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Measures of Success: Developing an Understanding of Students Enrolled in Community College Educational Opportunity Programs in the State University of New York System

Christopher Lawrence Hockey
St. John Fisher College, clh02972@students.sjfc.edu

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Abstract
Community colleges have become a major national- and state-level focal point to increase the number of credentials awarded. Academically underprepared students may not be entering community colleges to earn a credential. This quantitative study examined students enrolled in community college Educational Opportunity Programs (EOPs) in the State University of New York from the perspectives of student-defined goal completion, self-efficacy, and perceptions of the EOP. The study used secondary data available from the State University of New York's Office of Institutional Research as well as an online survey instrument. Results of the study showed a multivariate relationship between goal completion, enrollment in EOP, race, and type of self-defined goal. The study also revealed that students perceived additional financial aid assistance as the most influential component of the EOP. A positive correlation was found between the social and course self-efficacy subscales. As a result of the study, community colleges are encouraged to examine their policies and practices around EOP enrollment, advisement, and services provided.

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Theresa L. Pulos

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Linda Hickmon Evans

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Measures of Success: Developing an Understanding of Students Enrolled in Community

College Educational Opportunity Programs in the State University of New York System

By

Christopher Lawrence Hockey

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Supervised by

Theresa L. Pulos, Ed.D.

Committee Member

Linda Hickmon Evans, Ph.D.

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Dedication

This journey would not have been possible without the help and support of so many people. First and foremost, I must acknowledge the endless support of my wife, Melissa. I can't thank you enough for tending to every aspect of our life while I pursued this dream. I'm grateful for your endless patience and understanding and also for your constant encouragement to just get it done. I love you dearly. To my parents, Sharlene and Dennis, thank you for always believing in me and always encouraging me to do better.

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Lastly, I dedicate this journey and dissertation to my daughters, Kaelyn and Madison. Your love of learning, exploration, and fun have been an inspiration to me during the length of this program. I hope this work, in turn, inspires you to achieve all of your hopes and dreams and that you never stop learning. Your daddy loves you.

Biographical Sketch

Christopher Lawrence Hockey is currently the Associate Director of Transfer

Success & Technology at the State University of New York. Mr. Hockey attended the

State University of New York College of Oswego from 1997-2002 and graduated with a

Bachelor of Sciences degree in Political Science in 2002. He attended Syracuse

University from 2003-2006 and graduated with a Master of Sciences degree in Higher

Education Administration in 2006. He came to St. John Fisher College in the fall of 2013

and began doctoral studies in the Ed.D. Program in Executive Leadership. Mr. Hockey

pursued his research in developing an understanding of self-efficacy and student-defined

goal completion of students enrolled in community college educational opportunity

programs in the State University of New York under the direction of Dr. Theresa L. Pulos

and Dr. Linda Hickmon Evans and received the Ed.D. degree in 2015.

Abstract

Community colleges have become a major national- and state-level focal point to increase the number of credentials awarded. Academically underprepared students may not be entering community colleges to earn a credential. This quantitative study examined students enrolled in community college Educational Opportunity Programs (EOPs) in the State University of New York from the perspectives of student-defined goal completion, self-efficacy, and perceptions of the EOP. The study used secondary data available from the State University of New York's Office of Institutional Research as well as an online survey instrument. Results of the study showed a multivariate relationship between goal completion, enrollment in EOP, race, and type of self-defined goal. The study also revealed that students perceived additional financial aid assistance as the most influential component of the EOP. A positive correlation was found between the social and course self-efficacy subscales. As a result of the study, community colleges are encouraged to examine their policies and practices around EOP enrollment, advisement, and services provided.

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Chapter 1: Introduction

Introduction

There is a clear emphasis on community colleges as a starting point for career advancement or attainment of higher education. President Barack Obama and New York State Governor Andrew Cuomo have made references to the importance of community colleges and announced initiatives to support community college growth and success (Cuomo, 2015; Stratford, 2015). The most recent figures from the American Association of Community Colleges (AACC) (2015) show that community college enrollment totals approximately 7 million students across approximately 1,100 institutions in the United States. Current analysis shows that, through 2018, jobs requiring an associate degree are projected to increase at double the rate of those jobs that require no college experience (Carnevale, Smith, & Strohl, 2010). It is also projected that, overall, public institution enrollment will increase by 15% between 2010 and 2021 (Hussar & Bailey, 2014). Aud et al. (2010) reported that undergraduate enrollment at community colleges could increase to as high as 8.2 million by 2019. Community colleges are an integral part of the higher education system in the United States, but there is very little that is consistent between them.

Each community college offers a wide range of academic programs and credentials. In contrast with the homogenous demographics of public and private 4-year campuses, community colleges are the primary educational provider for a wide range of students with an equally wide range of goals (Townsend & Twombly, 2007). The variety

of academic programs offered and the range of student services that community colleges provide speaks to the challenge that each institution has in identifying any one specific mission. While this variation in academic programming and student support offerings create a challenge for an institution's ability to develop a specific identity, one clearly defined and unified mission of all community colleges is to provide access for low-income populations (Boggs, 2011; Boswell & Wilson, 2004; Bragg & Durham, 2012). Community colleges are often a major access point for low-income students. With access to a lower tuition rate, students from low socio-economic households find community colleges to be a more attainable educational option. According to the Southern Education Foundation (2015), 48% of the students in 2011 enrolled in public schools in New York State were living in low socio-economic households.

Students who come from low socio-economic households are at significant risk for failing to earn any credential or transfer to baccalaureate-offering institutions (Bailey, Jenkins, & Leinbach, 2005e). New York State's Educational Opportunity Program (EOP), in an effort to provide access and support to economically disadvantaged students, was developed in 1967 at Buffalo State College, and it expanded to 30 campuses by 1970 (State University of New York [SUNY] at New Paltz, 2009).

The State University of New York (SUNY) system has 32 community colleges; 14 provide an EOP. According to SUNY Document No. 3600 entitled, *Guidelines for the Operation of Educational Opportunity Program (EOP)* (State University of New York [SUNY], 1970), the purpose of the Educational Opportunity Program is to "combine access, academic support and supplemental financial assistance to make higher education possible for students who have the potential to succeed, despite poor preparation and

limited financial resources" (p. 1). Students enrolled in community college EOPs are representative of economically disadvantaged students throughout the SUNY system. Bailey and Morest (2006) and Burns (2010) reported that low-income students are more likely to experience additional challenges to their educational attainment, such as caring for children, single parenting, commuting, and working part or full time, making EOPs a viable opportunity. While admissions requirements vary from campus to campus, EOP applicants must be a New York State resident for 12 months prior to enrollment, and they have to be ineligible for admission under traditional standards; however, they must demonstrate the potential for completion of a college-level program (SUNY, 2015). Students who enter the EOPs are demographically diverse, ranging in age, race, ethnicity, and gender. That diversity also applies to students' educational goals.

There is a misconception that all community college students enter the institutions with the goal of achieving an associate degree and to transfer thereafter to a 4-year institution to achieve a bachelor's degree (Bailey, Jenkins, & Leinbach, 2005d). In fact, community college students enter academia with a variety of goals that range from simply testing the academic waters to earning a 2-year degree (Hoachlander, Sikora, & Horn, 2003). In addition to arriving at the institution with a variety of goals, students also enter with diverse internal controls and motivations.

Research shows that the desire to succeed is a strong predictor of achievement. Desire increases the motivation to succeed, helps to develop a stronger sense of self-efficacy, and increases participation in opportunities that help students achieve their self-identified goals (Bandura, 1997; Kao & Tienda, 2005; Schunk, Pintrich, & Meece, 2008; Wentzel, 1991). The research by the cited individuals indicates that examining student

goal setting and achievement can provide a new perspective when determining the success of community college students.

This perspective takes into account the varying motivations that community college students have when entering an institution. For example, students may be entering a 2-year college for job-specific training requiring only one or two courses. Under a traditional measure of success, this student is considered a loss for the institution, even though the student met his/her goal (Bers & Smith, 1991). In addition, for some, college may simply be an opportunity for personal growth and achievement, perhaps only requiring a small number of courses for the individual to feel fulfilled (Bailey et al., 2004). There are also students who take a more traditional path through community colleges. Some students aim to achieve a 2-year degree and move on to a career, while other students seek to transfer to a 4-year campus (Hoachlander et al., 2003). Because there are a variety of paths that students can take through community colleges, there exists an opportunity to conduct a thorough examination of all of the factors related to student achievement and success.

Traditional measures of student success, both at 2- and 4-year campuses, have primarily been based on institutional goals and outcomes rather than on individual student goals and outcomes (Bailey et al., 2005d). The most common method of measuring the success of students is whether or not they are retained within any specific academic year, persist from one academic year to the next, or graduate within a set timeframe, which is typically 4 to 6 years. Most recently, whether or not a student transfers from a community college to a baccalaureate-degree-offering institution has been added as a metric of success by organizations such as Achieving the Dream,

Complete College America, the Community College Research Center, and the Voluntary Framework of Accountability (Committee on Measures of Student Success, 2011; Horn & Radwin, 2012). What these metrics lack is the student perspective.

Bailey et al. (2005c) examined data from the Beginning Postsecondary Students (BPS) (National Center for Education Statistics, n.d.) survey and found that students entering community college had both short- and long-term goals. The researchers found that only 21% of the students who had enrolled in community college in the 1996 cohort of the study indicated they did so to earn a degree or certificate. In addition, 36% indicated that their goal was to transfer to a 4-year institution. Also, within that same cohort, 40% of students responded they had entered community college for personal enrichment or job skills. When examining the outcomes of these students, Bailey et al. (2005a) found that of the students whose goal was to earn a degree or certificate, only 36% met their goal, while 49% were no longer enrolled. For the students who at the time of their enrollment in a community college indicated that they were simply interested in personal enrichment, 36% went on to earn a degree or certificate, despite their original intentions. These findings support the premise that students' goals upon entering community college are not only varied, but they may also change over time. Due to the variability in student goals, measuring goal attainment is not clear cut or simplistic. In addition, for students who are meeting or exceeding their goals, there are many factors that contribute to that success, and to attend to and promote meaningful programs and services, colleges should be aware of the reasons students are or are not achieving their desired outcomes (Dellow & Romano, 2002).

As community colleges develop practices and policies to help support student achievement, there should be an understanding of the factors that contribute to and impede persistence and goal attainment (Bailey, Calcagno, Jenkins, Kienzl & Leinbach, 2005b). There has been research on the many different approaches to the student persistence issue. College student persistence research has focused on both individual and institutional factors, and each of these research approaches has yielded complex and varied results (Peltier, Laden, & Matranga, 1999). The case has been made that community colleges students are diverse in age, socio-economic status, preparedness, and other variables (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007). One of the major issues when trying to apply this research to community colleges is that it has customarily been focused on traditionally aged (18-22 years old) students who are attending baccalaureate institutions. There is little similarity in student characteristics, organizational structure, and resources between community colleges and 4-year campuses. This is an important distinction when examining the causes and cures for attrition (Crawford & Jervis, 2011). While many of the studies have made attempts to generalize the results to community college students, they do not provide a complete picture of student persistence at 2-year colleges. However, there are existing components of traditional college research approaches that can be used to explain community college persistence.

A traditional approach to examining student persistence has been focused on 4-year colleges and the interaction between academic and social integration within the institution (Metz, 2004). The social and academic integration concepts that have been used to help determine why students stay or leave an institution are primarily rooted in the idea that the connection the student has to the institution, both in and out of the

classroom, (i.e., campus involvement, campus employment, strong relationship with faculty member) is a determining factor in their persistence (Mutter, 1992; Terenzini & Pascarella, 1980; Tinto, 1993). While more abstract concepts, such as integration into the campus, have been used to explain persistence, more basic elements (i.e., high school grade-point average, socio-economic status) have also shown significance.

Existing research has found that a student's academic ability, grade-point average (GPA), and a lack of demographic risk factors do not always lead to student success (Hyers & Zimmerman, 2002). The results of these studies provide evidence that internal factors, such as motivation and goal setting, may be more of a determining factor for success. While there are some studies on these concepts, there is a lack of sizeable research on how the issues of motivation and goal setting affect student success and persistence. However, of the studies that have been conducted, goal setting and self-efficacy were found to be significantly influential in the persistence of community college students (Bers & Smith, 1991).

A review of the research on student persistence has not identified literature that speaks to the interaction between student goal setting, self-efficacy, and persistence. However, an understanding of theories related to self-efficacy and goal setting may provide insight into how these concepts intersect with college student persistence. Social cognitive theory provides an alternative viewpoint for the issue of student persistence. Social cognitive theory is defined as the interactions between intrapersonal influences, individual behavior, and environmental influences. Two major components of social cognitive theory are self-efficacy and goal choice (Bandura, 2001).

Goal setting is a major predictor for community college student persistence (Kao & Tienda, 2005). As previously indicated, there are a myriad of reasons why students enroll in community colleges, and there is a higher likelihood that students will reach their goals when those goals are specific and realistic (Bandura, 2001). Research shows that setting achievement goals is a strong predictor of success or failure. Fryer and Elliot (2007) defined a goal as being (a) focused on an object, (b) used to direct or guide behavior, (c) focused on the future, (d) internally represented, and (e) something the organism is committed to approaching or avoiding. Bandura (1997) posited that having a goal actually increases motivation. In addition, the setting of goals leads to a higher likelihood of developing a sense of self-efficacy and activities that aid in the achievement of the set goals. Goal setting has been shown to be a major factor in student persistence and success, but it is not often included in research on community college students (Bers & Smith, 1991; Perin, 2006; Silver, Smith, & Greene, 2001).

Several studies show that commitment to goals is a major factor in student persistence in any setting. Bers and Smith (1991) found that the development of educational goals is a defining variable between *persisters* and *non-persisters*. In addition, researchers Zimmerman, Bandura, and Martinez-Pons (1992) found that the absence of educational goals led to consistently higher withdrawal rates among community college students. Goals have been found to increase individual performance because they provide a specific requirement for self-defined success. There is a distinct link that can be made between student goals and student success.

While community colleges have become a major focus of attention, aspirations of students continue to be the focal point for administrators and legislators. With greater

emphasis being placed on community colleges by the President of the United States and large non-profit organizations, like Lumina and the Bill & Melinda Gates Foundation (n.d.), it is becoming increasingly important for community colleges to provide effective programs and services for the large number of students entering these schools to meet their desired goals. Community colleges have become a central focus for federal, state, and local governments; therefore, it is important to examine how community colleges are being assessed on their ability to help students succeed.

Currently, decisions on state and federal funding to community colleges are based on the traditional metric of degree attainment. It is important to realize that not every student is working toward degree attainment and that failure to do so may not constitute failure on the part of the institution or the student. This is especially the case for students who are seeking to transfer to 4-year institutions or who simply want to gain experience or knowledge for career advancement (Bailey et al., 2005d). Polinsky (2002) also claimed that community college performance indicators should be driven more by student-defined goal achievement, rather than the traditional metrics.

The landscape of higher education changes often, and due to the impact of economic downturns and government turnover, the community college sector of higher education appears to be most impacted by demographic, policy, and financial fluctuations (Bailey, 2002). The cost of college continues to increase, forcing large increases in enrollment in community colleges across the country. A large segment of students attending community colleges are from low socio-economic backgrounds, and while it is not predetermined that they will fail, these students often struggle with degree attainment (Bozick, 2007). However, not all of these students are setting their sights on obtaining a

degree, because these, like other students entering community colleges, have less ambitious and/or different goals. The students who achieve their goals should be considered a success, but the existing metrics of success do not count student-defined goals. As federal and state funding is closely tied to degree attainment, new efforts must be made to account for success from the perspective of the student (Bound & Turner, 2007; Bound, Lovenheim, & Turner, 2009).

Problem Statement

Community colleges across the country face growing enrollment and continued reductions in funding. While 4-year campuses have become more selective in an effort to attract students who are more likely to complete their degree studies, community colleges have a broad mission to provide open access and open enrollment to any student who has completed high school and meets the individual campus' academic standards based on high school grades and placement tests (CollegeBoard, n.d.). According to the National Center for Education Statistics (NCES), there will be a 14% increase in community college enrollment between 2012 and 2022 (Hussar & Bailey, 2014). While enrollments are increasing, the ability for community colleges to provide the faculty, staff, services, and programs needed for the growing numbers is compromised by massive funding cuts. Nationally, at least 43 states have cut assistance to public colleges and universities. New York State, specifically, has cut funding to community colleges by 11% and increased tuition by 14% since 2009 (Johnson, Nicholas, Oliff, & Williams, 2011).

Nationally, as community colleges are faced with higher enrollments and reduced budgets, they also face increasing dropout rates (Marti, 2008). Schneider (2010) reported that between 2003 and 2008, New York State spent $402 million on first-year-only

students, received $75 million in federal student aid that was spent on first-year dropouts, and appropriated $89 million in state student grants to first-year-only students. In addition, in 2010, New York State lost an estimated $24 million in state income and an estimated $934 million due to the student dropouts earning an estimated $11,000 less annually (Schneider & Yin, 2011). These facts highlight the impact that student dropout rates have on the financial well-being of colleges. While there are no specific data for New York State, nationally, the average cost incurred by a community college for a student who has left without a degree or without transferring is $14,730 per student (Johnson, 2012). Community colleges in New York State have a significant interest in preventing high dropout rates because two-thirds of community college budgets are provided by the state and county governments.

As the financial resources for community colleges are limited, the issue of performance-based funding becomes significant. The current metric of degree attainment assumes a limited scope of the community college mission and of the students' intentions. Many students are not enrolled with the intent to earn a degree, but rather, they may be seeking to transfer to a 4-year institution or simply want to gain experience or knowledge for career advancement (Bailey et al., 2005e). Advocating for a change in performance funding, Polinsky (2002) supported the idea that community college performance should be based on a combination of student-defined goal achievement and degree completion. While this study's primary focus is not to advocate for or against performance funding, the movement toward institutional funding based simply on degree attainment does provide context for the examination of student-defined goals. A core function of a community college is to provide open enrollment to any student with a high

school diploma or general education development (GED) certificate with minimal or no other admission requirements. As a result, community colleges have become the major point of access for economically disadvantaged students, providing educational opportunities for more than 40% of undergraduate students living in poverty (Mullin, 2012).

New York State is home to 32 community colleges, 14 of which offer EOPs. The purpose of the Educational Opportunity Program is to "combine access, academic support and supplemental financial assistance to make higher education possible for students who have the potential to succeed, despite poor preparation and limited financial resources" (SUNY, 2015, p. 1). Students enrolled in EOPs are representative of economically disadvantaged students throughout the university system.

In 2009, President Obama proposed the American Graduation Initiative (AGI) in an effort to provide increased federal funding to community colleges that develop innovative ways to increase educational attainment. The goal of the AGI was to create an additional 5 million college graduates by 2020 (Mullin, 2010). While federal funding is certainly welcomed by the community college sector, only 5% of community college revenue comes from the federal government, whereas 75% of community college funding comes through tuition costs, and state and local appropriations (Dowd & Grant, 2006). As state funding for community colleges has decreased between 2010 and 2015, tuition has become a significant portion of the funding model for community colleges.

