, and Na (2002) and Johnson (2006) who found that delayed enrollment decreased student persistence. They hypothesized that because the older students postponed college, their rates of persistence

would decrease because older students would decide not to enroll in college after comparing time invested and economic returns.

The findings from the current study showed that older African-American community college students were more likely to persist (p < .01) than younger African-American students. Pittman and Richmond (2007) demonstrated that older students were more likely to feel they belonged on the college campus, and a sense of belonging was a key indicator of college student persistence. Grounded speculation by the researcher of one possible explanation of this study's findings could be that older African-American college students were more likely to persist due to maturity and having more life experiences than younger African-American college students.

Younger Latino community college students were significantly more likely to persist (p < .01) than older Latino community college students. The results of this study indicated it is important to encourage Latino students to enroll in college as soon as possible after graduating high school.

The results of this study indicate that more Latino students might earn four-year degrees if educators worked to increase the enrollment of younger Latino students in community colleges. Latinos are projected to account for 80% of California's high school graduates by 2010, yet only half of Latino high school graduates are projected to enter a California community college (Chavez, 2008). Latino students are often the first in their families to attend college. As a result, many students must work to support themselves and their families. Grounded speculation by the researcher of one possible explanation of the finding is that younger Latino college-students were more likely to persist because

they had fewer family obligations and responsibilities. As Latino college students age, they are expected by their culture to direct their priorities to their families and not to academics.

SES.

SES was significantly related to persistence (p < .01) for African-American students. As SES increased, so did persistence. This finding supported the work of Dougherty and Kienzl (2006), Ishitani (2006), and Johnson (2006) who demonstrated that community college students with higher socio-economic status had a significantly higher transfer rate due to their better academic preparation and higher educational aspirations.

SES was not a significant influence on persistence for Latino community college students. Grounded speculation by the researcher suggests a possible explanation that centers on the strong focus on family within the Latino culture; a number of relatives may support Latino community college students in a variety of ways, which may include financial support. The more family members who are financially supporting Latino community college students, the more insignificant SES is in influencing student persistence.

Significance of the Study

This study is significant because research on community college students of color is lacking. This study has begun the process, but more research is needed to understand the factors impacting persistence for students of color at the community college level. In order for our communities and states to advance social justice, more research is needed on both students of color and community colleges.

Community colleges create a more just society because they enroll 41% of all non-traditional college students plus low income and older students, as well as students of color (NCES, 2009). Sixty-six percent of California community college students are students of color (California Postsecondary Education Commission, 2008). In 2008, Latino students numbered 818,988 in California community colleges and African-American students numbered 208,924 (Community College League of California, 2009).

Piland (2004) referred to students of color as having been historically oppressed. *Historically oppressed*, is a term used to describe people of non-white ethnicities because historically they were socially and politically marginalized (Gorski, 1999). Educators can help create and maintain an equitable opportunity for students of color as they pursue a college education. Social justice is the continuous desire to provide equally to all people without considering gender, race, or social class (Gale & Densmore, 2000). Even though funding at all levels of higher education has been cut in the recent State of California budgets, community colleges have been the most affected. These cuts directly affect college students of color in the State of California because most college students of color begin their college career at the community college level.

The study findings showed that meeting with an academic counselor (p < .01), being offered financial aid (p < .01), and being offered services from EOPS (p < .05), significantly raised the level of community college persistence of African-American and Latino students. The influential factors of this study fall into the three following categories: (a) demographic measures (gender, age, and SES); (b) financial measures (financial aid and EOPS); (c) relational measures (Personal Development 20, academic

counselor, and EOPS). The researcher of this study believes these measures are associated with academic self-concept, self-efficacy, and social integration. Knowing these factors positively influence persistence rates for community college students of color and recognizing the importance of having high levels of academic self-concept, self-efficacy, and social integration can assist community college admission officers, administrators, and faculty to work more effectively with students of color and assist them in adjusting and acclimating to the college environment.

Implications of the Study

The study's findings can help educators understand African-American and Latino community college student persistence by delineating the factors that influence the persistence of students of color in community colleges. Students of color need various forms of support. Fike and Fike (2008) reminded educators that it is imperative to recognize and understand that the typical community college student is different from the traditional university student. Community college students are older and have more life experiences, familial duties, and more work responsibilities, making student persistence more difficult. The researcher has concluded that three personality traits are associated with students of color persistence rates at the community college level, as discussed in the following paragraphs.

