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# Psychosocial Factors and the Persistence of Underprepared, African American Community College Students

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# Walden University

College of Education

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Denise McCory

has been found to be complete and satisfactory in all respects,
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the review committee have been made.

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Walden University
2015

Abstract

# Psychosocial Factors and the Persistence of Underprepared, African American Community College Students

by

Denise Michelle McCory

MEd, Cleveland State University, 2001

BA, Ohio University, 1998

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

November 2015

Abstract

This study examined a problem at a large community college in the Midwest United States, where African American students experienced poor developmental education outcomes and low degree completion. Those outcomes had negative effects on the institution and the surrounding community. This qualitative case study was framed in Astin's theory of involvement, which attributes students' behaviors, whether productive or unproductive, to their levels of motivation. Purposeful sampling was used to select 20 African American students who successfully completed the developmental education sequence. The participants were interviewed to determine how psychosocial factors impacted their decisions to persist through their courses. The data from the interviews were organized using coding software and then analyzed using a manual coding process. The data revealed that students' attitudes were the most influential in explaining their persistence. Having a positive, no-quit attitude was deeply salient among participants, and it helped them persist, despite obstacles and setbacks. Faculty influence was another factor that was deeply salient in the data, as most participants attributed their persistence to having positive relationships with faculty. In an effort to leverage this powerful dynamic to benefit more students, it was determined that a faculty training program would be the most effective way to address the problem at the case study site. The faculty training program is the culminating project for this study and is intended to equip faculty with strategies to promote more positive attitudes in students. This study and the resulting project may create positive social change by increasing degree attainment for underprepared African American students.

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## Dedication

I dedicate this work to my colleagues in higher education, who serve as role models, mentors, and guides to the next generation of leaders. This is also dedicated to students who faithfully and relentlessly pursue their dreams, despite obstacles and challenges. I hope that this study provides encouragement and inspiration to all who read it.

## Acknowledgments

There are many individuals who supported me throughout this journey. First, I owe many thanks to my family who endured this process along with me. They have earned this doctorate as much as I, and I am extremely grateful for their support, patience, and sacrifice as I pursued this long-awaited goal. Many thanks to my life-long friend, Erica, who is a solid confidant and sounding board, keeping me encouraged and motivated through this program. Your friendship is priceless. Finally, I would like to acknowledge my committee, Dr. Elizabeth Bruch, Dr. Therese Kanai, and Dr. Anita Dutrow, who helped me become a better writer and provided me with immensely helpful feedback. I am blessed and grateful to be surrounded and supported by a host of extraordinary people, and I owe this accomplishment and so many others to them.

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Section 1: The Problem

## Introduction

A degree from an American higher education institution is highly regarded around the world (Wellman, Desrochers, & Lenihan, 2008). Credentials from these institutions provide entry to the middle class, ultimately leading to a better quality of life. In addition to postsecondary education's economic advantages, there are also benefits to society, including reduced crime, better health, improved social integration, and citizens who are actively engaged in the political process (Gardenhire-Crooks, Collado, Martin, & Castro, 2010). Furthermore, obtaining a postsecondary education is becoming a necessity in the current U.S. economic system, due to the fact that a certificate or degree is becoming increasingly essential to acquiring meaningful workforce employment (Silver-Pacuilla, Perin, & Miller et al., 2013).

Once reserved for only an elite few, postsecondary education has expanded over the decades to afford higher education opportunities to all American citizens. Increased access to higher education was made possible by historical movements and legislation, such as the Morrill Acts, the Servicemen's Readjustment Act (G.I. Bill), the Civil Rights Movement, the Women's Movement, and *Brown vs. Board of Education*. These initiatives were instrumental in broadening educational access for those who were previously underrepresented in higher education (Pope, Mueller, & Reynolds, 2009). These movements led to the establishment of community colleges, and greater ethnic, social, and economic diversity in higher education. Over the last forty years,

postsecondary enrollment has increased by 40%, with minority enrollment increasing by 146% (Kinzie, Gonyea, Shoup, & Kuh, 2008). More first generation college students and students with more diverse backgrounds and abilities are now enrolling in college (Kinzie et al., 2008).

Community colleges have delivered on their missions to provide access to students who would otherwise be left without a postsecondary education. However, this mission is partially fulfilled as high attrition and low completion rates plague community colleges across the country (Martin, Galentino, & Townsend, 2014). Community colleges offer "an opportunity to escape stagnation and achieve upward mobility," but minorities have not had an opportunity to keep pace with Caucasians in this regard (Walker, Pearson, & Murrell, 2010, p. 739). African Americans and other ethnic minorities lag behind Caucasians in degree attainment, with less than one-third achieving their educational goal of an associate or bachelor's degree (Walker et al., 2010). One explanation for this phenomenon is that African Americans are more likely to enter college underprepared, therefore contributing to their lower success rates (Bahr, 2010).

Facilitating better outcomes for underprepared African American students starts with understanding and appreciating their unique perspectives and the ways that they experience the college environment. Despite the sobering statistics (Walker et al., 2010), some underprepared, African American, community college students successfully complete developmental education and graduate. Given that academic preparedness is a primary indicator for persistence (Porchea, Allen, Robbins, & Phelps, 2010; Reason,

2009), the implication of these students' success is that in addition to background characteristics, psychosocial factors may play an equal, if not more important role in academic achievement and persistence (Karp & Bork, 2012).

The body of research connecting psychosocial factors to the persistence of underprepared, African American, community college students is limited, and the phenomenon is not thoroughly understood (Cokley, 2003). Since underprepared, African American persisters found a path to success that has eluded so many of their peers, this is an ideal group from which to learn. This case study, set in a large community college in the Midwest United States, investigated the psychosocial factors that led to these students' persistence through developmental education. The study sought to identify ways that the institution can improve persistence and completion outcomes for all underprepared, African American students.

## Definition of the Problem

A problem exists at a public, 2-year college in a large metropolitan city in the Midwest region of the United States, where African American students suffer the worst academic outcomes of any racial group at the institution. Although African American students' enrollment has increased over the decades, graduation rates have not kept pace with growing enrollment. This has led to conclusions that persistence, not access, is the problem for African American students (Vice President of Evidence and Inquiry, personal communication, 2011). For the institution that is at the focus of this study, the majority of African American students are underprepared, meaning that they require at

least one developmental (remedial) course to bring them to a skill level that is on par with college expectations. The outcomes for developmental education students are generally poor, as only 1 in 5 completes the developmental course sequence, and less than 1 in 10 makes it to graduation (Vice President of Evidence and Inquiry, personal communication, 2011). It should be noted that throughout this discussion, the terms *remedial, developmental*, and *underprepared* will be used interchangeably, which is common in the literature. In addition, this study defines *persistence* as students completing their developmental sequence within two years of entry into the institution. Achieving this milestone puts students on track to earn an associate degree within three years, which is the national standard for timely degree completion (The White House Scorecard, n.d.). The problem that this research study investigated was the low persistence and completion rates of underprepared, African American students.

## Rationale

### Evidence of the Problem at the Local Level

The regionally accredited community college was established in 1960, at the height of the community college expansion. The institution enrolls nearly 60,000 credit and non-credit students between four campuses and multiple sites. Approximately 65% of students study part-time and 56% of students seek an associate degree or take courses to prepare for transfer to a four-year institution (college website, n.d.a). The college's mission is to "provide high-quality, accessible and affordable educational opportunities and services—including university transfer, technical and lifelong learning programs—

that promote individual development and improve the quality of life in a multicultural community" (college website, n.d.b). This indicates to stakeholders that the college is committed to serving a broad range of learners, with an emphasis on quality and affordability. *Accessible* implies that the college serves students of all ages, backgrounds, and abilities, including those who are academically underprepared.

Each year, the college serves thousands of underprepared students who experience high rates of course failure and leave the institution shortly after initial enrollment. During the Fall 2014 semester, over 80% of new students tested into remedial math or English (Vice President of Evidence and Inquiry, personal communication, 2014), which is well above the national average of about 50% (Community College Research Center, n.d.). Based on trend data provided by the Vice President of Evidence and Inquiry (personal communication, 2014), less than 50% of incoming students who are enrolled in remedial courses will be retained to the following year. Nearly half of the students never complete the developmental sequence; therefore, attainment of a degree is unlikely (Goldrick-Rab, 2010; Zachry Rutschow & Schneider, 2012).

As an open-access institution, the college addresses the needs of underprepared students while maintaining high academic standards and a focus on timely degree completion. These challenges are evident in the institution's overall retention, persistence, and graduation rates. The college's Fall 2013 to Spring 2014 retention rate was 67%, and the Fall 2013 to Fall 2014 rate was 44%. According to the White House

Scorecard (n.d.), the college has a 3-year graduation rate of just 4.2%, which is well below the national average of 20% for two-year colleges (Martin et al., 2014).

A close examination of the college's underprepared students reveals that African Americans suffer higher failure and attrition rates than their peers. African American students constitute 30% of the institution's enrollment (National Center for Education Statistics, 2013), yet they represent nearly 40% of the developmental education program (Vice President of Evidence & Inquiry, personal communication, 2011). This is consistent with numerous studies that found African Americans to be over-represented in developmental education programs (Crisp & Delgado, 2014). In addition, African American students are less successful in these courses, particularly in math, as institutional data show that the developmental math course pass rates for African Americans and Caucasians were 47% and 67%, respectively (Vice President of Evidence & Inquiry, personal communication, 2011). The poor performance of African American students is reflected in their retention and completion rates, as an average of 41% of African American students are retained each year, compared to 50% of Caucasian students (Vice President of Evidence & Inquiry, personal communication, 2011). The institution's three-year graduation rate for African Americans is 2%, compared to 7% for Caucasian students (National Center for Education Statistics, 2013).

When discussing overall performance of developmental education students, it should be noted that some eventually make it to graduation, albeit slowly, as the average full-time student takes six years to earn an associate degree (Vice President of Evidence

and Inquiry, personal communication, 2014). During the 2013-2014 academic year, the college conferred over 3,000 degrees and certificates, and over two-thirds of those students started in remedial education (Chief Academic Officer, personal communication, 2014). Although former developmental students make up the majority of each year's graduating class, they represent only a small fraction of the underprepared students who attempted to earn a degree. In order to improve overall institutional effectiveness, the college must find ways to increase the persistence and completion of underprepared, African American students.

The problem of low persistence and completion rates extends well beyond the immediate geographic location of this case study. The college contributes to a larger socioeconomic system that needs skilled workers. By 2018, the nation is projected to need twenty-two million new college degrees, and 63% of jobs will require a postsecondary credential (Nguyen, Ward, & Engle, 2012). Unless the nation can improve its college graduation rates, as many as sixty million Americans are "at risk of being locked into predominantly low-wage jobs that cannot support a family" (American Association of Community Colleges, 2012, p. 6).

While college-going rates have remained steady, the state has gained little ground in the number of postsecondary graduates because over half of residents who enroll in college fail to earn a degree (Ohio Board of Regents, n.d.a.). The state is facing a potentially devastating skills gap, and ranks 38th in the country for degree attainment, "with only 26% of adults holding a bachelor's degree, compared with the national

average of 31%" (Ohio Board of Regents, n.d.b., para. 2). According to projections, if the state's degree attainment rates keep the current pace, it will have over 61,000 fewer adults in the workforce with postsecondary credentials. In order to address the skills gap, one study estimated that the state's colleges and universities will need to increase their numbers of graduates by 10% annually to meet the workforce demands for 2018 (Carnevale & Strohl, 2010).

Community colleges enroll nearly half of all undergraduates in the United States (American Association of Community Colleges, 2015), and may be considered the "backbone of labor force development" (Porchea et al., 2010). Since community colleges play such a vital role in workforce preparation, the fact that they produce relatively few graduates has significant economic implications. As a result of stagnant college graduation rates, the "United States is for the first time seeing that younger generations will be less educated than their elders," and "a child born in the United States today is more likely to remain poor than at any other time in the country's history" (American Association of Community Colleges, 2012, p. vii). Moreover, a record number of Americans are impoverished or qualify as low-income (American Association of Community Colleges, 2012), a situation in which African Americans are overrepresented. In the state where this study takes place, African Americans have the lowest median income, averaging $26,100 per year, compared to the state average of $45,400 (U.S. Census, 2009). Correspondingly, African Americans experience higher rates of poverty,

and 1 in 3 African Americans in the state lives at or below the poverty line (State of Ohio, 2015).

African Americans also lag far behind other races in rates of employment. At the end of 2014, the U.S. unemployment rate was 5.5%. However, the percentage of unemployed African Americans was 10.4% - significantly higher than the next ranked group, which was Hispanics, who had a 6.5% unemployment rate. The largest disparities could be found between African Americans and those who were Caucasian or Asian. Caucasians and Asians experienced unemployment rates of 4.8% and 4.2%, respectively. In the state surrounding the study site, African Americans fare even worse, with an unemployment rate of over 20% (U.S. Bureau of Labor Statistics, 2015), which is nearly four times the state and national averages.

The local community is also affected by the college's low persistence and completion rates. The college serves a high-need community where the number of under-educated and under-skilled citizens is disproportionately high. The local metropolitan school district is the college's largest K-12 partner, and has a graduation rate of less than 60%, with most graduates entering post-secondary education at the developmental level (Higher Education Compact, 2011). Moreover, only 6% of the city's residents have an associate degree and only 8% have a bachelor's (Higher Education Compact, 2011). Compared to the rest of the country, these numbers represent only one-fourth of the national average (U.S. Census, 2012a). In addition, the city surrounding the college has a 35% poverty rate (U.S. Census, 2015). Since the college's mission is to improve the

quality of life in the local community, and having a postsecondary credential significantly increases the likelihood of that outcome, then it is imperative that the college find a way to get students through remedial education and graduate them.

One approach to improving persistence and completion is to study and learn from successes, rather than failures. This is not a new concept in higher education, as benchmarking and adopting best practices have been common strategies for improving institutional effectiveness. Yet, in instances where the successes come few and far between, they are often overlooked or dismissed, which is an important premise for this study. It is evident that some African American students persist and complete their developmental education coursework, despite having what researchers believe to be multiple risk factors (Greene, Marti, & McClenney, 2008; Hagedorn, 2010; Martin et al., 2014). A close examination of these successful students could provide insight into how and why they persisted and reveal ways that the college can facilitate better outcomes for this high-risk population. Therefore, the purpose of this qualitative project is to study African American students who have successfully completed their developmental coursework and learn if there are common factors and characteristics that contributed to their persistence.

## Evidence of the Problem from the Professional Literature

Since they were established over a half-century ago, community colleges have promoted the democratic values of access, equality, and opportunity (Topper & Powers, 2013). Community colleges' missions call for an open-door policy whereby academic,

financial, social, and geographic barriers are removed (Nakajima, Dembo & Mossler, 2012). In addition to having an open-access mission, community colleges are distinguished by their role as a link between secondary schools and the universities (Palmer, as cited in Saenz, Hatch, Bukosi, Kim, Lee, & Valdez, 2011), and by their broad offerings, which range from courses in personal development, to career, technical, and university transfer programs. As a result, students attend community colleges for a variety of reasons, including updating skills, job training, personal enrichment, and preparation for transfer to four-year institutions (Martin et al., 2014).

The convenience, ease of access, and affordability of community colleges attract more students who are ethnically diverse, and more socially and economically disadvantaged, compared to other postsecondary institutions. Furthermore, these diverse populations are steadily increasing (American Association of Community Colleges, 2015). Currently, there are 12.4 million students attending the nation's 1,123 community colleges (American Association of Community Colleges, 2015), and 40% of those students live at or below the poverty level (Mullin, as cited in Sandoval-Lucero, Maes. & Klingsmith, 2014). Further, 1 in 3 community college students is a minority (Ryu, 2010), and more than half of all minority undergraduates in the United States attend a community college (American Association of Community Colleges, 2015).

The diversity of community colleges often makes it challenging to facilitate successful student outcomes. In addition, more than half of community college students have situational challenges and characteristics that make them more likely to drop out.

They are generally more prone to having "family conflicts, financial constraints, low academic skills, and psychological distress" (Levin, Cox, Cerven, & Haberler, 2010, p. 35). Community college students are more likely to possess high-risk characteristics, which include part-time enrollment, full-time work, being financially independent from parents, and single parenthood (Greene et al., 2008; Hagedorn, 2010; Martin et al., 2014). Low-income students and students of color are more likely to have these characteristics (Saenz et al., 2011), and these groups are predominantly served by community colleges.

The case study setting is not unique in its challenges to retain and graduate students, especially those who enter the institution underprepared. Improving the success rates of students in developmental courses is one of the greatest challenges that community colleges face in the efforts to increase overall graduation rates (Zachry Rutschow et al., 2012). Further, student retention and persistence have been identified by Cejda and Leist (2006) as frequently mentioned challenges faced by community colleges. This is not surprising, since nearly half of all community college students drop out before obtaining their degree (Wolfle, 2012), and this typically happens within the first year of attendance (American Association of Community Colleges, 2012; Greene et al., 2008).

Only about one-third of community college students who are first-time, full-time, and degree-seeking earn a credential within three years, or 150% of the normal time required to complete an associate degree (Bremer, Center, Opsal, Mehanie, Jang, & Geise, 2013; Karp & Bork 2012; Sandoval-Lucero et al., 2014), and less than 50% achieve that goal within six years (Center for Community College Student Engagement,

2012). Further, the national three-year graduation rate for community colleges lingers around 20%, with many community colleges performing well below this average (Martin et al., 2014). According to some studies, it appears that the community college setting itself imposes a greater risk of student attrition. A study by Crisp (2010) found that even after controlling for the typical factors that place students at greater risk of attrition (background, ability, high school grades, degree aspirations, etc.), community college students were still 10% to 18% more likely to drop out, compared to those who attended four-year institutions.

Under-preparedness is a major contributor to the poor performance of community college students (Bailey, Jeong, & Cho, 2010; Wolfle, 2012) and a characteristic that is common among the community college population. Students who require remedial coursework seem less likely to complete any type of credential at a community college (Goldrick-Rab, 2010), and so few make it through the developmental course sequence that it has been referred to as a “burial ground for student aspirations” (American Association of Community Colleges, 2012). Further, developmental courses are presumed to “screen out less determined students, students who face more nonacademic problems, and perhaps those who lack support networks outside of college” (Bailey, Jaggars, & Scott-Clayton, 2013). Given the typical characteristics of community college students, it is not surprising that so many find it difficult to persist through these courses and complete their programs.

There are even worse outcomes for students who possess multiple high-risk characteristics, such as African American students who enter the college underprepared. Among all of the racial groups, African American students have the highest drop-out rate, and for those in developmental courses the rate can climb to as high as 70% (Bharath, 2009). However, despite the fact that underprepared African American students have high attrition, there has been little research devoted to understanding and remedying this issue. Instead, much of the research on underprepared students has focused on improving developmental education outcomes.

Developmental education has been in existence in the United States for almost four centuries. It began at Harvard University with the purpose of teaching remedial reading to adults, and has been a formalized area of study since the early 1900's (Wolfle, 2012). Levin and Calcagno (2008) defined remedial education as "a class or activity intended to meet the needs of students who initially do not have the skills, experience or orientation necessary to perform at a level that the institution's instructors recognize as 'regular' for these students" (p. 182). Essentially, remedial education provides students with skills that should have been mastered at the K-12 level. Given the impracticality of sending adult students back to K-12 schools to acquire the requisite skills, remediation is an indispensable bridge between a credential and inadequate preparation (Roberts, 1986). Studies show that developmental education has the intended equalizing effect, since students who complete the developmental sequence experience the same retention and graduation rates as students who did not require remediation (Grimes, 1997). Further,

more recent research indicates that community college students who successfully complete their developmental sequence have similar graduation or transfer rates as those students who began at the college level (Pretlow & Wathington, 2012).

While it appears that developmental education makes a difference, there are a large number of students who do not realize the benefits because they never complete the courses (Wolfle, 2012). Fewer than half of students who enter the developmental education pipeline matriculate to college-level courses (Nora & Crisp, 2012; Zachry Rutschow & Schneider, 2012), and even fewer of those who are assigned to multiple levels of remediation (Wolfle, 2012). Furthermore, students who are at the bottom levels of developmental education have the lowest probability of completing the sequence (Bahr, 2010; Hughs & Scott-Clayton, 2011). Remedial math has the least favorable outcomes, with only a third of students completing their remedial math sequences (Bailey et al., 2013). Bahr (2010) noted that the underlying cause of attrition in the lowest skilled students remains uncertain and is a topic for further research. However, he offered a number of possible explanations that are supported by the literature, such as the tendency for underprepared students to view college attendance as an *experiment*, the courses not counting towards degree requirements, and the stigma of being placed in low-ability groups. Ultimately, between 60% and 70% of developmental education students will never attain a degree or credential (Zachry Rutschow & Schneider, 2012).

As community colleges develop strategies to raise persistence and graduation rates, it is logical that they have identified developmental education as a point of

leverage. The impact of developmental education on these institutions is tremendous, because the number of students that require remediation make up as much as two-thirds of community college enrollments (American Association of Community Colleges, 2012; Goldrick-Rab, 2010). Entering freshmen at community colleges are more likely to require at least one remedial course than are their peers from four-year colleges (Karp, 2008), and about 45% of community college students take at least one developmental course in reading, writing, or math (Silver-Pacuilla, Perin, & Miller, 2013). Community colleges' heavy focus on remediation is due in part to a shift in responsibility from the four-year schools. Most developmental education programs are administered by community colleges, where instruction is less expensive (Fike & Fike, 2008). Thus, *preparing* the *underprepared* has become a niche for community colleges, as implied by Bahr (2008), who asserted that "remediation is not simply one of many functions of the community college. Rather, it is so fundamental to the activities of the community college that significant alterations in remedial programs would drastically change the educational geography of these institutions" (p. 445). It is estimated that without the developmental education curriculum provided by community colleges, approximately 2 million students would have to drop out of postsecondary education (Higbee, Arendal, & Lundell, as cited in Wolfle, 2012).

Bahr (2008) described remedial education is as "a 'remedy' intended to restore opportunity to those who otherwise may be relegated to meager wages, poor working conditions, and other consequences of socioeconomic marginalization" (p. 422), but the

potential effects are thwarted by students' lack of persistence in these courses. Time appears to be a critical factor in developmental course completion, as the longer that it takes for a student to complete developmental education, the more likely he or she is to drop out (Center for Community College Student Engagement, 2012). Also, students who attend part-time (and therefore, progress more slowly) are less likely to persist (Martin et al., 2014). This means that since more than half of community college students attend part-time, the fact that most need remediation exacerbates the persistence problem.

One challenge with improving developmental education outcomes is that the characteristics, such as academic deficiencies, that qualify students for the coursework are the same ones that place them at risk of dropping out. Further, the impact of background characteristics is deeply salient, even across levels of academic preparedness. A recent study by Crisp and Delgado (2014) revealed that demographic characteristics, such as being a racial minority, or being a first-generation college student, substantially increase the risk of dropping out of college, independent from remediation experience.

Another finding is that ethnically diverse students are overrepresented in developmental education (Bahr, 2010) and are typically less successful in these courses than Caucasians (Wolfle, 2012). African Americans at community colleges are almost twice as likely as Caucasian peers to enroll in at least one developmental course (Greene et al., 2008), and they represent the largest group in developmental education (Mulvey, 2009). African American students are enrolled in remedial courses at a rate of 62%, compared to 36% of Caucasians, 63% of Hispanics, and 38% of Asians (Bahr, 2010).

African Americans are especially overrepresented in math. Bettinger and Long (2005) conducted research in the state where this study is located, and discovered that over 75% of African American and Hispanic students were placed in developmental math courses, compared to only 55% of Caucasian students. Thus, African Americans are clearly overrepresented in developmental education at the study site, as well as across the state and across the country.