With tuition dollars becoming more of a revenue staple for community colleges, there is increasing stress on them to enroll higher numbers of students to account for the state funding decreases (Dowd, 2007). Since 2007, state appropriations have been

increasingly linked to graduation rates of the students enrolled. This type of funding

formula can place undue stress on community colleges to enroll more students than they

may have the capacity to serve, and the state may withhold funding due to low graduation

rates without regard to student goals and intentions upon entering college (Lee &

Gladieux, 2003).

While community colleges have remained the major point of access, they no

longer serve as the final destination for most students. College students have varying

pathways to education completion, and the community college does not always serve as

the degree-awarding institution (Bradburn & Carroll, 2002). However, due to a renewed

focus on graduation rates for K-12 and higher education, community colleges are being

measured on the traditional metric of graduation rate. Many students may leave their

community college and achieve success if they transfer to another institution and

complete a degree. Using existing metrics, students who are looking for job training or

coursework to help advance their careers are not considered a successful student nor is

the institution be viewed as having met its goal.

This research aimed to study student persistence from a student-defined goal

perspective. Existing measures of community college success are tied to funding and,

thus, those traditional measures may be negatively impacting institutions that have helped

students reach their self-defined goals. It has been shown that economically

disadvantaged students are at risk for not persisting to degree completion, and this

represents a large population within community colleges that may, based on student-

defined goals, be more successful than existing research shows (Bailey et al., 2004). The

EOPs provide a structure and support system for a segment of the economically

disadvantaged college population, thus, the researcher explored the differences between the goal attainments of students enrolled in EOPs compared to students enrolled through traditional admissions. Additionally, in an effort to understand the EOP population from a cognitive perspective, the researcher sought to understand the relationship between demographic variables of the EOP population and self-efficacy levels. Lastly, the researcher explored student perceptions of specific components of the EOP that assist students toward achieving their defined goals.

Theoretical Rationale

This study is guided by three well-known and pertinent theories. Tinto's (1975) theory of student departure was used as a lens through which to understand the causes for student departure within community college settings. In particular, Tinto's focus on institutional and goal commitment has significant bearing on this study. Locke's (1968) theory on goal setting provided a theoretical viewpoint for understanding the importance of goal setting and its impact on successful outcomes. In addition, Bandura's (2001) social cognitive theory was also be used as an alternative lens to explain student departure. An emphasis on Bandura's concept of self-efficacy provides an additional viewpoint as it relates to student goal achievement.

Student departure theory. The most notable theory used to explain student attrition is Tinto's 1975 work on social and academic integration. Tinto's (1975) theory of student departure is one of the most widely recognized models for attempting to understand the causes of college student departure. The key element of Tinto's theory is that the student's background characteristics, combined with the ability to integrate academically and socially into the college environment, determine whether or not a

student will persist. However, an ancillary concept in Tinto's theory is the importance of goal commitment (Tinto, 1975).

The basis for the student departure model is that the interaction between individual goals and commitments influences if and how students leave an institution of higher learning and, because the student departure model is an institutional-level model, there is shared responsibility between the institution and student for the student's success (Tinto, 1975). In addition, Tinto argued that while the student characteristics at the point of entry matter, the interactions that take place in and outside of the classroom also matter. The intersection of student characteristics and interactions with members of the college community in the academic and social environment largely determine whether or not a student persists (Tinto, 1975).

Tinto (1975) showed that a student's choice to persist or leave an institution is directly influenced by the commitment to his/her institution and goals. The institutional commitment refers to the extent to which a student desires to earn a degree from a particular institution, while goal commitment explains the level to which a student is driven to earn a higher education degree. Tinto confirmed that goal commitment is one of the most influential factors for persistence. This finding was supported in other major studies by Napoli and Wortman (1998) and Terenzini and Pascarella (1980).

While Tinto's (1975) is the most widely used model to help explain college student's persistence and departure, it is not without criticism (Goel & L'heureux, 2003; Nakajima, Dembo, & Mossler, 2012). Several researchers have pointed out the shortcomings of Tinto's work and have sought to present alternative models. One criticism of student departure theory is that the research conducted did not take into

account the different variables and experiences associated with students of color and non-traditional students (Bean & Metzner, 1985; Tierney, 1992; Webb, 1989). In another study, Tinto's (1975) work was critiqued for its applicability to non-residential institutions and inconsistency over an extended time frame (Ishitani & DesJardins, 2003; Pascarella, Smart, & Ethington, 1986; Pascarella & Terenzini, 1991).

Goal setting theory. Locke's (1968) theory on goal setting was developed to understand employee motivation in the workplace, and it states that clear goals and consistent and appropriate feedback provide the best motivation for increased productivity. Results showed that employees working toward a specific goal resulted in a strong motivation toward achieving the goal, which, in turn, improved overall performance (Locke, 1968).

The study conducted by Locke (1968) resulted in the findings that there was a relationship between the difficulty and specificity of a goal and the performance of the task. Setting more specific and more difficult goals were more likely to lead to increased task performance than working toward goals that were simpler and more vague.

Other researchers have also examined goal setting theory and have continued to expand on the theory (Latham & Baldes, 1975; Latham & Kinne, 1974; Latham & Yukl, 1975). Latham and Baldes (1975) found that the use of a specific goal over a period of 12 months for a logging operation improved performance immediately. Latham and Kinne (1974) found that the employees who engaged in a one-day training program in goal setting were more productive and were absent less than those employees who were in a control group.

Latham and Yukl's (1975) analysis of research up to that point on the topic of goal setting found strong support for Locke's (1968) theory that specific and difficult goals resulted in increased performance. The review of the research did find, however, that there was not enough evidence to support Locke's (1968) contention that goal setting mediates the effects of participation, monetary incentives, and performance feedback. Additionally, the review of the research also failed to identify determinants of goal acceptance and goal commitment, which leaves questions about how goal acceptance is determined.

Social cognitive theory. Bandura's (1986) development of social cognitive theory introduced the concept that human behavior is based more on cognitive, self-regulatory, and self-reflective actions. Bandura's theory claims that people are not driven by environmental factors, but they are more proactive in nature with self-regulating and self-reflecting behavior. Human behavior, from this point of view, is a product of a connection between personal, behavioral, and environmental influences.

At the very core of social cognitive theory is the idea that individuals are proactively participating in their own development, and those actions determine an output. A major key in this concept is that individuals possess self-beliefs that allow them to have some level of control over their thoughts, feelings, and actions, and that "what people think, believe, and feel affects how they behave" (Bandura, 1986, p. 25). Bandura established that self-beliefs are a key component in the exercise of control. Therefore, individuals are viewed both as being a product and producer of their own environments and of their own social systems. Social cognitive theory also suggests that factors, such as educational and family environment, socio-economic status, and economic conditions,

have no direct effect on human behavior. Rather, these variables affect human behavior to the extent that they shape people's ambitions, self-efficacy beliefs, emotional states, and other self-regulatory influences.

One of the core tenets of social cognitive theory is that of self-efficacy beliefs. Self-efficacy is defined as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1997, p. 391). Self-efficacy beliefs are the cornerstone for motivation and personal achievement. Bandura (1997) theorized that unless people believe that they have the ability to achieve their goals, they have little motivation to push forward during challenging times.

Bandura's (1997) self-efficacy concept is primarily based on the idea that "people's level of motivation, affective states, and actions are based more on what they believe than on what is objectively true" (p. 2). Using this basis, Bandura argued that how people behave is more likely to be predicted by self-beliefs about their abilities rather than by what they are actually capable of achieving. It is the perception of ability that helps individuals decide what to do with the talent they have. It is also important to note that because individuals do not exist in a vacuum, self-efficacy is both a personal and a social construct. As a result, social systems also develop a collective efficacy. The collective efficacy is a group's shared belief in its ability to achieve goals and accomplish tasks. Collective efficacy is an important construct here as this study is examining the individual self-efficacy levels of a group of students that meet the same eligibility requirements for a selective college program. As it relates to this study, self-efficacy beliefs also govern how much effort people will apply to any task and how long they will

stay committed when faced with challenges. As the level of self-efficacy increases, so does the amount of effort, persistence, and resilience (Pajares, 2002).

Self-efficacy beliefs also play a significant role in an individual's thought process and emotions. A high level of self-efficacy assists in creating feelings of tranquility when taking on new and challenging activities. Conversely, beliefs of low self-efficacy may lead to an individual believing that things are harder than they truly are, which, in turn, creates feelings of anxiety, stress, depression, and limited problem solving. The result of these emotional impacts is a form of self-fulfilling prophecy in which people achieve what they believe they can accomplish (Bandura, 1997).

The development of the self-efficacy theory has generated considerable interest amongst researchers in a variety of fields. In particular, self-efficacy has been a major focus in the areas of academic achievement, attributes of success and causes of failure, and goal setting. A thorough review of the literature in these areas can be found in Chapter 2, but in general, "researchers have established that self-efficacy beliefs and behavior changes and outcomes are highly correlated and that self-efficacy is an excellent predictor of behavior" (Pajares, 2002, para. 3). Graham and Weiner (1996) concluded that, in education, self-efficacy has shown to be a more reliable and consistent predictor of behavioral outcomes than other motivational variables. Pajares (1996) also found that high levels of perceived self-efficacy were regularly connected to persistence. As this study sought to explore the relationship between perceived levels of self-efficacy and goal achievement of EOP students, Pajares's (1996, 2002) research on self-efficacy is useful for understanding students' motivation and achievement in the context of enrolled EOP students.

Statement of Purpose

There is an extensive body of research on retention, persistence, and student success. This literature provides an understanding of the complexities of persistence and student achievement. However, with all that has been studied and written, there are still gains to be made in student persistence (Tinto, 2012). Students attend community colleges for a variety of reasons. Some students enter with a goal of degree attainment while other students strive for completion of a few courses. As a result, many researchers have supported the concept that failure to obtain a degree does not mean a student is a failure in achieving a self-defined goal (Bailey, Jenkins, & Leinbach, 2005c). Current metrics of success include graduation or transfer. Shapiro et al. (2012) stated that "college completion, earning a degree or certificate, is considered to be a key college success outcome, supported by every educational policymaker." Horn and Radwin (2012) compiled efforts of several key organizations focused on defining and reporting success metrics. The work by Horn and Radwin highlights the broad range of metrics associated with student success in community colleges. The table in Appendix A illustrates the organization of their work and the framework for development of their "completion arch."

The two outcomes of graduation and transfer do not represent the totality of enrollment patterns or success that community college students achieve (Crosta, 2014). Student success can be measured from multiple perspectives, including that of the student's goals (Polinsky, 2002). A review of the research found that there are many different variables that impact student behavior (Krumrei-Mancuso, Newton, Kim, & Wilcox, 2013; Martin, Galentino, & Townsend, 2014; Robbins et al., 2004). It is

important to determine why some students are successful in their persistence and achievement and others are not, even when academic, financial, and demographic traits are held constant.

The purpose of this study is to develop an understanding of the characteristics of students enrolled in community college Educational Opportunity Programs the State University of New York system. In particular, the study explores the relationship between enrollment in the community-college-sector EOPs and goal achievement as well as the relationship between enrollment in EOPs and self-efficacy levels. The goal of the study is to provide an addition to the research literature on community colleges, self-efficacy, and goal achievement, as well as to provide information on the effectiveness of specific EOP services. The results of the study aim to provide further research on whether community college students are meeting their goals, the relationship between EOP enrollment and self-efficacy, and the role EOPs play in goal achievement. Last, the study seeks to provide support to the argument that the existing metrics of success provide an incomplete picture of student success in community colleges.

Research Questions

The primary purpose of this study is to explore the possibility of a relationship between enrollment in a community college EOP and student goal achievement. A quantitative approach is used. For the purposes of this study, the following questions guided the study:

1. What is the relationship between enrollment in the Educational Opportunity Program and achievement of student-defined goals?

2. What is the relationship between enrollment in the Educational Opportunity Program and self-efficacy?

3. What is the student perception of the effectiveness of the Educational Opportunity Program in helping to meet student-defined goals?

Potential Significance of the Study

Existing research suggests that there is a strong link between socio-economic status and degree completion. There is less research on whether socio-economic status prevents students from achieving their own defined goals. In addition, little exploration has been done on how self-efficacy impacts students from lower socio-economic classes. An understanding of what types of goals these students set for themselves and how they compare to traditionally admitted students may yield a better understanding of self-imposed limitations. An exploration of self-efficacy of EOP students can be used to understand if self-efficacy is enough to help them overcome the many obstacles that low socio-economic students often face. In addition, an understanding of the role self-efficacy plays in the experience of EOP students would provide campus administrators with another tool to identify at-risk students. The identification of the EOP components that aid in student persistence to self-defined goal completion would provide policy makers with valuable information about specific program elements that aid in student success. In addition, because a cross section of campus sizes in rural, urban, and suburban areas were researched, the results of the study are more generalizable to the SUNY system of colleges as well as to community colleges in other areas of the country.

The use of retention and graduation as the primary assessment method of institutional success has become commonplace in higher education, and some researchers

have advocated for different metrics for 4- and 2-year colleges (Dougherty & Reddy, 2013; McKeown-Moak, 2013). These primary metrics do not accurately portray the success of community college students. Polinsky (2002) also stated that student goal achievement is a more accurate measure of institutional success because it shows the institution is providing the necessary services and supports to aid students in their own achievements.

This study has the potential to inform policy makers on the importance of including student intents and goals as part of any performance funding policy. In addition, the study can draw attention to the role that EOPs play in assisting students with meeting their self-defined goals. This information is useful to campus administrators who have decision-making responsibilities in the areas of student services and programs to help identify specific EOP components that assist in goal completion, which may also be replicated for the larger student body.

Definitions of Terms

Community College – A 2-year public institution of higher learning that offers associate degrees and certificates. These institutions may also be referred to as a *junior college*.

Educational Opportunity Program (EOP) – A state-funded, organized plan combining access, academic support, and supplemental assistance to make higher education possible for students who have the potential to succeed, despite poor preparation and limited financial resources.

Educational Opportunity Program (EOP) Student – A person who has met the criteria for admission into a state-funded, organized plan combining access, academic

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support, and supplemental assistance to make higher education possible for people who have the potential to succeed, despite poor preparation and limited financial resources.

Persistence – The continuation of a student's education from one semester to the next.

Regular-Admit Student – A person who is accepted into an institution of higher learning program under the normally allowed criteria that is specific to that institution.

Retention – A percentage of students who remain enrolled for an academic semester.

Traditional-Age Student – A person in an institution of higher learning who is within the lifespan of a person immediately following high school, for example, 18-20 years of age.

Chapter Summary

Community colleges have become significant components of the higher education system. Students from a variety of demographic and educational backgrounds are enrolling in community colleges, seeking access to further their education. Existing literature on 2-year colleges is lacking depth and understanding of the complexities of student persistence. Traditional methods for understanding persistence rely heavily on demographic variables. While the research has shown relationships between persistence and individual characteristics, it provides an incomplete measure of success. Further, student success is often measured from an institutional point of view rather than from that of the student. This institutional metric leaves out the student perspective on success, and it can impact community colleges' ability to be fairly judged on their support of student success and achievement.

Chapter 2 highlights significant research in the areas of student persistence, specifically the impact of institutional and individual characteristics that play a role in persistence. Chapter 3 provides a detailed description and explanation of the methodology and processes used in performing this study. In addition, Chapter 3 presents information on the source of data for this study and a description of the tools used to complete it. Chapter 4 provides a detailed description of the analyses conducted on the collected data and describes the results of each phase of the study. Chapter 5 discusses the results of this study and the implications of the results for policy and practice. In addition, the limitations of this study are presented and suggestions for future research are provided. Last, Chapter 5 provides recommendations to policy makers and higher education professionals for improving Educational Opportunity Programs.

Chapter 2: Review of the Literature

Introduction and Purpose

  Persistence and retention have been used interchangeably when discussing student success. The National Center of Education Statistics (NCES, 2011), however, differentiates these two terms by stating that *retention* is an institutional measure, while *persistence* is a student measure. When using these terms, persistence is used to describe the act of a student remaining enrolled in an institution, and retention is used to describe the act of an institution keeping the student enrolled. The review of the research focuses on an overview of persistence literature, institutional characteristics related to persistence, and the relationship between self-efficacy and persistence. An understanding of this literature provides a context for understanding the complexity of student success and the many variables that contribute to student persistence.

Review of the Literature

  The research on community college student persistence is less extensive than that of the research conducted on student persistence at 4-year institutions. However, recent literature on the topic of student persistence in community colleges, much like that of the research centered on 4-year campuses, has focused on individual and institutional characteristics that influence persistence rates of students enrolled in community colleges. In some cases, the researchers have attempted to examine both individual and institutional attributes in the same study to determine how they interact with each other to influence persistence.

Institutional characteristics impacting persistence. Calcagno, Bailey, Jenkins, Kienzl, and Leinbach (2008) sought to determine which institutional characteristics were correlated with positive outcomes for community college students. A positive outcome is defined as completion of a certificate or degree or transferring to a baccalaureate-degree-offering institution. Calcagno et al. (2008) conducted a quantitative analysis on student and enrollment data from the 1988 National Education Longitudinal Study (NELS) merged with institutional variables from the Integrated Postsecondary Education Data System (IPEDS). Results from the study show that the sample population was more likely to have successful outcomes if they came from a small-sized institution of less than 1,000 students. Students who were less likely to attain a degree came from institutions that had high numbers of part-time faculty and minority populations.

A key finding from the Calcagno et al. (2008) study was that when student demographics, student socio-economic status (SES), and student test scores were included in the regression, they were found to be more strongly related to the completion of a degree or transfer than the institutional factor, contradicting the findings of Nakajima et al. (2012). The researchers pointed out that institutional characteristics do not capture pedagogic strategies, successful guidance and academic counseling efforts, faculty culture, and organizational characteristics that may have an influence on the outcome (Calcagno et al., 2008).

Goble, Rosenbaum, and Stephan (2008) also looked more closely at specific institutional attributes that might help predict degree success for students enrolled at 2-year colleges. Conducting a logistic regression using the IPEDS data and the 1988 NELS dataset, the Goble et al. (2008) study attempted to build upon the work of Calcagno et al.

(2008) by adding institutional graduation rates as a measure, looking at degree completion, and excluding transfer as an outcome. Institutional graduation rates for community colleges are determined by the percentage of full-time, first-time students in any particular cohort who graduate within three years.

Results of the Goble et al. (2008) study indicated that students with higher levels of high school achievement had increased odds of completing an associate degree or higher. There was also a positive, significant relationship between the graduation rate of the institution and the odds of a student persisting to completion. One significant negative relationship found was that the larger the proportion of minority students enrolled in the institution, the lower the odds were of a student persisting to completion. This finding is consistent with Calcagno et al. (2008).

When the sample was broken down into high-, middle-, and low-achieving groups, there were differences in the findings. Institutional graduation rates had no impact on the high-achieving student group; however, the percentage of part-time faculty had a significant negative relationship on degree completion, as did the size of the institution. Schools with over 15,000 students had lower completion rates. This is also consistent with the findings of Calcagno et al. (2008). Middle-achieving students in suburban colleges did significantly better than those attending urban schools, and they also did better in small schools compared to large institutions. There was a slightly negative, but significant, relationship between the funds spent on students and the degree completion for middle achievers. These middle achievers showed the most significant relationship between institutional graduation rates and outcomes. Similar to the findings of Calcagno et al. (2008), the results of the low-achieving group of students showed that

the percentage of minority students enrolled at the institution had a negative relationship on their degree completion.