Academic self-concept.

Much is still unknown regarding the impact of personal and environmental characteristics on student persistence. Most retention efforts have been unsuccessful because we still do not fully understand why students leave college (Tinto, 1993;

Pascarella & Terenzini, 2001). Almost every attribute of personality can cause students to leave their institution prior to graduating. For example, the lack of emotional, intellectual, or social preparation, faculty or staff interaction, and college connection can lead students of color to drop out of college (Tinto, 1993; Pascarella & Terenzini, 2001; Freeman et. al., 2008). In addition, students of color who perceive a lack of student diversity on campus sometimes leave their institution before completing their academic goals, extinguishing their persistence in college.

Three of the seven variables examined in this study were meeting with an academic counselor, being offered financial aid, and being offered assistance through EOPS. Through these variables, this research examined students' academic self-concept.

This study solidified the connection between the degree to which students feel they belong at their institution and their persistence. Students' experience after they arrived at college seemed to have greater influence on their academic success and sense of self than the type of college they attended (Pascarella & Terenzini, 1991; Newman & Newman, 1999). The way students felt about the community college environment was essential in students' adaptation to college life and to persistence.

Academic self-concept includes attitudes, feelings, and perceptions of one's academic skills and intellect. Minority students or students of low-socioeconomic status who had a strong and positive academic self-concept were significantly more likely to persist (Newman & Newman, 1999). Students' views of their academic ability affected their academic self-concept (Cokley, 2000). Students with a strong academic self-concept interacted with others on campus, had increased intellectual dispositions, clearer senses

of career identity, and more positive attitudes about their college education than those with less interaction and participation in the college environment (Pascarella & Terenzini, 2001). Students who possessed strong academic self-concepts persisted in community college with the support they received from meeting with a counselor, being offered financial aid, and being offered EOPS assistance.

Ley and Young (1998) and Byrd and Macdonald (2005) cited the importance of self-regulating behavior in college student persistence. Students who persisted believed they had control over the outcome of their lives. Ochroch and Dugan (1986) and Byrd and Macdonald (2005) stated it is imperative to possess a strong academic self-concept to be able to advocate for one's self. The researcher of this study, as well as the results of this study, support the research work of Byrd and Macdonald (2005) in sharing the belief that self-advocacy is an important skill for first-generation students to possess to counterbalance their lack of knowledge regarding institutions of higher education. Self-advocating students are able to make connections with counselors, professors, and financial aid officials, which positively affect persistence (Byrd & Macdonald, 2005). This study supported Pittman and Richmond (2007) who found that college students who have a strong academic self-concept have a greater sense of college belonging and stronger levels of persistence because they were more likely to have better grades, scholastic self-competence, work orientation, and psychological adjustment.

Self-efficacy.

Self-efficacy is related to academic self-concept. Students who have high levels of self-efficacy feel confident academically and have strong academic self-concepts.

Bandura (1997) defined self-efficacy as students' judgments of their capabilities to organize and successfully complete a task. Roeser, Midgley, and Urdan (1996) and Ramos-Sanchez and Nichols (2007) added that self-efficacy occurs when students have better perceived school relationships which lead to a stronger sense of belonging in college, which, in turn, leads to persistence through positive beliefs and emotions about learning. Self-efficacy has consistently been found to be a strong predictor of academic achievement (Hsieh et al., 2007).

Bandura (1997) and Hsieh, Sullivan, and Guerra (2007) found students with a higher sense of self-efficacy were more motivated, worked harder, put forth a greater amount of effort to meet their personal goals; they persisted when their academics were difficult. The researcher of this study agrees with the work of Newman and Newman (1999) that, in addition to being academically capable and skilled, students need to develop a strong sense of self and believe they are capable of completing the given task which leads to persistence in college.

Students with higher levels of self-efficacy do not perceive obstacles as insurmountable, and they exert greater effort to persist (Ramos-Sanchez & Nichols, 2007). Non-first-generation college students perceive themselves as more capable and thus are more confident in academic arenas and persist in college at a higher rate than college students of color and first generation college students (Ramos-Sanchez & Nichols, 2007).