The generally poor outcomes associated with developmental education have resulted in harsh criticism and pressure from the public who want better returns on their investment (Bahr, 2008; Bailey, 2009; Levin & Calcagno, 2008). It appears that students and institutions invest a great deal into remedial education, often with very little to show for it (Bailey, 2009; Crisp & Delgado, 2014). Remedial coursework does not count towards degree requirements, so students experience a longer time obtain their degree, which threatens institutions' retention and graduation rates (Bailey, 2009; Bettinger & Long, 2005). In addition, remedial education is extremely expensive, with estimated costs as high as $3 billion per year (Scott-Clayton & Rodriguez, 2012). Some argue that remedial education wastes tax dollars, while leaving students feeling demoralized and their financial aid exhausted (Bahr, 2008; Bailey, 2009; Levin & Calcagno, 2008). Finally, students sacrifice time and wages while trying to make it to college-level courses (Bettinger & Long, 2005; Levin & Calcagno, 2008). When adding up monetary and opportunity costs, students spend between $1,607 and $2,008 on developmental coursework (Silver-Pacuilla et al., 2013). The cost and momentum loss associated with

developmental education has prompted colleges, researchers, and policy makers to consider reforms that would facilitate better completion rates (Silver-Pacuilla et al., 2013).

There are national initiatives to improve the persistence and completion of community colleges' underprepared and at-risk students. One such initiative is *Achieving the Dream: Community Colleges Count (ATD),* which is designed to improve students' success at community colleges, with a focus on low-income students and students of color (Gardenhire-Crooks et al., 2010). The ATD initiative includes over 100 community colleges across the country, and has identified developmental education as an area of high interest. ATD's work and focus demonstrates that persistence and completion is a national challenge, particularly for students of color. According to an ATD report, less than a third of students at its first-round member colleges who were referred to developmental coursework were able to pass their highest-level remedial math class within a three-year period, and English pass rates were only marginally better (Gardenhire et al., 2010). Furthermore, the report indicated African American students had the lowest achievement in other measureable outcomes, such as course pass rates, grade point averages, retention, and graduation rates.

The issue of African Americans' college achievement is a chronic and pervasive concern. Decades ago, Allen (1992) asserted that "African American students continue to be plagued by problems associated with access, retention, and achievement in U.S. higher education. These problems have been stubbornly persistent, defying long-term, effective

solutions" (p. 41). Still today, African American students are least likely to be academically successful and persist in college (Nakajima, Dembo & Mossler, 2012). Race as a factor in student persistence continues to surface in the literature, even for academically prepared students. For example, in a study of community college students, Wolfle (2012) examined the impact of developmental status, age, and ethnicity on the completion of first college-level math courses and fall to fall persistence. Wolfle found that the factors that were significant in determining the success of students were age and ethnicity. In fact, a Caucasian student was found to be 1.29 times more likely to succeed than a non-Caucasian student. Consequently, there is a significant gap in degree attainment rates between African Americans and Caucasians. The college graduation rates for African Americans have remained virtually unchanged for a quarter of a century, due in part to high rates of college departure (Strayhorn, 2012). One analysis indicated that after college entry, only 26% of African American students complete either a degree or certificate, compared with 39% of Caucasian students (American Association of Community Colleges, 2012). At community colleges, only 27% of African American students receive a degree or certificate within six years, which is lower than the overall average rate of 36% (Bailey, Alfonso, Calgano, Jenkins, Kienzl, & Leinbach, 2004). The degree attainment gap pervades the four-year sector as well, as fewer than half of African American students attain the bachelor's degree that they were seeking, and on average, African Americans earn bachelor's degrees at rates 20 percentage points below their Caucasian peers. (Lynch & Engle, 2010).

The racial and ethnic gaps in graduation rates, as well as the low completion rates for all students dictate that too many students do not acquire the competencies necessary to meet workforce demands (Kinzie et al., 2008). By the year 2020, nearly 60% of jobs will require a credential *beyond* high school (Ohio Board of Regents, n.d.a.), meaning that millions of African Americans are not on track towards earning a living wage and securing their economic future. This trend has significant implications for society, especially when one considers the increasing diversity of this nation. African Americans make up over 13% of the United States population, and that number is expected to grow to 15% by the year 2050 (U.S. Census Bureau, 2012c). Hence, African Americans represent a significant and growing portion of the nation whose talents and skills will not be developed and leveraged to benefit their families or their communities. These realities, along with the subsequent demands for improved institutional performance and accountability have created a sense of urgency across the community college sector. There is a critical need to better understand the factors that contribute to student success and create more effective teaching and learning environments (Kinzie et al., 2008).

There have been a number of reasons presented for the performance disparities between African Americans and students of other races; however, research has consistently reported that a major contributing factor in African American students' low success rates is poor preparation from the secondary school systems (Bailey et al., 2010). In addition to preparation, Strayhorn (2012) cited socioeconomic status as a key factor in student attrition, with African Americans being the most affected because they are

disproportionately represented in the lowest socioeconomic levels. Even though the majority of African American students attend more affordable community colleges, the economic burdens of college attendance can be overwhelming for low-income students, and cause them to withdraw from the institution. Other reasons for African American attrition, which are perhaps the most influential, are related to social factors. Strayhorn (2012) asserted that African Americans are faced with a confluence of challenges and emotional threats that inhibit or limit their opportunities to participate in higher education. These challenges include having high rates of incarceration, negative stereotypes, and low self-confidence. It is important to recognize, though, that despite having numerous disadvantages, African American college students have been shown to have similar or higher aspirations than their Caucasian counterparts (Allen, 1992; Lee & Ransom, 2011; Strayhorn & DeVita, 2010); yet, because of early departure from college, these visions often go unrealized.

## Definitions

This study uses terms that vary according to context, and are defined as follows:

*Developmental Education*: Developmental education is "composed primarily of sequences of increasingly advanced courses designed to bring students to the level of skill competency expected of college" (McCabe, as cited in Barbatis, 2010, p. 16). Developmental education may also include non-technical content, such as socialization or study skills.

*Open-access (open-door) institution:* An open-access (open-door) institution is one that enforces "minimal standards of admission, typically requiring only the completion of a high school diploma, GED, or other evidence of a likelihood of benefiting from the educational services provided by the institution" (Bahr, 2013, p. 41).

*Remediation:* Remediation consists of curriculum that teaches "minimum levels of reading, writing and math deemed essential for functional participation in democratic society" (Bahr, 2010, p. 211). Moreover, remedial coursework is commonly referenced as content that should have been mastered at the K-12 educational level.

*Persistence*: Persistence generally means that entering college students re-enroll for subsequent terms and make progress toward a credential (Arnold, 1999). These students have been identified throughout the discussion as "persisters." However, in the context of this study, persistence is used to describe students' continued enrollment in their developmental education courses. Specifically, persistence means that students complete all of their developmental courses (earning a "C" or better) within two years after entering the institution.

*Psychosocial factors:* This term is "shorthand for the combination of *psychological* and *social* factors, and it also implies that the effect of social processes are sometimes mediated through psychological understanding" (Stansfeld & Rasul, as cited in Upton, 2013, p. 1580). In this study, psychosocial factors encompass all factors that do not directly involve cognitive or physical ability.

*Underprepared:* Maxwell, as cited in Mulvey (2009) characterized underprepared students as having “skills, knowledge, motivation and/or academic ability that are significantly below those of a ‘typical’ student in the college or curriculum in which they are enrolled” (p. 36). Mulvey added that under-preparedness may often involve more than academic issues; it may also involve social and economic factors that can threaten student success and persistence. For this study, a primary indicator of academic under-preparedness will be placement in remedial courses.

## Significance

This study is significant in a number of ways. First, this research is a timely contribution to the social justice movement and is intended to promote positive change for millions of marginalized Americans. Secondly, this study highlights a critical issue that has been inadequately addressed in the literature, which Bean, as cited in Schreiner, Kammer, Primrose, & Quick (2009), described as “the individual motivation and psychological processes that lead students to engage and fully benefit from the opportunities presented in the college environment” (p. 2). The purpose of the study is to fill a knowledge gap concerning the non-cognitive factors that lead to students attaining their educational goals. The particular focus on underprepared African American students is also significant, as this population appears to be under-explored, especially in the community college setting.

In addition, this study is intended to provide insight into a prevalent and chronic problem that is causing concern for stakeholders at the study setting (Vice President for

Academic Affairs, personal communication, 2014). The severely low persistence and completion rates of African American students have a number of implications. First, the college's high student loan default rate is likely an artifact of poor completion rates. The loan default rate is currently at 23%, which is nearly 8% above the national average (The White House, n.d.). This is significant because the college is approaching a loan default rate that will place it at risk of losing Title IV funding (Executive Director of Enrollment Operations and Financial Aid, personal correspondence, 2014). Timely degree completion has been identified as a key strategy in reversing this trend.

Another challenge that is indirectly addressed by this study involves the college's funding and economic stability. The college is supported by a tax levy that makes up over a third of its operating budget (college website, 2012). As a steward of public funds, the college is accountable to its constituents and must demonstrate its worth to policy makers and taxpayers by producing more graduates. Additionally, the state funding formula has recently changed, and places more emphasis on course and degree completion, and less on enrollment. The formula requires colleges to educate students more efficiently and effectively (National Conference of State Legislators, 2013). According to the Chief Financial Officer, the college must improve its educational outcomes in order to maintain the fiscal health of the institution (2014, personal communication).

Finally, this study supports a national focus on timely degree completion. In the United States, the number of underprepared college students is steadily increasing, while the country trails far behind many industrial nations in educational attainment (Daiek,

Dixon, & Talbert, 2012). In an effort to reverse this downward trend, President Obama's administration has established the Completion Agenda, which is a federal mandate to improve student completion rates by 50% (The White House, 2011). The Completion Agenda is a call to action for higher education institutions to produce more graduates to keep America globally competitive. For the college in this study, the Completion Agenda means an additional 3,000 graduates by the year 2020 (Vice President of Evidence and Inquiry, personal communication, 2014). The college may not meet the Completion Agenda mandate unless it can improve outcomes for underprepared students.

## Guiding/Research Question

As discussed, relatively few underprepared, African American, community college students persist through developmental education courses, and it is clear that those who do persist are influenced by factors that allow them to succeed in spite of their academic deficiencies. Empirical evidence of the factors relating to the persistence of underprepared, African American, community college students is very limited. Further, the few studies that address this issue tend to amplify students' failures and deficits instead of their successes (Harper, 2012). As such, "we know little about those students who, despite all that we know about what complicates and undermines achievement for their particular racial group, manage to successfully navigate their ways through college" (Harper, 2012, p. 64). As an alternative to the approaches that currently dominate the literature, this study focused on some of the successful students. The research was guided by one overarching question, which was "how do psychosocial factors impact the

persistence of African American students in their developmental courses?" This question was answered using qualitative inquiry, an approach that will be outlined later in this study.

## Review of the Literature

The literature for this study was obtained using a comprehensive and systematic search process. To start, I searched for scholarly articles through the Walden library and the library at the institution where I work. Boolean searches were conducted through the OhioLink, ERIC, EBSCOhost, and Academic Search Complete databases. Next, articles and scholarly content were identified through Google Scholar, which is a better option than searching the entire World Wide Web, because Google Scholar filters academic related materials, and allows the researcher to search for relevant, scholarly research across multiple sources and disciplines. In general, searches were narrowed to include research that was less than five years old. However, since there was very little literature on my specific subject, I expanded the timeframe in some instances to provide more research that was closely related to my topic. Searches focused on literature pertaining to community college retention, community college persistence, underprepared student achievement, African American achievement, African American retention, African American persistence, non-cognitive/psychosocial traits and persistence, and student motivation. I also conducted searches that combined two or more of these topics. Further, to demonstrate that the identified problem has extensive implications, I also searched for local, state, and national data relating to African Americans' degree

attainment, employment status, and average income. Finally, the Community College Research Center (CCRC) and American Association of Community Colleges (AACC) websites provided relevant information. The searches produced over 150 articles and relevant data. After carefully reviewing and reconciling the information from these sources, I determined that saturation was achieved. The following is a review of the timeliest and most relevant research on community college student persistence, as well as the persistence of underprepared African American students. The review will also include a description of Astin's theory of student involvement (1984), which is the conceptual framework for this study.

**General Factors that Affect Student Persistence**

There is abundant research on the factors that impact college student persistence. These include cognitive, non-cognitive, and environmental factors (Lohfink & Paulsen, 2005). A review of the literature shows that academic performance and, in turn, persistence are achieved through a complex exchange of personal and environmental variables. The potential impact of those variables is summarized in the following statement by Allen (1999):

> How bright the student is, his or her academic background or preparation, the intensity of his or her personal ambition and striving- all these factors will ultimately influence academic achievement. Beyond these personal traits, however, is a set of more general factors- characteristics that are more situational and personal. Therefore, the student's academic

> performance will also be affected by the quality of life at the institution, the level of academic competition, university rules/procedures/resources, racial relations on the campus, relationships with faculty and friends, and the extent of social support networks on campus (p. 40).

The factors that Allen described may be grouped into three distinct categories: (a) cognitive factors, (b) social factors, and (c) institutional factors (Swail, 2003). *Cognitive* factors pertain to students' academic ability, such as level of proficiency in reading, writing, and math. *Social* factors involve students' ability to interact effectively with people on campus, as well as personal attitudes and cultural perspectives. The third set of factors, which is *institutional*, refers to "practices, strategies, and culture of the college or university that, either in an intended or unintended way, impact student persistence and achievement" (p. 92). The relationships between these three factors are so interwoven, that it is difficult to analyze the effect of a single variable on student persistence (Nakajima et al., 2012), leading to the conclusion that persistence is the result of a complex set of interactions (Swail, 2003). Thus, there is a need to better understand what leads to student persistence, using methods that explore both conditional and contextual influences.

**General Characteristics of Persisters and Nonpersisters**

Although researchers have yet to identify the distinct combination of conditions that lead to persistence, numerous studies have identified the characteristics of students who do and do not drop out of college (Martin et al., 2014; Nakajima et al., 2012;

Porchea et al., 2010; Reason, 2009). Academic preparation is generally regarded as the most indicative characteristic of college persistence (Porchea et al., 2010; Reason, 2009), with high school GPA being the single highest academic related predicator (Grimes, 1997). Additionally, Nakajima et al. (2012) cited other entering characteristics as being important to persistence, such as cultural capital, college plans, and age. Other research has found that the demographic characteristics of gender, race, ethnicity, and socioeconomic status were related to persistence (Nakajima et al., 2012; Reason, 2009). Non-cognitive characteristics have also been identified as contributors to persistence. Persisters have been shown to possess “clear goals, strong motivation, the ability to manage external demands, and self-empowerment” (Martin et al., 2014, p. 229), as well as “higher general self-esteem” (Grimes, 1997, p. 52).

Compared to persisters, nonpersisters are more likely to be less prepared, have poor study skills, lack the motivation to succeed, and have inadequate financial resources (Grimes, 1997; Porchea et al., 2010; Reason, 2009). Additionally, some studies have concluded that nonpersisters had greater external demands than persisters (Grimes, 1997; Napoli & Wortman, 1998; Porchea et al., 2010), and often identified situational challenges, such as “job loss, failing health, or broken marriages” as the reasons for not persisting (Capps, 2012, p. 40). Persistence characteristics have also been narrowed down to student type. For example, in a study of academically underprepared, community college students, Grimes (1997) found that compared to persisters, nonpersisters had

"lower rates of course completion, higher attrition, and a greater tendency to have test anxiety and an external locus of control" (p. 51).

**Tinto's Model of Persistence**

Many of the studies on college student persistence stem from Tinto's (1975) interactionalist model of student persistence, which describes the relationships between student entry characteristics, goal commitment, integration, institutional commitment, and the outcome of persistence (Martin et al., 2014). There is a plethora of empirical studies that are framed by Tinto's model, but very few deviate from the focus on traditional undergraduate students, or students aged 18 to 24 who are enrolled full-time at four-year universities. Since these students and settings are demonstrably different from those of community colleges (Martin et al., 2014), it is important to consider institution type, as environmental factors are as critical as academic ones in influencing persistence decisions (Karp, 2011).

As a criticism of Tinto's model, Karp (2011) stated that "the dominant paradigm for understanding postsecondary persistence does little to account for the experiences and outcomes of the many part-time, commuter, and underrepresented minority students attending two-year institutions" (p. 3). Karp's argument is supported by other researchers, who posited that the undergraduate experience of minority students, including African Americans, may differ from that of the Caucasian majority (Walker et al., 2010). Further, Allen (1999), found that the variables that predicted persistence were different for students of color, compared with Caucasian students. Persistence factors may also be

influenced by institution and student type. Barbatis (2010) studied underprepared community college students and found that students who persisted attributed their success to characteristics not identified by Tinto, such as "sense of responsibility, goal orientation, resourcefulness, determination, and faith" (p. 20). To summarize, critics of Tinto's model have stressed the need to examine student persistence using more diverse populations and contexts (Museus & Quaye, 2009).

**Influence of Psychosocial Factors on Persistence**

The majority of research linking student characteristics to persistence is based on demographics and background characteristics, rather than personality traits and their resulting behaviors (Reason, 2009). Although academic preparation is generally regarded as the strongest predictor of academic performance and college persistence, research supports psychosocial factors as having comparable influence on student success (Porchea et al., 2010). The literature indicates that noncognitive factors strongly influence persistence (Astin,1984; Barbatis, 2010; Howard & Whitaker, 2011; Lei, 2010; Martin et al., 2014; Reason, 2009; Robbins, Lauver, Le, Davis, Langley & Carlstrom, 2004; Van Ora, 2012; Williams & Williams, 2011; Wood & Palmer, 2014). These characteristics include motivation, self-discipline, self-confidence, and sense of academic skills. Similarly, students with clear goals, college social connections, and college commitment are more likely to persist (Reason, 2009). Howard and Whitaker (2011) drew similar conclusions, attributing student learning to attitude, which requires learners to overcome their fears and believe that they can succeed.

As discussed, persistence is typically linked to students' level of academic preparation. Thus, needing developmental education would presumably increase students' potential for dropping out. However, there is substantial evidence that being successful in college requires more than academic ability (Karp, 2011; Komarraju & Schmeck, 2008; Palmer, Davis, & Hilton, 2009). Unsuccessful students often struggle with adjusting to, understanding, and meeting college norms and expectations, which are psychosocial challenges, and not related to cognitive ability. The influence of psychosocial factors becomes evident when one considers that even some college-ready students do not earn a credential, which suggests that college readiness involves more than having academic skills (Karp & Bork, 2012).

The impact of psychosocial factors varies by institution type, and likely by other dimensions as well. Braxton, Hirschy, and McClendon (2011) noted specific differences in the effects of non-cognitive characteristics on the persistence of commuter and residential students. The authors asserted that level of motivation, locus of control, self-confidence, empathy, and the need to belong impacted these groups differently. Since the impact of non-cognitive characteristics varies between residential and commuter students, then it is reasonable to suggest that there is similarly variable impact on other demographics, such as race and gender (Robbins et al., 2004).

**Psychosocial Factors and African American Students**

There is limited research on how psychosocial factors contribute to the persistence of African American students, but the few studies on this topic indicate that

noncognitive variables are particularly important to the academic success of this population (Palmer et al., 2009; Strayhorn, 2008). Studies have pointed to utility, goal commitment, self-efficacy, self-confidence, sense of belonging, and locus of control as being particularly important in the academic achievement and persistence of African Americans (Wood & Palmer, 2014). Additionally, African Americans' academic performance may be primarily attributed to a number of dispositional factors, including a desire to achieve career goals, to prove others wrong, to create a better future for themselves and their families, to develop intellectually, and to fulfill responsibilities to others (Van Ora, 2012; Wood & Palmer, 2014). Strayhorn (2008) found that connection to college, personal/emotional adjustment, and having a strong support system were more instrumental to African American academic success than cognitive characteristics.

**Conceptual Framework**

As a complement to the discussion on psychosocial factors and persistence, motivational theories are emerging as ways to explain academic performance (Robbins et al., 2004). Accordingly, the conceptual framework that guides this study is based in motivational psychology, specifically, Astin's theory of student involvement. Astin (1984) described student involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 518). Astin explained that student involvement is a concept that closely resembles motivation, which is a common construct in psychology. However, Astin preferred the term *involvement* over *motivation*, as motivation is a psychological state, and involvement connotes a behavioral

manifestation of that state (Saenz, Hatch, Bukoski, Kim, Lee, & Valdez, 2011). In addition, Astin described student involvement as an environmental factor mediated by student choices. These choices culminate into five categories of student involvement: (a) academic achievement, (b) involvement with faculty, (c) involvement with student peers, (d) involvement with work, and (e) other forms of involvement (Saenz et al., 2011). Student involvement can also take the form of participation in clubs, sports, or student organizations. In the context of student success, Astin's theory suggested that the degree to which students demonstrate involvement behaviors is directly related to their learning, academic performance, and retention (Saenz et al., 2011). This idea was supported by Wolf-Wendel, Ward, and Kinzie (2009), who resolved that "student involvement is linked via research to almost every positive outcome of college" (p. 412). It should be noted, though, that the research on student involvement at community colleges is limited (Walker et al., 2010), and even more so when the focus is narrowed to African American students. This is noteworthy because involvement is known to be "particularly important for minority students" who often enter college with deficits, and experience the educational environment differently (Walker et al., 2010, p.740).

Astin (1984) posited that the principal advantage of the student involvement theory is that it "directs attention away from subject matter and technique and toward the motivation and behavior of the student," and it views student time and energy as "institutional resources" (p. 529). Astin recommended that all institutional policies and practices be evaluated in terms of the degree to which they increase or reduce student

involvement. Kuh's (2009) theoretical framework expanded on Astin's theory by placing the responsibility on institutions to create an engaging learning environment.

## Leading Psychosocial Contributors to Persistence

Studies have linked numerous psychosocial factors to student persistence, and this discussion will identify the factors that are most prominent in the literature. Very few studies have examined the impact of psychosocial factors on underprepared, African American, community college students. However, it is clear that, despite the context to which they apply, psychosocial factors are all, in some way, derived from motivation. This supports motivational theory as an appropriate conceptual framework for this study.

**Motivation.** Astin's theory and other motivational theories are emerging as ways to explain academic performance. Motivation is an internal condition that arouses, directs, and keeps learners engaged (Lei, 2010). Astin (1984) used the term *involvement* as a proxy for motivation, emphasizing that motivation results in physical and psychological behaviors that impact student learning. Astin believed that a highly involved student devoted more effort to the academic experience, as demonstrated by the time spent on studying, academic tasks, participating on campus, and interacting with classmates and faculty. A student's level of motivation or involvement can be so strong that it can overcome academic deficiencies, low socioeconomic status, or lack of college knowledge, which may explain why students with these challenges still manage to persist (Barbatis, 2010; Howard & Whitaker, 2011; Karp, 2011; Martin et al., 2014).

***Motivation of African American students.*** Some African American students, many of whom faced the aforementioned deficiencies and situational challenges, still manage to persist, in spite of a pervasive belief that African Americans lack motivation, positive self-concept, and possess a negative attitude towards school (Cokley, 2003). Cokley (2003) described African American students as starting college "highly motivated and with high expectations about their future economic potential" (p. 532), yet this high self-esteem, motivation, and confidence diminish as African Americans experience academic failure. Given these observations, Cokley (2003) called for more "theoretically and methodologically diverse empirical research" (p. 528) to construct a more sophisticated understanding of the motivational psychology of African American students.