Individual characteristics impacting persistence. Looking at individual student characteristics that predict persistence, Nakajima et al. (2012) acknowledged that an increasing number of students withdraw from college without meeting their educational goals of a degree or certificate, and the rates of withdrawal at community colleges are even higher than those of 4-year institutions, specifically during the first year of enrollment. The purpose of the Nakajima et al. study was to gain an understanding of the predictors of persistence among community college students through a close examination of multiple variables. The researchers asked 427 study participants to complete the Institutional Integration Scale, the College Self-Efficacy Inventory, and the Career Decision Scale to gather information on the sample. The researchers then conducted correlational and multivariate logistical regression analysis to explore the relationships between the collected variables.

Findings of the Nakajima et al. (2012) study indicate that student persistence was negatively related to students' age, off-campus work hours, total work hours, and English proficiency. Persistence was positively related to the receipt of financial aid and a higher GPA. Academic integration variables and psychosocial variables had no significant relation to persistence. Effect sizes were small for the results, and they showed that cumulative GPA was the strongest predictor of student persistence. Other predicting factors of persistence included a high number of credits accumulated and English proficiency. Also of importance is that no significance was found with the academic integration or psychosocial variables, but the findings do support that there is a strong

interrelationship between the variables, which shows that the concept of student persistence is a complex issue.

From this, the researchers generalized that students who are most likely to persist are those who: (a) earn high grades, (b) attend full-time, and (c) have mastery of the English language (Nakajima et al., 2012). There was also a clear difference in persistence between age groups and those who worked full-time and those who did not. The Nakajima et al. study suggested that because cumulative GPA was the strongest persistence predictor, it limits the importance that institutions should place on pre-college variables, and the institutions should put into place policies and practices that enhance student GPAs, and the relational factors that go into enhancing student GPAs should be considered of significant value.

Hawley and Harris (2005) also examined the factors related to community college persistence, specifically at a large metropolitan community college. But rather than examine background characteristics, the researchers chose to look at behaviors and attitudes of the study participants. The researchers surveyed 400 freshman community college students using the Cooperative Institutional Research Program questionnaire. Of the 400 students, a total of 108 responded to the survey. The researchers used discriminant function analysis to analyze the survey results.

Results from the Hawley and Harris (2005) study showed that motivational and academic variables that predicted the biggest impact on retention were: (a) a student's motivation to transfer to a 4-year institution, (b) cumulative GPA, and (c) being highly active and highly focused. In the expectations category, the most significant predictor of retention was the length of time the student planned to stay at the institution. The other

significant variable was the student's expectation that he or she would not be able to finance college. Similarly, students who had an expectation of job responsibilities while in college were more likely to leave.

The study found that, overall in the community college setting, students likely to persist are: (a) active in campus activities, (b) high academic achievers, and (c) expected to stay at the institution. The researchers found that African American and Latino students, other than Mexican Americans, were highly likely to persist over other racial groups (Hawley & Harris, 2005).

Martin et al. (2014) also investigated the low percentages of community college students who were graduating. The researchers explored, qualitatively, the behaviors and characteristics of community college students who graduated. The study was specifically focused on students who had an intent to complete an associate degree program and who accomplished that goal within three years of enrolling at the community college. The specific purpose of the study was to identify behavior patterns and themes that were typical of community college graduates. In addition, the study sought to capture those traits and characteristics that are not typically captured in datasets from national databases or are not part of well-validated surveys.

The Martin et al. (2014) research took place at a large, public 2-year college located in the southeastern United States. The student population was 80% White, and 60% of the population was required to take remedial coursework. Semi-structured interviews were conducted as the primary method of data collection. The first participants were faculty, staff, and administrators. These participants were asked to identify students that "persisted against the odds and graduated from the institution" (Martin et al., 2014,

p. 228). In total, 17 graduates were identified through this process. Other student participants were identified through recommendations from other graduates or from random selection. The researchers wanted to determine the students' perceptions of factors that contribute to student success and how the college promoted those factors.

Results from the Martin et al. (2014) interview analyses showed several themes that led to successful graduation from the community college. Successful graduates were identified as having: (a) clear goals, (b) strong motivation, (c) the ability to manage external demands, and (d) self-empowerment. The most prevalent theme was strong motivation to succeed. The source of the motivation did vary between internal motivation and motivation provided by parental expectations, opportunities for the future, and even motivation in the form of competition from their peers. Successful students were able to manage the demands put upon them from outside the institution, and they were inclined to seek out support services to help deal with the challenges they were facing. Also, the successful students all indicated that they worked one or more jobs and struggled financially, both of which are variables that are often part of quantitative analysis on persistence and which are shown to be negatively associated with persistence (Nakajima et al., 2012). The contrast in the findings of Martin et al. (2014) and Nakajima et al. (2012) demonstrate that a strong sense of motivation can outweigh the challenges that Nakajima et al. found to be a hindrance to student persistence.

Napoli and Wortman (1998) also sought to understand the causes for attrition of community college students through an examination of a collection of academic and psychosocial variables that were found as part of Tinto's (1993) model of student departure. Specifically, the study was designed to determine the impact of a set of

academic and psychosocial factors on the persistence of 2-year community college students.

The final sample size for the Napoli and Wortman (1998) study was 1,011 first-time freshman students enrolled in freshman seminar classes across a three-campus community college in downstate New York. The researchers conducted a longitudinal study over a period of one year, collecting data at three different intervals. The researchers collected data from the College Entrance Examination Board's computerized placement tests and from the answers to several questionnaires designed to ascertain information about students' time commitments, goal-setting behavior, and academic success. Confirmatory factor analysis and discriminate function analysis was used to examine the collected data.

Initial goal commitment was positively and significantly associated with: (a) socio-economic statues, (b) gender, (c) conscientiousness, (d) self-esteem, and (e) campus size (Napoli and Wortman, 1998). Significant and negative associations were found with ethnicity and developmental course requirements. The nonminority students in the study showed significantly greater initial goal commitment than the minority students, and basic skills deficiencies were shown to have a significant negative impact on initial goal commitment. Given the strong correlation between cumulative GPA of students and persistence (Hawley & Harris, 2005; Nakajima et al., 2012), it is important to note that the first-semester GPA of the students was significantly and positively associated with social support and psychological well-being. Ultimately, persistence was significantly linked to institutional commitment at the point of entry, first-semester GPA, and goal commitment at the end of the fall semester.

Borglum and Kubala (2000) were also interested in the academic and social integration components of Tinto's (1993) student departure model. The researchers explored the importance of academic and social integration, as well as background characteristics, on community college withdrawal rates. The study took place across three campuses of Valencia Community College in Florida. A total of 2,115 students were included in the study. The researchers used a modified version of the Enrolled Student Satisfaction Survey. Borglum and Kubala used frequency distributions and ANOVAs to analyze the survey results.

Results of the Borglum and Kubala (2000) study show that students who felt academically integrated also felt socially integrated, but results also showed that there was no significant correlation between academic and social integration variables and withdrawal rates. The researchers did note, however, that this may be in large part due to the fact that the second-semester students were surveyed and would have already developed skills in transitioning to the institution and would likely have clearer goals than first-semester students.

Similar to Borglum and Kubala (2000), Strayhorn (2012a) was interested in the impact that academic and social integration had on retention. However, Strayhorn was particularly interested in how these integration variables impacted retention among African American males at community colleges. The researcher conducted a secondary analysis of data retrieved from responses from 127 African American men on the 2004-2005 Community College Student Experiences Questionnaire (CCSEQ). The CCSEQ was developed to gather information about the quality and quantity of students' experiences in 2-year institutions. The theory behind the questionnaire was based on the

idea that the more students use institutional resources and take advantage of institutional opportunities, the more they benefit. Strayhorn (2012a), however, focused the research on those survey questions that were designed to measure (a) whether a respondent would choose the same college if he/she had to do it over again, and (b) the extent to which college was stimulating and exciting to the student. The researcher used descriptive statistics, correlation analyses, and hierarchical multiple-regression tests to examine the relationships between student background traits, social integration (with faculty, with students, and with campus life), and the outcome of retention (Strayhorn, 2012a).

Results from the Strayhorn (2012a) study show that age was a significant predictor of college satisfaction, indicating that students older than 19 were less satisfied. The researcher postulated that this was likely the result of increased outside commitments as students get older. This hypothesis is supported in the finding that there was a higher level of satisfaction among students whose family responsibilities had little to no effect on their school work. Last, social integration with other students was found to have a negative relationship to college satisfaction for African American males. The researcher hypothesized that this could be the result of frequent interactions with other students of different ages, races, and value systems.

Specific student populations. A number of studies, while still focused on individual characteristics that impact persistence of community college students, examined very specific cohorts of students. Settle (2011) sought to explore the variables that could predict persistence at a community college but focused primarily on first-generation college students, using information on socio-economic status and social capital as the primary variables. An additional purpose of the study was to attempt to

develop a model that would predict the persistence of these students. Settle used data from the Beginning Postsecondary Students Longitudinal Study of 1996 and examined 42 variables, which were grouped into seven factors. The researcher used logistic regression on six different samples of students.

Settle (2011) wanted to develop a better understanding of how socio-economic status and social capital variables influence year-to-year persistence of first-generation college students compared to continuing-generation college students. Results show that the year-to-year persistence among all students at 2-year campuses was predicted mostly by whether or not the students had friends attending the same institution and whether or not the student had social contact with faculty outside of the classroom. In particular, these findings echo the importance of social connections found in Hawley & Harris (2005) and Napoli & Wortman (2008). Settle (2011) also found that GPA was a significant predictor of persistence. This finding is consistent with other research that placed a significant importance on GPA (Hawley & Harris, 2005; Nakajima et al., 2012).

Fike and Fike (2008) conducted a retrospective empirical examination to identify predictors of first-time-in-college (FTIC) student retention at a community college in west Texas. Variables typically associated with Tinto's (1993) student departure model were analyzed in an attempt to predict retention. This retrospective study used four years of archival data that was collected between 2001 and 2004. The researchers conducted a chi-square analysis, bivariate correlations, point-biserial correlations, and multivariate logistic regressions.

Results of the Fike and Fike (2008) data analysis showed that the strongest positive predictor of retention from fall to spring was successful completion of a

developmental reading course. The results showed that students who completed a developmental reading course were more likely to be retained than those students who enrolled in a developmental reading course but did not complete it. Additionally, both enrollment and completion of a developmental mathematics course was also associated with increased odds of retention. Even students who enrolled in a developmental mathematics course but did not complete were more likely to be retained than students who did not enroll at all in the developmental mathematics course. Another positive correlate was participation in Student Support Services, one of eight federally funded TRiO Programs, which is a group of federally funded programs that target and serve low-income individuals, first-generation college students, and individuals with disabilities to help them progress through the academic pipeline. Of particular importance was the finding that developmental education plays a key role in the retention of FTIC students.

In contrast to Fike and Fike (2008), Bailey and Morest (2006) discovered, through an analysis of 15 community colleges from six states between 2000 and 2002, that remedial education was not a path to student persistence. Overall completion rates, regardless of the discipline and placement policy of the institution, were low (Bailey & Morest, 2006). Bailey and Morest also found that dropout rates for students enrolled in remedial courses were high, and the number of students that moved on to the next-level course was low.

Wells (2008) was also interested in persistence and used Bourdieu's (1986) concepts of social and cultural capital as his theoretical framework. Social capital is defined as "the social and personal connections or networks that people capitalize on for interpersonal assistance and personal gain" (Bourdieu, 1986, p. 29). Cultural capital is

defined as "culture-based factors and indicators of symbolic wealth that help define a person's class. Cultural capital is often inherited from one's family and therefore may sustain socio-economic status stratification based on families passing the torch of societal privilege and advantage" (Bourdieu, 1986, p. 29-30). The researcher was interested in the effect that social and cultural capital have on persistence in both 2- and 4-year institutions.

The Bourdieu (1986) results show that social and cultural capital, overall, had a significant effect on student persistence. However, when just examining the institution type model, the only significant variable was that of the parents' college education. However, when applying the control variables and examining the interactions between the variables, it was found that students with little capital beginning at community colleges persist in staying in school at higher rates than students with little capital beginning at a 4-year institution. The Bourdieu hypothesized that this may be the result of community colleges being more socially equitable and 4-year campuses being plagued with an attrition problem as a result of elitism.

Comparison studies. Another method for examining persistence at community colleges was to run comparisons against other cohorts and other institutions. Strauss and Volkwein (2004) were interested in attempting to predict institutional commitment, but they expanded their lens to include both 2- and 4-year institutions. For their purpose, the researchers defined *institutional commitment* as a student's overall satisfaction, sense of belonging, impression of educational quality, and willingness to attend the institution again. The purpose of the study was to "focus on the dynamics of student commitment as

an important institutional outcome and predictor of student persistence" (Strauss & Volkwein, 2004, p. 205).

Strauss and Volkwein (2004) conducted a secondary analysis of data collected from 23 four-year and 28 two-year public institutions. The institutional level data was gathered from the IPEDS and the student-level data was collected via an outcome survey that was distributed to students at the cooperating institutions. Descriptive statistics were performed and data analysis was multivariate, using hierarchical linear modeling.

Results from the study were notable when related to organizational characteristics. Institutional mission was significant in affecting institutional commitment. While this finding was significant for both 2- and 4-year institutions, the significance was higher with 2-year institutions. Other findings include the discovery that older students and White students have higher institutional commitment (Strauss & Volkwein, 2004). Additionally, students with high financial aid and students who perceive greater challenges in paying for their education had higher institutional commitment. The finding that social integration proved to be one of the strongest predictors, in particular at the 4-year institution, was consistent with other research that included social integration as a variable (Hawley & Harris, 2005; Napoli & Wortman, 2008; Settle, 2011). Also related is that students, who felt they had achieved greater social growth since the beginning of college, also had higher institutional commitment (Strauss & Volkwein, 2004). Last, academic integration and academic growth were strong predictors of institutional commitment. Classroom experiences at the 2-year college was a significant predictor, and it was a higher predictor than that of the 4-year

campuses. Higher institutional commitment was also significantly associated with faculty interaction and intellectual growth at both 2- and 4-year institutions.

Sontam and Gabriel (2012) were specifically interested in student engagement at community colleges, and they were also interested in exploring the possibility of differences between genders and races relating to student engagement in community colleges. The researchers were interested in determining if there were gender differences in student engagement, and if so, were the differences more apparent in certain areas of student engagement? Additionally, the researchers were interested in discovering if there were differences in individual student engagement based on race, and if African American students differ from other races.

Results show that women scored higher than men regarding student effort. Women also had higher scores than men in the academic challenge category. Last, female participants scored higher than male participants on student-faculty interaction. Findings also showed that African American students were more likely than other racial groups to put forth more effort in their studies. African American students were also more likely than other racial groups to be academically engaged. However, this engagement did not lead to higher GPAs (Sontam & Gabriel, 2012). These findings create a paradox in which student engagement has shown to have a positive relationship on persistence and retention, but the same student engagement of African American students does not have the same impact on persistence, leading to a question of whether or not there are specific forms of student engagement that are more or less likely to lead to persistence for African American community college students.

Goal setting and persistence. As this dissertation is focused on understanding goal completion, it is important that a review of literature on the topic of goal setting in a college environment be explored. A review of the literature on this topic provided seminal as well as more current research on this topic.

Research on goal setting has evolved from the very early works of Heider (1960) and Lewin (1958) who, in general terms, developed an understanding that human behavior is largely driven by goals. This initial research was expanded by Fishbein and Ajzen (1975) who developed the theory of planned behavior in which they posited that the likelihood of any behavior being performed was strongly correlated with the strength of the person's intention to perform that behavior. The works by Latham and Locke (1975, 1979) helped to develop a better understanding of goal setting through their goal-setting theory. Latham and Locke (1979) argued that setting specific goals leads to higher levels of performance than defining more generic goals, and that the more difficult a goal is, the more effort, time, and perseverance is placed into accomplishing that goal.

Dweck (1985) and Dweck and Bempechat (1983) continued the work of Locke and Latham (1979) and explored the differences in the types of goals. Dweck observed that all goals can be placed into one of two categories: mastery or performance. Mastery goals are those goals that seek to develop ability through increasing effort, while performance goals assume that ability is fixed while working towards the desired outcome. Another distinction between the two categories is how success is measured. Elliott and Dweck (1988) argued that performance goals are measured by outperforming peers, and mastery goals are successfully achieved through meeting task-based or self-defined criteria. They further argued that, due to the difference in how success is

measured between the two categories, mastery goals, in essence, are the easier of the two goals to achieve and they create more feelings of competence, which leads to more positive outcomes. The research and theory development of these early researchers provided the opportunity for other researchers to further their work and develop an understanding of how goal setting relates to persistence and success.

Travers, Morisano, and Locke (2015) used a qualitative approach to explore academic growth through an in-depth, reflective goal-setting method. Their study focused on 92 United Kingdom college seniors enrolled in an elective, advanced interpersonal skills and personal development course that focused specifically on goal setting and self-reflection. The researchers had students write regularly in journals during the course and provided qualitative questionnaires during, at the completion of, and six months after the course.

Results from the Travers et al. (2015) study showed that there was a relationship between academic performance and the setting of specific academic growth goals. Goals that were more indirectly related to achievement (e.g., stress management) appeared to have the most positive impact on academic growth and performance. The follow-up survey results revealed that, even after the course ended, the goal-setting habits that students had been engaged in continued to produce academic growth and performance. One major finding from the research was the importance of subgoals in the goal-setting process with one student responding, "I set myself mini-goals to complete, and each time I completed a goal it filled me with a sense of achievement, which in turn encouraged me to complete the next goal" (Travers et al., 2015, p. 236).

Tovar-Murray, Jenifer, Andrusyk, D'Angelo, and King (2012) explored goal setting within the context of race and ethnicity. In particular, the researchers were interested in understanding how racism-related stress and ethnic identity determined career aspirations. The researchers collected data from 163 African American students enrolled at an urban, predominately White Midwestern university. A moderation regression analysis was used to determine whether ethnic identity moderated the relationship between racism-related stress and career aspirations (Tovar-Murray et al., 2012).

A Pearson's product-moment correlation coefficient revealed that career aspirations had a positive and significant relationship with ethnic identity. Results also identified that racism-related stress was related to ethnic identity. In the context of career aspirations, it was found that for students with low identity development, as stress from a perceived environment of racism increases, career aspirations decline. Conversely, students with high levels of identity development showed an increase in career aspirations as perceived racism increased (Tovar-Murray et al., 2012).

Seijts and Crim (2009) explored goal types from the standpoint of cognitive ability. Specifically, the researchers sought to determine what, if any, relationship existed between goal setting or motivation, cognitive ability, and situational constraints. The researchers hypothesized that there is an interaction between the type of goal and cognitive ability when a complex task, which requires new knowledge, is being performed. Using Elliott and Dweck's (1988) model of performance and mastery goals, the researchers posited that participants with higher cognitive ability would benefit more

from a performance goal while participants with lower cognitive ability would benefit more from a learning goal (Seijts & Crim, 2009).