It is hoped since meeting with a counselor (p < .01), being offered financial aid (p < .01), and being offered EOPS assistance (p < .05), were significant variables in

community college persistence for students of color, that this research can be used to aid students of color in strengthening their sense of self-efficacy.

Social integration.

The results of this study demonstrated a relationship between community college students of color persistence and meeting with a counselor, being offered financial aid, and being offered EOPS assistance. The results of this study supported the research by Pascarella and Terenzini (2001), which called for community colleges to increase the integration of students into college and campus life to improve student persistence.

Social integration is the degree of affiliation students feel toward the college (Hagborg, 1994; Tao et al., 2000; Smerdon, 2002; Pittman & Richmond, 2007).

Approximately one-third of all entering college students drop out and leave college without obtaining a degree; most leave during their first year of college (Bradburn & Carroll, 2002). Feelings, interactions, and connections are influenced by meeting with a counselor, being offered financial aid, and being offered assistance through EOPS. The researcher of the study further adds that the more students feel they belong or are integrated socially in college, the more likely they will be to persist. The researcher of the study believes students with strong senses of social integration are also committed to college and believe in their academic abilities.

It is hoped through the findings of this study, community colleges can create and maintain a supportive environment for community college students of color so that their academic success is not compromised. Community college students of color must feel

connected to their college environment. The connection will both prepare and allow them to persist in college until they meet their academic goal.

Limitations of the Study

A limitation of this study is that it sampled participants from one community college. Perhaps factors that influence persistence differ by location because each community college campus has a unique ethnic student population. The study is quantitative. Perhaps results would differ in a qualitative or mixed method study because data would directly come from student participants. In addition, qualitative data would connect academic-self concept, self-efficacy, and social integration to quantitative results more concretely.

The variables found to significantly and positively influence persistence for students of color were meeting with an academic counselor (p < .01), being offered financial aid (p < .01), and being offered services from EOPS (p < .05). All significant variables required the student to initiate a relationship by making an appointment to meet with an academic counselor and both completing and submitting financial aid and EOPS applications. In addition to the variables that positively influenced persistence, perhaps it was the students' motivation, drive, and determination that influenced their persistence, making the students the indicator influencing persistence. The researcher of this study believes students' personalities, temperaments, internal characteristics, levels of self-motivation, and personal attributes indicate whether they will persist in community college in addition to the three factors found to be significant in the persistence rates of community college students of color.

Recommendations for Future Research and Program Development

Much is still unknown regarding the impact of internal and external characteristics on student persistence. Most retention efforts have been unsuccessful because college administrators do not fully understand why students leave college (Tinto, 1993; Pascarella & Terenzini, 2001). All variables have the potential to compromise the academic experience for students of color. Pascarella and Terenzini (2005) stated that the more motivated a student is to academically succeed, the more likely he or she is to be socially integrated into college life, and as a result, persist in college. However, this alone is not a guarantee for student persistence.

Community college counselors need to intensify efforts to meet with as many new community college students of color as possible, as soon as possible. Counselors need to help solidify interpersonal connections with new community college students of color, leading to improved transition between high school and community college, therefore, increasing student persistence rates.

The findings showed that the younger the Latino community college students were, the more likely they were to persist. The researcher of this study believes it would benefit Latino community college students for educators and administrators to improve communication between high schools and community colleges. Hopefully, this would increase Latino student enrollment and persistence rates in California community colleges. Ideas to improve communication with Latino students and their families include visiting students and their families in their homes and providing individual counseling to

create an educational plan for Latino students at both the high school and community college levels. This would allow Latino students to see the connection between academic success in high school and community college persistence.

Suggestions for research.

Ramos-Sanchez and Nichols (2007) called for additional studies to examine the relationship between self-efficacy, academic outcomes, and the adjustment of first-generation college students. Further investigation is merited to develop interventions to ensure a smooth transition to college and to improve persistence for students of color and first-generation college students. The researcher of the study believes students are more likely to persist in community college if they feel a connection to the college and a sense of belonging in the college environment.

The researcher of this study believes additional research in these specific areas is needed to further examine the following:

- The connection between personal attributes and student persistence.
- The impact of meeting with a college counselor on student persistence for community college students of color. The subjects of previous research that analyzed the impact of meeting with a counselor were White students at fouryear institutions.
- Research with a more diverse group of participants such as Asians or Pacific
 Islanders could provide valuable insight into ways to positively impact
 student persistence and increase the educational attainment for students of
 color.