***Intrinsic vs. extrinsic motivation.*** Motivation is generally explained as a dichotomy consisting of intrinsic and extrinsic motivation. Intrinsic academic motivation involves "engaging in academic behaviors for their own sake," or because they are enjoyable and interesting. Alternatively, extrinsic academic motivation involves "engaging in academic behaviors because they are seen as instrumental to achieving some goal" (Cokley, 2003, p. 535). Both types of motivation have implications for students' learning, academic achievement, and persistence.

Intrinsic motivation has been linked to academic achievement in numerous studies (Afzal, Ali, Khan, & Hamid, 2010; Deci, Vallerand, & Pelletier, 1991; Komarraju et al., 2008; Lei, 2010). In general, students who are more intrinsically motivated are more

likely to stay in school, receive more enjoyment from academic work, have positive perceptions of faculty, have higher self-esteem, and achieve better academic performance (Cokley, 2003). Komarraju et al. (2008) found that intrinsic motivation is a strong predicator of GPA, and noted that "students with high intrinsic motivation are more inclined to engage in conscientious behaviors, such as being self-disciplined, being organized, attending class, and studying systematically" (p. 50). Intrinsically motivated students also participate in activities that lead to deeper learning, such as participating in discussions, and frequently reviewing new course information (Lei, 2010).

Extrinsic motivation is often framed as a less desirable, and in some cases, counterproductive form of motivation. For example, in a study by Afzal et al. (2010), researchers concluded that academic performance is negatively affected by extrinsic motivation. Despite such findings, Komarraju et al. (2008) affirmed that even externally motivated students can be encouraged to perform well academically; this can be achieved by: (a) rewarding hard work, (b) building students' self-confidence by training them to develop successful learning strategies, and by (c) providing students with numerous learning options and options for assignments. Komorraju's et al.'s (2008) assertions have promising implications, since they suggest that under the right conditions, external motivation can be leveraged to achieve meaningful and positive student outcomes.

**Attitude.** Howard and Whitaker (2011) maintained that attitude is closely related to motivation, and stated that attitude, or "the feeling one develops towards learning can significantly influence not only what one learns but how one learns" (p. 35). Research has

shown that a positive attitude has a positive effect on student achievement (Howard & Whitaker, 2011). Howard and Whitaker (2011) highlighted the importance of developing a "growth mindset," or the belief that people can grow through consistent efforts and application of their learning, despite having varying levels of talent, aptitude, and ability. In short, having a growth mindset or positive attitude can help overcome fear of failure and promote a belief that one can achieve.

Similar to having a positive attitude, having aspirational capital, or hopes and dreams for the future, helps students persist. Aspirational capital helps students persevere through their programs despite significant barriers (Sandoval-Lucero et al., 2014). Another attitudinal factor is internal locus of control, or the belief that one can influence his or her environment or circumstances. Having an internal locus of control contributes to higher academic performance (Grimes, 1997; Jones, 2009; Wood & Palmer, 2014). In summary, having a positive attitude helps students persist through difficult tasks and negative life circumstances.

**Academic Self-Efficacy and Self-Concept**. Self-efficacy has been discussed as being related to, and predictive of, academic performance and persistence (Bandura, 1997; Robbins et al., 2004; Vuong, Brown-Welty, & Tracz, 2010). Self-efficacy is an individual's perceived ability to perform a necessary task to achieve a goal (Vuong et al., 2010). Self-efficacy affects level of effort, as individuals are more inclined to embrace tasks in which they feel more confident and competent, and avoid those in which they do not (Bandua, 2002). In an educational context, self-efficacy is defined as "a student's

degree of confidence in performing various college-related tasks to produce a desired outcome, such as passing an examination" (Vuong et al., 2010, p. 52). Bandura (2002) asserted that self-efficacy is at the core of student motivation:

> Whatever other factors serve as guides and motivation, they are rooted in the core belief that one has the power to produce desired effects by one's actions, otherwise one has little incentive to act or to persevere in the face of difficulties (p. 2).

Unlike with other aspects of motivation, self-efficacy is salient across multiple student demographics and institution types (Grimes & David, 1999; Hagedorn 2001; Silver, Smith, & Greene, 2001). For first-generation minority college students, empirical data indicate that academic self-efficacy and perceived college stress jointly impact their academic success (Solberg & Villarreal, 1997). Also, Wood and Palmer (2013) found that African American males who have strong academic self-efficacy are more likely to succeed than those who have lower levels of academic self-efficacy. Similarly, Cokley (2003) explored self-efficacy in African American students, but used the term *academic self-concept*, which was defined as the way that a student perceives his or her academic ability when compared to other students. Cokley stated that self-concept is an important consideration when discussing academic motivation and achievement, because "individuals who think well of themselves are believed to be more motivated to succeed" (p. 529). An important consideration for African Americans is that this group has traditionally been marginalized, and they often struggle with self-doubt and academic

self-confidence (Sandoval-Lucero et al., 2014). Despite this, Cokley asserted that many African Americans demonstrate higher levels of academic self-concept than their Caucasian peers, even when they are faced with lower academic achievement and economic disadvantage.

**Clearly articulated goals.** There is abundant evidence that having achievement goals has important influence on students' ongoing motivation, performance, and persistence (Halpin 1990; George, Dixon, Stansal, Gelb, & Pheri, 2008; Napoli & Wortman, 1998; Pekrun, Elliot, & Maier, 2009; Walker, et. al., 2010; Robbins et al., 2004), and it is one of the most important psychosocial contributors to persistence in community college students (Nakijima et al., 2012). Robbins et al. (2004) found that goal directedness, or a general sense of purpose, mediated successful student behaviors, and therefore, contributed to persistence. Further, Nakijima et al. (2012) argued that having concrete goals is important, since "community college students enroll for various reasons, and the more concrete those reasons are, the more likely they will endeavor to achieve them" (p. 593). Karp (2011) asserted that, as an aid to students' goal planning, students be provided with "tools to develop a concrete set of steps for attaining their goals" (p. 12), which may encourage commitment and positive academic outcomes. Karp added that such tools are particularly important for community college students, who often struggle to identify and follow a major or career pathway.

For African American students, goals serve as major drivers for academic achievement. Palmer and Strayhorn (2008) stated that it is important for African

American students to be "conscious of their visions and aspirations, stay focused, and work diligently to bring them to fruition" (p. 133). Kim and Hargrove's (2013) study of African American males at a predominantly Caucasian university revealed that for participants, having educational plans was a stronger predictor of persistence than socioeconomic status (SES). This is a very important finding, because numerous studies have found SES to be powerfully influential on persistence (Young, Johnson, Hawthorne, & Pugh, 2011).

**Utility.** In addition to goals, others have found utility to be a core motivational driver for community college students (Howard & Whitaker, 2011; Karp, 2011), but particularly for African American students (Wood & Palmer, 2014). Utility is one of the few motivational drivers that has been studied across multiple dimensions, such as institutional type, level of academic preparedness, and race. According to Wood and Palmer (2014), African Americans in community college were more likely to succeed when they determined that their academic efforts were worth the time and effort. This idea is supported by Cokley (2003), who asserted that students are motivated when they engage in academic behaviors that have an explicit purpose, but students are amotivated when they do not see their behaviors linked to any beneficial outcomes.

Researchers have concluded that utility is strongly related to motivation, and in turn, positive academic behaviors and outcomes (Howard & Whitaker, 2011; Karp, 2011). The notion of behavioral effect is supported by the argument that "students who do not see the value in their coursework often behave in counterproductive ways, for

example, by failing to complete assignments or by dropping required courses" (Karp, 2011, p. 12). Utility as a motivating factor was demonstrated in a study by Howard and Whitaker (2011), who interviewed successful developmental math students who had previously done poorly in a math course. Students implied that utility was a factor in their later success, and explained that their motivation to learn was enhanced once they understood the link between success in mathematics and potential career opportunities. This new understanding led students to more actively engage in their studies and seek tutors and help from faculty to be able to complete their courses successfully.

Utility is an important consideration for students in developmental education, particularly because most developmental courses do not count towards degree requirements, so it is difficult for students to find them useful and worth their time (Van Ora, 2012). In such cases, Karp (2011) recommended that institutions help students "understand why they are expected to learn the content of their courses and how it relates to their future goals" (p. 12). Another important consideration is how the concept of utility can be influenced by culture. African Americans, especially those enrolled at community colleges, are often academically underprepared and come from backgrounds that lack a college-going culture. Thus, these students may have a limited sense of the importance of college and the ways that it can help them reach their goals (Karp, 2011). Therefore, many African American students would benefit from seeing a clear connection between their coursework and their desired outcomes.

A particularly worthwhile outcome for African Americans is the probability of finding a job (Celikoz, 2010; Strayhorn, 2012). A study of minority community college students found that students who persisted maintained “hopes and dreams for the future, regardless of real or perceived barriers” (Sandoval-Lucero et al., 2014, p. 530). These aspirations involved being employed, and in some cases, securing an upper management position or a position with high responsibility. Similarly, in a study by Gardenhire-Crooks et al. (2010), the researchers found that African American men and other men of color made a direct connection between their performance and the potential for higher earnings and entrepreneurial activities. Participants were extremely interested in being their own boss, being independent, and being in a position to provide for their families-statuses that would earn them respect.

The findings from Cokley’s (2003) study of African American community college students may indirectly point to utility as a motivating factor. Cokley noted a “surprising” observation in his research, which is that the intrinsic motivation of African American students is not related to their academic achievement (p. 553). This is indeed interesting, because as previously discussed, intrinsic motivation has been linked to academic achievement in numerous studies. Cokley estimated that for many African American students, “learning for learning’s sake may be seen as a luxury that is not instrumental to doing well in school, getting a job, and making money” (p. 553). According to Cokley, these findings imply that utility is a primary motivator for African American students.

Even though there is a preponderance of research that points to utility as a primary motivator for community college students, Van Ora (2012) challenged that view, as her qualitative research revealed that students discussed "an intrinsic yearning to learn and develop intellectually" (p. 28). Van Ora's participants' intrinsic motivations for learning superseded those pertaining to financial or practical reasons. Van Ora observed that students were more motivated by the opportunity to make their families proud or to serve as a role model for children and friends- reasons that align with the forthcoming discussion of the influence of family on student motivation.

**Academic and Social Integration.** Many authors have attributed academic and social integration to persistence. Tinto (1975) defined academic and social integration as students' congruence with academic and social systems, or a "normative fit between the student and the values, special rules, and academic quality of the college community" (Deil-Amen, 2011). Integration reinforces students' commitments to the institution and educational goals. Halpin (1990) and Schmid, and Abell (2003) posited that, as part of their educational experience, students interact with social and academic systems, and the cumulative outcome of those interactions is what influences them to persist. Therefore, students who have negative interactions with the institution's social and academic systems are less likely to persist. (Napoli & Wortman, 1998).

A study by Hausemann, Schofield, and Woods (2007) found that academic integration was associated with an increase in sense of belonging and an increase in persistence. Furthermore, Karp, Hughes, and O'Gara (2010) studied the social integration

of beginning community college students, and through in-depth interviews, discovered that students who had strong social networks were more likely to report being integrated into their college environment. Subsequently, the authors concluded that integrated students were more likely to make progress towards a degree.

***Integration and community colleges.*** Determining the most important type of integration, or even clearly defining them, is particularly challenging for community colleges and other commuter institutions. Some of the challenge and confusion is that for most commuter institutions, there is no clear delineation of academic and social activities; many of them overlap, as the majority of commuter students' engagement happens within the classroom. However, there are arguments that for certain commuter populations, such as disadvantaged students, academic integration, not social integration, influences persistence (Napoli & Wortman, 1998).

Researchers have found that institution type had significant influence on involvement in college life. As suggested by Robbins et al. (2004), "the salience of student social and academic integration factors is contingent on institutional characteristics, such as commuter versus residential, selectivity, and 2-year versus 4-year programs" (p. 277). As an example, it was found that community college students were less-likely than other four-year students to "participate in study groups, to speak to faculty outside of class, and participate in school clubs" (Schmid & Abell, 2003, p. 9). This aligns with Karp, O'Gara, and Hughes' (2008) observation that "community college students rarely experience social integration as a result of participating in activities such

as clubs" (p. 17). Thus, Tinto (1997), whose retention and persistence models have largely relied on activities that occur outside of the classroom, acknowledged that for commuting students, if academic and social integration is to occur, "it must occur in the classroom" (p. 559). This means that it would be prudent for community colleges and other commuter institutions to use the classroom as the primary place to build campus community. Accordingly, Karp et al. (2008) offered the suggestion of developing academic and social integration simultaneously using classroom activities. For example, faculty can use class discussions to help students feel academically connected to the college, while also fostering relationships that can extend beyond the classroom. Deil-Amen (2011) came to a similar conclusion, noting that community college students have limited time, resources and inclination to seek support outside of class. Given the characteristics of community college students, and the limited applicability of Tinto's model, Karp et al. (2008), Deil-Amen (2011), and other scholars recommended the development of a student retention framework that makes the academic experience the central vehicle of integration.

***Integration and minorities.*** The research on academic and social integration highlights the need for frameworks that are sensitive to more diverse populations. Research shows that in addition to institution type, variables like race and culture may impact students' levels of integration. Deil-Amen (2011) found that community college students, similar to racial and ethnic minorities in other institutional settings, experience validation outside the classroom. Moreover, some research has indicated that minority

students, rather than fully integrate with the institution, rely on their cultural affiliations and families for support (Museus & Quaye, 2009; Sandoval-Lucero et al., 2014). Deil-Amen questioned the universality of Tinto's (1975) model, claiming that since integration can have significantly different meaning for historically marginalized groups, it is reasonable to question the applicability of Tinto's model to minority groups. Consequently, Karp (2011) asserted that since Tinto's theory and other dominant theories do not apply, then we need an "alternative, or at least supplemental theoretical perspective" (p. 3) to explain integration and engagement for diverse groups.

**Student Engagement.** Student engagement, or the level at which students participate in educationally enriching activities, plays a major role in student persistence, and it is documented in a substantial body of research (Astin 1984; Barbatis, 2010; Reason, 2009). Reason (2009) argued that engagement is "perhaps, the most influential driver of student decisions about persistence" (p. 678). Yet, few studies have focused on engagement within a community college setting (Lundberg, 2014), and even fewer have investigated underprepared, African American students at community colleges. Torres (2006) noted that key differences do exist between the engagement of residential and commuter students, and these differences, in addition to differences in race, class and culture, have yet to be adequately explored.

Tinto's (1975) theory of student engagement is often cited as a framework for relating student involvement to success and persistence. The premise of the theory is that the more that students assimilate to an institution's culture, the more that they feel

connected to the campus, and the more likely they are to persist. Tinto also asserted that in order for engagement to happen, students must disconnect from their home communities and embrace their new college community. However, the literature on community college persistence and minority student persistence only partially supports this theory. Jones (2009) cited research that suggested that African American students may cope with the stressors of school by seeking social support from peers, family, and through spiritual activities. Furthermore, in a qualitative study of urban community college students, Barbatis (2010) found that students (particularly the graduates and persisters) maintained their relationships with family and high school friends. The findings of Barbatis and others serve as evidence for critics of Tinto, who argue that commuter students remain closely affiliated with their home communities.

Unlike with residential students, external commitments powerfully frame commuter students' academic and social experiences (Palmer et al., 2009). Commuting students may be unable, or even unwilling to break away from their home communities, so they travel back and forth between on-campus and off-campus relationships and commitments. According to Braxton, Hirschy, and McClendon (2004), these comings and goings of commuter students create a "buzzing confusion" (p. 45) that can increase the likelihood of dropping out; however, it is clear that not all students are affected to the same degree. Given the unique characteristics of community colleges and the commuting, open-door nature of these institutions, Saenz et al. (2011) asserted that further study is needed that focuses specifically on engagement models in the community college sector.

***Engagement of African American students.*** Race has been found to impact student engagement. Cruce, Wolniak, Seifert, and Pascarella (2006) and Kuh (2007) found that as their engagement increased, African American college students achieved and/or persisted at higher levels than their Caucasian counterparts. These findings imply that there is a casual relationship between African Americans' engagement and their academic success; however, a closer examination of the phenomenon reveals that this may be an incorrect conclusion. This was explained by Greene et al. (2008), who theorized that "since African American students are more likely to drop out of college than their Caucasian counterparts, it is possible that African American students, as a whole, are not more engaged: rather, only the most highly engaged persist" (p. 532). The authors surmised that the engagement reported by African American students may reflect a "survivor effect, whereby only highly engaged students survive long enough for their engagement to be measured" (p. 530). Greene et al. posited that if this assumption is true, then it would be advantageous for African American students to have a higher degree of engagement than their Caucasian counterparts in order to achieve similar academic outcomes.

Another study by Sontam and Gabriel (2012) showed that African American students were more engaged than other racial groups taken together. The findings indicated that African American students found coursework to be more challenging, intellectually complex, and stimulating. Moreover, compared to other racial groups, African American students were more likely to work on their papers in multiple drafts

and use skills labs more frequently. In addition, African Americans report being more involved in collaborative learning and educational enrichment activities. (Saenz et al., 2011). These findings are consistent with other research that concluded that African American students report higher levels of engagement than Caucasian students (Greene et al., 2008; Palmer et al., 2009). However, an investigation into how minorities interpret engagement may be warranted, because despite being more engaged, minorities tend to experience less persistence and academic success (Greene et al., 2008; Sontam & Gabriel, 2012).

Finally, research suggests that institutional context may also be important, as evidenced in studies on student engagement and race. According to Lundberg (2014), studies of four-year institutions showed that engagement was a stronger predictor of learning for African Americans, more so than for Caucasian students, while a similar study at a community college setting yielded opposite results. These outcomes indicate that in addition to examining different institutional types, there is the need to test Tinto's theory using the variables of race and ethnicity (Harper & Hurtado, 2007; Harper & Quaye, 2008).

**Supportive relationships.** The literature strongly supports that relationships are an important factor in student persistence (Astin, 1984; Karp, 2011; Komarraju, Musulkin, & Bhattacharya, 2010; Lundberg, 2014; Martin et al., 2014; Reason, 2009), particularly for minority students (Deil-Amen, 2011; Grimes, 1997; Museus & Quaye, 2009; Walker et al., 2010), and for those who are academically vulnerable (Deil-Amen,

2011). Even those who criticize Tinto's theory agree that relationships are important in promoting student success, especially for academically vulnerable students (Karp 2011). The role of supportive relationships is evident in a study by Harper (2012), where African American men who acquired their bachelor's degree credited their success to having connections with influential people. Participants did not credit their achievements to being particularly smart or superior; instead, they attributed their success to having a close acquaintance (family, teacher, peer mentor), who supported and encouraged them. Harper's findings, as well as others', underscore the importance of relationships and how they can aid in students' growth, development, and persistence.

***Institutional agents*.** Relationships with people inside of the institution are perhaps the most impactful, since institutional representatives, or *agents,* serve as critical links to information and support that promote student persistence (Lee & Ransom, 2011). For minority students, institutional agents serve as mentors, cultural translators, mediators, and role models (Museus & Quaye, 2009). They also provide support, social capital (Deil-Amen, 2011), and procedural assistance (Karp, 2011; Lundberg, 2014) to help navigate college. According to Walker et al. (2010), African American students put more effort into establishing and maintaining relationships with institutional agents than Caucasian students, possibly to compensate for having cultural obstacles.

Institutional agents have also been credited with helping underprepared students persist. In a qualitative study by Capps (2012), participants taking developmental education courses acknowledged that faculty and advisors deeply affected their feelings

and decisions about college. It is clear that institutional agents can serve as beacons of hope to the most vulnerable students; however, engaging in these critical interactions is difficult for part-time and commuter students, who spend so little time on campus (Astin,1984; Komarraju et al. 2010; Lundberg, 2014). It appears that if community colleges can somehow overcome those challenges and strategically employ their institutional agents, they have the potential to greatly impact student success, especially for underprepared and marginalized students. The idea of *mobilizing* institutional agents challenges Tinto's perspective, which depicts the student as being the "author of his or her success" (Deil-Amen, 2011, p. 58), and responsible for his or her own engagement. Alternatively, Deil-Amen recommended against institutions putting the onus completely on students to navigate and integrate with the college terrain. Instead, he suggested that colleges intentionally place institutional agents in a position to guide and assist students, especially those who are at risk of dropping out. Deil-Amen's position is shared by Harper (2012), who stated that "given the well-documented nexus between engagement and student retention, institutional agents must assume greater responsibility for engaging undergraduates who complete college at lower rates" (p. 22).

***Faculty.*** One of the themes that repeatedly appears in the literature concerns interaction between students and faculty. Faculty have the opportunity to be powerful conduits for stimulating students' motivation to learn (Afzal et al., 2010; Kamarraju et al., 2010), and therefore, they are powerful facilitators of student success (Gardenhire-Crooks et al., 2010; Greene et al., 2008; Howard & Whitaker, 2011; Komarraju et al.,

2010; Nakajima et al., 2012; Napoli & Wortman, 1998; Reason, 2009). Deil-Amen (2011) described effective faculty as those who are perceived by students as “understanding, respectful, encouraging, and accessible” (p. 339). Further, Deil-Amen found that students need faculty to be approachable and provide a safe environment in which to ask questions without the risk of embarrassment. This is particularly important for both African American and underprepared students, who may suffer from feelings of inadequacy and lack of self-confidence (Sandoval-Lucero et al., 2014).

*Faculty-student relationships at community colleges*. For community college students, faculty-related experiences have major impact on student retention (Nakajima et al., 2012). However, the challenge with community colleges is that the involvement between faculty and students is minimal (Astin 1984), and with the majority of courses being taught by adjunct faculty, the time that can be devoted to deeper interaction is very limited (Lundberg, 2014). Student-faculty interaction at community colleges primarily takes place in the classroom environment. Even though *formal*, in-classroom faculty-student engagement is more prevalent, studies reported that students who engage in positive *informal* interactions with faculty tend to be more confident, motivated, engaged, and active learners (Komarraju et al., 2010; Williams & Williams, 2011). Komarraju et al. (2010) found that when students perceived to be alienated and distanced from faculty, it led to feelings of apathy and lack of motivation. Halpin (1990) recommended that institutions create mechanisms whereby positive faculty/student contact is maximized. Halpin proposed small, interactive classes, active, developmental advising systems,

frequent office hours, mentoring, and small group projects. Additionally, Kamarraju et al. (2010) posited that even less-formal faculty-student interactions can have significant impact, an example being discussions between faculty and students around intellectual issues.

*Faculty-student relationships and African Americans.* Faculty interaction is perhaps the most significant factor in minority retention (Grimes, 1997). Faculty influence is so powerful, because among other reasons, they can serve as cultural agents that help students adjust and persist in college (Museus & Quaye, 2009; Walker et al., 2010). Cokley (2003) found that faculty encouragement was a powerful predictor of academic self-concept among African American students, and Cole (2007) contended that positive faculty interaction could promote academic achievement and help recruit and retain African American students and other students of color.

The effects of student-faculty interaction are different for African Americans than for other races (Kim, 2010; Lundberg & Schreiner, 2004; Schreiner, Kammer, Primrose, & Quick, 2009). Kim (2010) cited research by Lundberg-Schreiner (2004) that reported that although African American students "work hardest to meet faculty expectations, due in part to faculty feedback, but these interactions have little significant impact on learning" (p. 162). The researchers argued that African American students benefit less from their interactions with faculty, despite having more frequent contact than their Caucasian counterparts. In his own study, Kim came to similar conclusions, finding that some of the typical effects of faculty-student interaction, such as higher

GPA, were not as significant for African American students, compared to other races. Lundberg-Schreiner's and Kim's findings are similar to those around student engagement, where African American students report being more engaged than Caucasians, yet they do not reap the expected benefits. A possible explanation for these findings is that African American students may have a unique perspective on what constitutes positive faculty-student interaction. For example, Harper and Hurtado (2007) and Swail (2003) found that African American males may be particularly sensitive to certain teaching styles- responding more positively to some styles, and less to others. Cole (2007) asserted that students of color benefit from faculty who refrain from criticism and use *growth mindset* strategies to boost students' self-confidence. Further, Palmer et al. (2009) reported that African American students perceive student-centered faculty as those who do not limit their professional responsibilities solely to teaching. African American students perceive supportive faculty as going above and beyond their duties, nurturing and enhancing students' psychosocial and emotional development. Palmer et al. referenced the term "over-mothering" to describe the perceived positive interactions between African American students and faculty. The implication of these findings is that positive faculty-student interaction cannot be universally defined and a *one size fits all* approach to engaging students is likely ineffective. Moreover, these findings call for a deeper, and more contextualized exploration of this topic.