The participants for the study were 105 first- or second-year university students enrolled in the pre-business programs at a Canadian university. Participants were randomly assigned to either a challenging performance goal or a challenging learning goal. The task given to each group was to create unique university class schedules that included five non-redundant classes. Participants with a learning goal were instructed to implement four or more unique strategies, while participants with a performance goal were instructed to complete 11 or more class schedules (Seijts & Crim, 2009). The researchers utilized a multiple-hierarchical regression analysis to test the proposed hypotheses. Results show that there was a significant and positive correlation between cognitive ability and performance, and there was a significant positive correlation between commitment to the assigned goal and actual performance, supporting the findings by Napoli and Wortman (1998) and Strauss and Volkwein (2004). The hypothesis was proven to be true showing that participants with higher cognitive ability benefit more from the performance goal while participants with lower cognitive ability benefit more from the mastery goals (Seijts & Crim, 2009).

Sorrentino (2006) utilized goal-setting theory to assess the impact of an academic mentoring program. The College of Staten Island, City University of New York, offered a semester-long pilot program to support students whose overall GPA was below 2.5, making them at risk for academic dismissal. The pilot program used a goal-setting approach to help students identify and overcome obstacles to their academic success. Participants in the study consisted of 63 at-risk college undergraduates broken up into

three groups comprising a mentor group that received tutoring and mentoring, a tutor group that received only tutoring, and a control group that received neither. The mentor group was given several options of goals that could be worked on over the course of the semester.

Results of the study were found using qualitative analysis and ANCOVA, which were used to evaluate whether population means of a dependent variable are equal across levels of categorical independent variables while controlling for the effects of other variables that are not of interest. Quantitative analysis was conducted on pre- and post-GPA and the intervention. Results of the ANCOVA revealed that there was a statistically significant difference between the three groups on total post-GPA grades for that semester, and that the post-GPA scores for the mentor group were significantly higher than the other groups (Sorrentino, 2006). The qualitative analysis showed the importance of the goal-setting element of the mentoring program with one student reporting "my mentor helped me to fix goals and now I am passing all of my classes" and another student reporting "I have career goals now and am motivated to work towards those goals" (Sorrentino, 2006, p. 247).

In a more thorough examination of cognitive variables, Çetin (2015) sought to determine whether academic motivation and self-regulated learning predicted students' GPA in a collegiate early-education program. Study participants consisted of 166 early-education majors at a southern university. Data was collected via the *academic motivation scale* and the *academic self-regulated learning scale*.

Pearson correlations were conducted to determine if there were significant correlations between early-childhood-education students' academic motivation, self-

regulated learning, and GPAs. Multiple regressions were performed to determine if motivation and self-regulated learning together predict GPA. The only correlation found was between that of goal setting, a subfactor of the academic self-regulated learning scale, and GPA. There was a significant positive correlation between GPA and goal setting.

Self-efficacy and persistence. From a review of the literature on student persistence and success, there also emerged studies that were related specifically to more cognitive attributes of students such as self-efficacy and motivation. Brady-Amoon and Fuertes (2011) collected data from 271 full-time undergraduate students. The researchers collected data using the College Self-Efficacy Inventor (CSEI) in addition to the Self-Directed Search (SDS) and the Student Adaptation to College Questionnaire (SACQ). These instruments were used to collect information on self-efficacy strength, self-rated ability strength, and college adjustment. In addition to these tools, the researchers also examined cumulative GPA. Data analysis was conducted using descriptive statistics and multiple regression.

Brady-Amoon and Fuertes (2011) found that self-efficacy had a significant relationship with college adjustment. This finding was consistent with earlier research on the contribution that self-efficacy has on college adjustment (Bandura, 1997; Lent, Brown, & Hackett, 2000). As noted earlier, college adjustment is a key element to student goal and institutional commitment (Tinto, 1975).

Vuong, Brown-Welty, and Tracz (2010) analyzed the effects of self-efficacy on the academic success of first-generation college sophomore students. In particular, the

researchers examined the relationship between self-efficacy and academic success, which is defined by GPA, persistence, demographic factors, and institutional size.

The researchers sampled a total of 1,291 students from across five institutions in the California State University system. These students responded to questions as part of the CSEI. The researchers used four regression models to study the relationship between academic success and self-efficacy. In addition, a one-way MANOVA was used to explore the relationship between institutional size and self-efficacy. The MANOVA test is used to compare the means of a multivariate analysis and helps to determine if changes in the independent variable have significant effects on the dependent variable. Results from the study show that self-efficacy has an impact on GPA and persistence. This finding was consistent with the findings of Brady-Amoon and Fuertes (2011) and Hackett and Betz (1992).

Chemers, Hu, and Garcia (2001) conducted a longitudinal study of 373 first-year university students and their ability to adjust to college. The researchers examined the effects of self-efficacy and optimism on academic performance, stress, health, and academic commitment. While various Likert-scale instruments were used to collect data from the students, it is noteworthy to mention that Chemers et al. (2001) developed a self-efficacy measurement tool that differed from the more traditional CSEI that other researchers have used. Collected data was analyzed using structural equation modeling, the maximum-likelihood-based comparative fit index, and the standardized root-mean-square residual formula.

Chemers et al. (2001) found that self-efficacy had a direct and indirect relationship to academic performance and personal adjustment. In particular, they

discovered that self-efficacy was a significant predictor of academic performance, and that academic expectations were directly related to academic performance. In addition to the findings of the effects self-efficacy had on academic performance, the researchers found that self-efficacy was related to the perceptions students had about their own abilities to adjust to college (Chemers et al., 2001).

Ramos-Sánchez and Nichols (2007) also examined the effect of self-efficacy on academic outcomes of first-generation and second-generation students. The researchers studied 192 entering freshman at a private 4-year university. Similar to other studies mentioned herein, the researchers used the CSEI, and the SACQ was used to measure adjustment to college.

Bivariate analysis was performed to determine the relationships between participant variables and the dependent measures. In addition, a univariate repeated-measures ANOVA was used to determine differences in self-efficacy between first- and second-generation students. Findings indicate that the self-efficacy levels did predict college adjustment. Another notable finding was that the self-efficacy levels of the participants did not increase over time, indicating that college experience does not necessarily result in a higher confidence to achieve (Ramos-Sánchez & Nichols, 2007).

Elias and MacDonald (2007) explored the relationship between prior academic performance and self-efficacy on college academic performance. The researchers used a modified version of the Collective Efficacy Scale and the Academic Self-Efficacy Scale. Participants for the study came from several sections of an introductory psychology course at a large university in the Rocky Mountain region of the United States.

The researchers used a hierarchical regression analysis to examine the data and found that past performance or high school GPA was a predictor of academic self-efficacy beliefs. In addition, results show that past performance was a significant predictor of college performance, consistent with other studies (Piland, 1995; Porchea, Allen, Robbins, & Phelps, 2010; Wang, 2009). Finally, Elias and MacDonald (2007) found that as certain tasks became more familiar, efficacy beliefs had a greater impact on academic performance than past performance, contradicting the findings of Ramos-Sánchez and Nichols (2007).

A subset of studies conducted on self-efficacy dealt with self-efficacy changes over time. One such study was conducted by Ouweneel, Schaufeli, and Le Blanc (2013) in which the researchers sought to explore if and how self-efficacy levels changed over time with similar changes in engagement and performance. The researchers grouped participants into categories of patterns of change or stability in self-efficacy over time. The subgroups were compared to one another to determine differences in students' motivation and performance. Specifically, the researchers were seeking to investigate the effects of changes in self-efficacy over time related to academic self-efficacy and task-related self-efficacy.

The study was conducted with 335 university students who were given questionnaires halfway through the semester and at the end of the semester. The measures included in the study were study-related self-efficacy and study engagement. The researchers conducted several different analyses, including a multivariate analysis of variance with repeated measures, a univariate analysis of variance, paired sample t-tests, independent sample t-tests, and Levene's tests (Ouweneel et al., 2013).

Results of the Ouweneel et al. (2013) study show that changes in self-efficacy scores were more aligned with changes in study engagement with no apparent relationship to actual study performance. In the study, self-efficacy was related to subjective measures, such as study engagement, but not to measures like GPA. The researchers found that changes in self-efficacy levels were related to how the level of engagement of students varies over time. To explore the phenomenon further, the researchers conducted an experiment to determine if positive feedback would increase the level of self-efficacy in students. The researchers found that participants in the study who received positive feedback scored significantly higher on self-efficacy than those who received negative feedback ($p < .001$) and who were in the control group ($p < .05$). Overall, the researchers found that increased self-efficacy led to increased engagement and performance over time (Ouweneel et al., 2013).

While examining changes in self-efficacy over time is an important component of a broader understanding of how self-efficacy impacts success, it is important to examine the very nature of the origins of self-efficacy. Waaktaar and Torgersen (2013) looked at the self-efficacy levels of adolescent twin pairs to determine if self-efficacy is more a result of environmental factors or inherent in the genetic makeup of an individual.

Waaktaar and Torgersen (2013) collected data from seven Norwegian cohorts of monozygotic and dizygotic adolescent twins of both sexes who were raised together. The researchers hypothesized that perceived self-efficacy would be moderately heritable. For the study, the mother, father, and twins responded with a paper and pencil inventory of the Children's Perceived Self-Efficacy Scale. The researchers chose to use a biometrical modeling approach to analyze the collected data. This approach fits covariances, based on

raw data, into a structural equation model through a full-information maximum-likelihood (FIML) estimation (Waaktaar & Torgersen, 2013).

Results of the study showed that genetic factors accounted for 75% of the variation in the common psychometric, general self-efficacy factor with the remaining 25% being explained by non-shared, unique environmental variables (Waaktaar & Torgersen, 2013). Results of the study also showed that there was no significant difference between the genders of the study participants. The results of the study challenged the widely held notion that self-efficacy is predominately learned through experiences (Bandura, 1977; Zimmerman, 2008)

Educational opportunity programs. A search for literature on EOPs yielded few applicable studies. The terms *Educational Opportunity Program* and *Higher Education Opportunity Program*, as well as their acronyms *EOP* and *HEOP*, were entered into the databases of Academic Search Complete, Education Source, ERIC on ProQuest, JSTOR, ProQuest Central, Sage Journals Online, and Taylor & Francis Journals. The results were filtered to include peer-reviewed academic journals between the period of 2004 and 2015. While this search did yield findings with those search terms, upon closer examination, the search terms were not the primary focus of the returned studies. Rather, the terms were used to describe common student support structures. None of the returned studies examined EOPs beyond historical accounts nor did they examine longitudinal student demographics and outcomes.

Chapter Summary

This chapter began with a review of literature on persistence from an individual perspective, focusing on pre-determined characteristics and high school performance.

The chapter also focused on the role that the institution plays in student persistence and success. The review focused on the specific role of interventions, institutional size, and support offerings. Last, there was a review of what role self-efficacy plays in student success. The impact self-efficacy has on performance was highlighted.

Studies that have focused on the institutional characteristics that create successful students provide only minimal understanding of the larger and more complex issue of student persistence. Many of these studies have also focused solely on 4-year institutions that students enter for the explicit purpose of achieving a degree. In contrast, the community college sector caters to students with many different academic goals. The goal of this study is to identify specific institutional practices within the EOPs that lead to persistence toward the student-defined goals.

The studies that focused on individual characteristics and traits leading to persistence and retention primarily found relationships between persistence and prior academic performance and cumulative college GPA. However, these findings were also viewed through the lens of persistence to achieve a degree or to transfer to another institution of higher learning. Similarly, the studies of various cohorts of students have focused on how and why specific groups of students persist over others, but none of these studies have included EOP-enrolled students.

There is little discussion of student outcomes from the student perspective. This gap in the literature results in an incomplete understanding of how student motivation, goal setting, and psychosocial behavior are linked to student-defined goal outcomes. In order for community colleges to better understand how to support student-defined success, a more thorough examination of the role of student goals and self-efficacy is

warranted and should provide additional support for advocates of a different performance-funding paradigm. The researcher used the research highlighted in this chapter as the foundation for this study by examining the lesser known variable of self-efficacy on a scarcely studied EOP population.

Chapter 3 presents a detailed explanation of the research study. Context for the research study is provided in addition to a description of the research participants and methods. Last, Chapter 3 describes the data-collection methods and instruments used and the type of analysis that was conducted on the collected data.

Chapter 3: Research Design Methodology

Introduction

The community college has become a major educational institution in the United States with more than 7 million students attending over 1,300 community colleges across the country (AACC, 2015). Part of President Obama's 2020 goal includes a renewed and significant focus on community colleges to graduate more students (Jaschik, 2009). The success of community college students has primarily been measured by student persistence to receiving an associate degree. However, not every community college student has a desire to complete an associate degree. Some students enroll to earn credit, to transfer, or to prepare for a career (Bailey et al., 2005d). While student intent is not a current metric that measures community college success, there is value in assessing whether or not community colleges are helping students meet their self-articulated goals (Polinsky, 2002).

Many factors contribute to community college students persisting toward their educational goals. Studies have examined the impact of variables, such as race, gender, community college GPA, high school scholastic aptitude test (SAT) scores, and socio-economic status, on persistence (Piland, 1995; Porchea et al., 2010; Wang, 2009). Studies on the demographic variables of student persistence have found that socio-economic status is a significant predictor of persistence, showing that there is a negative relationship between socio-economic status and persistence. Other research has focused on the institutional characteristics of community colleges and student psychological

influences that may impact persistence (Bailey, Calcagno, Jenkins, Kienzl, & Leinbach, 2005b; Dougherty, 1992; Wang, 2012). Goal setting and self-efficacy are other variables that have been shown to be predictive of student success (Brady-Amoon & Fuertes, 2011; Çetin, 2015; Chemers et al., 2001; Klomegah, 2007; Seijts & Crim, 2009; Sorrentino, 2006; Vuong et al., 2010).

The SUNY system provides support to economically and academically disadvantaged students through campus Educational Opportunity Programs. Of the 32 community colleges that are part of the SUNY system, 14 provide EOPs. Each of the campus EOP offices provide campus-specific programs and services, however, they all operate under the general purpose of combining access, academic support, and supplemental financial assistance to make a college education possible for students who show promise to be successful but lack solid academic skillsets, have limited financial support, or whose life patterns are characterized by historical economic or cultural deprivation.

The information contained in Table 3.1 provides an overview of the characteristics of the institutions selected for this study as of the fall of 2015. The campuses chosen for this study range in total undergraduate enrollment from 3,700 to over 26,000. *Undergrad Enrollment* is broken down into freshman EOP and freshman regular-admit students. *Campus Setting* provides a description of the geographic area in which the campus is located.

Table 3.1

Characteristics of Selected Institutions

Community College	Campus Setting	Undergrad Enrollment	Freshman EOP Enrollment	Freshman Reg-Admit Enrollment
A	Urban	13,649	150	1,922
B	Rural	6,800	52	1,226
C	Rural	7,087	49	861
D	Urban	15,335	93	2,784
E	Urban	12,271	100	2,133
F	Rural/Urban	26,219	68	4,532
G	Rural	3,702	110	131

Using archival enrollment data, the researcher sought to explore the differences in student-defined goal outcomes of EOP and non-EOP students to determine what type, if any, relationship exists between enrollment in a campus Educational Opportunity Programs and student-defined goal completion. Archival data was also used to develop a working description of EOP students enrolled in SUNY community colleges. In addition, this study sought to provide a description of self-efficacy levels for community college EOP students. Last, the study sought to identify components of the EOP that the enrolled students perceived to assist in the completion of the student-defined goal.

The research design for the study was quantitative, and it was conducted in two phases. The archival data was examined using a correlational approach. A correlational approach is used to determine the extent of a relationship between two or more variables using statistical data (Creswell, 2014). The study was cross-sectional in nature in order to estimate the prevalence of the outcome for a larger population. In addition, the archival data was used to provide a description of community college students enrolled in EOPs.

Finally, survey research was conducted to ascertain the self-efficacy levels of students enrolled in an EOP at the time of the study and perceptions of the impact of EOPs on student-defined goal completion. Creswell (2014) noted that survey research is effective for collecting a description of trends, attitudes, or opinions of a population with the intent to generalize from a sample to a population.

A correlational, cross-sectional study was used to compare an EOP sample group with a non-EOP sample group, between fall 2011 and fall 2014, to determine what, if any, differences exist between the achievement of the intended goals of the EOP- and the non-EOP-enrolled students. The study looked at the intended goals of (a) *enrolled to enrich – no degree*, (b) *earn degree – seek employment*, (c) *transfer within SUNY with a degree*, and (d) *transfer within SUNY with no degree*. In addition, the archival data was used to determine if any relationship existed between the various characteristics of the EOP population and goal achievement. A survey research component was added to gather input on the self-efficacy levels of the participants as well as to acquire the perceptions of EOP-enrolled students as to what components of the EOP they perceived aided them in their persistence toward their goal achievement.

The survey used was a modified version of the College Self-Efficacy Inventory, which was originally developed for use by Solberg, O'Brien, Villareal, Kennel, and Davis (1993) but was later modified and validated by Barry and Finney (2009). The purpose of the CSEI was to assess levels of confidence on different college-related tasks. Barry and Finney's modified version contains 15 questions, which are answered using a 10-point Likert scale. The researcher eliminated four of the questions in this modified version, which addressed self-efficacy in a residential experience, resulting in an 11-

question instrument (Appendix B). In addition to the questions that were part of the CSEI, the researcher added three additional questions that were related to the participants' experiences with the EOP (Appendix C).

Research Context

An EOP exists at 14 of the 32 community colleges within the SUNY system. Each of these campus programs admits and serves a population of students who are historically under-represented, academically underprepared, and/or financially needy. EOPs operate under the umbrella of the Office of Opportunity Programs at SUNY System Administration; however, each campus has the ability to use their financial and human resources to develop programs and services specifically for their EOP population.

Both phases of the study examined the EOP populations at the following institutions (a) A Community College, (b) B Community College, (c) C Community College (d) D Community College, (e) E Community College, (f) F Community College and (g) G Community College. These institutions represent 75% of the EOP enrollments within the community college sector of SUNY.

Research Participants

This study's participants varied based on the different components of the study. The first research question sought to explore the relationship between enrollment in the EOP and achievement of student-defined goals. The second research question was aimed at describing the self-efficacy levels of students enrolled in a community college EOP. Phase one of the study utilized archival data provided by the SUNY Institutional Research Office, which captured students enrolled in EOPs and regular-admit students between fall 2011 and spring 2014. Participants in phase two consisted of students

enrolled in EOPs at the seven community colleges listed above. These students were enrolled in the community college EOPs during the fall of 2015.

The initial population compiled from the SUNY Institutional Research Office contained a total of 16,013 students with a beginning enrollment between the fall of 2011 and spring of 2013. While students could select one of seven goals, to narrow the study population, only students who selected the following goals were examined: (a) enrolled to enrich – no degree, (b) earn degree – seek employment, (c) transfer within SUNY with a degree, and (d) transfer within SUNY with no degree. With this filter in place, the EOP segment of the population was 675, while the non-EOP segment was 15,338 students. In order to accurately compare the two cohorts, the researcher used a random sample of 675 students from the non-EOP group for all analyses that compared the two groups.