- Future research needs to examine persistence rates for urban community college students and their levels of familial support. These students may receive inappropriate advice from family members who are unfamiliar with college requirements, lack the knowledge for college success, and as a result, hinder student persistence.
- Further research is needed to determine why older Latino community college students do not persist at the same rate as younger Latino community college students. As 40% of community college students are between the ages of 22 and 39 years (AACC, 2009), research on older student persistence would be valuable.

Additional research will help educators understand how better to assist community college students who enroll in college with limited support to reach their academic goals (Pittman & Richmond, 2007). More research is needed to understand the relationships between community college, students of color, and persistence.

Suggestions for program development.

As of 2010 in the State of California minimal communication exists between the K-12 level of education and higher education. High school counselors advise high school seniors to apply for and to immediately attend college directly after graduating high school, but established systems do not exist to provide follow-through support to help high school students attend college. There have been attempts to connect the two educational levels, such as summer bridge programs, but these programs are limited in their effectiveness because they are not mandatory.

The researcher of this study believes program development is needed to further examine the following:

- The researcher of the study is hopeful that a system will be created and
 implemented that would allow all high school students, regardless of ethnicity
 or socio-economic status, to receive the financial and non-financial support
 necessary to begin their post-secondary education as soon as possible after
 earning a high school diploma.
- Additional ideas by the researcher include having several days per semester
 where local community college counselors visit the high schools to meet with
 juniors and seniors, to educate them on how to apply, enroll, and register in
 college classes, as well as how to buy their college books.
- College counselors can emphasize to students the importance of being
 academically successful at the high school level in order to promote student
 success at the community college level. By meeting with college counselors,
 high school students can successfully transition to higher education.

Educators, policy makers, and other stakeholders must implement and follow through with successful and widespread reforms of the American educational system (Hoyle & Kutka, 2008). The researcher of the study hopes her findings that show the positive impact on students of meeting with a counselor, being offered financial aid, and being offered EOPS services would indicate to educators and policy makers that something must be done to correct the under-funded and low-performing California community college system.

Summary

College is an important time in the lives of individuals. In addition to academics, the college experience can teach students to acculturate, encourage new thoughts and ideas, develop interpersonal and critical thinking skills, discover a sense of self and career identity, and clarify values (Pascarella & Terenzini, 2001). However, when students are tested by academic challenges, their life skills, as well as academic skills, play a role in determining their academic success and persistence in their education at community colleges.

Community college student persistence requires student initiative and self-regulating behavior. Adapting to the lifestyle of a college student can be challenging and stressful for an inexperienced student (Bryde & Milburn, 1990; Pascarella & Terenzini, 2001). Many students of color and first-generation community college students demonstrate resilience and determination. However, feelings of frustration, isolation, confusion, and bitterness have the potential to curtail student persistence for many community college students of color (Newman & Newman, 1999). Despite the obstacles community college students of color face, many do persist and graduate (Ramos-Sanchez & Nichols, 2007; Chavez, 2008). With firmly instilled knowledge that meeting with a counselor, being offered financial aid, and being offered services from EOPS can increase student persistence, community college campuses can become more student-centered; additional support can be offered to students of color, resulting in increased student persistence and graduation rates for these students. With this knowledge, completion of a postsecondary degree can become a reality for non-traditional students,

including students of color. It is noteworthy to mention that even when community college students of color meet with a counselor, are offered financial aid, and are offered assistance from EOPS, the students may not persist if they do not take the initiative to navigate through the educational process. Therefore, the primary and imperative variable indicating community college persistence for students of color is belief in themselves.

The study findings have highlighted the importance of examining variables which may determine which students are likely to remain enrolled over four semesters of community college and persist until their personal goals are met. As educators, we need to be concerned with the reasons leading students to leave college before they have met their academic goals. The findings of this study provide information that can increase the rate of college completion for African-American and Latino community college students. The findings may benefit the students and create a more socially just society by contributing to increased college student persistence, regardless of ethnicity or socioeconomic status. For every student who does not persist, an educational dream is unfulfilled. For every unfulfilled dream, there is a long-term impact for the student, as well as for society.

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