*Faculty mentoring.* Mentoring is a powerful way to engage faculty and students, and has been shown to impact the retention rates of college students (Bharath, 2009;

Crisp, 2010; Lundberg, 2014). Mentoring, which may be formal or informal, is a situation in which a faculty member provides ongoing information, support, and guidance to a student. Moreover, faculty mentoring has been shown to be relatively more important than peer support, especially for minorities (Harmon, 2013) and for students who are just transitioning to college (Gardenhire-Crooks et al., 2010; Kamarraju et al., 2010). Research shows that "students successful in knowing even one faculty member closely are likely to feel more satisfied with their college life and aspire to go further in their careers" (Kamarraju et al., 2010, p. 332).

***Family.*** According to Reason (2009), scholars are just starting to understand the relationship between family and student persistence. Studies have established that family and peers influence students' perceptions, attitudes, behaviors, and ultimately persistence decisions (Crisp, 2010; Reason, 2009). The effects of family support are especially impactful for African American students who are transitioning to college (Haussmann et al., 2007). A study of community college students in developmental education found that students were highly motivated to make family members and friends proud of them, hence, their efforts to persist (Van Ora, 2012). Sandoval-Lucero et al. (2014) suggested that family members and other close acquaintances provide *familial capital*, which sustains students through their academic programs. Furthermore, the authors recommended that a "supportive family system be a significant contributor in designing success models for community college students" (p. 523). It should be noted that in some cases, family commitment can be so strong, that it can deter students from persisting in

college. Gardenhire-Crooks et al. (2010) and Palmer et al. (2009) observed that men of color, in particular, had a deep commitment to caring for their families. For this reason, participants in Gardenhire-Crooks et al.'s study felt the need to work and make money, which interfered with the time that they could commit to their studies. It is clear that, no matter if the impact is positive or negative, family relationships greatly influence the goals, intentions, and behaviors of college students.

**Culture.** The role of culture in student persistence has been widely explored. Martin et al. (2014) used social reproduction theory to explain how social culture impacts the academic environment. According to the authors, "schools socialize students to occupy roughly the same position in the class structure as that of their parents" (p. 224). Moreover, Bahr (2010) referred to the American educational system as a socioeconomic "sorting machine" (p. 210) that directs students to opportunities based on their income level and social status. These practices perpetuate social inequality, as they promote the dominant, middle class culture and devalue the culture of lower classes (Karp, O'Gara, & Hughes, 2008). Consequently, minority students who are new to the college environment and culture must negotiate an unfamiliar and seemingly unwelcoming landscape, learning how to move in and out of multiple social contexts at an accelerated pace (Museus & Quaye, 2009; Swail, 2003). Students who are able to do this effectively are said to have "dual competency" (Swail, 2003, p. 49). Dually competent students live in a state of bifurcation, negotiating two cultures and two realities simultaneously. Research shows that the degree of cultural bifurcation can vary, depending on the student and

institution type. For example, Wood and Palmer (2014) found that African American males in the community college setting generally experience fewer campus climate issues and feel more welcomed on campus, compared to other institutions. This is perhaps because African Americans feel more congruence with the community college culture.

Culture plays a major role in the persistence of African American students. According to Meeuwisse, Severiens, and Born (2010), institutional culture can make learners feel like “a fish in water or a fish out of water” (p. 532). In other words, institutional culture can make students feel that they do or do not belong in the environment. For African American students, the time and effort required to adapt to a dominant culture causes stress (Museus & Quaye, 2009) and distracts them from focusing on acquiring *componential intelligence*, or essential academic skills. This may contribute to the disparities in achievement between African American students and their Caucasian counterparts (Greene et al., 2008).

***Sense of belonging.*** Sense of belonging is an important factor in student persistence. Sense of belonging results from experiencing “intellectual and social congruence, or a normative fit between the student and the values, social rules, and academic quality of the college community” (Deil-Amen, 2011, p. 55). Sense of belonging is an important reason for students making the decision to withdraw, and some studies have shown it to be more vital for minority students (Meeuwisse et al., 2010). In institutional settings where there is less congruence or sense of belonging, African Americans cope by establishing their own social networks, as indicated by Deil-Amen

(2011), who found that in culturally incongruent environments, "African Americans were much more likely to explicitly articulate a desire for a cultural or a personal connection with an individual or group on campus" (p. 61). The implications of cultural congruence and sense of belonging could explain why African American students have perceived to have greater academic and social support at historically Black colleges and universities (HBCUs), compared to that of predominantly White institutions (Miller, 2012). Miller (2012) estimated that this is because African American students' values and norms are more congruent with those of the HBCU. Research indicates that either acclimation to the dominant campus culture, as suggested by Tinto (1975), or immersion in cultural affinity groups may positively affect minorities' college experiences and persistence (Museus & Quaye, 2009; Reason, 2009).

***Sociocultural capital***. In order to survive an educational environment that promotes the dominant culture, researchers have concluded that African Americans must acquire *socio-cultural capital* (Martin et al., 2014; Sandoval-Lucero et al., 2014). Socio-cultural capital includes "culturally learned and internalized beliefs, values, and attitudes about the role education plays in life success" (Sandoval-Lucero et al., 2014, p. 524). African American students must also acquire *contextual intelligence*, or adaptive skills, such as handling racism, having a positive self-concept, and cultivating supportive relationships (Greene et al., 2008). The literature indicates that African American students rely heavily on cultural capital throughout their educational journey. This idea was more strongly articulated by Yosso (as cited in Sandoval-Lucero et al., 2014), who

asserted that people of color "rely on their cultural capital in order to not only be competitive, but also survive in academia" (p. 524).

According to Barbatis (2010), social capital can come by way of family, friends and community members. Karp et al. (2008) determined that students who had access to more advantaged social networks, including friends who had attended college before, were more likely to seek out campus support. Moreover, Topper and Powers (2013) argued that socio-cultural resources are what allow many community college students to successfully complete college, despite having many of the characteristics associated with dropping out.

Cultural capital, or lack thereof, can determine students' level of engagement with the educational environment and impact their success. Therefore, the concept of social capital has important implications for institutions that serve diverse students. According to Sandoval-Lucero et al. (2014), community colleges and other higher education institutions often fail to pay attention to the cultural capital that many students bring to the college experience- capital that could aid in their academic success and retention.

***College know-how.*** College know-how is one of the artifacts of having cultural capital. Karp (2011) posited that college-know how, or knowing the "rules" of the postsecondary environment, is essential to students navigating college successfully (p. 14). Similarly, Tinto (1975) implied that students' failure to persist has more to do with poor understanding of the postsecondary culture, than it does with academic preparedness and performance. Cultural capital is generally defined and possessed by dominant groups

(Karp, 2011) and involves "knowing how to ask for help (and where and when to ask for it), how to participate in class appropriately, and how to 'work' bureaucratic systems to access resources, such as financial aid" (Karp, 2011, p. 15). Strayhorn (2012) described acquiring these skills as a sort of "second curriculum" (p. 359) that must be mastered in order for students to be successful.

Students with less social capital may not be aware of expectations, and may not have the skills and knowledge to navigate the postsecondary culture (Karp, 2011; Karp et al., 2008). Howard and Whitaker (2011) studied successful developmental math students and found that a common behavior of the participant group was to proactively seek resources that aided them in understanding the course content. These students also solicited friends or relatives to tutor them, or they went to their instructor's office to get help. Also, in a study by Bremer et al. (2013), the researchers found that successful developmental education students applied for financial aid and participated in tutoring, which Bremer et al. characterized as *purposeful* behaviors that often require no prompting by institutional representatives. These *self-help* behaviors may not be exhibited in students with less social capital. Since students with less social capital (such as minorities) may be less inclined to seek resources, they may need to be nudged towards campus support. Accordingly, Rendon, Jalomo, and Nora (2000) recommended that institutions actively invite minority students to take advantage of college services, rather than rely on students to seek support on their own.

*Influence of financial resources on cultural capital.* Lack of financial support and resources is a major barrier to student persistence. This is a typical challenge of community college students (Palmer et al., 2009), as community colleges enroll the most students from the lowest socioeconomic quartile (Martin et al., 2014). When discussing persistence at community colleges, the institutions' high-need population is important to consider, since resources are often associated with socioeconomic status (SES), which is a strong indicator of student persistence.

Having low SES, and in turn, low social capital, could also mean that students have less educational resources, which include books in the home, and participation in cultural enrichment and college preparation activities (Martin et al., 2014). Further, under-resourced students come from environments where they are "surrounded by peers with low academic motivation, parents who are uninvolved in their children's education, and teachers who are less qualified" (Martin et al., 2014, p. 225). Consequently, these students often enter college academically and socially underprepared.

Social capital strongly influences academic achievement, and having less of it may place students at a disadvantage. Alternatively, having more social capital can afford students access and opportunities that have long term, positive effects on their academic careers. In a study of high-achieving African American mathematics majors, Ellington and Frederick (2010) explored the influence of parents' social capital on their children's mathematics performance, which began as early as elementary school. According to the authors, students who had parents with high social capital were "granted access to

accelerated programs in elementary school, which paved the way for their subsequent success in mathematics" (p. 75). Socioeconomic status, and indirectly- social capital, are so impactful that the influence of other characteristics on academic success, such as academic ability, gender, and race, is diminished when controlling for SES (Reason, 2009; Young et al., 2011).

**Institutional Climate.** The final and perhaps most influential psychosocial factor is institutional climate. The prevailing climate within an institution has a significant impact on student outcomes (Meeuwisse et al., 2010). Essentially, students are more likely to persist when they are comfortable and satisfied with the institution. This concept is explained in greater detail by Kuh (2001):

> Among the core promising efforts to enhance persistence and graduation rates is creating a campus climate in which students feel they belong and are valued, challenged, and affirmed by their peers and teachers. Numerous studies show that the institution's cultural milieu affects students' perceptions of the institution which in turn influences their satisfaction and the degree to which they devote energy to activities that matter to their education (p. 23).

The psychological effects of institutional climate are important to consider because, according to theories on human development, humans thrive in environments where they feel valued and socially accepted. These feelings establish a level of comfort that contributes to achievement and persistence. Campus climates influence all of the

previously discussed psychosocial variables, and set the stage for students to ultimately persist or withdraw from institutions.

***Institutional climate and African American students.*** Students who feel that there are racial or cultural tensions on campus are less likely to feel comfortable and experience a sense of belonging (Karp, 2011). Feeling like one does not belong or fit in has been shown to be a particularly significant contributor to minority student drop-out (Meeuwisse et al., 2010). Much of the research on African American students on predominately Caucasian campuses indicates that African American students feel less supported (Kinzie et al., 2008), marginalized (Miller, 2012; Sontam & Gabriel, 2012) and they struggle with social, academic, and psychological adjustment (Jones, 2009). In environments where African Americans constitute the minority, they often suffer from stressors associated with perceived racism, which reduces self-confidence (Jones, 2009). Additionally, African American students in these environments have feelings of “alienation, sensed hostility, racial discrimination, and lack of integration” (Allen, 1992, p. 39). According to social psychologists, feelings of isolation and alienation are what prompt African American students turn to social circles for support and acceptance. (Strayhorn, 2008). Kuh (2001) referred to these social circles as “cultural enclaves” (p. 205) that help students negotiate the psychological difference between their home cultures and a potentially hostile academic environment (Reason, 2009). Conversely, in environments where African Americans feel a sense of belonging, they have a higher perception of social support, which contributes to persistence (Young et al., 2011).

Therefore, institutions should support ethnic student organizations, as these cultural hubs help increase students' confidence, and provide a safe place where students of color can thrive, as well as develop communication and leadership skills that they can apply to more mainstream activities and organizations (Harper, 2012).

***Perceived racism by African American students.*** Studies show that many African Americans consider racism to be pervasive on their campuses (Greene et al., 2008). These discriminatory and unreceptive environments, which may be real or perceived, can negatively affect African Americans' academic achievement (Greene et al., 2008) and persistence. Another issue related to racism on campus is *stereotype threat*, which is where students are burdened with negative perceptions of their abilities (Schreiner et al., 2009), and held to lower expectations (Sontam & Gabriel, 2012). Moreover, African American students have reported experiencing prejudicial treatment from faculty to a greater degree than Caucasians (Greene et al., 2008). For these reasons, Sontam and Gabriel (2012) surmised that African American students feel like they have to work harder than their Caucasian counterparts to demonstrate their capabilities. The perceived inequities and lack of acceptance may place African American students at greater risk for academic failure and drop-out.

## Implications

Understanding and appreciating student persistence allows for consideration of a new theoretical basis to build infrastructures that support student success (Kim & Hargrove, 2013). To facilitate this outcome at the study setting, I will share my research

findings with the institution's faculty, staff, and administrators. These stakeholders can use the findings to make data-driven decisions that may lead to better outcomes for underprepared, African American students. Although the findings from this study will not be generalizable, they may inform scholars and practitioners across the community college sector, lending insight into a widespread, critical phenomenon that appears to be under-explored in the literature.

## Summary

Obtaining a postsecondary credential is required to secure social and economic mobility in America. However, too few students find this pathway, largely because of early departure from college. African American community college students who are academically underprepared are highly susceptible to this outcome and consequently, have far lower persistence and completion rates than their Caucasian counterparts (American Association of Community Colleges, 2012; Gardenhire-Crooks et al., 2010; Levin et al., 2010). As America becomes more ethnically diverse, graduating too few African American students will have increasing negative impact on not only the unsuccessful students, but their families, communities, and the nation. Therefore, in an effort to facilitate positive social change for millions of Americans affected by this problem, this study sought to uncover the factors that increase the college persistence of underprepared, African American students.

This study was grounded in motivational psychology, specifically, Astin's theory of student involvement (1984), which relates students' motivation to their level of

involvement, and in turn, their academic achievement. Astin's theory is best aligned with this study, in comparison to more commonly referenced frameworks, such as Tinto's interactionalist model of student persistence (1975), which has been widely criticized as being too narrowly focused on traditional-aged students at four-year residential schools. Student motivation, and by proxy, student involvement, has been strongly supported in the literature as a primary factor in student persistence (Barbatis, 2010; Howard & Whitaker, 2011; Karp, 2011; Karp & Bork, 2012; Martin et al., 2014).

For this study, a comprehensive review of relevant and current research was conducted, which was obtained using various Boolean search strategies. To provide background and context for the problem, the literature was used to demonstrate the evolution of open access institutions, and the associated challenges. This facilitated a connection between broader educational access, the substantial numbers of academically underprepared students, and the generally poor performance of community colleges. Further, the regional, state, and national implications of low college persistence and completion were presented, stressing the urgency of the problem and justifying the need for further investigation. The literature review focused specifically on underprepared, African American students- a topic that was found to be under-explored in the literature. After reviewing over 150 studies and data sources, it was determined that saturation was achieved.

The research indicates that psychosocial factors are influential in student persistence, but the degree and scope of this influence are not thoroughly understood

(Cokley, 2003). Moreover, underprepared African Americans, who have been shown to be uniquely impacted by psychosocial factors, have been largely overlooked by scholars. There are few studies that focus specifically on this population, and most of them investigate the issue using a deficit framework (Harper, 2012). In other words, the majority of studies highlight African American students' failures as opposed to their successes. As a result, the accomplishments of the few successful students have been overshadowed by the sobering statistics of the majority (Harper, 2012). Alternatively, it was anticipated that this study would provide a more positive perspective, in which the focus was on *successful* students and understanding the psychosocial factors that contributed to their success. This in-depth examination was conducted through a qualitative case study, the details of which are discussed in the following Methodology section.

Section 2: The Methodology

## Introduction

The purpose of this study was to examine the psychosocial factors that contribute to the success of underprepared, African American, community college students. This was accomplished by studying students who had successfully completed their developmental courses. Section 2 of this study provides a description of the research methodology and an analysis of the data.

## Qualitative Research Design and Approach

The nature of the problem and the goal of the study were carefully considered in determining the methodological approach. As discussed, the purpose of the research was to examine psychosocial factors that influence persistence. Further, the study sought to identify ways that the institution can increase the number of African American students who complete developmental courses.

The literature suggests that student persistence is a complex decision resulting from the interrelationship of numerous variables (Swail, 2003). Additionally, the literature indicates that unlike cognitive factors, psychosocial factors are not easily measured, and their scope and degree of influence varies by context (Nakajima et al., 2012). Creswell (2014) explained that quantitative approaches are best for providing explanations of trends, while qualitative studies are best for exploring problems in order to obtain deep understanding of a phenomenon. A quantitative approach would not be useful to explain the *how* and *why* of student persistence. To gain this type of

understanding, a qualitative approach is more appropriate, providing insight into how meaning is constructed and how people make sense of their environment (Merriam, 2009). Qualitative inquiry would be especially helpful in understanding the nuances of underprepared, African American, community college students, who, as the literature suggests, may experience academia from a very unique perspective (Greene et al., 2008; Robbins et al., 2004; Sandoval-Lucero et al., 2014; Wood & Palmer, 2014). The goal of the qualitative inquiry was to uncover and make meaning of those perspectives and experiences.

Under the category of qualitative research, four options were considered: (a) case study, (b) grounded theory, (c) ethnographic study, and (d) phenomenological study (Lodico, Spaulding, & Voegtle, 2010). A grounded theory approach allows the researcher to develop a theory based on the data. Since this study was already grounded in Astin's theory of student involvement (1984), grounded theory was rejected as a potential approach. Another consideration was ethnographic study, which investigates the influence of society on a cultural group (Lodico et al., 2010). Ethnography was initially considered because of this study’s focus on African Americans, which implies the existence of a unique cultural perspective. According to Creswell (2014), ethnographic studies examine a cultural perspective with the goal of identifying culture-based patterns of behavior. However, since African American culture was not the primary focus of the study, and since the study focuses on a specific setting, and not the influence of the larger society, it was determined that ethnographic design was not appropriate. A

phenomenological approach, which studies the human experience, was also considered, (Lodico et al., 2010). Similar to the earlier discussion on ethnography, the purpose of this study was carefully considered, and it was determined that the primary purpose was to uncover the psychosocial contributors to student persistence, and not to solely present students' perceived experiences. Therefore, phenomenology was not selected as a pertinent approach. The final consideration was case study, which seeks to find meaning, insight, and gain in-depth understanding of an individual, group, or situation (Lodico et al., 2010). Additionally, Creswell (2014) defined case study as a deep exploration of a bounded system. In this study, the underprepared, African American persisters represented the group for which the researcher intended to gain in-depth understanding. Furthermore, the specific college setting, and the activities, events, individuals, and processes therein, constituted a bounded system. According to Merriam (2009), the bounded system, or unit of analysis, is what distinguishes case studies from other qualitative methods. In contrast to case studies, other methods, such as phenomenology and ethnography, are defined by the study focus. Further, Merriam asserted that case study might be selected in order to reveal the *how* and *why* of a phenomenon, which is knowledge to which the researcher would not otherwise have access. This research project aligned with Lodico et al.'s and Creswell's aforementioned definitions; thus, the case study approach was determined to be the most effective method for addressing the research question.

Case study results in intensive, holistic description and analysis (Merriam, 2009). Yin (2003) used three criteria to describe case studies, which are: (a) the research questions are worded with "how" and "why," (b) the phenomenon being studied is a contemporary event, and (c) the researcher has little or no control over the behaviors and events that occur in the setting. The case study can be further defined by its features, which are described as "particularistic," "descriptive," and "heuristic" (Merriam, 2009, p. 43). *Particularistic* means that case studies focus on a particular event, program, or phenomenon, which is fitting for this study of underprepared, African American persisters. According to Merriam (2009), this specificity of focus makes case studies particularly good designs for addressing practical problems. *Descriptive* means that the end product of the case study will be rich, thick descriptions of the phenomenon. These descriptions may be creative, and use prose and literary techniques to convey the researcher's interpretation of the case (Merriam, 2009). Case studies may be characterized as *heuristic*, which means that they enhance the reader's understanding of the phenomenon. The heuristic nature of the method means that it can bring about discovery of new meaning, leading to a new way of thinking of the phenomenon being studied (Merriam, 2009).

Finally, the knowledge gained from case studies is different from other research knowledge in that it is more concrete, contextual, developed by reader interpretation, and depends on the reader's individual frame of reference (Merriam, 2009). Using a case study approach, this researcher sought to bring about discovery of new meaning, as

suggested by the authors, and deepen readers' understanding of the psychosocial factors that contribute to underprepared, African American students' persistence.

## Participants

This study employed two levels of sampling. The first level of sampling involved identifying the bounded system that would be studied. There were two criteria for the case. The first criterion was that the setting be a public, regionally accredited community college that experiences high levels of attrition within its developmental education courses, particularly among African American students. The second criterion related to Walden University's commitment to effecting positive social change in one's local community (Walden University, n.d., para 3). This study aligned with Walden's educational objective because it focused on a social problem at an institution with which the researcher was affiliated.

The first level of sampling identified four campuses within a single institution. As dean of students at one of the four campuses, I telephoned the president of each campus (including my own) to express my interest in conducting the study. After the telephone conversation, I followed up by emailing a *Letter of Cooperation* (Appendix B), which I asked to be signed and returned. My expectation was that each campus president would respond affirmatively to my request, and sign and return the Letter of Cooperation, (Appendix B) so that I could move forward with obtaining approval from the study site's IRB chair (Appendix C).

The second level of sampling was performed within the case setting. The study used purposeful sampling, which is the most common form of sampling in qualitative research (Lodico et al., 2010). Purposeful sampling is appropriate when the researcher wants to discover, understand, and gain insight. Therefore, the researcher selects a sample from which the most can be learned (Merriam, 2009). To accomplish this objective, the participants for this study met the following criteria:

- At least 18 years of age;
- Currently pursuing an associate degree or certificate;
- Entered the institution requiring two or more levels of developmental math *or* two or more levels of developmental English;
- Successfully completed all courses in his or her required developmental sequence within two years of initial enrollment at the institution (*Note: by institutional standards, successful completion means achieving a final grade of "C" or better),* and
- African American, and identified as such in the institution's information system.

Using these criteria ensured that participants had in-depth knowledge of the phenomenon. In addition, equal numbers of females and males were selected to ensure a balanced gender perspective. Merriam (2009) noted that the goal of qualitative sampling is to secure enough participants so that the point of saturation or redundancy is reached,

thereby producing no new information from the sample. Accordingly, this study involved 45-60 minute, semi-structured interviews of 20 participants.

A positive researcher-participant working relationship was accomplished using a number of approaches. First, the participants received an introductory email in which the purpose of the study, their role within the study, and the potential benefits were explained. Participants were invited to join the study and they were instructed to indicate their interest by answering a set of verification questions. The questions were used to verify that participants met the criteria outlined in the Participants section. After students answered the questions appropriately and accepted the invitation to join the study, they received an email informing them that they would receive a call to establish a date and time for the interview. After the maximum number of participants had been reached, an email was sent to the participants who expressed an interest in the study, but were not selected. The message indicated that they were not selected due to the limited number of participants, but if space became available, they would be contacted for an interview. Five students (three males and two females) received the non-selection message. They were not called to participate because none of the initial participants dropped out of the study.