The third research question sought to identify specific components of the EOPs that assisted with persistence toward student-defined goal completion. Participants for the second and third research questions of the study were drawn from the existing EOP population enrolled at the identified seven community colleges.

Instruments Used in Data Collection

The first phase of the two-phase study consisted of gaining access to archival data within the SUNY system. At the time of the study, the researcher was employed by the SUNY System Administration and had access to data through the Institutional Research Office.

The second phase of the study required the use of a survey instrument to collect responses from students regarding their self-efficacy levels and perceptions of EOP to answer the second and third research questions. Phase two of the study consisted of the

researcher collecting data on students' level of college self-efficacy. Creswell (2014) indicated that survey research can provide a description of trends, attitudes, and opinions. The purpose of the survey was to collect information about the level of confidence the students had with various college-related tasks. The CSEI was developed by Solberg et al. (1993) to examine the relationship between self-efficacy and college adjustment for Hispanic students. Barry and Finney (2009) sought to validate the CSEI, using a program-construct validation, and they found the model-data fit to be unsupported. As a result, the researchers modified the instrument and performed an additional analysis on the modified tool and found there to be an adequate global fit. The resulting instrument was a 15-item, three-factor model (course self-efficacy, roommate self-efficacy, and social self-efficacy) that was empirically supported.

The researcher used this modified 15-item instrument for students enrolled in community colleges with housing programs. However, given that not all of the participating institutions have housing programs, a reduced 11-item questionnaire was used to eliminate the roommate self-efficacy subscale (Appendix B). The instrument used a 10-point Likert scale, ranging from 1 = not at all confident to 10 = extremely confident, and asked students to indicate their confidence level on various college tasks such as *talk to university staff* and *manage time effectively*. A pilot study of the CSEI was conducted with non-participating students who were enrolled at a local SUNY community college, to ensure usability of the survey and to address formatting changes that were needed to deliver the inventory online.

In addition, the researcher developed a survey instrument to obtain information regarding student perceptions of the importance of the EOP on the students' ability to

achieve their defined goal. Additional questions were asked about specific EOP

components that students found to be helpful in their academic achievement. The

additional questions (Appendix C) provided students with a listing of the most common

services provided across SUNY EOP offices, such as *academic advisement* and *EOP*

Orientation, and asked students to identify the impact that each component had on their

success, using a Likert scale between 1 = Not at all influential and 5 = Extremely

influential. A Likert scale was chosen for the EOP portion to keep the overall survey

instrument consistent throughout. However, a 5-point Likert scale was chosen for this

questionnaire because it is a more common configuration and less confusing than the 10-

point scale (Fowler, 2014).

The EOP portion of the survey instrument was validated through distribution to

EOP directors at four SUNY community colleges. The survey was pretested in order for

the researcher to ascertain how the survey instrument and protocol functioned in a

realistic setting. Pretesting was done with five students enrolled at a SUNY 4-year

institution, who were previously enrolled in a community college EOP. The pretesting

required the students to self-administer the online survey. Afterwards, they participated in

a brief interview aimed at assisting the researcher with modifying the survey.

The survey protocol included providing prospective participants with an

introductory letter informing them of the purpose of the study and providing them with

instructions for the survey. The survey instrument remained open for a period of four

months to capture responses at the end of the spring 2015 term and at the beginning of

the fall 2015 term. The first communication (Appendix D) was sent to the sample

population in late June 2015, with an additional reminder sent two weeks later. Third and

fourth reminders were sent in late August and mid-September, respectively, to catch any students that may not have been checking their institutional emails during the summer of 2015. There was no risk to the students for participating or for choosing to opt out. In addition, those students who did participate were entered to win a $100 or $50 gift card. To ensure confidentiality, all data were stored in the researcher's home on an external hard drive device and not accessible to college employees or students. The electronic files will be maintained on this external drive for a period of 3 years after the publication of this research.

Data Analysis

Three distinct research questions were examined in the study. Each question required a different procedure for gaining access to the necessary data. The first phase of the study required the researcher to seek permission from the Institutional Research Office of the State University of New York in order to gain access to the Business Intelligence dashboards that house all collected information for students in the SUNY system. Once granted access, the data that were collected from the Business Intelligence database consisted of SUNY identification numbers, age groups, gender, race, admission status (EOP vs. non-EOP), academic status (first-time freshman or transfer), academic majors, and educational goals. This data was collected for cohorts that began in 2011, 2012, and 2013.

The second and third research questions for the study required the researcher to seek permission from the participating community colleges. The researcher sought permission from each of the campus' Institutional Research Offices, via email, to survey all enrolled EOP students for the study. The institutional email address for each student

was obtained through the participating campus, and students were contacted through their institutional email addresses.

The first phase of the study involved the use and analysis of archival data. However, the data needed for the second and third research questions were collected via Qualtrics Research Suite©, a computer-based delivery software that has advantages that other methods cannot provide, such as branching, which creates a custom path through the survey that varies based on a respondent's answers (Fowler, 2014). Data collected from both phases of the study were analyzed using the Statistical Packaging Software Systems© (SPSS), version 21.0, a software program used for statistical analysis. Use of SPSS allowed for more effective management of the research data and provided for an in-depth analysis of all of the collected data.

To determine if there was a relationship between enrollment in an EOP and achievement of student-derived goals, a chi-square test of independence was conducted. Chi-square analysis is used when the scale of measurement is nominal, in this case, achievement of a student goal, and there were two groups that were independent of one another, EOP-enrolled and non-EOP-enrolled students. This descriptive analysis provided a determination of a relationship between the independent variable of enrollment in an EOP and academic goal achievement (Huck, 2012). A log-linear analysis was also performed to understand the interrelationships between student-defined goal completion and goal type, race/ethnicity, and admission status. In addition, results from the EOP component of the survey were analyzed using descriptive statistics. One-way ANOVAs were also performed to compare each of the independent variables and each of the self-efficacy subscales. A Pearson correlation was used to examine the relationship between

the subscales of self-efficacy. Descriptive statistics, including frequency distributions, were performed for the EOP perception portion of the survey. A frequency distribution shows how many people, when measured on the same dependent variable, fall into the same category or have the same score (Huck, 2012). One-way ANOVAs were also performed on the EOP perception data and the student variables. A Pearson correlation was used to examine perceptions of EOP and self-efficacy.

Summary of Methodology

The researcher sought to understand the relationships between enrollment in an EOP and student-defined academic achievement. The study also focused on developing an understanding of the self-efficacy levels of EOP students. Using a quantitative approach allowed the researcher to develop a clear understanding of the relationships between the variables in the study (Creswell, 2014). The quantitative method was used to help generalize from a sample (SUNY community colleges) to a population (all community colleges). According to Fowler (2014), survey research can be applied to obtain information about behaviors, feelings, and knowledge, and thus, the survey instruments used in the study allowed the researcher to (a) collect data regarding student self-efficacy levels, and (b) identify components of the EOP that aid in the achievement of student-defined goals.

Summary

This quantitative, multi-phased study sought to provide a comprehensive analysis of the relationship between student-defined goal achievement, self-efficacy, and enrollment in an Educational Opportunity Program. Phase I of the study consisted of the researcher identifying the EOP-enrolled and the non-EOP-enrolled students in the

archival data and assessing their goal achievement. The second and third research questions were addressed through survey research using participants drawn from the seven participating community colleges that offered an EOP.

The entire population of enrolled EOP students at the seven participating community colleges were contacted and asked to complete the self-efficacy inventory and EOP component questionnaire. The participants who indicated that the EOP was a contributing factor in their self-defined goal achievement were asked to identify which specific components they perceived to be the most impactful.

Quantitative analysis was conducted and analyzed on the collected data primarily to determine if there was a relationship between enrollment in an EOP and student-defined goal achievement. There was also a quantitative analysis of the survey results that sought to determine what type of relationship existed between enrollment in an EOP and self-efficacy as well as the student perceptions of the individual components of the EOP that related to their success.

Chapter 4: Results

Research Questions

The primary purpose of the study was to explore the possibility of a relationship between enrollment in a community college EOP and student-defined goal achievement. A quantitative approach was used. The following questions guided the study:

1. What is the relationship between enrollment in the Educational Opportunity Program and achievement of student-defined goals?

2. What is the relationship between enrollment in the Educational Opportunity Program and self-efficacy?

3. What is the student perception of the effectiveness of the Educational Opportunity Program in helping to meet student-defined goals?

To answer these questions, the researcher used non-parametric statistics because only nominal and ordinal data was used. The first research question was answered using a chi-square test of independence between enrollment in a community college Educational Opportunity Program and achievement or completion of a student-defined goal. The second research question was answered using descriptive statistics, one-way ANOVAs, and Pearson correlation. The final research question was answered using descriptive statistics, one-way ANOVAs, and Pearson correlation. IBM© SPSS Statistics© Version 21.0 was used to conduct analysis on all collected data.

Archival Analysis and Findings

      Frequency analysis. Descriptive statistics were run on the archival data to determine frequencies and relationships between the archival data variables. Of the 675 EOP students that were analyzed, 38% began enrollment in the fall of 2011, 11% in spring 2012, 43% in fall 2012, and 7% in spring 2013. Analysis on the race and ethnicity of the cohort shows White students making up 25% of the cohort, with Black/African American comprising 45%, and Hispanic/Latino comprising 14% of the cohort. The remaining cohort members, comprising 14% of the total cohort, were divided between American Indian or Alaska Native, Asian, two or more races, and *unknown*. Gender analysis showed a distribution of 57% female and 43% male. Archival data also contained a variable regarding which students received a Pell grant upon enrollment. Pell grant recipients comprised 91% of the cohort. An analysis of the chosen goals and goal outcomes showed the majority of students chose transfer to SUNY with degree as their goal with a total of 57%. Students who selected that their goal was to earn degree – seek employment comprised 35%. Transfer to SUNY without degree and enrolled to enrich – no degree each comprised 5%. The analysis of goal completion showed that 10% completed their self-defined goal.

      Chi-square analysis. A chi-squared test of independence was calculated on six variables to determine if they were related to goal completion. The researcher sought to determine if there was any relationship between student-defined goal completion and (a) term of enrollment, (b) race/ethnicity, (c) Pell grant receipt, (d) admission status, (e) gender, and (f) type of student goal. Findings of the chi-square analysis were significant at or below the .05 level. Effect sizes were determined using Phi, for a 2 x 2 contingency

table, or Cramer's *V* for anything larger than a 2 x 2 table. Using Phi, the effect is considered small at the .1 level, medium at the .3 level, and large at the .5 level. Effect size for Cramer's *V* is dependent on the *df* or the number of values in the final calculation of a statistic that are free to vary. As an example, the effect sizes for a contingency table with a *df* of 3 is small at the .06 level, medium at the .17 level and large at the .29 level (Howell, 2012; Huck, 2012).

A chi-squared test of independence was calculated on the term of enrollment against student goal completion. A significant relationship was found (X^2 (3, $N = 675$) = 25, $p < .001$) such that students who were enrolled in the first cohort of fall 2012 were more likely to have met their student goal than any other cohort. While 17% of the fall 2012 cohort met their goal, the percentages dropped each subsequent semester with only 8% of the spring 2013, 5% of the fall 2013, and 2% of the spring 2014 having met their goal. Cramer's *V* ($V = .19$) suggests that there is a weak-to-moderate relationship between cohort and goal completion.

The initial chi-squared test of independence on self-reported race/ethnicity against goal completion showed that, overall, there was a significant relationship between race/ethnicity and goal completion. The initial analysis was run against seven different race/identity codes, including students identified as unknown, and non-resident alien. Because the overall numbers for these groups were very small, compared to the major race/ethnic categories, the researcher later excluded these categories, limiting the analysis to race/ethnicity categories of Black/African American, White, and Hispanic/Latino. A chi-squared test of independence on this reduced cohort showed that there was a significant relationship between race/ethnicity and goal completion, (X^2 (2, $N = 580$) =

20, $p < .001$). Results show that 17% of White EOP students achieved their goal, while 15% of Hispanic/Latino students achieved their goal, and only 5% of Black/African American students achieved their self-defined goal. Cramer's V ($V = .186$) suggests the relationship between race/ethnicity and goal completion was weak to moderate, meaning that race only moderately affected the variable of goal completion.

In addition, a chi-squared test of independence on the type of student goal showed a significant relationship (X^2 (3, $N = 675$) = 216, $p < .001$, $V = .6$). Results show that 100% of the students who indicated their goal was to enrich and not earn a degree achieved that goal. In stark contrast, only 9% of the students who indicated their goal was to earn a degree and seek employment or to transfer without a degree had done so. Last, only 5% of the students who expressed their goal was to transfer with a degree did so. Cramer's V ($V = .6$) suggests a strong relationship between the type of student goal and the completion of that goal. This first analysis looked at the student goals of (a) enrolled to enrich – no degree, (b) earn degree – seek employment, (c) transfer within SUNY with a degree, and (d) transfer within SUNY with no degree. While this first analysis did show significance, the researcher viewed the last goal as having been accomplished if the student simply remained enrolled for one whole semester. As a result, the researcher ran a subsequent chi-squared test of independence on just the goals of (a) earn degree – seek employment, (b) transfer within SUNY with a degree, and (c) transfer within SUNY without a degree. The subsequent analysis showed no significant relationship between the type of student goal and goal completion (X^2 (2, $N = 653$) = 3.89, $p = .143$).

As with the goal of enrolled to enrich, the goal of earn degree-seek employment was difficult to assess. Determining if a student was successful in accomplishing this goal

requires the knowledge as to whether the student was employed. Therefore, the researcher ran an additional chi-squared test of independence on just the goals of transfer within SUNY with degree and transfer within SUNY without degree. The results of this analysis also showed no significant relationship between the type of student goal and goal completion. The researcher performed one additional analysis on the student goal type. The last analysis recoded the goals of transfer SUNY with degree and transfer SUNY without degree into one goal of *transfer* and recoded the goals of enrolled to enrich – no degree and earn degree – seek employment into the goal of *no transfer*. The results of the chi-squared test of independence showed a significant relationship between the goal of transferring and the goal of completion (X^2 (1, $N = 675$) = 23.76, $p < .001$). Only 5.3% of students who had the goal of transferring actually did so, while 16.7% of the students who had the goal of simply enriching themselves or earning a degree and then seeking employment met their goal. The strength of this relationship was small ($\varphi = .18$).

Also, a chi-squared test of independence was performed to determine if there was a relationship between the admit status (EOP vs non-EOP) and the type of goal that the student had chosen. Results from this analysis showed that there was a significant relationship between the admit status of the student and the type of goal chosen (X^2 (3, $N = 1350$) = 8.89, $p < .05$). Results show that the largest difference was within the earn degree – seek employment and transfer SUNY without degree goal. Students enrolled in EOPs accounted for 53.9% of the earn degree – seek employment goal group while regular-admit students only accounted for 46.1%. Students enrolled in EOPs accounted for 37.2% of the transfer SUNY without degree goal group while regular-admit students made up 62.8% of the goal group. The enrolled to enrich – no degree goal group was split

evenly at 50%. Last, the transfer SUNY with degree goal group was split between 49.4%

of the EOP population and 50.6% of the regular-admit population. The relationship

between these variables was weak to moderate ($V = .081$).

Similar to the analysis of just the EOP cohort, an analysis was run on just the

goals of earn degree – seek employment, transfer SUNY with degree, and transfer SUNY

without degree against the enrollment type as well as just the goals of transfer SUNY

with degree and transfer SUNY without degree. The first analysis was found to be

significant (X^2 (2, $N = 1306$) $= 8.89$, $p < .05$) with a weak-to-moderate effect size

($V = .083$). Again, results show that the largest difference was within the earn degree –

seek employment and transfer SUNY without degree goal. Students enrolled in EOPs

accounted for 53.9% of the earn degree – seek employment goal group while regular-

admit students only accounted for 46.1%. Students enrolled in EOPs accounted for 37.2%

of the transfer SUNY without degree goal group while regular-admit students made up

62.8% of the goal group. Last, the transfer SUNY with degree goal group was split

between 49.4% of the EOP population and 50.6% of the regular-admit population. In

addition, the analysis on just the goals of transfer SUNY with degree and transfer SUNY

without degree was also found to be significant (X^2 (1, $N = 868$) $= 4.93$, $p < .05$) but with

a small effect size ($\varphi = -.075$). The distribution between the transfer SUNY with degree

goal group was 49.4% EOP and 50.6% regular admit. The distribution between the

transfer SUNY without degree goal group was 37.2% EOP and 62.8% regular admit.

Last, the researcher recoded the goals, transfer and no transfer, as conducted for just the

EOP cohort. This last analysis revealed no significance between the recoded goal types

and admit status (X^2 (1, $N = 1350$) $= 3.73$, $p = .053$).

One of the primary focal points of the study was to determine if there was a relationship between enrollment in EOP and student-defined goal achievement. To determine if a relationship existed between these variables, the researcher took a random sample of 675 regular-admit students from the population of 15,322, so there was an equal number of EOP and regular-admit students. The results of the chi-squared test of independence showed that there was no significant relationship between enrollment in the EOPs and student-defined goal completions (X^2 (1, N = 1350) = 1.13, p = .287).

A review of the chi-squared test of independence on those students who did or did not receive Pell grants found that there was no significant relationship between Pell grant receipt and goal completion (X^2 (1, N = 645) = .285, p =.593). Similarly, the chi-squared test of independence on gender and goal completion also showed no significant relationship (X^2 (1, N = 675) = .209, p = .647).

After reviewing the results of the individual chi-squared tests of independence, the researcher noticed connections between more than one variable. The results of the chi-squared tests of independence revealed significant relationships between the variables of race and goal completion, goal type and goal completion, and admit status and goal type. The researcher wanted to explore the interrelationships between admit status, goal type, race, and goal completion.

Because the researcher was interested in the relationship between four categorical variables, a log-linear model was developed. Log-linear analysis is a statistical method used to investigate the relationship between more than two categorical variables. The procedure is used for model building and hypothesis testing. In both cases, models are tested to find the least complex model that best accounts for the variance in the observed

frequencies (Howell, 2012). A four-way frequency analysis was performed to establish a hierarchical log-linear model with backwards elimination of race, admit status, and goal type to goal completion. Variables that were analyzed for the model were (a) race/ethnicity of the student, (b) admit status of the student, (c) student-defined goal type, and (d) completion of goal. The model used was a 3(race) x 2(goal completion) x 3(goal type) x 2(admit status).

The researcher checked that the requirements of the test were met. Each case could only fit in one cell. The data set contained 5 times the number of cases as cells in the design. After testing the 2 x 2 contingency tables, it was determined that the goal type of enrolled to enrich – no degree could not be used for the analysis because there was a frequency of 0 contained in one cell. While a small number of students selected this goal, the exclusion of this goal prevented a full analysis of all the goals and their interactions with admit status, race, and goal completion. All of the remaining two-contingency table cells had a frequency of at least one, and no more than 20% of the cells had a frequency of less than five. The elimination of the one goal type resulted in a sample size of 1,133 students. The resulting model had a likelihood ratio χ^2 (4) = 6.57, p =.16, indicating a good observed fit between observed frequencies and expected frequencies generated by the model.

The goal of running the log-linear model was to determine what relationships existed between the four categorical variables of race/ethnicity, goal type, admit status, and goal completion. Results from the frequency distribution revealed several important and distinct findings. The four-way model that produced the best fit shows that there is a multivariate relationship between race, goal type, admit status, and goal completion.

A review of overall goal completion revealed that White EOP students were more than twice as likely to meet their defined goal as their Black/African American counterparts. White regular-admit students were also twice as likely to meet their defined goal as Black/African American regular-admit students. Additionally, Hispanic/Latino EOP students were more than 3 times as likely to meet their goal as Black/African American EOP students. Last, the Hispanic/Latino EOP students were almost twice as likely to meet goals as the regular-admit Hispanic/Latino group.

A closer examination of the relationship within the individual groupings revealed major differences in goal completion. White EOP students were more than twice as likely to meet the goal of earn degree – seek employment than Black/African American and Hispanic/Latino EOP students. Additionally, compared to White EOP students, Black/African American EOP students were 13 times more likely to meet the goal of transfer without degree, and Hispanic/Latino EOP students were 14 times more likely to meet that same goal over the White EOP cohort. Results show that White EOP students were twice as likely to meet the goal of transfer with degree than the Black/African American EOP group, while Hispanic/Latino students were more than 3 times as likely to meet that same goal than White EOP students and 8 times more likely to meet that same goal than their Black/African American EOP counterparts.

A review of specific differences between the regular-admit population and the EOP population also revealed major differences. Regular admit White students were 20 times more likely to meet the goal of transfer without degree than the White EOP group. Regular-admit Black/African-American students were almost 4 times more likely to meet the goal of transfer without degree than the EOP population of the same racial group.

However, Hispanic/Latino students enrolled in EOP were 14 times more likely to meet the goal of transfer without degree than their regular-admit counterparts and almost twice as likely to meet the goal of transfer with degree than their regular-admit counterparts.

Other notable results from the log-linear analysis include the findings that, overall, White and Hispanic/Latino students were equally as likely to meet their self-defined goal but more than twice as likely as Black/African American students to meet their goal. Regular admit students from all three of the racial groups with the goal of transfer without degree were more than twice as likely to meet their goal as the three EOP racial groups combined. Across both admit status groups and all three racial groups, students who indicated a goal of transfer without degree were almost twice as likely to meet their goal as the earn degree – seek employment group and almost 3 times as likely to meet their goal as the transfer with degree group. Table 4.1 shows the observed cell counts for each part of the multivariate analysis.

Survey Analysis and Findings

In order to develop an understanding of the self-efficacy levels of EOP students, a survey instrument was distributed to EOP students enrolled at seven SUNY community colleges to collect their perception of self-efficacy. In addition, the survey instrument sought to understand the role that individual EOP components play in the success of EOP students.

Table 4.1

Cell Counts of Log-Linear Analysis of EOP Goal Completion

Race	Admit Status	Student Goal*	Goal Completion	Observed Count
White	EOP	EDSE	Did Not Meet Goal	59
			Met Goal	11
		TWOD	Did Not Meet Goal	11
			Met Goal	0
		TWD	Did Not Meet Goal	76
			Met Goal	4
	Reg	EDSE	Did Not Meet Goal	109
			Met Goal	13
		TWOD	Did Not Meet Goal	32
			Met Goal	8
		TWD	Did Not Meet Goal	234
			Met Goal	21
Black/AA	EOP	EDSE	Did Not Meet Goal	103
			Met Goal	6
		TWOD	Did Not Meet Goal	14
			Met Goal	2
		TWD	Did Not Meet Goal	175
			Met Goal	4
	Reg	EDSE	Did Not Meet Goal	37
			Met Goal	2
		TWOD	Did Not Meet Goal	3
			Met Goal	3
		TWD	Did Not Meet Goal	50
			Met Goal	0
Hispanic/Lat	EOP	EDSE	Did Not Meet Goal	28
			Met Goal	2
		TWOD	Did Not Meet Goal	6
			Met Goal	1
		TWD	Did Not Meet Goal	49
			Met Goal	9
	Reg	EDSE	Did Not Meet Goal	20
			Met Goal	1
		TWOD	Did Not Meet Goal	7
			Met Goal	0
		TWD	Did Not Meet Goal	30
			Met Goal	3

Note. *EDSE: Earn Degree – Seek Employment; TWOD: Transfer Without Degree;
TWD: Transfer With Degree.

Frequency analysis. Descriptive statistics were conducted on the respondents of the self-efficacy and EOP perception survey. There were a total of 34 respondents to the survey out of 722 who were asked to participate. Of the 34 respondents, 71% were female, and 29% were male. When examining the race and ethnicity distribution, the researcher found that, of the survey respondents, 47% identified as White, 35% identified as Black/African American, while the remaining 18% were distributed between Unknown, Asian, and Underrepresented multiracial.

All students were full-time, undergraduate first-time students. When examining the age groups of the survey respondents, the researcher found 32% of respondents were between the ages of 20 and 21, 15% were between 18 and 19, another 15% were between the ages of 25 and 29, 12% were between the ages of 40 and 49, and the remaining 26% were distributed in the age groups of 22-24, 30-34, 35-39, and 50-64.

Of the respondents, 50% were enrolled at A community college, 18% enrolled at B community college, 15% enrolled at C community college, and 6% enrolled at each of D, E, and F community colleges. Last, the breakdown of student goals for the participants was 53% transfer SUNY with degree, 32% earn degree – seek employment, 6% each for enrolled to enrich – no degree, and transfer SUNY without degree, and 3% responded to enrolled to learn job skills"

Self-efficacy. Descriptive statistics were calculated for the individual self-efficacy items. Results of the analysis showed that on the course self-efficacy subscale, *take good class notes* was rated the highest ($M = 9.12$, $SD = 1.72$). The lowest scoring item on the course self-efficacy subscale was *manage time effectively* ($M = 8.03$, $SD = 1.678$). Results also showed that on the social self-efficacy subscale, *talk to your professors*

scored the highest ($M = 9.09$, $SD = 1.51$) while *participate in class discussions* scored the lowest ($M = 8.21$, $SD = 1.92$). Table 4.2 provides the descriptive statistics of the self-efficacy results.

Table 4.2

Self-Efficacy Scale Descriptive Statistics

Task	N	Min	Max	Mean	Std. Dev.
Take good class notes[1]	34	1	10	9.12	1.719
Talk to your professors[2]	34	3	10	9.09	1.505
Ask a professor a question[2]	34	4	10	8.94	1.536
Understand your textbooks[1]	34	5	10	8.79	1.343
Talk to college staff[2]	34	4	10	8.65	1.704
Keep up to date with schoolwork[1]	34	4	10	8.65	1.631
Write course papers[1]	34	2	10	8.53	2.107
Research a term paper[1]	34	1	10	8.50	2.403
Do well on your exams[1]	34	1	10	8.29	1.947
Participate in class discussion[2]	34	4	10	8.21	1.919
Manage time effectively[1]	34	4	10	8.03	1.678

Note. [1]Course Self-Efficacy Subscale; [2]Social Self-Efficacy Subscale

One-way ANOVAs were performed on several variables. An initial one-way ANOVA was performed to compare the type of student goal and each subscale of self-efficacy. Results showed no significant relationship between course self-efficacy and type of student goal ($F(4) = .375$, $p = .825$). In addition, there was no significant relationship found between social self-efficacy and student goal type ($F(4) = .894$, $p = .480$). Goals were later recoded into three groups, "enrichment," "earn degree" and

"transfer" and the same one-way ANOVA was calculated on the social and course self-efficacy scales. Results of this analysis showed no significant relationship between course self-efficacy and student goal type ($F(2) = .754$, $p = .479$). Results of this revised analysis also showed no significant relationship between the type of student goal and social self-efficacy score ($F(2) = 1.19$, $p = .318$).

In addition, a one-way ANOVA was performed to compare self-efficacy and race/ethnicity. A one-way ANOVA was run on both social self-efficacy and course self-efficacy and the race/ethnicity groups of White and Black/African American. Results showed that there was no significant relationship between race and social efficacy ($F(1) = .017$, $p = .897$) or course self-efficacy ($F(4) = .042$, $p = .84$).

Lastly, a Pearson correlation was calculated to test the relationship between the course and social self-efficacy scores. Results of the test determined that there was a significant and strong positive correlation ($r = .55$, $p = .001$) between course and social self-efficacy. Table 4.3 shows the results of the Pearson correlation test.

Table 4.3

Correlations Between Course and Social Self-Efficacy Scores and EOP Perceptions

	1	2	3
Sum EOP Perceptions	—		
Course SE Avg	−.04	—	
Social SE Avg	.22	.55*	—

Note. *p < .01

EOP perceptions. Descriptive statistics were performed on responses from the EOP perception survey. Results show that receiving additional financial assistance

($M = 4.09$, $SD = 1.35$) as part of the EOP was perceived to be the most influential in helping students achieve their goals. Conversely, orientation or summer programs was perceived as least influential ($M = 2.81$, $SD = 1.85$) in helping students achieve their goal. Table 4.4 illustrates the findings from the EOP survey.

Table 4.4

Student Perceptions of EOP Services

Service	N	Min	Max	Mean	Std. Dev.
Financial Assistance	32	0	5	4.09	1.353
Contact with EOP Counselor	32	0	5	3.66	1.638
Academic Advisement/Planning	32	0	5	3.47	1.524
Educational and Career Planning	32	0	5	3.41	1.739
Tutoring Services	32	0	5	3.28	1.888
Study Skills Classes	32	0	5	3.28	1.651
Financial Advisement	31	0	5	3.26	1.825
Assistance with accessing general campus offices	31	0	5	3.47	1.524
Career Exploration	30	0	5	3.03	1.712
Assistance with Transferring	30	0	5	3.00	1.661
Orientation/Summer Program	31	0	5	2.81	1.851

To develop a better understanding of the perceptions that EOP students have of the EOPs, one-way ANOVA tests were performed on several variables. A one-way ANOVA test on EOP perception score and type of student goal was performed and showed no significant relationship ($F(4) = .894, p = .480$). Because certain goals had a low number of responses, the researcher recoded each of the goals into the goal groups of (a) enrichment, (b) earn degree, and (e) transfer. Results from a one-way ANOVA test revealed there was no significant relationship between these new goal groups and EOP perception scores ($F(2) = 1.22, p = .312$). Additionally, there was no significance discovered between EOP perception score and gender ($F(1) = .002, p = .968$). Initial analysis of the participant age groups revealed no significant relationship with EOP perception scores ($F(6) = 1.54, p = .214$). However, because of the range of participant ages, the researcher chose to recode the participant age groups into three larger groups of (a) 18-24, (b) 25-34, and (c) 35-64. The results from a one-way ANOVA test showed that there was no significant relationship between these new age groupings and EOP perception scores ($F(2) = .067, p = .935$).

However, a one-way ANOVA test comparing EOP perception and race/ethnicity found a significant relationship ($F(1, 21) = 12.98, p < .001$) with a strong effect size ($R^2 = .491$). Results of this analysis showed that White students had a significantly lower perception of the EOPs' influence on their goal achievement ($M = 29.33, SD = 8.67$) than Black/African American students ($M = 44.82, SD = 7.74$).

Last, a Pearson correlation was performed to determine if there was a correlation between either social self-efficacy or course self-efficacy and EOP perceptions. Results

show there was no significant relationship between EOP perceptions and course self-efficacy ($r = -.041$, $p = .839$) or social self-efficacy ($r = .223$, $p = .264$).

Summary

The quantitative design of this study, initiated to answer three research questions, provided a description of students enrolled in community college EOPs within the State University of New York system. The use of archival data provided an opportunity to examine the completion of student-defined goals. The use of the college self-efficacy inventory instrument provided data that focused on how students enrolled in community college EOPs perceived their own abilities in a college setting. Last, a survey instrument was used to assess perceptions of the role EOPs play in helping students achieve their self-defined goals.

The results of the archival data analysis show that there were significant relationships between term of enrollment and goal completion, race/ethnicity and goal completion, and the type of student goal and goal completion. Results of the archival data analysis did not show any direct statistical significance between enrollment in the EOP and achievement of self-defined goals, one of the primary questions the research sought to answer. However, log-linear modeling shows that there were statistically significant interrelationships between the variables of race/ethnicity, admit status, goal type, and goal completion.

Quantitative analysis on results from the college self-efficacy inventory show that students had the highest levels of course and social self-efficacy when it came to taking good class notes and talking to their professors. Students were not as confident in their ability to manage their time effectively and participate in class discussions. No

statistically significant relationship was found between self-efficacy scores and the type of student goal or student race/ethnicity. However, it was discovered that there was a strong correlation between the subscales of course self-efficacy and social self-efficacy.

The analysis of the EOP perception survey found that receiving financial assistance was perceived to be the most influential component of the EOPs toward achieving success, while orientation or summer programs were perceived to be the least influential component of the EOPs. As was the case with the self-efficacy inventory, there was no statistically significant relationship between the EOP perception score and student goal, gender, or age. Additionally, it was found that there was no correlation between either course or social self-efficacy and EOP perceptions. However, results from the analysis of the EOP survey did show that there was a strong statistically significant relationship between EOP perception score and race/ethnicity.

Generally speaking, analysis of the archival, self-efficacy, and EOP perception data yielded few statistically significant findings. However, the lack of statistically significant findings does provide insight into the level of importance that enrollment in an EOP has on goal completion and self-efficacy because it provides evidence that EOPs services may not be contributing to the success of students as they were designed to do. The findings demonstrate the complexity of the intersection between goal completion, self-efficacy, race/ethnicity, and enrollment in an EOP. Further discussion of these findings and implications for practice are presented in Chapter 5.

Chapter 5: Discussion

Introduction

The focus of this dissertation has been to develop a better understanding of goal setting and goal completion of students within the community college Educational Opportunity Program population at SUNY schools to support current and future SUNY EOP offices with the development of services and support systems for the EOP population. In addition, the dissertation sought to explore the relationship between enrollment in a community college EOP and college self-efficacy.

The increase in accountability of community colleges to increase completion rates is well documented (Lumina Foundation, 2015; Shapiro et al., 2014). Also well documented is the struggle of community college students to graduate with a community college credential or transfer to a baccalaureate-degree-granting institution, including those students who are academically underprepared or from low socio-economic backgrounds (Bailey, 2005e; Bailey & Morest, 2006; Burns, 2010).

As community colleges are pushed to improve their completion rates, the increase of performance-based funding for institutions of higher education place enormous stress on the community colleges to find ways to graduate or transfer students that have historically been unable to do so, such as the academically underprepared and economically disadvantaged (Dougherty & Reddy, 2013; McKeown-Moak, 2013; National Conference of State Legislatures, 2015). There is also an extensive collection of research on the importance of goal setting and the variables associated with goal

completion, one of which being self-efficacy (Bandura, 2012; Krumrei-Mancuso et al., 2013; Liao, Ferdenzi, & Edlin, 2012; Ouweneel et al., 2013). An understanding of these cognitive variables and their relationship to student success can provide community colleges with additional tools to help students achieve.

However, there is a distinct lack of literature on the EOP population in higher education. The lack of studies on EOP students could be the result of a program not uniformly designed or administered across states, both in admission requirements and program services. This study sought to provide some insight into the characteristics of community college EOP students in the SUNY system. In particular, a better understanding of student-defined goal completion and self-efficacy of community college EOP students provides valuable information to EOP directors as they continue to develop and assess their programs and services. The results of this study seek to inform policy makers and EOP administrators on the possible gaps in service and to draw attention to opportunities for the creation of new and/or improvement of existing services.

This quantitative study investigated the characteristics of community college EOP students from a number of different perspectives. In particular, the researcher focused on student-defined goals and goal completion, self-efficacy, and perceptions of the EOP. The study looked at three research questions:

1. What is the relationship between enrollment in the Educational Opportunity Program and achievement of student-defined goals?

2. What is the relationship between enrollment in the Educational Opportunity Program and self-efficacy?

3. What is the student perception of the effectiveness of the Educational

   Opportunity Program in helping to meet student-defined goals?

The research questions were answered through quantitative analysis, using data

from the SUNY System Office of Institutional Research, the College Self-Efficacy

Inventory, and a survey on the perceptions of EOPs by students. This chapter discusses

and interprets the results presented in Chapter 4 and provides an analysis of the findings

in context with professional practice, decision making, theory, and scholarly

understanding of the field.

Implications of Findings

The analysis of all data collected was conducted using SPSS software, version

21.0. In addition to providing descriptive statistics, chi-square tests and log-linear

modeling were performed in order to determine the relationships between goal

completion and student variables. Descriptive statistics and Pearson correlations were

conducted in examining the relationships between self-efficacy, student perceptions of

EOP, and demographic variables of survey respondents. The results of the study provide

a description of community college EOP students within the context of student-defined

goal completion, self-efficacy, and their perception of the program they were enrolled in.

The first research question was to determine if there was any relationship between

enrollment in the EOP and student-defined goal completion. The hypothesis was that

enrollment in an EOP would lead to higher goal completion rates than those of regular-

admit students. The reason behind the hypothesis was that EOP students receive targeted

support and services as part of their enrollment, such as individual counseling, financial

aid, academic advisement, and academic support services. The results of the initial chi-

square analysis negated the hypothesis. The findings show that there was not a significant bivariate relationship between enrollment in an EOP or enrollment as a regular-admit student and the completion of the student-defined goal. The chi-squared analysis, however, only looked at admit status and goal completion in isolation of everything else. The subsequent log-linear analysis showed that completion of the student-defined goal was dependent on the variables of race, goal type, and admit status. The multivariate analysis looked at the relationship between admit status and goal completion in the full context of the student and provided much better representation of the reality that students face regarding not separating themselves from their race or their admit status. The results of the log-linear model showed that goal completion, in the context of this study, depends on three things: race, admit status, and the type of goal.

The major implication of this finding is that, based on this study, enrollment in an EOP alone is not enough to help students achieve their self-defined goals and, as a result, higher education policy makers should contemplate the advantages and disadvantages of continuing to fund the program. This is particularly noteworthy as the SUNY looks to expand EOPs to additional campuses and increase the number of students eligible to participate (James, 2015). The challenge that this study highlights is that there is a tremendous amount of complexity as it relates to why some students are successful and others are not. This study found that White students enrolled in EOPs were more likely to meet their defined goal than Black/African American EOP students, but they were less likely to meet their goal than the Hispanic/Latino EOP population. The results also show that the only racial group that seemed to benefit more from being enrolled in an EOP, compared to being a regular-admit student, was the Hispanic/Latino population. Neither

the White nor Black/African American EOP population outperformed the regular-admit sample in the same racial groups. Further highlighting the complexities of the problem, the results showed that Black/African American EOP students were more likely to meet the goal of earn degree – seek employment and transfer within SUNY with a degree than their regular-admit counterparts, whereas the Black/African American regular-admit population was far more likely to meet the goal of transfer within SUNY without a degree than the same EOP racial group.