During the interview, information was reiterated from the introductory email, which outlined my role as the researcher, and the student's role as the participant. Participants were assured that their identities, responses to the interview questions, any unstructured discussion, and the identity of the institution would remain confidential and

would not be published. The participants were encouraged to provide candid responses, as this would ensure that the study data was valuable and credible. Finally, participants were informed that all of the collected data would be used solely for the purpose of constructing the project study.

**Ethical Protection of Participants**

Several measures were taken to protect study participants from harm. As discussed, permission was secured from the appropriate institutional representatives, specifically, the president of each of the four campuses of the college. Each president was asked to sign a *Letter of Cooperation* (Appendix B), authorizing the study to take place at their respective campuses. Next, written approval was obtained from the IRB of the case study site (Appendix C), which served as the institution's formal approval to conduct the study. The process was implemented according to the guidelines established by Walden University's Institutional Review Board (IRB). Walden's IRB verified that the research was conducted ethically and with integrity. The IRB approval number for this study is 07-02-15-0382688. Per Walden's guidelines, the voluntary nature of the study and its potential risks were to be clearly outlined in the *Informed Consent* form,which participants signed before the start of the interview. Further, the university required that the data collected from the study be stored for five years, and kept in a secure place that is only accessible by the researcher.

Care was taken to protect participants' rights and confidentiality. Participants were advised of their rights as members of the study through the initial email invitation

and through the formal consent form. Further, participants were reminded of those rights during the introduction phase of the interview. Participants were advised that they had the option to withdraw from the study at any time. Further, they could refuse audio-recording, or refuse to answer any or all of the interview questions. Moreover, participants' confidentiality was maintained by not including the name of the institution in the study, by not using participants' names, by collecting the data using a privately owned digital recorder, and by completing the transcription of all interviews on a personal, password-protected computer. Also, the interview data were not shared or discussed with people outside of the study, or between participants. Finally, participants were ethically protected by the authentic and accurate representation of the data.

## Data Collection

The goal of the research was to collect rich, thick data that would reveal the psychosocial factors that contribute to persistence in underprepared, African American students. The data were collected through individual interviews. According to Merriam (2009), interviewing is necessary when one cannot observe behavior, feelings, or how people interpret the world around them. Participant interviews were the most effective methods for capturing the psychosocial influencers on student persistence, because these phenomena are not observable, and understanding them relies on participants sharing their personal experiences and perspectives. Yin (2003) asserted that case study interviews are complex in that they require the investigator to operate on two levels simultaneously. This involves the researcher collecting sufficient information to satisfy

the inquiry, while at the same time posing friendly and non-threatening questions to the participants. The interviews were semi-structured, which means that the questions were predetermined, but used flexibly, and explored deeply as appropriate. The deep exploration, which happened through follow-up questions, was described by Lodico et al. (2010) as *probing*. Probing was used to gain clarification or further understanding of a participant's response. Finally, the interview questions (Appendix D) were open-ended, which allowed participants to share their perspectives without being influenced by the researcher's views or by past research findings (Creswell, 2014).

The interviews were conducted at the study site, except for one, which took place at a coffee shop. The follow-up interviews, which occurred by telephone, took between 3 and 15 minutes. Interview lengths ranged from 32 to 68 minutes. They were recorded using a digital audio recording device (with the participant's permission) and then transcribed for coding and analysis. Audio recording ensured that everything said in the interviews was preserved for analysis. As a complement to the audio recordings, I took written field notes to record my personal reactions to something the participants said, or to note non-verbal cues, such as facial expressions and body movements. The field notes were written shortly after the interviews to ensure that details were not forgotten. The information from field notes was used in the data analysis. The audio recordings of the interviews were transcribed and coded in preparation for analysis. The data analysis process is outlined in the upcoming section, titled Data Analysis.

After obtaining IRB approval from Walden, a request was made to the site's Evidence and Inquiry Department to for a list of students who met the study criteria. The list of students included their names, campus, gender, home address, telephone numbers, campus email address, and personal email address. The student identification numbers were also requested, and were used to verify students' identities and exclude students whose relationship to the dean of students presented a potential conflict of interest. The issue of conflict of interest is discussed in detail in the Role of the Researcher section.

Each student on the list was emailed an invitation to participate in the study. After seven calendar days, a reminder email was sent to students who had not responded to the initial request. The respondents received an email thanking them for their interest in the study, and advising them that they would be contacted by phone to schedule an interview. Interviews were scheduled with the first 10 female and the first 10 males who agreed to participate in the study. After the interviews were conducted, the students who were not selected were sent an email informing them that the limit of participants had been reached, and thanking them for volunteering to participate in the study.

**Role of the Researcher**

In qualitative case studies, the researcher is the primary instrument of data collection and analysis (Merriam, 2009). As such, the researcher's perspectives, experiences, and biases may inadvertently influence a study. Some of the ways to mitigate this influence is for the researcher to disclose any relationships with the

participants or the site, identify any personal experiences with the study's phenomenon, and acknowledge any potential biases that may affect the study.

My relationship to the study site and to the participants were important considerations, as these relationships could lead to conflicts of interest and bias in the final research report (Creswell, 2014). As dean of students, I oversaw most of the student services, including admissions, recruitment, registration, bursar, student life, athletics, counseling services, and the student complaint and judicial process. Although I provided broad oversight to an array of student services, each of these areas was managed by a director who reported to me. Due to the nature of my position, I had limited direct contact with students; therefore, it is unlikely that I had personally interacted with the students in the participant pool. Further, I did not make decisions concerning students' admission, enrollment, or eligibility for services, except in cases where a student violated the student code of conduct. As the conduct officer, I had the authority to discipline students for conduct code violations, which means that in some instances, I made judgments concerning a student's continued enrollment at the college. The potential conflicts that arise from my role as dan or as a conduct officer were addressed by thoroughly vetting the potential participants through our institutional databases.

The participant vetting process was facilitated by having access to students' identification numbers. In the Participants section of this proposal, it was discussed that student identification numbers would be used to verify students' identities. The purpose of this information was two-fold. First, since identification numbers were unique to each

student, having this information ensured that there was no confusion if multiple students had the same first and last name. Second, the identification numbers made it easier to search for students in the institutional database, and ensure that those who were included in the study did not have a past or current conduct case that was assigned to me. Further, students who were employed within my division were removed from consideration, as that could be a potential conflict of interest.

In addition, I recognized that my position within the institution may be a factor for students; therefore, I was transparent about my role as a professional and my role as researcher, and explained the distinction between the two. I outlined my professional role and responsibilities, but I also tried to relate to participants as a fellow student, expressing that my single purpose for the interview was to conduct research for my doctoral study. Moreover, students were advised that their involvement in the study was completely voluntary, and that their participation, or refusal to participate, would have no effect on their current or future status in the institution. Participants were assured that they could be candid with their responses, even if they were negative, without the threat of retribution.

Another opportunity for bias was my personal experiences and perceptions of the phenomenon. The problem of low degree attainment of African Americans, and consequently, their limited socioeconomic opportunities, negatively affects a significant portion of my ethnic and geographic community. I was aware that the comments that would be shared by participants may resonate with me, or even reflect my own feelings

and perspectives. Therefore, I acknowledged that my interest and connection to the topic could result in biases that affect the study. As a responsible researcher, I was conscious of those biases, and used peer debriefing, member checking, and triangulation to ensure that the findings were as accurate as possible.

As a higher education professional with 14 years of experience in the study setting, I had my own ideas concerning the factors that contribute to the persistence of African American students. For example, it seemed that institutional culture and climate had major influence on students' decisions to leave or remain at the institution. Further, I posited that Astin's Theory of Involvement (Astin, 1984), which is the conceptual framework that grounds this study, was an accurate explanation for the phenomenon. In addition, it is likely that student persistence was the result of motivation, and that motivation could be internally or externally controlled. Finally, I believed that the lack of African American persistence was not only related to individual motivation, but it was also symptomatic of past and present social injustices.

These acknowledgements were vital to preventing biases from influencing how the data were collected, analyzed, and reported. As a first step in reducing bias, I deliberately selected a research topic that was unrelated to my professional field. Also, the field notes, which were described in the Data Collection section, helped me identify and reflect on my biases, in an effort to prevent them from influencing the data analysis. Additionally, several of the methods recommended by Creswell (2014) and Lodico et al.

(2010) were used to reduce bias and support the credibility of the findings. These methods are discussed in the next section, titled Data Analysis.

## Data Analysis

In qualitative analysis, the researcher uses an inductive, evolutionary process that involves reviewing and interpreting data. Similarly, this study used a bottom up approach, as recommended by Creswell (2014), where the researcher develops a general sense of the data, and then codes descriptions and themes about the phenomenon. In contrast to quantitative study, the analysis of qualitative data involves ambiguity, and making meaning from what participants have said and what the researcher has observed, heard, and read (Merriam, 2009).

This study followed Creswell's (2014) recommended steps for analyzing and interpreting qualitative data. The first steps involved initial preparation of the data and a preliminary analysis. Within five calendar days after each interview, the recorded interviews were transcribed, a preliminary analysis of the information was conducted, and the initial analysis was presented in the form of an interview summary. Next, the summary was emailed to each participant with a request that he or she review it for accuracy. After the participant had opportunity to review the summary, a brief follow-up interview was conducted over the phone. The purpose of the follow up interview was to allow the participant to verify the accuracy of the summary and to offer any additional information. Only one of the participants requested changes to the summary. Finally, the

summary was reviewed multiple times to gain a general sense of the data before starting the next step in the analysis process.

The data were analyzed using a system that involved reviewing, comparing, chunking, and finally organizing the data into themes. This was accomplished using a combination of manual coding and computer assisted coding software. The software, called ATLAS/ti, substantiated manual coding and allowed that data to be efficiently organized, categorized, and filed. Following Creswell's (2014) recommendations, the data were segmented using the ATLAS/ti program. Next, codes were developed using In Vivo coding (Saldana 2013) and Microsoft Word, which involved manually grouping sentences and phrases that had like meanings. This process yielded 53 codes. Next, similar or redundant codes were identified, which reduced the number to 22. Finally, the 22 codes were combined to create seven themes, or major ideas that were mentioned most frequently by participants, or had the most evidence to support them. Due to the consistency of the recurring themes, it was determined that the data were saturated, and no additional participants were needed. The themes that emerged from the coding process were evidence of the researcher's in-depth understanding of the central phenomenon and provided answers to the research question (Creswell, 2014).

**Accuracy and Credibility**

Merriam (2009) asserted that the integrity of the researcher is key to the study being credible, and this involves taking steps to ensure that the findings and interpretations are accurate (Creswell, 2014).  Bias is a potential threat to the accuracy

and trustworthiness of qualitative research. However, qualitative researchers do not typically use the word *bias* because qualitative research is considered interpretive (Creswell, 2014). Creswell recommended that to enhance the validity of the study, the researcher should be self-reflective about his or her research, how the findings are being interpreted, and about his or her personal history and political views that affect the study.

To reduce the influence of bias and enhance the credibility of the study, a peer de-briefer was used. A peer de-briefer is a colleague who is familiar with the research project and qualitative design, and who can serve as a critical auditor and validator (Creswell, 2014). The de-briefer was an administrator and adjunct faculty member at the case study site. She was also experienced with conducting qualitative research with the target population. The de-briefer carefully reviewed the methodology, the interview questions, interview summaries, and final report to look for bias, or detect if legitimate findings or discrepant data were overlooked. The conversations with the peer de-briefer, known as “peer debriefing sessions” (Guba & Lincoln, 1985), involved the de-briefer asking probing questions and providing alternative interpretations and explanations of the data. The de-briefer was also a sympathetic listener, providing an outlet for me to share ideas and concerns. The de-briefer and I kept written accounts of our debriefing sessions, and since the de-briefer had access to sensitive information, she signed a confidentiality agreement (Appendix E) to help ensure that the research participants were protected.

As an additional validation measure, member checks were conducted, which involved asking the participants for feedback on the researcher’s emergent findings.

According to Merriam (2009), member checking is a safeguard against misinterpreting the meaning of participants' actions, words, and perceptions of the phenomenon. Member checking ensures that the researcher accurately depicts the participants' experiences, as well as the conclusions that are drawn from the data. Member checking occurred after the interviews were transcribed and after conducting a preliminary analysis of the data. Participants reviewed copies of their interview summary and discussed the summary with me through a brief follow-up interview over the phone. The purpose of the follow-up interview was to allow participants to add information if needed and confirm that the representation was fair and accurate.

Another way of enhancing a study's accuracy is through triangulation, which is the process of corroborating evidence from different sources (Creswell, 2014). According to Yin (2003), interviews are verbal reports that are subject to "bias, poor recall, and poor or inaccurate articulation" (p. 92); therefore, to improve accuracy, the data were triangulated by comparing the responses from each of the interviewees. Throughout data collection and analysis, participants' responses were corroborated, identifying evidence that supported a theme.

Finally, Merriam (2009) stated that the researcher should purposefully look for variation in the phenomenon. This is achieved by looking for data that support alternative explanations or by identifying discrepant cases that may surface in the research. Lodico et al. (2010) defined *discrepant cases* or *negative case analysis* as information that contradicts or disconfirms the hypothesis. The peer debriefing sessions helped uncover

these variations in the data. To ensure that the information was accurate and fully representative of the emergent data, all discrepancies were reported in the findings.

## Findings

Participants had attended three of the site's four campuses. Ten participants were male, and ten were female. The average age of the female participants was 33, and the average age of the males was 37. The combined average age was 35, which was higher than the college's average age of 29. Ninety percent (18) of the participants placed into developmental math when they entered the institution, and 60% (12) placed into developmental English. Three participants entered the institution needing at least three levels of math remediation, for which they were referred to a basic arithmetic course. Four participants needed at least two levels of English remediation, for which they were referred to a language fundamentals course. Fifty percent (10) of the participants needed remediation in both math and English. As dictated by the study criteria, all of the participants completed their developmental education sequences within two years of entering the institution.

Participants were eager to share their experiences and they seemed flattered by the opportunity to provide insight into the factors that led to them persisting in developmental courses. A few participants said that they were surprised by the invitation to be part of the study, because they did not perceive their accomplishments as being particularly remarkable. All of the participants appeared to be very comfortable, open, and honest in their interview responses.

The interviews began with an icebreaker question, which was “why did you select this institution for your studies?” to which participants responded with very practical reasons. The primary reasons for attending were affordability and proximity to home or work. Two of the participants indicated that they did not feel prepared to enter a university right away, so they wanted to start their education at the community college. The remaining interview questions more directly related to the research question, which was “how do psychosocial factors impact the persistence of African American students in their developmental courses?” The resulting data are categorized into seven themes: (a) finding a degree useful or necessary, (b) wanting to set an example or to not let others down, (c) clear goals and plans, (d) attitude, (e) supportive internal and external relationships, (f) supportive institutional environment, and (g) negative stereotypes. A detailed description of these themes is provided in the following discussion. Codes are used in place of participants’ names to protect their identities.

**Finding a Degree Useful or Necessary**

The majority of participants were pursuing a degree because they wanted a better quality of life for themselves and their families. Quality of life factors included amount of physical labor, time spent with family, and personal fulfilment. Money was the most common reason for pursuing a degree. Participants felt that a having a degree would increase their chances to earn more income and be able to take care of themselves and their families. Having a degree was perceived as something that was not only useful, but necessary to survive:

> I need a degree to sustain life- to be able to get what I need to survive. Everyone I know who has a college degree makes a lot more money than people who don't. I see their lifestyle and I want that (VC6080).

*Struggle* was used by several participants to describe life without a degree:

> I look around this city and I see how people are struggling in life, and it motivates me to stay in school (WP9652).
>
> I know people who have and people who don't. You struggle without it (VL5104).
>
> I don't want to have to struggle so much (VC6080).

For most participants, life experience taught them the value of having a degree. LN5828 found that in his employment searches, the question of a degree or certificate constantly came up, so he determined that he needed a credential to increase his chances of finding a good job. One participant described how he had been passed over for promotions at work because he did not have a degree, even though he had the requisite skills. He concluded that having a degree would put him in a position where employers will bid for his service. Similarly, AL6624 believed that "employers don't pay for what you do, they pay for what you know," indicating that a having a degree takes precedence over technical ability. VC6080 reflected on what he learned from his father's experiences in the work environment, claiming that "I can put in 1,000 resumes, but if it doesn't say that I have a degree, my resume goes in the same place as the other 10,000, which is in the trash." The phrase "getting ahead" was often used as participants explained what

having a degree would provide. According to WP9652, "having an education is not only important, it's how most people in life are getting ahead."

Observing their parents' lifestyle was a motivator for some participants. CH2511 attributed her mother's hard laboring to not having a degree:

> My mother is very smart, but she works too hard, and I don't want to be in her position when I get to be her age. I want to be able to retire and love what I do. She doesn't love what she does. She works 10-12 hours on her feet all day and comes home tired. I don't want that.

One participant reflected on her experiences growing up with parents who did not spend much time with her because they worked so much. Others reflected on their experiences as parents themselves and wanting to have more time to spend with their children. Participants were motivated to persist because of the flexibility that a degree would afford them, as well as the potential for having a better quality of life.

**Wanting to Set an Example/ Not Let Others Down**

Setting an example for others and not wanting to let others down were factors in students' persistence. VC6080 desired a degree because he wanted to make his parents proud and show his children that they can be anything they want when they grow up. AL6624 wanted to prove to her children that she (and therefore, her children) could finish a degree, stating that "you just can't tell kids things, you have to show them." Three participants had children who were currently attending college, and they wanted to encourage their children by setting a positive example.

As students faced struggles and challenges, the desire to be a positive example and not let others down drove them to persist. VC6080 stated that when she considered giving up, she thought about what her children would think of her, and that motivated her to finish her courses. BP0921 said that being a father motivated him to finish his courses. His decision to go to college inspired his daughter to pursue a degree. BP0921 felt that he could not quit school because he needed to show his daughter that it was possible to finish. NK6547 said that he pushed through physical pain to make it to school because he wanted to finish for his mother and grandmother. EC3383 reflected on a painful experience that challenged him in finishing his courses:

> I promised my mother that I would finish school. I wanted to drop out because she was sick. She died of cancer. I wanted to quit, but I stayed because of a promise to her. I didn't want to go to school anymore. I got frustrated, and I didn't care about the goals I had set- I didn't care about any of that. I stayed because of a promise I made to her that no matter what, I will walk that stage and get a degree.

Setting an example for peers was also important to participants. CH2511 worked on campus as a Student Ambassador, a role in which she mentored and guided students toward degree completion. Having the Student Ambassador role helped CH2511 persist by overcoming her shyness and reluctance to ask for help:

> Being a student Ambassador has helped me a lot. I'm a shy person, but telling others to go to tutoring, I feel like I'm lying if I don't do that

> myself. Now that I'm an Ambassador, I tell myself "if you need help, then you should go and get it. If you're not getting help for yourself, then you shouldn't tell someone else what they should be doing."

In most cases, participants would be the first in their immediate family to earn a degree, which served as motivation to complete. LG2430 would be the first in his family to complete college, which he said "feels good, but it's a lot of pressure." Similarly, DB1249 was motivated by being the first college graduate in her family, saying "I really didn't have anybody with college experience. I think that's what made me want to succeed because no one surrounding me has done that." Taking a different path from those around her motivated CB1770 to persist in her developmental classes: "I have older cousins, older sisters, my mother, my father- who haven't really done anything in their lives and I don't want to be like that. I want to be better." Honoring commitments, being the first to achieve, setting a positive example, and showing others that completing college is possible were factors in students' persistence.

**Having Clear Goals and Plans**

All of the participants were able to articulate their goals and how those goals motivated them to persist. In addition to earning the associate degree, all but one participant had plans to move on to obtain a bachelor's degree or beyond. Participants had dreams of working in a career that they enjoyed. RS8325 explained that she was pursuing a bachelor's degree in education because she loved teaching and it is something that she wanted to do for the rest of her life. AL6624 aspired to earn two associate

degrees within two and a half years. Her goal was to eventually earn a master's degree and become the director of a Fortune 500 company. TB0389 wanted to go into mortuary science. She was already working at a funeral home, and explained how her experiences working in the field kept her motivated to stay in school:

> I work for a funeral home now, and that's the business I'm going into. They want to see me get that degree. They show me things that I'll see when I get to mortuary science school. They're pushing me. They're talking to me about the business. They let me see the other side I probably wouldn't see in school.

In addition to having goals, participants had clear plans for accomplishing their goals. BD9631 shared her strategy to prepare for the physical therapy program:

> My main goal is to finish out my prerequisites while I wait to enter the physical therapy program. I'll be working on my bachelor's credits, so that when I'm done here, it shouldn't take me that long to get my next degree.

Some participants had financial plans for how they could complete their degree efficiently and as inexpensively as possible. VL5104 tried to maintain a 4.0 GPA, which would make him more qualified for scholarships. His goal was to use scholarship money to fund his undergraduate education, and save his G.I. Bill for graduate school. Participants maintained clear goals and developed plans for accomplishing them, which led to their persistence in developmental courses.

**Attitude**

Attitude was the most impactful factor in students' persistence in their developmental courses. Throughout conflict or challenges, students maintained a positive attitude and demonstrated resilience and an indomitable spirit. The theme of attitude is organized into five topics: (a) love of learning, (b) attitude towards developmental education, (c) confidence, (d) approach to challenges, and (e) commitment to excellence.

**Love of Learning.** Most participants demonstrated a love of learning. Love of learning involves having an inquisitive nature, as well as appreciating new and different perspectives. RS8325 described herself as a person who was "open to learning anything." Several participants expressed an appreciation for the diversity around them, and the ability to learn about different cultures. AG9189 believed that getting to know other cultures was a benefit. AL6624 had a similar appreciation for diversity; she said "there are all kinds of people here. Once you get to know them, you start to understand their culture and try to compare it with yours. I like that." Similarly, NK26547 observed that the campus had lots of diversity, and that was important to him because he liked talking to people from every facet of life. Participants embraced differences and enjoyed learning new things, so the educational environment energized and motivated them to persist.

**Attitude towards Developmental Education.** All of the participants believed that the purpose of developmental courses was to build skills in preparation for higher level courses. According to CB1770, "if you don't do well on the placement test, they put you all the way at the bottom, so when you get to math 1250 you will know what you're doing and you won't be lost." VC6080 commented that she felt like the courses were

needed, saying "I felt good about it, because it helps a lot. Especially if you're going to an English 1010 or 1020 class, and you don't know anything, developmental really helps you." Those who had spent many years out of school viewed the courses as refreshers, helping them to regain the knowledge they lost over time:

> I knew a lot, but it's just that I spent six years not doing it. Getting back in the groove of doing math was a help because it got me ready for the next level. The developmental courses are a catch-up for people who have a gap between schooling (VL5104).

Some participants were disappointed after being placed into developmental courses. When asked about his perception of developmental courses, participant WP8325 said "I really thought that was for kids who aren't ready for the college level courses and it was a little discouraging." Participant EC3383 described his reaction to the math placement as "shocked and offended" because math was his favorite subject in high school. Similarly, CB1770 said that she didn't agree with her placement at all because she is "excellent in math."

After starting the courses, several participants determined that they were placed too low. After EC3383 started his classes and began to remember math, he determined that he only needed a refresher, and should have been placed in a higher math class. NK6547 initially accepted his placement into the lowest developmental math, citing the fact that he had not been in school in over twelve years, but once he started taking the courses, he realized that his placement was too low. NK6547 inquired about retesting to

see if he could achieve a higher placement, but he was advised that it was too late since he had already started taking his math courses.