The finding that goal achievement was linked to EOP enrollment through race indicates that existing EOP offices are not doing enough, in the case of the Black/African American student population, to mitigate the differences in the academic preparedness and financial disadvantage of the EOP students. Other variables that may also be contributing to the lack of success for the Black/African American population is the sense of belonging and cultural capital (Hausmann, Schofield, & Woods, 2007; Horn, 2009; Mulvey, 2009; Strayhorn, 2012b). The lack of significant relationship between enrollment in EOPs and goal achievement is also noteworthy because a subset of the student goals that were examined are also the goals of the SUNY system and the community colleges.

One of SUNY's goals is to increase degree completion to 60% by 2020 (SUNY, 2015). That goal includes students who are enrolled in community colleges on track to receive an associate degree. This study found that 91% of EOP students chose a goal that included earning a degree, but only 6% had actually achieved that goal. In comparison, 88% of regular-admit students had chosen a goal that included earning a degree, and 12% had completed that goal. Regardless of the statistical significance between regular

enrollment and EOP enrollment, the data shows that, in general, students who are setting out in higher education institutions to earn an associate degree are not accomplishing that mission. This finding has two major implications. The first is that it suggests that more campus and system resources need to be allocated to the improvement of degree attainment rates for community college students. The second, and more controversial, implication is that it provides policy makers and administrators with a reason to explore the financial commitment made to the EOPs.

The results of the chi-square analysis did show that the variables of race and goal type had an individual significant relationship to the completion of those goals. The analysis shows that White EOP students were more than to twice as likely to achieve their goal as Black/African American EOP students but equally as likely to achieve their goal as Hispanic/Latino students. While the relationship was weak to moderate, this gap in goal completion shows that race, particularly the divide between White and Black/African American, is still a factor in whether or not students are able to accomplish their goal. These findings regarding race and goal completion seem to support the assertion by Sontam and Gabriel (2012) that, even though African American students have shown to be more engaged in their studies than their racial counterparts, that increased engagement has not led to an increase in persistence and degree attainment.

The variable that showed to have the biggest impact on student-defined goal completion is the type of student goal. The strongest significant relationship was between the type of student goal and goal achievement. Those results showed that 100% of the students who chose, what could be considered the least ambitious goal, enrolled to enrich – no degree accomplished that goal. This is likely the result of that goal being considered

completed if the student simply remained enrolled for at least one full semester. In stark contrast, the least achieved goal of transferring with a degree, of which only 5% of the population completed, could be considered one of the more challenging goals because it requires the student to not only successfully completing degree requirements over a 2-year period, but the student to also able to get accepted by a 4-year institution and into a bachelor degree program. Even after recoding the goal types into smaller groups, the goal of transferring still showed significance.

When the goal of getting accepted into a 4-year institution was removed from the chi-square analysis, the relationship between goal type and goal completion was no longer significant. However, each of the four goals was later recoded into just two goals of transfer (transfer with degree and transfer without degree) and no transfer (earn degree – seek employment and enrolled to enrich – no degree), and the chi-squared analysis, again, showed a small but significant relationship between these new goal types and goal completion. The results indicate that students with the goal of not transferring were three times more likely to meet that goal than those students who had a desire to transfer. It is important to put these numbers into the context that, within this coding structure, EOP students were almost twice as likely to enter the community college with transferring as a goal. This finding demonstrates that EOP students are, indeed, entering community colleges with goals of transferring, but only 5% actually achieve that desire. These specific results suggest that simply setting goals does not lead to the achievement of those goals. The results also reinforce existing research on the dismal transfer rates of community college students (Goldrick-Rab, 2010; Shapiro, Dundar, Yuan, Harrell, & Wakhungu, 2014; Wang, 2012). However, given that student goals can change over time,

it is possible that the original goal of transferring was changed during enrollment to a lesser goal of just enrichment or a goal that did not include transferring such as earning an associate degree.

Interestingly, even though there was no bivariate statistical significance between the admit status of the student (EOP vs. regular admit) and goal completion, there was a weak-to-moderate relationship between the admit type variable and the chosen goal. Results show that regular-admit students were almost twice as likely to choose transferring without a degree as a goal, but both groups were just as likely to choose earn degree – seek employment, enrolled to enrich – no degree, and transfer within SUNY with a degree as a goal. This finding suggests that students who are economically disadvantaged and come to college academically underprepared, thereby qualifying for access to EOPs, are, on average, setting their sights on goals that are equal to their regular-admit counterparts, and they are setting their sights higher than their regular-admit counterparts in the case of simply transferring without a degree.

EOP students appear to be slightly more focused than regular-admit students on completing the degree to enter the workforce, while regular-admit students are much more focused on completing some coursework to transfer to another SUNY institution. This finding is in alignment with the results of the studies by Ender and Wilkie (2000) and Grimes and David (1999) that discuss the goal setting habits of the economically or academically disadvantaged. Ender and Wilkie (2000) stated that students that come from an academically underprepared background typically exhibit low academic self-concept, have unrealistic grade and career expectations, have unfocused career objectives, and have a poorly developed internal locus of control. Grimes and David (1999) explored

several variables between underprepared and college-ready community college students and found that, as it relates to future activities, the underprepared students had higher means on the measures of dropping out and failing courses and lower means on the measures of earning at least a B average, getting a bachelor degree, and graduating with honors. The research by Grimes and David (1999) and Ender and Wilkie (2000) does contradict the finding of this study that EOP students are confident in their abilities. This may be a result of the participants being overconfident in their abilities or it may also highlight the complexities of the relationship between self-efficacy and other cognitive variables.

Similar to the analysis conducted between goal type and goal completion, an additional analysis between admit status and goal type was performed, eliminating and regrouping the goal types. Each of the subsequent analyses showed small significant relationships between admit status and the goal type, except for when the goals were grouped into the transfer and no transfer, which showed no significant relationship.

The variable of race/ethnicity also showed to have a statistically significant relationship with goal completion. The analysis performed on three major racial/ethnic groups of Black/African American, White, and Hispanic/Latino revealed that White and Hispanic/Latino students were almost equally likely to meet their goal at 17% and 15%, respectively, while only 5% of the Black/African American EOP students met their defined goal. Again, given that all three of these racial/ethnic groups were enrolled in EOPs under the same admission criteria, there appears to be other major obstacles that the Black/African American EOP population are struggling with. The literature suggests that the social environment of the predominately White institution (PWI) is the largest

contributor to the lack of success of this particular racial group. In particular, the propagation and reproduction of their stress becomes so ingrained in the campus environment that it has significant effects on their sense of self and general well-being (Flowers, 2002; Herndon & Moore, 2002; Wasson, 1990). Wasson (1990) discovered that Black students enrolled at PWI institutions perceived the faculty to be unresponsive and unwilling to support their academic progress. In addition, the lack of Black faculty or administrators adds to the feeling of isolation. Racist incidents, whether obvious or subtle, also contribute to a negative racial climate. The combination of these factors create additional challenges for the Black/African American population that does not exist for their White counterparts.

The multivariate analysis provided for a more complex analysis of the relationships between race, goal type, admit status, and goal completion. This analysis revealed several important findings related to these relationships. The most surprising finding was that enrollment in EOPs only seemed to impact Hispanic/Latino students; they were the only racial/ethnic group where EOP goal completers outnumbered the regular-admit goal completers, 13% to 7%, respectively. A higher percentage of regular-admit students in the White and Black/African American racial groups completed their goals than the EOP students. There was not enough information from the remaining data that could explain the difference between the success of the Hispanic/Latino EOP students compared to the other racial groups, but existing literature on Hispanic students suggests that they are much more motivated to succeed and have stronger family supports than that of the Black student population (Bordes-Edgar, Arredondo, Kurpius, & Rund, 2011; Santos, 2004). However, there is much more research that finds that

Hispanic/Latino students do not do as well as other racial groups, contradicting the findings of this study (Bordes-Edgar et al., 2011; Nuñez, Hoover, Pickett, Stuart-Carruthers, & Vázquez, 2013; Tovar, 2015).

Differences in the goal completion rates of the Hispanic/Latino EOP population compared to other EOP groups could be attributed to several variables. Crisp, Taggart, and Nora (2015) conducted a thorough examination of existing research and literature on the successful academic outcomes of Latino/a students to identify any patterns in variables that may lead to their success. Their literature review found that across many studies, female Latina students were more successful than their male counterparts. In addition, Hispanic/Latino students who were at least second-generation college students were more likely to be successful. Furthermore, the researchers found strong evidence that strong academic self-confidence was linked to degree completion, and that students with a strong desire to succeed were among the most successful students. Last, a substantial amount of evidence was found to suggest that interactions with supportive individuals contributed to persistence toward degree completion. Another possible reason for the success of the Hispanic/Latino population in this study may be attributed to the individual community colleges that those students attended. Two of the community colleges that were part of the study are located in urban areas in downstate New York State that have a sizeable Hispanic/Latino population, and thus the community colleges may be more prepared to serve this population. While the extensive review of literature by Crisp et al. (2015) provides potential reasons to explain the success of the Hispanic/Latino students in this study, their literature review was focused on Latino/a students, to the exclusion of other racial groups.

Another finding was related to the completion of the specific goal of transfer within SUNY without a degree. The results of the log-linear analysis found that the overall population of the regular-admit students was more than twice as likely to complete this goal as the overall population of EOP students. By race, the group that was least likely to meet this goal were the White students with 0% of the White EOP population meeting that goal, compared to 13% and 14% of the Black/African American and Hispanic/Latino EOP population, respectively. Transferring without a degree may be viewed as one of the least challenging goals to meet, given that a student could complete this goal just by completing one semester at a community college and then transferring. The results suggest that there is a distinct challenge for EOP students in completing this goal. The challenge may be that the EOP student is not able to persist through a semester, but it may also be likely that failure to transfer to a 4-year institution is the result of a limited number of EOP spaces being held for transfer students at 4-year institutions across the SUNY system. There are 845 students enrolled in EOPs across the SUNY community college sector and 2,083 enrolled in EOPs across the 4-year sector of SUNY. However, 2014 projections of enrollment for EOPs were 2,242 for the community college sector and 7,162 for the 4-year sector, resulting in only 38% of the projected community college seats being filled and only 29% of the projected 4-year institution seats being filled ("EOP Information Summary," 2015). The SUNY policy on EOP indicates that students who come from community college EOPs are to be "afforded the highest priority in transfer considerations" (SUNY, 1970, p. 13). While it is likely that transfer students make up a portion of the SUNY 4-year EOP enrollments, because there is no language in the SUNY policy that guides specific enrollments for transfer students, the majority of

the EOP seats at the 4-year institutions are reserved for incoming freshman students that meet the same enrollment criteria for entry in EOP. The question can be proposed as to whether or not SUNY 4-year institutions have the capacity to enroll all of the community college EOP students that wish to transfer to a baccalaureate institution and remain in an EOP; but also, what is the incentive to enroll more transfer EOP students from the community colleges when the freshman EOP students will provide the campus with more tuition dollars over 4 years than the community college students would provide over two years?

Results from the College Self-Efficacy Inventory showed that, in general, the EOP students who were surveyed were very confident about their abilities to adjust socially and academically. The average mean of both subscales was 9.10 on a scale of 10. In contrast, the average mean of the lowest scoring items on both scales was 8.12, only one point from the average mean. The lowest scoring item from each subscale was manage time effectively from the course self-efficacy scale and participate in class discussion from the social self-efficacy scale. The highest scoring items from the subscales were take good class notes and talk to your professors.

These results indicate that EOP students are comfortable with their abilities to succeed in the college. While the self-efficacy results and the archival analysis results are not from the same data set, it is interesting to note the apparent difference in confidence to succeed in college and actual completion of student goals. This difference suggests that EOP students may be overconfident in their abilities. Given that 92% of the total archival EOP population students chose a goal that involved earning a degree and only 6% actually achieved that goal, it is reasonable to believe that some of that difference is

attributable to EOP students feeling overconfident in their ability to succeed. Given that all of the participant scores for self-efficacy were high, it supports Bandura's (1997) theory that self-efficacy can also be a social construct, in this case, the collective self-efficacy of students enrolled in EOPs. Even though individual participants of this study all reported levels of high confidence in both academic and social self-efficacy, low confidence in the group's ability to succeed may still inhibit not only group success but group dialogue as well. This is particularly noteworthy because students enrolled in EOPs are essentially told that they are not good enough to access the institution through the regular process and thus may be placing limitations on themselves.

The only test of the self-efficacy results that showed any significance was a Pearson correlation, which tested the relationship between course and social self-efficacy subscales. The results of this test did show a strong relationship between the two self-efficacy subscales, meaning that if students were highly confident in one area, they were also highly confident in the other. This strong relationship between these subscales may not be surprising given that the question items for the survey, even though they are divided by social and course self-efficacy, are all in an academic context. An example of this is talking to professors and asking a professor a question are both in the social self-efficacy subscale, because they require the student to engage socially as opposed to attending to tasks that are more personal, such as taking good notes. Another possible cause of this close relationship could, again, simply be an overall confidence in abilities as a result of the types of services and support provided to the EOP population.

The survey provided to current EOP students to assess their perceptions of the EOPs also provided findings that have implications for practice. On average, students

indicated that receiving additional financial assistance as part of the EOP was perceived to be the most influential in helping them achieve their goals. Conversely, the students perceived the orientation or summer program to be the least influential in helping to reach their self-defined goals. This finding regarding the perceived impact of orientation is contrary to the results of Garcia (1991) and Berkovitz and O'Quin (2006) whose research determined that orientation programs had a significant impact on persistence and graduation. However, students currently enrolled in community colleges may not fully understand or appreciate the benefits and advantages that orientation programs provide.

The fact that the research study students perceived the financial assistance component of the EOP as helpful is not surprising given that the EOP enrolls students "who have the potential to succeed, despite poor preparation and limited financial resources" (SUNY, 2015, p. 1). A closer look at the individual responses between the White students and the Black/African-American students show that of the White students, 73% scored that the financial assistance as either very influential or extremely influential, compared to 92% of the Black/African-American respondents. This suggests that the White EOP students may not be entering the community college as financially disadvantaged as the Black/African-American students. It is noteworthy that the chi-squared analysis on the Pell grant receipt and goal completion showed no significant relationship. EOP students may be perceiving financial assistance as a major influence on their goal completion when, in fact, it may not be having any actual impact on their progress. There may also be a significant difference in dollar amounts between the Pell grant and the financial assistance received as part of EOP, which would account for why one type of financial assistance is perceived to be influential while another is not.

Results from the one-way ANOVA comparing EOP perceptions and race/ethnicity show that certain race/ethnicity groups had a better perception of the EOP than others. In particular, White students were less likely to perceive the EOP as a contributor to their progress toward their goal than the Black/African-American students. This finding suggests that previous academic and social experiences influence the perception of the value that an EOP provides. Even though enrollment in an EOP is predicated on the student being from an under-represented group or showing academic lack of preparedness, this finding also raises the question as to whether White and Black/African American community college EOP students are entering the institution as equally academically unprepared.

To better understand the implications of these findings, it is important to take a closer look at how students come to be enrolled in EOPs and what criteria was used by the EOP offices when making decisions on enrollment and acceptance. The SUNY policy that outlines the criteria for acceptance into an EOP bases admissions on economic and academic eligibility. However, the policy document provides broad criteria within those categories. Economic eligibility is primarily based on household size and total annual income. For the purposes of eligibility, total annual income can comprise (a) income from wages, tips, dividends, interest, rental, and business profits; (b) pension, annuity or unemployment benefits, and disability benefits; (c) Social Security, Supplemental Security Income, or Veteran's Administration non-educational benefits; (d) public assistance; or (e) child support. Academic eligibility is based on the student failing to meet admission standards for matriculation to the college or to a desired degree program

and potential for successful completion of a program of study at the college given appropriate support (SUNY, 1970).

Within those eligibility requirements, there are several exceptions and other considerations. Students may be exempt from the income requirement, for example, if the student is living with a foster family "who do not provide support for college and no such support is provided by the natural parents" (SUNY, 1970, p. 13). While there are few exceptions or other considerations for the income guidelines, the academic guidelines are far more flexible, particularly for community colleges. Due to the open-enrollment policies of the community colleges, the 2-year institutions have the ability to make eligibility determinations "based on alternative criteria identified in the campus plan" (SUNY, 1970, p. 13). In addition, the policy document states that due to the limitations of resources for EOP, particularly at the community college level, "campuses are encouraged to make a careful match between students and campus and to use interviews, written statements from qualified observers, participation in extracurricular activities, community involvement, personal responsibility, or other special talents to determine applicant's motivational level" (SUNY, 1970, p. 13).

Community colleges, in particular, seem to have more flexibility on both types of admission criteria to determine who gains access to an EOP. Particularly noteworthy is language in the general eligibility of the policy document that states that "each campus is expected to determine eligibility and to select students in accordance with the established overall criteria and those set forth in its campus plan for the operation of the program" (SUNY, 1970, p. 8). This is an important piece of language to highlight because it implies that the campuses have the ability to set internal guidelines for admission into the

EOP based on their campus strategic plans that may give priority to one population of student over another. The policy document indicates that those campuses that operate EOP offices are expected to base recruitment and enrollment decisions on life patterns that are characterized by historical economic and cultural deprivation. The indicators of such deprivation include (a) long-term economic deprivation; (b) membership in an under-represented group in higher education and/or characterized by a high unemployment rate; (c) a record of inadequate schooling; (d) little or no accumulation of assets; (d) inability to provide for more than the basic needs of family members; or (e) dependence on public assistance (SUNY, 1970).

Given the results of the study and the context of the EOP guidelines for recruitment and enrollment, there exists a strong possibility that the EOP population within campuses are not homogenous in nature but rather are made up of students who come from varying degrees of economic hardship and historically challenging personal backgrounds. It is also just as likely that the students who might benefit from access to an EOP the most are being denied access by enrollment officers, which may be due to the wide variance in criteria that can be used in forming a decision about what students might benefit the most from the program. While the SUNY policy is unclear about whether final decisions for enrollment are to be made by general enrollment officers or by the EOP offices, there may exist unknown or unrecognized biases on the part of the enrollment decision maker that have the potential to impact enrollment decisions and lead to the needier students being denied access to the EOP services.

Limitations of the Study

The study was limited by the type of data that was available from the Institutional Research Office at SUNY and by the low response rate of 4% to the self-efficacy and EOP perception survey. There is a wide range of student data that would have provided additional insight into the EOP population, but those variables were either not collected by the SUNY Institutional Research Office or the data was not uniformly collected. Additionally, because the response rate to the survey on self-efficacy and perceptions of EOPs were low, the diversity of participants was not as varied as hoped. There were seven community colleges that were part of the study, but 82% of the responses came from three institutions. Another limitation of the study was the instrument used to assess the college self-efficacy of the EOP students. The only validated and tested instrument to assess self-efficacy in a college setting, developed by Solberg et al. (1993), has been tested and modified in studies, but limitations still remain, particularly when trying to assess the confidence levels of students in non-academic social settings such as making friends or finding a date (Barry & Finney, 2009; Gore, Leuwerke, & Turley, 2005).

Recommendations

Future research. The use of a mixed-methods or qualitative approach to the same study may provide for more robust findings on the interrelationships between self-efficacy and student-defined goal completion. In particular, a longitudinal study of community college EOP students would provide valuable information on how self-efficacy and goals change over time. An examination of self-efficacy and student-defined goals at the beginning and end of each semester would be tremendously useful in continuing to develop an understanding of the complexity of both phenomena.