Other participants who initially disagreed with the placement eventually found the courses to be useful. At first, LG2430 was suspicious of his low placement, saying “I thought it was a money thing, you know? The college is making us take these courses so they can make some more money, because let's face it, college is business.” However, LG2430 admitted that after starting his developmental courses, he felt like the level was appropriate, describing his placement as “right on point.” Similarly, WP9652 admitted that at first he did not take his developmental classes seriously, and that developmental courses were “not good enough academically.” Further, he didn’t think that he needed the courses or that he was required to take them. Eventually, WP9652 realized that the developmental courses were a good way to rebuild his skills.

Despite being dissatisfied with their placement in developmental courses, participants viewed them as a means to an end, or a necessary step to get to their higher level courses, and eventually their degree:

> I just figured that it was something I had to do to get where I needed to be. So I thought “get over it and get through it” (RS8325).
>
> I just took it for what it was. Maybe I needed to refresh, you know? I could have gone back and taken the test again, but I felt like if that’s what I need, then that’s what I need (CB1770).

> This is me paying my dues. This is what I want to do, and this is what it's going to take for me to do what I want to do. (AL6624)

Although participants accepted their developmental courses as necessary steps to completion, they believed that it would have been helpful if they were made clear on how the courses help students obtain a degree. RS8325 suggested that developmental classes should count towards degree requirements:

> If they could combine the math 0950 and 0960 into one class and have it count towards your degree, it would probably motivate people do better. If someone knows that this class is coming out of their pocket, but it's not really helping them get towards that degree, some people don't care, or they just go through it and if they fail they just get upset. But if some people knew that their money was going toward the degree, then they would do way more.

NK6547 suggested that students be better informed of the implications of taking developmental courses:

> I just wish that they would tell you that these classes don't count towards your 60 credits. It would also help students to know that the developmental credits don't transfer, but that the classes are there to help them.

In summary, participants' attitude towards their developmental education courses impacted their persistence. They had varied reactions to their placement in developmental

education, and most of them were surprised and disappointed. However, regardless of their initial perceptions of developmental education, participants ultimately accepted the courses as unavoidable steps to degree completion and approached them with the same dedication as they had in their college-level classes.

**Confidence-** Participants entered their developmental education courses with varying degrees of confidence. Several students had complete faith in their ability to finish the courses:

> I knew I was going to do it and I knew I was going to finish. God doesn't give me anything I can't handle (CB1770).
>
> I really think I'm just blessed with intelligence. I don't know. It's always come easy to me. I've always just had a natural ability to do well in school (AA8408).
>
> I felt very strong about my abilities. I felt like I would definitely finish the courses (NK6547).
>
> I never doubted it. I knew I was going to finish them- just like I know I am going to get my degree (VL5104).

Other participants were less confident. EE3383 recalled that he was scared and nervous to come back to school, feeling like he would be the dumbest person in the class. After completing his first assignments in developmental math, EE3383 felt more confident in his abilities. KC1558 said that she was told years ago that she was not college material. Therefore, she was so unsure about her ability to finish that she waited nearly a year

before she told her friends and family that she was in college. AL6624 was concerned about being out of school for so many years, and felt she would not be able to keep up. For AL6624, it was her instructor who gave her confidence:

> I thought I wasn't going to be able to do it, but my instructor said "Yes you can- you're going to do this." Even though I was older, she told me that I could do it. She let us come to her office and she did extra things for us. I got a "B" in the class. I couldn't believe it.

In AL6624's situation, a faculty member helped to increase her confidence, but in other cases they had the opposite effect, sometimes unintentionally. LN5828 cautioned against a common practice in which faculty announce the withdrawal deadline in their classes:

> When the teacher brings up that it's the last day to withdraw, it's like offering an escape to students. Instead of offering them to leave, offer them something else. Let them know that there is light at the end of the tunnel, because when they hear that it's the last day to withdraw, they think they're not getting it, and they're not confident.

Having self-confidence helped students complete their courses. Whether the self-confidence was innate or developed through interpersonal or environmental interactions, participants' confidence in their ability to make it through developmental education was important to their persistence.

**Approach to Challenges-** When faced with challenges, participants demonstrated adaptability, resilience, and tenacity. Three of the older participants attributed their

difficulties to being out of school for so long. LG2430 shared "when I went to school a computer was bigger than this room. We had the old floppy disk, and no mouse. I was lost, but I stuck with it, and I'm still sticking with it." Six participants failed a developmental class at least once, but after failing a course, they immediately repeated it. DB1249 said "I took math 0950 at least three times, but I stayed with it."

Other challenges included illness, death of a loved one, transportation issues and disabilities. KC1558 talked about how she would cry and pray about her math classes because she struggled so much. She recently learned that she had ADHD and mild dyslexia, which contributed to her difficulties in math. In addition to her challenges with grasping the course content, KC1558 struggled with being a new student and learning how to study. Her approach was to put immense amounts of time and effort into her studies so that she could keep up in her math courses. NK6547 explained that his back problems sometimes caused him so much pain, that he did not want to get up and go to school, yet he pushed himself anyway. RS8325 recalled how her boyfriend's illness made her contemplate taking a break from school:

> I had to take him to the hospital a lot. I thought- "should I take the semester off?" But then I had to say to myself that I can't let anybody else stop my future and make me do something that I really don't want to do.

Participants also endured academic challenges. EC3383 reflected on a challenge relating to his math teacher:

> I was struggling in math because I couldn't understand the teacher's accent. I hated coming to class every day, because I couldn't understand what the teacher was saying. I became more patient and listened more carefully. Instead of just saying "I don't like your accent, so I'm going to drop the class," I made myself accept it and I adapted to it.

Participants' ability to stay positive and focused through challenges was salient throughout the interviews. When asked about dealing with struggle, LN5828 responded "I don't glorify my struggles. I glorify my successes." WP9652 noted the difference between how he and his classmates responded to a poor grade:

> I wouldn't just get mad and throw a temper tantrum like most of the students here. You know, show out in class because they're taking a test or the homework assignment is too hard. Instead, I would talk to one of my professors about it and figure out how I can do better.

Dwelling on mishaps was not a habit for participants. In the face of failure, participants saw an opportunity to learn from their mistakes and apply it to their next try:

> If I failed a class, would I be sad? Yes, because that's wasted money, but would that discourage me to not do it anymore? No. I'm willing to learn from my mistakes. I'm willing to learn from people and learn from my past (RS8325).

In addition to learning from mistakes, several participants attributed resilience (or lack thereof) to attitude and mindset. They viewed challenges as tests that could be

overcome with will and mental fortitude, as evidenced by VL5014's assertion that "a challenge is just another thing you have to get over. I'm not going to let it break me." Further, EC3383 said "I think the main thing that holds most people back anyway is mindset- not the lack of knowledge. I don't care who you are, If you want it bad enough, you can get it." LN5828 spoke about the attitudes of students being a reason for their failures, claiming that "a lot of them approach their classes like they're do or die." EC3383 felt that math students, in particular, fail class before it even starts by saying "I hate math. I'm not good at it, so I'm just trying to get a 'C' and get out of here." According to EC3383, students who go in with that mentality have failed already. EC3383 claimed his approach is different from his peers:

> I don't care if I like a class or not, or if I'm good at it or not, I'm going to get an "A". Even if I make a comment that I don't like a subject, I won't let it take me over mentally, and I won't use that to lessen my expectations of myself.

Finally, participants viewed failures as temporary setbacks, and felt that improvement was within their control. They learned from their mistakes and readjusted. CT0708 recalled his reaction when he failed his math 0960 class:

> When I failed, I was really scared at first and then I said, "I can't believe I did this bad." But then I thought "next time I'm going to study, focus, and put a lot of hours into it."

Participant TB0389 had a similar response to failing her math 0950 class, which was "I tried my best, and now I'm going to try it again. I just have to study more and practice more."

Even when participants had issues with faculty, in most cases they did not assign blame, but instead treated their challenges with the teacher as a natural occurrence:

> For some reason, I got a "D" in the 0950 class. I said to myself "just take it for what it is and try again." Obviously, the teacher wasn't for me, so I took it over again (CB1770).
>
> I wasn't discouraged by my withdrawals or failures because it wasn't the work- it was the teacher. All teachers are not the same (CH2511).
>
> I'm not good at Trigonometry, so I had to withdraw. I just wasn't clicking with the teacher. (NK6547).

Challenges were not a deterrent for participants because quitting was not an option. They described themselves as stubborn, determined, persistent, and prideful. LN5828 described his approach as "I finish this, or I finish nothing." Similarly, LG2430 asserted that "I'm the type of person that once I start something, I'm not going to stop until I finish it." Participants described how they hated re-working and taking classes over again. Even if they failed a class, participants were not inclined to give up on school altogether. KC1558 admitted that she was terrified when she struggled her in math course, but said she was "determined to keep showing up." She recalled how determined she was to succeed, even though she did not feel like her teacher was supportive:

> I'm going to prove you wrong. You are not going to talk to me this way and I'm not going to drop out like everybody else. I talked to myself all the time and I said "I like math. I can do math and math makes sense to me," even though I didn't believe it at first. I just literally told myself over and over again that math makes sense. I would be up in the middle of the night chasing after the same problem over and over, but I would just cry about it and say "I like math" over and over until it clicked. Then I just kept going.

KC1558 and her peers expressed a deep aversion to quitting. The words "I hate to fail" were uttered by nearly half of participants.

Participants took ownership of their mistakes and the resulting setbacks. CH2511 admitted that sleeping in class was the reason that she failed math 0950. She claimed "I wasn't learning what I was supposed to learn. It was my fault; nobody else's but my own." CT0708 attributed his "C" in math 0960 to his poor study and preparation for the exams. AG9189's advice for students who fail courses reflected his sense of personal responsibility:

> If you fail a course, you should reflect on what happened; see what you could have done better to get a different outcome. Don't give up, and when you give it a go a second time, do things differently; don't do things the same and expect a different result.

Participant LB2742 accepted responsibility for failing a term after taking on a heavy class load. His poor performance, and subsequent depression made him want to quit school. LB2742 blamed himself for the mishap, commenting that “being overwhelmed like I was, I set myself up. Nobody else did it but me. I’m the one who made that schedule, nobody else. My arrogance and pride got in the way of common sense.” Like his peers, LB2742 learned from his mistakes and adjusted his actions to achieve better outcomes.

Participants perceived their outcomes to be a direct consequence of their actions. When they received a poor grade, a common response was to increase their focus, find resources, or dedicate more time and effort to studying. CT0708 believed that math, in particular, is a subject where “what you put into it is what you put out.” He believed that some people are “geniuses” in math, while others have to put in more work and focus. EC3383 shared a similar belief, saying that “some people have to study for an hour, and some people don’t have to study at all. Some people read things only once- while some people have to read all night.” It was clear that participants did not feel like their level of knowledge was fixed; they felt that with enough will and effort, they could be successful at even the most challenging tasks.

Finally, participants responded to challenges by facing them head on and engaging in help-seeking behaviors. Nearly all of the participants used the college’s tutoring services when they felt like they did not understand something in the course. If they did not use a tutor, then they relied on a classmate or family member. Approaching the faculty member was the most common strategy for participants who struggled with

course material. Several participants expressed that they were not “afraid” to ask for help, which implied that they had classmates who feared asking the teacher for assistance. LB2742 described how some of his classmates felt uncomfortable with asking questions of the teacher:

> I don’t understand how when the teacher asks if there are comments or questions, nobody says anything; they’re all quiet. I’m the only one talking to the teacher, and everybody else is just sitting like bumps on a log. I don’t know what they’re doing; I’ve never seen anything like that. I guess they figured if they didn’t say anything, they won’t get judged or graded harshly; I don’t know what it is. I inquire because I want to know. That person is the instructor- the one who can tell me what’s going on.

Participants described an array of resources that they used, including counseling, psychological services, the writing center, disability services, and Student Support Services (TRIO/SSS). One participant recommended Google as a good source for information, while another participant used YouTube and Khan Academy to help her understand course content. Participants proactively engaged in help-seeking behaviors, which helped them overcome challenges and persist.

In summary, attitude was a major factor in students’ persistence in their developmental courses. Students maintained a positive, no-quit attitude, even in the face of disappointment and failure. They took responsibility for their mistakes, learned from them, and felt empowered to use what they learned to improve their future. Finally, when

faced with difficulties, participants sought help from a variety of resources, and took proactive, corrective action to ensure that they would continue to progress.

**Commitment to Excellence.** Participants exercised discipline and demonstrated an awareness of the types of habits that made them successful. They described an array of behaviors that involved working ahead on assignments, making time to study, and removing distractions. EC3383 said he had to reduce distractions and "just take time out to study- no TV, maybe light music, but that's it." He claimed that studying without distractions was hard for him to do, because he believed that he should have been able to multitask, but quickly learned that dividing his focus between study and other things did not yield the best results. BP0921 moved away from his companion and got an apartment by himself so that he could focus on his studies. Several of the participants described detailed study routines and plans, like CT0708, who determined that in order to achieve a 4.0 GPA, he needed to dedicate at least two hours of study per week to each subject.

Avoiding procrastination was a concern of over half of the participants. CH2511 stated that she tried to do assignments as soon as they were given instead of waiting until the last minute, claiming that "if you wait until the last minute, you get last minute results." AA8408 admitted to having a problem with procrastination, especially for tasks that he considered tedious. He said it is something that he is "constantly working on." In general, working ahead on class assignments was a common practice among participants.

Participants often made sacrifices of time, sleep, relationships, and recreation in order to maintain their grades. VL5104 explained that since he worked full time and went

to school full time, he sometimes had to stay up all night or survive on just four hours of sleep. CB1770 said that in order to progress through her courses quickly, she did not take any breaks and sacrificed her summers in order to finish school. Two participants mentioned how they sacrificed time with friends so that they could focus on their studies:

> I distanced myself from all of my friends when I started school. None of them go to school. Some of them understand that I have to study, but I'm not 16 anymore. There's no such thing as peer pressure. If I don't want to call you, I don't. If I don't want to answer, I don't. School comes first (EC3383).
>
> It's a lot easier to associate with people who are dealing with school like me. I have friends and associates who don't go to school and it's harder for me to make them understand where I am with stuff and why I have to spend time doing this and not what they're up to (VL5104).

Several of the participants attributed their level of discipline to age and maturity. BP0921 said: "I'm of the age where I don't go out and party, so there are no distractions." LG2430 claimed that because he was older, and had been through school before, he understood the amount of dedication that it took to be successful in college. AL6624 reflected on her younger self and how going to school over twenty years ago would have impacted her persistence:

> At 20, your determination may not be what it is at 48. I don't know if I would be ready [for school] in my 20's, with the influence of a boyfriend,

> and the fashion, and everything that goes along with being young. I don't know that I would, because it takes stick-it-out-ness, you know? All of my days haven't been sunny here.

Maintaining very high expectations and a commitment to excellence was common among participants, with one slight exception, which was CB1770, who expressed that her primary objective was simply to pass her classes. The other nineteen participants had aspirations to not only pass, but to excel in their classes. Many participants set goals of maintaining all "A's", achieving a 4.0 GPA, making the Dean's list, or having the highest score in class. AL6624 expressed her disappointment with receiving what she believed to be a low grade on her math test, saying "I got an 84 on a test once, and I was disappointed. I thought 'you don't have a job, so it should be 90 or better.' You have to have some kind of standard." EC3382 said that if he received anything less than an "A" in math, he would be extremely disappointed, and he would attribute it to him making a "major mistake." He went on to explain how he did not understand some of his peers' lower aspirations:

> I don't understand when people say "all I need is a 'C' and I'm good." I couldn't be farther from that. I don't care if all I need is a "C". I don't believe in doing that. You're automatically putting a ceiling on yourself.

Similarly, LB2430 questioned his peers' pursuit of mediocre grades, saying "they're satisfied with a 'C' or 'D'. How can you be satisfied with that?" Maintaining high expectations and a commitment to excellence was deeply salient among participants.

**Supportive Internal and External Relationships**

Participants had a tendency to seek out people who were like them. Nine, or nearly half of participants shared that they were intentional about the people they selected as friends and study mates, both in and out of school. Associating with people who had like goals and aspirations was important to many participants. DB1249 said that in her group of friends, everyone wanted to graduate and make something of themselves. EC3383 did not associate with his classmates, but in regards to his personal life, he asserted that "if you don't have the same goals that I do, we can't hang together…If I'm going to hang out with individuals, it will be those who are already on the same level as me." When asked about his participation in study groups, LG2430 claimed that they did not work for him because he would be there to study, and half of the students were not. LG2430 said that his classmates would be on their phones, computers, Facebook, or Instagram, so he avoided studying with them. Several participants intentionally associated themselves with classmates who they thought were serious and successful:

> I try to hang out with classmates who don't talk too much and pay attention in class and really focus. I try to hang around them and sit near them so I can ask for help (AG9189).
>
> If I see a classmate who is doing well in the class, I tend to gravitate to that person because my goal is to be first-rate in the class. My mom always told me that you are who you hang around. I'm not going to hang around a person who does not care about the class (VL5104).

> In class, I usually hang out with the people who are as smart as me (AL6624).

About half of participants engaged in some sort of social activity with peers outside of class. They were engaged in activities such as Black American Council, student government, Phi Theta Kappa, math club, as well as informal campus events. Several participants worked, so they spent very little social time on campus. Two participants referred to themselves as "loners," who preferred to focus on their studies, and not engage in social activities. Four participants talked about how they were part of a supportive network in their developmental classes:

> We help each other. Some days they may not be able to make it or I may not be able to make it and they'll make sure that I get the notes. I do the same for them (CB1770).
>
> We were all determined; we were pushing one another by helping each other (DB1249).
>
> Talking to classmates definitely helps with wanting to get done and show the other person that you can do it (VC6080).
>
> Most of the people in my math class pushed each other whenever there was a test. When we had homework, we would help each other out. There were a couple of people that we connected with and formed study groups. We were all really supportive of each other (AA8408).

Overall, participating in some sort of social engagement activity with peers was considered to be a factor in students' persistence.

Participants talked about support systems in their personal lives that contributed to their persistence. External support systems included church, employers, relatives, and companions. CB1770 mentioned how when she felt like giving up, her family members motivated her to keep going, saying "you don't want to be like me; you want to be better than me." According to CB1770, statements like that helped her "stay above water." AA8408 commented on how proud his family was of him, and he chuckled as he explained how excited they got when he brought home good grades. He said "for the last couple of math tests, they had actually posted them on the refrigerator at the house." For RS8325, it was her church family who encouraged her the most:

> My church family was really supportive of me being in college. My pastor would say that he was very happy that I was getting an education. That motivates you when you see other people who are happy for you. You don't want to let them down.

Participants were appreciative of the support from the people around them, and it motivated them to persist.

**Supportive Institutional Environment**

Overall, participants viewed the institution as supportive. They viewed the college's personnel, support services, amenities, and racial climate as factors that

contributed to their persistence. The factors relating to institutional environment are discussed in terms of (a) faculty, (b) support services, and (c) racial congruence.

***Faculty.*** In general, participants felt supported in the institutional environment, especially by the faculty. Faculty were often credited with helping participants persist. All of the participants mentioned the faculty as a whole, or a particular instructor who helped them to persist. However, one participant remarked on negative experiences with faculty:

> I ran across a couple of teachers who were not really willing to help students- and that was a problem. It's a problem for a lot of students on this campus. You email them, and they never email you back, and that's very unprofessional. That's probably one reason why students fail, and it's not fair (CB1770).

Another participant remarked that she experienced some instructors who did not seem to care. She felt like they "talked to students like toddlers, or didn't talk to them at all" (KC1558). However, most participants described the faculty positively. RS8325 described her teachers as very supportive, and they always made sure that she was working hard. She said "when someone has confidence in you and high expectations of you, it's almost like you can't let them down and you can't let yourself down." LN5828 said "teachers played a big part in my case and they were very supportive." Participants described their best teachers as being approachable, available, and willing to help them outside of class. CH2511 described who she thought was her best teacher:

> My English teacher- Ms. _______, I loved her. She did a great job. She cared about her students and made sure that they knew what they were doing. If you had any issues, you could call her at any time and she would help you. Having an English teacher- or any teacher at all who is willing to help you outside of class is awesome. That's what you need. Without her, I don't know where I would be. I was able to take her for two semesters; she was just amazing.

Faculty also provided mentoring and encouragement to participants. WP9652 said that his instructors gave him lots of motivation and support by telling him to not let others deter him from his goals. NK6547 and AL6624 said that their faculty encouraged and motivated them to pursue advanced degrees. It was clear that having positive relationships and interactions with faculty played a significant role in participants' persistence.

***Support Services.*** Participants identified numerous internal support services that helped them persist in their developmental courses. Three participants mentioned TRIO/Student Support Services as a helpful resource that helped them persist through their courses. Two participants mentioned that they were part of the Black American Council, which provided them with mentoring, scholarship assistance, and other support that helped them persist. Three participants mentioned the college-provided meal plan and two participants mentioned that having free transportation were assets that helped

them stay in school. BD9631 commented that because the college helps cover their basic needs, "there's no reason not to go to class." AL6624 made a similar comment:

> We have tutoring, computer labs, money to go to the cafeteria, bus passes…all of that helps you. All you to have do is show up. I know a guy who transferred to ________, and he says that leaving here is like taking a blanket off.

Two participants commented that "everybody" at the institution is helpful, citing the counseling, enrollment centers, and financial aid offices as places where they received helpful assistance. CH2511, who works on campus, identified her work-study supervisors as part of her support system:

> My supervisors at school are very encouraging. The deans are very helpful. They want to make sure that you do something with your life and find a career after this. They build you up to be a better person and get a better job when you leave here.

AL6624 mentioned that her weight sometimes made her feel self-conscious, but it was never an issue on campus. She said that no one treated her differently because of her weight. She even perceived the college's availability of sturdy chairs without arms as one of the amenities that made her feel supported. AL6624 also credited the college with sparking her interest in learning:

> The school been a god send to me. They have really just opened their arms. You know, this is a place, it's not a person, but I just feel really

> welcomed here. I feel like there's nothing that I can't learn. This place ignites something in you.

There was one participant who offered a starkly contrasting view of the institution. KC1558 perceived the institution as a place where less persistent students are in effect "weeded out." She described her impression of how the institution systematically alienates weaker students:

> It takes so much fight to go to school here. The impression I get a lot of times is "we'll wait for you to show us something before we really pay attention or support you." I heard from many students that they just felt overlooked, looked down on, or not acknowledged at all.

KC1558 said that many times she was put into a position where she had to advocate for herself, and believed that less tenacious students lack the ability to do the same, which is why they drop out.

Having a supportive institution was very important to participants; several suggested that it is important for people at the institution to show that they care and motivate students to keep going. One participant recommended that the institution be more proactive with students who may be struggling:

> They can encourage students more. Try to reach out more to see if students need help. If you see a student isn't doing so well, try to call and find out the problem, instead of just letting it slide. Even though it's not your job to do that- it's the student's job to get on the right path, but

> sometimes you need someone to call and make sure that you're ok and don't need any help. I feel like the college should be able to do that (CH2511).

In summary, the majority of participants felt that the environment was overall very supportive. Participants spoke well of the faculty and their experiences with them, with a couple of exceptions. In addition to feeling supported, participants also credited their persistence to numerous resources provided by the college, including support services, food, and transportation.

***Racial Congruence.*** Racial congruence was an environmental factor that had an impact on persistence. Most participants seemed puzzled by the question of race and struggled to respond to the questions about their experiences being an African American at the college. They saw themselves as part of a majority at the institution, and therefore, did not see their race as much of a factor in their college experience. This was not surprising, since the majority of the participants attended campuses with large numbers of African American students. Being among students of the same race was not explicitly stated by participants as a benefit; however, one participant said that he avoided attending a particular campus because it was "majority White" asserting that it was important to be around other students who looked like him.

Feelings of racial congruence likely contributed to participants feeling comfortable at the institution, therefore, supporting their persistence. A third of the participants could not recall any issues with their race:

> There's really nothing to say. It feels like I'm just another student trying to get an education (CH2511).
>
> It was all the same- whether I'm Black or White- it's all the same (RS8325).
>
> It's not really about being Black; It's no big deal here (LG2430).
>
> It's been a wonderful experience. I think it's more of an issue of me being almost 50, rather than being African American. I just love it; I haven't had anything negative happen to me at all (AL6624).
>
> I don't feel different by being Black at this college. Nobody's gone out of their way to help me or to put me down because I'm black (EC3383).
>
> I've never had any obstacles with my race (DB1249).
>
> I haven't had any negative experiences. Everywhere I've gone, everyone has been helpful. I can't name an instance where I've felt out of place or uncomfortable (VC6080).

In general, participants did not feel that their race hindered their persistence. However, two participants alluded to feeling discrimination by their instructors. One participant perceived discrimination in one of the college's selective admission programs. When asked the question: *Tell me about your experiences being an African American at this college?* she responded:

> It's a fair game, but when you get to the point that it's selective, where only 27 people get in, I feel like they lose faith in you. I'm the type of

> person who's still trying to grow. I'm looking for college to mold me into the person I want to be, so if I'm a little rough around the edges, I don't want to feel like you don't have faith in me- like I'm not able to do this and progress like the people who are a little more advanced (BD9631).

From the context in which she made the comment, it can be concluded that BD9631 made a connection between being African American and the program "losing faith" in her. Participant KC1558 talked about a math class she took where she felt that the instructor discriminated against African American students. She recalled a situation in which the instructor showed preference to a Caucasian student by offering her special financial assistance:

> There was a White woman who would come to class with her hair looking like she had just woke up out of bed, like she had a bunch of kids, was on food stamps- the whole nine yards- the typical story, right? I remember this professor talking to her in class, and she gave her a form for a scholarship for students in math who had financial difficulty or something. I remember getting so angry because I was in the same exact financial situation as her and I just know that because she was White she got that treatment. The Black folks in the class were all frustrated and they could tell the difference in how she talked to everybody and I saw a lot of that across the board in a lot of classes.

When I asked KC1558 what made her persist in spite of the perceived discrimination, she responded that for her, getting a degree was about survival, and wanting it so badly that she was willing to fight for it. While most participants did not perceive racism or discrimination, there were a few who did. Yet, because of their strong desire to complete their degree, they did not let those experiences deter them.

**Negative Racial Stereotypes**

A few participants talked about negative stereotypes and observations of African American students. VL5104 said "I heard different conversations and people assume that African Americans might be slow or they are here to get the money, milk the system, and leave." WP9652 explained how he felt that his Caucasian peers perceived the African American students:

> When students here who are White see us walking around, they just have the expectation that all we're here to do is to listen to music, or talk about sports and musicians, nice cars, money, and women. That's what they always think of us if we don't try to fit in their shoes and be better than them.

WP9652 went on to express his own stereotypical perception of African American students:

> I'm not trying to play a race thing, but people or students who are black/ African American- some of us- most of us don't take it seriously for some

> reason. I guess we're lazy, in a way. I'm just one of a few who is lazy sometimes, but I know when to get the work done.

Another participant had similarly negative perceptions of African American students. LG2430 claimed that the problem with most African Americans is that they are "pampered," "entitled," and do not feel like they have to put work and time into their courses. LG2430 asserted that African American students "always have some sort of outside distraction, or some sort of excuse." He mentioned that when he would organize study groups with his African American classmates, he would be the only one to show up. Further, three participants observed that the African American students, in particular, did not try to pass their developmental classes. They perceived these students as only being interested in receiving financial aid, with no intentions of finishing the classes. The participants who expressed stereotypical views of other African Americans viewed themselves as different, or perhaps better, than their peers.

Several participants mentioned that their race was motivation to complete their degree. AA8408 said that he was proud to be African American, and that he and his peers needed to "represent their heritage and succeed." WP9652 felt like he needed to work harder and achieve more because of his race:

> Being an African American, you have to set higher goals than everybody else. You just can't think of yourself as equal to everybody else. You've got to have higher standards and get more than everybody else because someone from a different race can have nothing and have better results

> than you. So you always have to think of yourself as better than the next person.

Finally, CT0708 said that society's expectations of him as an African American man served as motivation for him to succeed:

> I think society in general doesn't expect me to be civil. They expect me to just do a manual job for the rest of my life or something like that. I want to be able to use my brain strength instead of my physical strength, and that's what I plan on doing. I don't think anybody wants me to do badly, but they don't expect good, either. That's my motivation.

One observation is that the participants who discussed negative stereotypes, or alluded to them being motivating factors, were male. They seemed to make it their objective to be different from how they perceived most of their peers, thereby proving the stereotypes wrong. In summary, several of the male participants seemed to adopt negative stereotypes about their own race, and persisted out of a desire to exceed those stereotypical expectations.

## Conclusion

A qualitative case study was conducted to investigate how psychosocial factors impacted African American students' decisions to persist through developmental education. This researcher used purposeful sampling to identify 20 participants, and the data were collected through semi-structured interviews. After the data were transcribed and analyzed, seven distinct themes emerged: (a) finding a degree useful or necessary, (b)

wanting to set an example or to not let others down, (c) clear goals and plans, (d) attitude, (e) supportive internal and external relationships, (f) supportive institutional environment, and (g) negative stereotypes. The data indicate that the most impactful factor in student persistence is attitude. It seems apparent from the research that students' attitudes were influenced by a variety of factors, including interpersonal relationships, feelings of support and belonging, and stereotype threat. The effects of attitude penetrated students' entire educational experience, and resulted in behaviors that led to their success.

Since the data revealed that students' attitudes are impacted by numerous factors, there are a number of projects that may be considered to address the problem at the case study site. One proposal is a position paper that would provide recommendations for policies and practices that promote more positive attitudes in students. These recommendations include enhancing the recruitment and onboarding processes, changing the language in written communication, and improving the written and verbal interactions between the students and faculty, staff, and administration. Another option is a revised First Year Experience course that would promote a positive attitude in new students and set them on an early path to success. Each of the aforementioned projects would positively impact significant numbers of students. However, a third option, which is a faculty training program, was determined to be the most effective approach to improve the attitudes and persistence of underprepared, African American students.

The findings indicate that participants highly valued their experiences with faculty. Faculty exerted enormous influence on students, both positively and negatively. Faculty

were the most helpful resource for participants when they struggled with course material. Furthermore, nearly all of the participants mentioned the faculty as a whole, or a particular faculty member who helped them to persist. The faculty built students' confidence and provided them with mentoring and encouragement. In many cases, it was a faculty member who made the difference in students' attitudes and their decisions to leave or stay at the institution. As a way of leveraging this powerful dynamic to benefit more students, the culminating project for this study will be a training program that will help faculty better understand how they influence students' attitudes and the ways that they can help them persist. The training program is intended to equip faculty with effective strategies to promote more positive attitudes in underprepared, African American students, and help them achieve timely degree completion. It is anticipated that this project will provide the most extensive and long-lasting impact on the case study site.

Section 3: The Project

## Introduction

Based on the research findings, a faculty development training program was determined to be the most appropriate project for this study. This section includes a description of the project, as well as the project goals, rationale, and a review of the relevant literature. The section also outlines the project's potential barriers, recommended supports, timeline for implementation, and evaluation plan. Finally, the section concludes with a discussion on the project's potential to create positive social change.

## Description and Goals

The problem that this study addressed was the low persistence of African American students in developmental courses. Of the seven themes identified from the research, attitude was found to have the most impact on African American students' persistence in developmental courses. The theme of attitude was organized into five topics: (a) love of learning, (b) attitude towards developmental education, (c) confidence, (d) approach to challenges, and (e) commitment to excellence. Throughout conflict or challenges, participants maintained a positive attitude and demonstrated resilience and an indomitable spirit. Moreover, they exhibited a love of learning, a commitment to excellence, and an appreciation for new and different perspectives. Participants also maintained a positive, no-quit attitude, despite disappointments, adversity, and failures. Participants' attitudes were such that they took responsibility for their mistakes, learned from them, and felt empowered to improve their own circumstances. Finally, instead of

succumbing to challenges, participants viewed them as temporary setbacks. They responded by relying on their resources and taking proactive steps to ensure that they would continue to progress.

Another phenomenon that permeated the findings was the influence of faculty on participants' attitudes. The faculty bolstered students' confidence and provided them with mentoring and encouragement, which contributed to persistence. It appears that the faculty's ability to positively impact attitudes could be leveraged to benefit more students. One approach to expanding faculty impact is to provide training so that those powerful and positive interactions happen more consistently. Therefore, the project for this study is a faculty training program that is designed to accomplish three goals: (a) recognize faculty impact on student attitude, (b) recognize attitudes that affect student behaviors and performance, and (c) identify and apply teaching strategies that promote more positive attitudes in students.

## Rationale

A professional development training program was selected as the project because it seemed to be the most efficient and effective way to engage the faculty. Further, faculty development is a common and highly supported practice at the case study site, and faculty development fits well with the institution's culture of continuous improvement. Another rationale for further faculty training is its potential impact on the study site. The study findings revealed that participants were deeply influenced by faculty, and most times this influence was so positive that it motivated students to persist. However, these

types of positive, motivational interactions with faculty were not consistent throughout students' time at the institution. It is assumed that training can fill gaps in the faculty's knowledge and practice so that they may provide more consistent and effective support to students. Further, it is anticipated that the faculty development program will provide the most extensive and long-lasting impact on the case study site.

## Review of the Literature

The review of literature provided the framework for the project, a training program that is intended to help faculty improve the attitudes, motivations, and academic outcomes of underprepared, African American students. The key terms that were searched were *student attitude, student mindset, mindset intervention, professional development, teacher development, and faculty development.* Some words were also combined with *African American, remedial, underprepared,* and *community college* to generate the most relevant data. Boolean searches were conducted through ERIC, EBSCOhost, and Academic Search Complete databases. Also, articles and scholarly content were identified through Google Scholar. A filter was used to include research that was less than five years old. The following is a review of the current psychosocial research and theory on student attitude and mindset, as well as empirically tested interventions that can improve student mindset. Also included is research on the techniques that faculty may use to improve students' attitudes, motivations, and academic outcomes. The literature review concludes with a discussion of five essential training components that will be incorporated into the project. The research in this section

provides the background and framework to develop rich, relevant content and the most effective presentation for the faculty development training program.

**Background on Mindset**

In the field of social psychology, the term *mindset* is often used interchangeably with the term *attitude*. Mindsets are how students frame themselves as learners, understand their learning environment, and understand their relationship to the learning environment (Dweck, Walton, & Cohen, 2011). Further, mindsets are beliefs, attitudes, dispositions, values, and ways of perceiving oneself, and these beliefs and assumptions guide people's behaviors (Brooks, Brooks, & Goldstein, 2012). Mindsets are motivators for academic outcomes, and they are motivators for engagement in deeper learning experiences.

As a precursor to this discussion, note that much of the research on mindset has focused on small samples in middle-class, secondary schools (Farrington et al., 2012). Further, much of the mindset research has not been applied to high-need students or institutions serving large proportions of poor students or students of color (Spitzer & Aronson, 2015). This means that more research is needed in more diverse contexts, particularly in community college settings. Although the empirical research on mindset is limited, the data offer some powerful and promising implications for community college practitioners.

**Implicit Theories of Intelligence**

Most of the literature on mindset is grounded in implicit theories of intelligence. Implicit theories are the core assumptions about the malleability of personal qualities, including intelligence (Yeager & Dweck, 2012). Research studies on implicit theories of ability have shown the impact on students' motivation, learning, and achievement outcomes (Rattan, Good, & Dweck, 2012). These theories influence how people respond to challenging situations, especially when they perceive a threat. According to Davis, Burnette, Allison, and Stone (2011), "these meaning systems create the context in which events are interpreted and subsequent expectations, affect, and behaviors ensue" (p. 332). Implicit theories also relate to adaptability, and ability to self-regulate and be buoyant in the face of challenges. Moreover, implicit theories affect a person's mental health in the form of life satisfaction, self-esteem, sense of purpose, enjoyment of school (Martin, Nejad, Colmar, & Liem, 2013), and stress endurance (Crum, Salovey, & Achor, 2013).

People can vary in their implicit theories about themselves and others, from more of an entity (fixed) theory of intelligence to more an incremental (growth) theory. Those who possess an entity theory believe that intelligence is fixed and unchangeable. They also tend to be more oriented toward diagnosing people's stable traits, often from preliminary information. In contrast, people with an incremental theory of intelligence believe that intellect can be grown or developed over time (Davis, Burnette, Allison, & Stone, 2011; Yeager & Dweck, 2012), and they see setbacks as a result of poor effort or strategy (Davis et al., 2011, Yeager & Walton, 2011), as opposed to their ability (Rattan et al., 2012). Motivation is also affected by implicit theories, as demonstrated by

Henderlong-Corpus and Hayenga's 2009 research, which revealed that students who viewed intelligence as a fixed entity and approached schoolwork as a means for validating their ability were likely to experience losses of intrinsic motivation. The researchers suggested that intervention efforts might be effective at altering these dangerous mindsets.

Entity theorists perceive everything in the world as a measure of their abilities, including challenges, effort, and setbacks. Essentially, entity theorists see the world in terms of threats and defenses, whereas incremental theorists view the world as being full of opportunities for learning and growth (Cook, Purdie-Vaughns, Garcia, & Cohen, 2012). In contrast to entity theorists, incremental theorists view challenges and setbacks not as threats, but ways to help them grow. Yeager and Walton (2011) claimed that the attributions that result from entity and incremental theories shape whether students respond to setbacks helplessly or resiliently.

In an attempt to demonstrate the effects of implicit theory in the classroom, Davis et al. (2011) manipulated the learning environment by placing certain math students in an *underdog* position, or a position in which they had an academic disadvantage. The underdog concept is based on popular culture narratives, like *Rocky*, *The Karate Kid*, and *Little Engine that Could*, where the underdogs overcame challenges and limitations to achieve success. The authors hypothesized that in academic settings, students who see themselves as academically inferior (underdogs) may have negative expectations, leading to poor performance. Consistent with the researchers' predications, the entity theorists

who were in an underdog position reported greater feelings of helplessness and less self-efficacy in their mathematical ability, compared to incremental theorists. The authors' findings supported views that possessing an incremental or entity perspective can influence students' responses to challenges, and ultimately affect their academic performance.

Mindsets are shaped by many contexts, but they are also malleable and can be changed through psychological interventions (Farrington et al., 2012). The goal of mindset interventions is to instill beliefs that mirror those of engaged students, which are: (a) to perceive the teacher as supportive, (b) to believe that whether they learn is based primarily on their own motivation, persistence, and effort, and (c) to recognize that making mistakes and not immediately grasping material are expected parts of the learning process (Brooks, Brooks, & Goldstein, 2012). Additionally, Yeager and Dweck (2012) have examined adversity in K-16 students, and asserted that instead of self-esteem boosting or trait labeling, students need mindsets that help them perceive challenges as things that can be overcome with time, effort, new strategies, help from others, and patience. This type of mindset promotes resilience.

Among other factors, changes to environment can affect mindset. Difficulty adjusting to a new academic environment can lead to academic underachievement, which is a condition characterized by the gap between a student's current performance and his or her potential. Without proper intervention, a reinforcing loop can form between subpar school performance and decreased motivation, ultimately leading to lower grades and

school departure (Morisano, Hirsh, Peterson, Pihl, & Shore, 2010). Underserved populations, such as African Americans, "face particular challenges of stress, limited support, lack of critical resources, and psychological disempowerment and disenfranchisement," contributing to "dramatic gaps in achievement that are detrimental to individuals and corrosive to society as a whole" (Shechtman, DeBarger, Dornsife, Rosier, & Yarnali, 2013, p. 18). Such challenges can make it difficult for many African American students to maintain a positive mindset and perform well academically.

**Impact of Mindset on Academic Behavior**

The logic behind focusing on academic mindsets is that student attitudes, beliefs, and dispositions determine the level at which they engage in academic behaviors and utilize strategies that help them learn (Snipes, Fancsali, & Stoker, 2010). Positive academic mindsets motivate students to persist at schoolwork, which manifests itself through better academic behaviors (Farrington et al., 2012). Evidence supports the relationship between positive academic mindsets, academic performance, and persistence, as summarized by Farrington (2013):

> When a student feels a sense of belonging in a classroom community, believes that effort will increase ability and competence, believes that success is possible and within his or her control, and sees school work as interesting or relevant to his or her life, the student is much more likely to persist at academic tasks despite setbacks and to exhibit the kinds of academic behaviors that lead to learning and school success. Conversely,

> when students feel as though they do not belong, are not smart enough, will not be able to succeed, or cannot find relevance in the work at hand, they are much more likely to give up and withdraw from academic work, demonstrating poor academic behaviors which result in low grades (p. 8).

Given the impact of mindset on academic performance, it would be unwise for administrators and other educational practitioners to attempt to alter the external behaviors of students without also paying attention to their internal mental frameworks (Sriram, 2010).

**Stereotype Threat**

The effect of classrooms on students' mindsets is particularly salient for racial/ethnic minority students (Farrington et al., 2012). This is largely due to stereotype threat, which is "the arousal, worrying thoughts, and temporary cognitive deficits evoked in situations where a group member's performance can confirm the negative stereotype about his or her group's ability in a domain"(Rydell, Rydell, & Boucher, 2010). Stereotype threat can impact many different identities, including socioeconomic status, age, race, and gender (Sherman et al., 2013). A study by Rydell et al. (2010) illustrated that negative stereotypes about women reduced women's ability to encode math-related information. Minorities may be threatened by the stereotype that their ethnic group is less intelligent or less hard-working than others, causing stress, anxiety, and distraction.

Research on stereotype threat shows that the worry that one could be perceived through the lens of a negative intellectual stereotype can undermine academic

performance, and cause common measures of academic performance to systematically underestimate the ability of negatively stereotyped students (Yeager & Walton, 2011). A considerable amount of research indicates that the underperformance of African Americans and other students of color is related to their internalization of social stereotypes or being afraid of confirming negative stereotypes through their own actions and language. These fears can undermine academic commitment and achievement (Spitzer & Aronson, 2015). Taylor and Walton (2011) conducted a study of the effects of stereotype threat on the academic learning of undergraduate students, and found that African American students who performed in a stereotype threat setting rather than a non-threatening environment performed worse. Caucasian students performed better in the conditions that were perceived as threatening by African American students, demonstrating a phenomenon that the authors called “stereotype lift” (p. 1065).

Stereotyped students also contend with *belongingness uncertainty*, which is the fear that one does not fit into a setting where academic ability is prized (Spitzer & Aronson, 2015). According to Farrington et al. (2012), if students feel part of a learning community that values academic work, they are much more likely to share those values and act accordingly. However, if students identify with a group that does not value academic achievement, they may lower their own expectations to match those of what they perceive to be the normative group.

For minority students, academic feedback can be threatening on several levels, because it can reflect one’s competencies, the teacher’s prejudice, or both. Minorities

who experience identity threat may scrutinize a teacher's nonverbal behavior for evidence of bias, rather than examine other equally important sources of information (Sherman et al., 2013). Minorities may also attribute teacher feedback to discrimination rather than ability, which discounts the feedback and protects the student's self-esteem. This discounting can lead to academic disengagement (Mendoza-Denton et al., 2010), and students detaching their sense of self-worth from academic tasks (Taylor & Walton, 2011). Further, as protection from stereotype threat, minorities may avoid activities that facilitate learning but pose a risk of failure and rejection, such as seeking help on challenging material or enrolling in rigorous courses (Taylor & Walton, 2011).

**Remediation and Mindset**

Since mindsets are shaped by school and classroom contexts, it is reasonable to assume that being immersed in a remedial environment has some effect on mindset. Although scholars have demonstrated that psychological interventions can promote a more positive mindset and bolster students' academic performance, very few current studies examined mindset in academically high-risk students as a way to improve the outcomes of remedial programs (Sriram, 2010). This is a missed opportunity, as Yeager and Dweck (2012) suggested that placement into remediation has the potential to lead students to conclude that math especially, is a fixed ability that they do not possess. The authors cited research that indicated that more than 68% of remedial math students endorsed an entity theory about math ability, which suggests that remedial math students, in particular, have an urgent need for interventions that help them adopt an incremental

theory. Further, some researchers believe that remediation represents an ability grouping practice that perpetuates fixed mindset. According to Boaler (2013), ability grouping, such as what typically happens with remedial students, affects students' beliefs about their own potential change in response to the groups in which they are placed. Boaler claimed that this effect happens whether or not students are told about the grouping or its implications. According to Sriram (2010):

> The academic skills that remedial programs teach could be blocked by mental filters that students possess that tell them that they cannot change in significant ways. A growth mindset removes these filters, helping students see that change is not only possible, but also worth the effort (p. 26).

In summary, it is likely that because of the potential effects of being sorted into a remedial environment, underprepared students could benefit the most from mindset interventions.

**Psychosocial Interventions as a Way to Close Performance Gaps**

Psychosocial interventions have been largely overlooked as a way to close performance gaps, in part because educational stagnation has confirmed a general pessimism about the ability to improve learning, especially among disadvantaged groups (Kirp, as cited in Spitzer & Aronson, 2015). Education reform efforts have given too little attention to the psychological side of the classroom experience, an implication being that the same event, such as teacher criticism, may be perceived differently by different

groups (Farrington, 2013). Educational innovations and extensive reforms have been common approaches to narrowing performance gaps among groups of students. Yet, Spitzer and Aronson (2015) argued that psychological interventions can be administered with far greater efficiency and effectiveness than the broad, expensive policy approaches traditionally used to change the culture of underperforming groups. The authors asserted that a more effective and realistic way of closing performance gaps is to acknowledge the highly social and psychological nature of learning, performance, and motivation.

**How Psychological Interventions Work**

Achievement gaps often result from a psychological predicament in which students feel a threat to their identity or sense of belonging. “Psychological interventions work by helping students cope with threats to identity, which can impair intellectual functioning and motivation identity” (Spitzer & Aronson, 2015, p. 4). Psychological interventions help with mindset because so much of teaching and learning is social. Psychological interventions can raise students’ confidence and increase their willingness to work harder, while improving their feelings of belonging in school. These are key components in raising student achievement and reducing persistent achievement gaps (Yeager et al., 2014).

The potential impact of psychological interventions is often hard to understand because the psychological factors that affect learning cannot be easily seen (Yeager & Walton, 2011). Yeager and Walton (2011) compared this dynamic to the numerous, invisible, and interrelated forces that miraculously cause a plane to fly. The complex and

invisible psychological forces that impact learning include worries about ability, stereotypes, and belonging. Additionally, there is a reasonable, but often faulty assumption that the pervasive gaps in educational achievement require large, expensive reforms. Psychological interventions are often dismissed because they seem “small” relative to traditional reforms, as people assume that large problems require large solutions. It is important to realize that psychological interventions complement, but do not replace traditional educational reforms. They do not provide academic content or skills and they do not improve teaching. Instead, these interventions change students’ mindsets to allow them to seize opportunities to learn (Yeager & Walton, 2011; Yeager, Walton, & Cohen, 2013), or, as Sriram (2010) stated, “they open the door [to learning] and encourage students to walk through it” (p.26).