Further research is also needed on the student-defined goals of enrolled to enrich – no degree and earn degree – seek employment, because these are broad goals and difficult to assess. A qualitative component to the study would allow for a deeper understanding of how each student defines enrichment. In addition, because employment data of SUNY graduates is not currently collected by the Institutional Research Office, a longitudinal study of students with this goal might capture actual completion of the goal. An analysis of high school variables and their relationship to self-efficacy would also be of value as students enrolled in EOPs that are generally academically underprepared. An integration of high school GPA and SAT scores into the dataset could provide insight into whether or not these variables impact self-efficacy and/or goal completion.

Results from the study showed that Black/African American students were 10-12% less likely to achieve a self-defined goal than White or Hispanic/Latino students. This finding warrants consideration of a study specifically focused on Black/African American community college students enrolled in an EOP to determine what other variables may impact this groups goal achievement. In addition, because Black/African American students had a higher overall perception of the influence of their EOPs on their success, a deeper analysis on those perceptions is likely to yield more specific information on the role EOPs play in the success of this population. There may also be sufficient evidence, based on the multivariate analysis, to explore the specific EOP experiences of the Hispanic/Latino population given that they were the only racial group that had an overall higher goal completion rate than their regular-admit counterparts.

While this study provides evidence that there are barriers to the goal completion of community college EOP students, including transfer with or without degree

attainment, it only suggests possible explanations for those barriers. It is recommended that a more in-depth study of transfer and degree-attainment barriers be conducted within the SUNY community college sector to gain a better understanding of what variables may be impacting the graduation and transfer metrics.

A study focused on the identification of students qualified for EOP services is suggested to gain a better understanding of the criteria used across institutions to place students in the program. There is evidence in this study that students who are selected for enrollment in EOPs are not all equal in their disadvantages and academic under preparedness and, thus, more research on this finding should be conducted to help policy makers and campus administrators understand the differences within the EOP population.

Last, this study looked specifically at goal completion, and it was determined that race and goal completion did have a significant relationship regarding certain racial/ethnic groups being more likely to attain their goal than others. However, the study itself did not explore the relationship between goal achievement and persistence. This study did not address the issue of goal changes over time, which would assist in determining if students who did not achieve their goal failed to do so because they dropped out of the institution or because they changed their goal during their enrollment. Further exploration of the relationship between goal achievement and persistence, particularly by race, is suggested, including a focus on how privilege and racism may influence goal completion.

Policy and practice. Nationally, community colleges are experiencing declines in both enrollment and degree attainment. According to the *New College Graduates* and the *Current Term Enrollment Estimates – Fall 2015* reports by the National Student

Clearinghouse Research Center (2015), community college enrollment decreased at an average rate of 3.5% between fall 2012 and fall 2015, and associate degree attainment decreased by 6% between 2010 and 2014. SUNY data shows that the 3-year associate degree completion rate for first-time community college students enrolled in 2011 is 23%. The 3-year success rate of first-time community college students is at 58%. The success rate metric used by SUNY is a way to capture students who have graduated with some sort of degree or certificate within 3 years or who have transferred to another institution. The success rate metric is more appropriate here because the study was exploring goals beyond just degree completion. The challenge that SUNY faces is to develop a better understanding of why certain populations achieve success and others do not.

SUNY (2015) also reported that minority enrollment increased by almost 4% between 2008 and 2011, while EOP enrollment at community colleges increased by 21% during the same time frame. However, the same SUNY data shows that, during that same 4-year period, while EOP retention is higher than that of regular-admit students over the course of two semesters, 83% for EOP versus 78% for regular-admit students, the percentage of EOP students still enrolled by the fourth semester drops to 46% versus 51% for regular-admit students. The fourth semester would traditionally be the end of an associate degree program. There is clearly a focus on enrolling more students in EOPs, but based on the existing quantitative data, there does not appear to be any information that supports that EOPs are particularly more advantageous over the long term.

All of the findings from both the archival and survey data show that there were major differences between goal completion of students, student self-efficacy, and student

perceptions of EOP between the races of Black/African American, White, and Hispanic/Latino. These differences highlight that even in a program that is designed to service the under-represented and academically underprepared, there are still academic success gaps between races, with the Black/African American student population having success at a lower rate than other racial groups. Existing EOP guidelines for recruitment and enrollment are broadly defined, with flexibility given to EOP directors and enrollment officers to make decisions regarding who ultimately gains access to the program, and recruitment and enrollment goals may be based on overall campus enrollment plans. These campus plans may not be aggressive enough in recruiting underprepared Black/African American students. The SUNY System Administration should make efforts to review these enrollment guidelines in light of these findings and develop more stringent enrollment targets for the Black/African American population. Campus EOP offices should be encouraged to prioritize Black/African American students that meet economic and academic eligibility requirements.

As noted earlier, the general success rate, using the transfer and/or degree attainment metric, of community college students is extremely poor. As a result, the same campus plans that help to direct recruitment and enrollment efforts should also be reviewed to determine what practices are being utilized, for both regular-admit and EOP students, to help students achieve a degree and/or transfer. Community college executive officers and administrators should be tasked with discovering what changes should be made to existing programs and services as well as exploring best practices in improving degree and transfer rates.

As it relates to funding, the results of the study do not support making any significant changes to the existing funding structure for higher education institutions. The data showed that the overall percentage of students, from the sample of EOP and regular-admit students who were not enrolled to either earn a degree or transfer, was very low at 3.3%. Students are still primarily interested in attaining a degree at community colleges and entering the workforce, attaining a degree and then transferring to a 4-year institution to earn a baccalaureate, or simply earning credits at community colleges and then transferring to earn baccalaureate degrees. Legislation proposed and passed in January 2015 by the New York State Assembly Bill 3003 (New York State, 2015) ties community college funding to the following measures:

- The number of students who are employed following degree or certificate completion and their wage gains

- The number of degree completions, certificate completions, and student transfers to other institutions

- The number of degree and certificate completions by:

  o students considered academically at risk due to economic disadvantage or other factor of under-representation within the field of study

  o veterans

  o students with disabilities

- The number of students who make adequate progress toward completion of a degree or certificate

- The number of degree completions in innovative programs designed to enable students to balance school, work, and other personal responsibilities

- The number of students engaged in career and employment opportunities including apprenticeships, cooperative education programs, or other paid work experience that is an integral part of their academic program

Of particular emphasis for this study is the focus on degree completion of academically at-risk students. The results of the study demonstrate that the completion rate of the goals of earning a degree with or without transferring are dismal for both EOP and regular-admit community college students. On average, only 22% of students are accomplishing a goal that includes earning a degree. This study does show that EOP students are slightly more likely to earn a degree than regular-admit students but there is significant variation by race with Black students accomplishing this goal the least. As a result, it is clear that community colleges need to redouble their efforts to determine why students, overall, are not accomplishing their goal of earning a degree and, specifically, why Black students are struggling more with that goal.

The following are additional recommendations for the higher education community based on these findings and other research and best practices:

Student-defined goals. Based on these findings and other recent research on the importance of student goals by Çetin (2015), Strayhorn (2014), and Travers et al. (2015), institutions and university systems should implement or improve the data-collection process of student goals. Collecting goal information at the point of entry only provides a baseline to measure the progress of the student. Research does support the assertion that students are apt to adjust their goals over time (Harackiewicz, Durik, Barron, Linnenbrink-Garcia, & Tauer, 2008; Jagacinski, Kumar, Boe, Lam, & Miller, 2010; Senko & Harackiewicz, 2005). Changes in goals could be the result of positive or

negative, internal or external factors. Institutions and university systems need to devise processes and systems that work to capture student goals more often throughout the student's enrollment. More frequent collection of student goal information would provide academic advisors, EOP or otherwise, with valuable insight, allowing them to better tailor their advising to the specific goals the student has, even if those goals change over time.

Self-efficacy. A standardized assessment for college self-efficacy should be utilized by community colleges to determine a baseline of confidence of incoming students, and students should be re-assessed regularly to track confidence levels over time. Existing research suggests that self-efficacy can change over time based on changes to an individual's external environment (Bernacki, Nokes-Malach, & Aleven, 2015; DiBenedetto & Bembenutty, 2013). Self-efficacy information can provide valuable information for advisors and faculty to assist students in helping them meet their self-defined goals.

Educational opportunity program. Community college EOPs should conduct a longitudinal analysis of their students in order to determine why they are less likely to persist over a two-year period. In addition, EOP offices should look toward the existing pool of research that discusses degree completion of African American students (Gentry, 2014; Sandoval-Lucero, Maes, & Klingsmith, 2014; Wilson, 2015). Existing and any newly developed EOP offices should be establishing or reinforcing components of the program that assist Black/African American students in particular. Last, SUNY should provide policy recommendations for 4-year institutions that incentivize the enrollment of EOP transfer students from the SUNY community college EOPs.

Leadership and social justice. The results of this study have important implications for executive leaders working in higher education. The findings from this study show that there are still major success gaps between racial groups in higher education. This study also raises questions about the access and service equity afforded students who are coming from economically or academically disadvantaged backgrounds. Executive leaders in higher education should more closely examine whether or not there is equal access to proven programs and services to all students enrolled in their institution. In addition, executive leaders should take a data-driven approach to identify those students who are at high risk for not being successful and ensure that resources are provided to those students throughout their enrollment at the institution. Leaders in higher education are also encouraged to utilize institutional and, when appropriate, system data to develop tailor-made programs and services to at-risk populations instead of using a cookie-cutter approach to all students regardless of race, ethnicity, socio-economic, or academic preparedness. While this approach may not seem as cost efficient, the return on investment in improved retention and graduation rates is worth the investment in the specialized services (Johnson, 2012).

Although this study provides a window into the complex relationships between enrollment in EOP, race, goal completion, and self-efficacy, there is still much that higher education institutions do not understand about why certain students are able to complete their goals and others are not. If anything, this study has shown that college students are complex individuals with a myriad of external and internal forces impacting their ability to succeed. As such, institutions of higher education must begin to move

away from one-size-fits-all models of programs and services and adapt practices that help each individual student.

Conclusion

The primary goal of this study was to draw attention to the issue of student goal completion of community college EOP students. With a greater emphasis being placed on community colleges to produce credentialed graduates, an examination of goals other than degree completion seemed warranted. Given the political and financial climate of higher education, particularly the community college sector, a better understanding of the implications of tying funding specifically to only one of many reasons why a student attends community college is very dangerous. Chapter 1 explored the importance of community colleges in the context of economic growth for the United States. The structure of community colleges and their focus on serving a variety of needs for the communities that they are tied to was discussed. An introduction to the Educational Opportunity Program in the State University of New York system was introduced, and information was provided about the many different goals that students have entering the community college. The chapter provided a clear rationale and theoretical framework for the research as well as the purpose of the research and the questions that guided the study moving forward.

Chapter 2 reviewed relevant literature on college student persistence from varied perspectives and approaches. Of primary importance was the research that highlighted individual student characteristics that impact persistence and the research conducted on goal setting and self-efficacy (Bandura, 1977, 2012; Brady-Amoon & Fuertes, 2011).

In Chapter 3, the methodology used in the study was described. The study was quantitative and utilized archival and survey data to examine the relationships between enrollment in EOPs, goal completion, and self-efficacy. Archival data provided by the State University of New York was used to explore the specific relationship between enrollment in EOPs and student-defined goal completion. The dependent variable of goal completion was examined through the lens of the independent variables of race, gender, admit status, Pell Grant aid, term of enrollment, and student goal. Survey data was collected to examine the self-efficacy levels of EOP students and their perceptions of how the EOP has contributed to their success.

Chapter 4 provided the results of the study, which yielded several findings. Results of the study showed that, by itself, enrollment in EOPs have no relationship to goal completion but the multivariate analysis revealed a four-factor best-fit model of race, admit status, and goal type. Results of the self-efficacy survey revealed that EOP students were generally highly confident in their abilities to adjust to the college environment. Additionally, the results of the EOP perceptions survey showed that financial assistance was perceived to be the most influential factor contributing to the success of the survey respondents.

This chapter discussed the findings in more detail and proposed policy and practice implications for higher education. In addition, the limitations of the study were explained and further recommendations for future study were presented based on those limitations and the findings from the data.

In conclusion, while the overall growth of community colleges and their enrollments continue to rise, the microscopic examination of the outcomes of the students

they enroll also increases. State funding is currently linked to the measures of degree progress, degree completion, and transfer. The findings from this study show that, overall, student-defined goals are in alignment with the goals of the state, but the achievement of those goals is perilous. If community colleges are going to become more successful in achieving the state's and students' goals, alike, more research, knowledge, and resources are going to be made available in the community college sector.

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Appendix A

The Completion Arch Core Measures and Summary of Data Availability – Measuring Community College Student Success

Measure title	National		State			Multiple institutions
	National	Student characteristics	Number of states	By student characteristics	States	ATD colleges[1]
Enrollment						
Fall enrollment	●	●	50	●		—
Unduplicated annual enrollment	●	●	50	●		—
Transition to community college [future addition]						
Transition of adults to community college [future addition]						
Developmental Education Placement						
Placement in developmental courses	—	—	1	—	VA	●
Participation in developmental courses	T	●	28	o	CA, CCA states*	—
Progress						
Precollege milestones Completion of the first developmental course	—	—	2	—	CA, VA	—
Completion of developmental sequence	—	—	25	o	CCA states	●
Completion of GED test or equivalent [future addition]						
College milestones Enrollment in gatekeeper courses	—	—	1		VA	●
Completion of gatekeeper courses	T	●	24		CA, CCA states	●
Threshold number of credit in specified time	T	●	3	●	CA, NC, WA	—
Persistence over terms and years	●	●	50	●		—
Completion of transfer curriculum	—	—	1	●	CA	—
Student learning outcomes (in development)						—
Momentum Points Full-time attendance in first term	●	—	50	—		●
Completion of courses attempted	T	●	3	o	CA, NC, VA	—
Specified credits earned within one year	T	●	4	o	CA, NC, VA, WA	—
Continuous enrollment	T	●	1	—	CA	●
Summer credits earned	T	●	1	—	CA	—
Early warning signs of dropout [future addition]						
Transfer and Completion						
Graduation rates	●	●	50	●		—
Number of degrees and certificates awarded	●	●	50	●		●
Completion rates within six years	T	●	10	●	CA,CT,FL,NC,OH,TN,TX.VA, WA,WI	—
Persistence without a degree after six years	T	●	7	o	CA,CT,FL,NC,OH,TX,VA	—
Time to degree	T	●	28	●	IA, CCA states	—
Credits to degree	—	—	27	●	CCA states	●
Near program completion after six years	—	—	—	—		
Simultaneous enrollment at more than one institution [future addition]						
Transfer without completing transfer-level curriculum [future addition]						
Completion of other student totals [future addition]						
Workforce Preparation and Employment Outcomes						
Licensure exam pass rates	—	—	5	o	MA (only RN exam), NC,OH, TX,WY	—
Job placement rates	—	●	12	o	CT,FL,IL,KY,OH,OR,TN,TX, VA,WA,WI,WY	—
Graduates' wages and wage growth	T	●	10	o	CT,FL,IA,IL,KY,OK,OR,VA,WA, WI	—

● Available. o Partial availability. — Not available or in development. **T** Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:04/09) Postsecondary Education Transcript Study (PETS:09).
* Complete College America (CCA) alliance includes data from these states: AR, AZ, CO, FL, GA, HI, ID, IL, IN, KY, LA, MA, MD, MO, MS, NC, NM, NV, OH, OK, OR, SD, TN, TX, UT, VA, WA, WV, and WY.
[1] Achieving the Dream (ATD) colleges. (For detailed background data and additional information, please visit http://completionarch.collegeboard.org)

Appendix B

College Self-Efficacy Inventory (CSEI)

The following 11 items concern your confidence in various aspects of college. Using the scale below, please indicate how confident you are as student at (College) that you could successfully complete the following tasks. If you are extremely confident, mark a 10. If you are not at all confidence, mark a 1. If you are more or less confident, find the number between 10 and 1 that best describes you. Item responses are aggregated across all student respondents in order to better understand how confident the average (College) student feels. Levels of confidence vary from person to person, and there are no right or wrong answers; just answer honestly.

1	2	3	4	5	6	7	8	9	10
Not at all									Extremely
Confident									Confident

1. Talk to college staff.
2. Manage time effectively.
3. Participate in class discussions.
4. Research a term paper.
5. Do well on your exams.
6. Talk to your professors.
7. Ask a professor a question.
8. Take good class notes.
9. Understand your textbooks.
10. Keep up to date with your schoolwork.
11. Write course papers.

Appendix C

Supplemental EOP Perceptions Survey

1. Do you believe that your experience in the Educational Opportunity Program at (College) assisted you in being able to achieve your self-defined goals?

2. Were there specific components of The Educational Opportunity Program at (College) that you believe influenced your ability to achieve your self-defined goals?

On a scale of 1 to 5, with 1 being "not at all influential" and 5 being "extremely influential", please indicate the level of influence that the following components of the Educational Opportunity Program had on your ability to achieve your self-defined goals.

N/A	1	2	3	4	5
Not Applicable	Not at all Influential	Slightly Influential	Somewhat Influential	Very Influential	Extremely Influential

    a. Academic Advisement/Planning
    b. Assistance with accessing general campus offices
    c. Assistance with Transferring
    d. Career Exploration
    e. Contact with EOP Counselor
    f. Educational and Career Planning
    g. Financial Assistance
    h. Financial Advisement
    i. Orientation Program/Summer Program
    j. Study Skills Classes
    k. Tutoring Services

Appendix D

Electronic Letter to Survey Participants

Dear ${m://FirstName},

I am a doctoral student at St. John Fisher College (SJFC) in Rochester, New York. As part of my doctoral research, I am conducting a study to determine the self-efficacy levels of community college students. Self-efficacy is defined as ones belief in what they can achieve. I want to hear what you think - your ideas and opinions count!

In this study, you will be asked to complete a survey. The survey will be open for a three-week period. It will take approximately 10 minutes to fill out the survey once you begin. There are no risks to you from completing the survey.

All survey responses will be confidential; no one will be able to identify you when the results are recorded/reported. Your name will be kept confidential and will only be used to contact you to deliver your $50.00 gift card if you are a winner. Participation in this survey will not impact your student status.

Your participation in this study is totally voluntary and you may withdraw at any time without negative consequences. If you wish to withdraw at any time during the study, simply stop participating in the survey.

Follow this link to the Survey:

${l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser:

${l://SurveyURL}

Please feel free to contact me, Christopher Hockey at ▮▮▮▮▮▮▮▮, if you would like to discuss anything about this study. The Institutional Review Board (IRB) of

St. John Fisher College has reviewed and approved this research proposal. For any concerns regarding confidentiality, please call Jill Rathbun ████████. She will direct your call to a member of the IRB at St. John Fisher College.

Thank you for your willingness to help with this research! Your ideas are valuable and will help college administrators understand the impact of self-efficacy on community college students.

I appreciate your willingness to engage!

Christopher Hockey

Doctoral Student and Researcher

St. John Fisher College

Doctorate in Executive Leadership

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