**Effects of Psychological Interventions**

Researchers have offered a consistent explanation for why psychological interventions are effective. Students who undergo psychological interventions experience a “snowball” effect, whereby small differences at an early stage can get magnified over time. The snowball effect can be particularly salient in science and math, where subsequent learning builds on an earlier foundation of knowledge, making it increasingly difficult to catch up later (Miyake et al., 2010). The effect can also be seen as coursework gets more challenging and the potential for difficulty increases, compounding the impact of identity threat. Further, beliefs about ability and expectations for success can be fragile, especially when students face a challenge they have never encountered before

(Schechtman et al., 2013). This reasoning validates decisions to incorporate psychological interventions in introductory and gateway courses. Farrington et al. (2012) discussed the reciprocal relationship between mindset and academic performance:

> There is a reciprocal relationship among mindsets, perseverance, behaviors, and performance. Strong academic performance "validates" positive mindsets, increases perseverance, and reinforces strong academic behaviors. Note that this reciprocal, self- perpetuating system also works in a negative loop. Negative mindsets stifle perseverance and undermine academic behaviors, which results in poor academic performance. Poor performance in turn reinforces negative mindsets, perpetuating a self-defeating cycle (p. 9).

Psychological interventions work by breaking this self-reinforcing cycle and resetting the student on a more productive cycle where success and positive expectations are mutually reinforcing. These slight changes in mental trajectory can cause lasting improvements in academic achievement (Farrington et al., 2012).

**Four Key Mindsets**

Farrington (2013) identified four key mindsets, each of which is independently associated with students having better academic behaviors, perseverance, and grades. These are: (a) I belong in this academic community, (b) I can succeed at this, (c) my ability and competence grow with my effort, and (c) this work has value for me. The following is a discussion of these key mindsets and the corresponding interventions.

**I Belong in this Academic Community**

The first mindset involves the sense that one feels he or she fits in with the academic setting and feels like a member of the classroom community. There is abundant research that suggest that having a sense of belonging in a school or classroom improves academic performance (Farrington et al., 2012, Spitzer & Aronson, 2015, Yeager & Walton, 2011), while situations that question one's belonging can impair it (Spitzer & Aronson, 2015, Yeager & Walton, 2011). Feeling part of a community is a powerful motivator for human beings. Sense of belonging is closely tied to perceptions of competence and autonomy, intrinsic motivation, and willingness to adopt established norms and values (Schechtman et al., 2013). In the academic environment, students who have a strong sense of academic belonging see themselves as members of not only a social community, but an intellectual one (Farrington, 2013). Students who feel like they belong may also initiate more social interactions and form better relationships on campus, facilitating their social integration and improving their overall academic experience (Walton & Cohen, 2011).

Sense of belonging is compromised when students perceive threats in the educational environment. When students feel left out, criticized, or disrespected, it may be seen as proof that they do not belong. This perception may increase stress and demotivate students to participate in the educational environment (Yeager et al., 2013). African Americans are more susceptible to identity threats that hinder their ability to fully participate and benefit from learning. African American students are sensitive to

messages and subtle cues that they do not belong in the educational environment. These include, among other things, harsher disciplinary actions, social alienation, and patronizing praise (Farrington, 2013). For African American students, one consequence of having this perception is that they withdraw their effort, fearing that they will not be evaluated fairly. This led to Yeager et al.'s (2013) conclusion that "it's not the case that African Americans lack motivation in school. Rather, they understandably may be uncertain as to whether they should invest their effort and identity in tasks where they could be subjected to biased treatment" (p. 805).

Numerous researchers have studied ways to mitigate perceived threats to identity, particularly in African American students. For example, Walton and Cohen (2011) tested a brief intervention aimed at strengthening college freshmen's sense of belonging at a university by lessening the perceptions of threat. Their research showed that African American students were benefited by the intervention, as evidenced by a smaller achievement gap (as compared to Caucasian students), as well as by improvements to self-reported well-being and physical health. A similar study by Cook et al. (2012) found that a brief values intervention insulated African American middle school students from feeling that they did not belong, thereby reducing declines in academic performance. In addition to discovering the effectiveness of social belonging intervention on African American students, the researchers surmised that the earlier that sense of belonging is protected from environmental threats, the more positive the outcomes. They stated that

"early threats to belonging, especially during sensitive transitions, may initiate a self-reinforcing downward spiral" (p. 480).

**Self-Affirmation Interventions.** Self-affirmation interventions have been frequently used to mitigate identity and stereotype threat and instill a sense of belonging. Self-affirmation theory is based on the premise that people are fundamentally motivated to maintain their self-integrity and self-esteem (Silverman, Logel, & Cohen, 2013). A threat to any component of one's self-esteem, such as a criticism of academic performance, may lead to rejection of negative feedback, or to attributing the poor performance to external circumstances (Silverman et al., 2013). The psychology of self-affirmation is that even simple reminders of self-worth can reduce the normal tendency to respond to threats defensively (Critcher, Dunning, & Armor, 2010). Essentially, the exercises help people "change the stories they tell themselves" (Sherman et al., 2013, p. 612). Silverman et al. (2013) explained that in self-affirmation exercises "participants reflect on intrinsically meaningful values, which bolsters self-integrity and reduces defensiveness" (p. 93). In other words, affirmations enable a person to pull back and see a challenge or stressor in a larger context, making it less psychologically threatening (Sherman et al., 2013). These small but potent acts of writing about values such as relationships, religion, or music (Cook et al., 2012) can change diverse aspects of a psychological experience over time (Sherman, 2013). In an academic environment, these exercises can help students reflect on the non-academic aspects of their self-worth, so that they will be less affected by negative feedback. Sherman (2013) discussed the benefits of

self-affirmation in terms of its ability to enhance *resources*, that is, the psychological resources that people rely on to cope with threats. Affirmations help remind people of the whole self, and other things that are important to them. This helps to mitigate the effects of an attack on a more narrow (i.e. academic) self. With academic threats being less disruptive, students are able to focus on the tasks at hand, such as studying, learning, and test-taking, as opposed to the implications of success or failure at those tasks, which leads to better academic outcomes (Sherman et al., 2013).

Studies have found that self-affirmed participants showed that their brains were more oriented towards learning activities (Legault, Al-Kihindi, & Inzlicht, 2012). Moreover, a study involving affirmed African Americans who wrote about belonging themes showed the greatest academic improvement (Schnabel et al. 2013). In a longitudinal study of the effects of value affirmations on middle school students, Cook et al. (2012) concluded that African American students benefited from affirmation because it decoupled their identities and sense of belonging from their academic performance, so that lowered performance was not as detrimental to their psychological state. Also, a study of women facing stereotype threats in science revealed that values affirmation reduced male-female performance gaps and learning differences (Miyake et al., 2010). Cook et al. (2012) posited that affirmations seem to have the greatest effect on people who are under the most threat. Their research indicated that sense of belonging and performance were decoupled most dramatically for African American students who engaged in affirmation exercises, while Caucasian students were relatively unaffected.

While affirmations do not directly cause changes in attitudes towards health behaviors, stress levels, and academic performance, they serve as catalysts to unleash useful forces that were once restrained by threat (Sherman, 2013).

**My Ability and Competence Grow with Effort**

The second mindset is connected to the belief that academic ability can improve in response to effort, rather than being fixed and out of one's control (Farrington et al., 2012). Neuroscientists now have extensive evidence of brain elasticity, or the ability for the brain to grow in response to effort. The evidence comes from studying people who have suffered major brain lesions, but who have subsequently learned to read, write, ride a bike, and master other learned activities (Boaler, 2013). What scientists know about brain plasticity has major implications for teaching, and is the basis for the concept of *growth mindset*, which is gaining popularity in the educational realm.

Much attention has been given to *growth mindset,* a phrase conceived by Dweck (2010). Growth mindset relates to one's ideas about the nature of intelligence. Approximately 40% of U.S. students display a growth mindset and 40% have a fixed mindset. The remaining 20% of students show mixed profiles (Boaler, 2013). Students with a growth mindset believe that the brain is like a muscle, and gets stronger with use. Just as with incremental theorists, students who have a growth mindset are likely to interpret challenges and mistakes as opportunities to learn and develop their brains. Students who have a growth mindset are also motivated by wanting to learn as much as they can about a subject in order to master the material (Farrington, 2013). Studies have

shown that when students are taught to have a growth mindset, they can perceive challenges as being mere *bumps in the road*, instead of reflections of their academic ability (Schechtman et al., 2013). Students who are taught growth mindset are overall more tenacious, resilient, and more successful academically (Dweck, 2010; Schechtman et al., 2013).

In contrast, students with fixed mindsets believe that intelligence is fixed and outside of their control. Like entity theorists, they are more likely to be performance oriented rather than mastery oriented. This means that they are motivated by the desire to demonstrate their intelligence. According to Farrington (2013), students who are driven by fixed mindset tend to give up quickly when success does not come easily, because they want to hide what they perceive to be substandard intelligence, or they refrain from participating in a task at all to avoid public failure. Moreover, because intelligence is believed to be stable and uncontrollable, then expending more effort is seen as futile (Hong, as cited in Aditomo, 2015). Thus, people with fixed mindset perceive an inverse relationship between effort and ability; low effort indicates high ability, while higher effort signifies lower ability (Sriram, 2010). Research has revealed that *retraining* students to attribute poor performance to effort or strategy, rather than academic ability, results in significant changes in persistence, and those changes last over time and across different domains (Farrington, 2013).

Educational systems can reinforce or undermine growth mindset. According to Boaler (2013), the United States and other countries have schooling practices that

promote a fixed mindset. Boaler provided examples of how U.S. schools group students according to ability and bombard them with messages that ability is fixed, with some students having talent and intelligence, while some do not. This is in stark contrast to the practice in many Asian countries, where education systems are based upon the idea that learning is a process resulting from effort, rather than fixed notions of ability. The author indicated that the ability grouping practices of U.S. schools are in direct opposition to empirical evidence, and initiate the harmful fixed mindsets that detract from students' ability to learn.

Teaching students to have a growth mindset has been accomplished in a number of ways and has had positive results; however, most were targeted towards middle school students. These strategies included a workshop, interactive software called *Brainology*, and a mentoring program. One intervention for college students was administered in 2002 in the form of a pen pal activity (Schechtman et al., 2013). While the effects of mindset intervention have promising implications at the postsecondary level, very little of this research has been applied to college students. However, one of the few recent studies conducted by the Carnegie Alpha Lab found that university students who received a growth mindset intervention had experienced lower course dropout rate in intermediate algebra than the control group. A particularly important observation is that the intervention resulted in better retention among Hispanic/Latino students, but not among other groups. This observation is consistent with other researchers', who found that

different sets of interventions target different mindsets and affect certain groups differently (Farrington et al., 2012).

Another recent study explored university students' mindsets, particularly related to intelligence, academic ability, effort attribution, and goal orientation. The researcher found that growth mindset about academic ability (but not about intelligence) prompted the adoption of mastery goals and effort attribution, which protected against demotivation in the face of academic setback. This protection led to better academic outcomes (Aditomo, 2015). In a rigorous study that used experimental design with random assignment, Sriram (2010) found that for academically high-risk students, participating in a mindset intervention influenced effort behaviors, but did not affect achievement. Another observation of Sriram's was that the growth mindset intervention did not significantly increase the effort of students of color when compared to the control group. Sriram offered stereotype threat as a possible cause for the disparity, suggesting that the brief intervention may not have been powerful enough to counteract years of enduring negative stereotypes.

Another study by Paunesku, Yeager, Romero, & Walton (2012) included more than 200 community college students and tested the effects of teaching students about incremental theory (growth mindset). The study involved random assignment of developmental math students to either a treatment group or control group. The control group read an article that taught about the brain, but it did not mention the potential for the brain to grow. The treatment group received the same information, with the addition

of the information about the brain's ability to grow. Students in both groups then wrote mentoring letters to future students in which they explained the key messages from the articles they read. The study revealed that the students in the treatment group withdrew from developmental math class at less than half the rate of students from the control group. Furthermore, these results were achieved several months after treatment, with no reinforcement from the teachers or instructors. Yeager and Dweck (2012) noted that the results from Paunesku at al.'s study is intriguing, considering that an intervention that took less than 30 minutes provided dramatically better results than larger developmental interventions, such as learning communities. Yeager and Dweck believed that Paunesku et al.'s intervention was effective for students because it changed the meaning of challenges from being dumb, to a way of getting smarter.

**I Can Succeed at This**

A third mindset is based on the degree to which students feel confident in their ability to succeed at a given task. Individuals tend to engage in activities where they feel confident in their ability and avoid those where they feel incompetent (Farrington et al., 2012). The extent to which students believe they are good at a task or subject is strongly related to academic perseverance. Research shows that self-efficacy and one's belief in the likelihood for success are generally more predictive of academic performance than measured ability (Farrington, 2013; Schechtman et al., 2013). When students believe that they can be successful, then they are much more likely to persevere and complete academic tasks, even when they find the work challenging or do not experience

immediate success (Farrington et al., 2012). The same affirmation exercises that are used to instill sense of belonging may be used to bolster students' confidence in their ability to succeed (Schechtman et al., 2013).

### This Work Has Value for Me

The fourth mindset involves a student having a sense that the material that he or she is learning is interesting and has personal value. Value has a variety of meanings, to include doing well on a task (attainment value); gaining enjoyment by doing a task (intrinsic value); or completing a task to meet an end or goal (utility value) (Farrington et al., 2012). Students value academic tasks that connect in some way to their lives, future careers, or interests. When students value their coursework, they are much more likely to put effort into completing it (Farrington, 2013). When goals are extrinsically motivated or unimportant to the student, setbacks and challenges can impose stress, anxiety, and distraction, leading to impacts on students' learning and psychological well-being (Schechtman et al., 2013).

Schechtman et al. (2013) recommended that when teaching unfamiliar material, instructors should engage students in activities that bridge the material with students' interests and familiar experiences. One example is for teachers to use class materials that address the social issues and concerns with which students identify, such as using rap lyrics to help students grasp complex literary concepts (Spitzer & Aronson, 2015). Essentially, teachers should help students connect the dots between the work they are doing and the purpose it serves in their lives.

Kosovich (2014) explained values intervention by referencing the work of the Carnegie Alpha Lab Research Network, which explored ways to help students see the value of math in their lives. The research showed that students who wrote an essay about how math related to their future life goals reported higher perceptions of utility value and interest, compared to the control group. Similarly, in a study of ninth graders who had low expectations of their success in science, Hulleman and Harackiewicz (2009) found that students who wrote summaries of how science applied to their lives (treatment group) experienced sizeable improvements in their grades at the end of the semester, relative to the control group. Other effective goal-setting interventions include *Mental Contrasting/Implementation Interventions*, *Possible Selves* workshops, and *Self-Authoring*, which is an online goal-setting program (Schechtman et al., 2013). The results of these interventions range from improved GPA and credit hour completion, to improved mental health.

One activity that helps students find value in their work is goal setting. Goal clarity increases persistence by making people less susceptible to the negative effects of anxiety, disappointment, and frustration (Morisano et al., 2010). As with other social-cognitive exercises, goal setting can lead to positive feedback loops, in which goal attainment increases self- efficacy, and self-efficacy leads to further goal attainment. Morisano et al. (2010) experimented with a goal setting intervention for undergraduates experiencing academic difficulty. They found that compared with the control group, students who underwent a goal-setting intervention experienced increased GPA,

reductions in self-reported negative effect, and increased likelihood of maintaining a full-time course load.

## Effective Learning Strategies

Although having a positive mindset has been shown overall to create better learning outcomes, students with positive mindsets may still perform below their potential (Dweck, Walton, & Cohen, 2011). Students need to complement positive mindset with effective learning strategies. Yeager and Dweck (2012) recommended specific learning strategies that mediate between academic mindsets and student outcomes. Those strategies include study skills, time-management skills, goal setting, help-seeking, self-regulated learning, and organization. The authors suggested that having such skills and knowing when to use them are associated with learning and academic success. Yeager (2012) found that community college math students frequently put forth great effort but use poor strategies and do not ask for help. Paunesku et al. (2012) emphasized the importance of students not relying solely on effort, but switching strategies when appropriate, and they asserted that growing one's brain comes from combining effort, good strategies, and help from others. In other words, the authors suggested that having a positive mindset and effort are not enough; students must be taught how to change strategies and seek help when they encounter challenges.

## Effects of the Learning Environment on Mindset

Psychological interventions alone do not instill a positive mindset. Researchers assert that in order to be successful, students need access to at least the basic educational

supports (Spitzer & Aronson, 2015). Tangible resources, such as time, humans, and materials, are necessary for students to overcome challenges and accomplish their goals. In addition, researchers acknowledge that family, peers, and social context may influence mindset in a way that undermines psychological interventions (Spitzer & Aronson, 2015). However, in the educational environment, the most powerful forces that impact students' mindset are at work within the classroom.

Farrington et al. (2012) cautioned practitioners to not rely solely on psychological interventions, while neglecting to tend to the larger psychological conditions embedded in the school or classroom setting. Doing so may undermine the effects of the intervention (Spitzer & Aronson, 2015). For example, the message that a student's brain can grow with effort may be undermined if the classroom setting promotes competitive, one-shot assessments of performance. Likewise, interventions that instill a sense belonging may have limited impact if teachers do not take the time to learn students' names or address their particular needs or interests. By neglecting to consider the psychological aspects of students' educational experience, teachers, administrators, and policymakers can inadvertently engage in practices and reforms that can cause irreparable harm (Farrington, 2013).

Classroom conditions powerfully impact students' feelings of belonging, self-efficacy, and valuation of school work and can also reinforce or undermine a growth mindset. The classroom conditions that have been shown to affect students' mindsets include the level of academic challenge, teacher expectations for success, student choice

and autonomy in academic work, the clarity and relevance of learning goals, availability of supports for learning, grading structures and policies, type, usefulness, and frequency of feedback on student work, and classroom norms of behavior (Farrington et al., 2012).

When attempting to change the mindset of students, it is important to realize that faculty mindset matters, too. According to Brooks, Brooks, and Goldstein (2012) “the mindsets that educators hold about the basic components of motivation and engagement will determine their expectations, teaching practices, and relationships with students” (p. 3). Brooks et al. (2012) encouraged educators to identify and modify those features of their mindset that are fixed and may work against student motivation and learning. A good start to changing one’s mindset is to reflect on ineffective teaching strategies by asking “what is it that I can do differently?” rather than waiting on the student to change first (p. 17). According to Brooks et al., asking what can be done differently should not be perceived as blaming oneself, or giving in, but rather as a source of empowerment. Brooks et al. also made a comparison between growth mindset behaviors of teacher and students, asserting that when students’ efforts are ineffective, it is recommended that they reflect on what could be done differently and change strategies. The authors argued that the same approach should be expected of teachers.

As with students, faculty can have an incremental (growth) or entity (fixed) view of intelligence, which affects their behaviors and messages they send to their students. Faculty who endorse an entity theory often try to comfort low-performing students. They may be well-intentioned and believe that they are acting in the student’s best interest, but

sometimes comforting statements and displays of empathy may be construed by students as the instructor having low confidence in them and their ability to succeed. Hence, entity comfort is not comforting at all.

Entity theorists can unknowingly inflict psychological harm on students. An experiment conducted by Rattan et al. (2012) revealed that the more that math instructors subscribed to an entity theory, the more that they perceived a students' poor grade on one test as an indicator that the student was "not smart enough in math" (p. 2). Moreover, the more that instructors endorsed an entity theory, the more that they attributed the students' low performance to lack of math intelligence as opposed to lack of sufficient effort, and this conclusion was likely to be drawn after just one low test score. These instructors were also more likely to resort to consoling the student for lack of performance, and use teaching strategies that that could reduce engagement and achievement. In summary, Rattan et al. (2012) found that implicit theories of math intelligence play a casual role in the early diagnosis of students' abilities and the teacher's subsequent pedagogical practices. Yeager and Dweck (2012) proposed a better way to provide feedback when students are not doing well, which is to help them see that they need better strategies. For example, suggesting to students that they should seek tutoring to help improve their strategies helps them perceive the instructor as having a more incremental theory of math, and gives students more confidence in their ability to improve.

**Teaching Practices that Promote Positive Mindset**

While the research demonstrates that classroom context shapes students' mindsets and that certain instructional practices lend to those mindsets, it is difficult to determine how to change classrooms on a broader scale, as there are few resources that help translate social-psychological theory into practical applications that teachers can readily use (Farrington et al., 2012). However, one can infer from the research that there are some teaching practices that are more likely promote more positive mindsets in students. First, Yeager et al. (2013) suggested that educators take the student's perspective when trying to address underperformance. The authors contended that examining teaching styles is important, but it is equally, if not more important for teachers to look beyond how they communicate material and to try to understand how students experience school. Subtle messages from teachers can affect students' mindsets. Yeager and Dweck (2012) posited that even seemingly positive behaviors, such as praise or comfort for struggling students, can lead students to adopt a more fixed, entity theory, or in the presence of stereotype threat, cause students to disengage. It is important that teachers use strategies and language in the classroom that promote a growth mindset. For example, when teaching new material, the instructor may say "let's start with an easy one," which can discourage students who struggle with the problem or get it wrong. Instead, a growth mindset approach would be to say "this may take a few tries," which may set students more at ease (Sparks, 2013).

Evaluation practices are also important influencers on mindset. Students are more likely to believe that success is possible when grading practices are transparent and

teachers explain how different assignments affect grades. Further, everyday messages that students receive about their academic performance affect their ability to maintain a growth mindset. Studies show that praising students for their effort rather than for being smart encourages endurance and a growth mindset (Spitzer & Aronson, 2015). Praising for *smartness* reflects an entity mindset and has been shown to be the most damaging to high-achieving girls. These girls have often been praised for their intellect from an early age, placing more attention on their cleverness than on their effort. The problem with fixed mindset praise is that when students fail a task, they infer that they are not smart, and they withdraw from the task (Boaler 2013).

Another important aspect of teaching is the way in which faculty treat mistakes. Research has shown that mistakes are important opportunities for learning and growth, but students routinely regard mistakes as indicators of their low ability (Boaler, 2013). Dweck, as cited in Boaler (2013), recommended that students and teachers should value mistakes and "move from viewing them as learning failure to viewing them as learning achievements" (p. 149). The strategy of *norming* struggle is effective because it not only teaches that struggle means growth, but it is also a subtle way to motivate behavior change because it fosters a sense of belonging (Yeager & Walton, 2011).

Dweck (2010) recommended that teachers illustrate the concept of growth mindset by having their students write about and share with one another something at which they used to be poor at and are now very proficient. Further, students can be taught the science behind people's potential to increase their intelligence and be shown how to

apply these insights to their own lives (Yeager & Dweck, 2012). According to Dweck, such discussions encourage students to not be ashamed of struggling to learn something new. Other recommendations include emphasizing challenge instead of success, giving students a clear sense of progress, and grading for growth. Grading for growth involves providing students with grades of "Not Yet" instead of failing grades, which lets them know that they are expected to eventually master the material. These strategies encourage focus, effort, persistence, and improvement by taking the spotlight off of fixed ability and placing it on the process of learning (Sparks, 2013).

Students perform well in environments in which teachers have high expectations (Farrington et al., 2012) and provide students with challenging but achievable tasks (Spitzer & Aronson, 2015). Setting high standards conveys the message that students are inherently capable of high achievement, which can effectively combat feelings of incompetence, especially for African Americans and other vulnerable populations (Spitzer & Aronson, 2015). Students who suffer from stereotype threat can mistrust teacher feedback, suspecting that the teacher is biased. In an effort to reduce stereotype threat, faculty often over-praise mediocre work as a way to boost students' self-esteem or to demonstrate their lack of prejudice. However, this approach can backfire, as students may perceive this well-intentioned, inflated praise as the instructor having low expectations. These perceptions may cause students to lose trust in the teacher and disengage from learning (Farrington, 2013; Yeager & Walton, 2011). Farrington (2013) asserted that critical feedback must be conveyed as reflecting a teacher's high

expectations and not his or her bias. Students must be assured that they have the potential to meet high standards, which creates an opportunity for students to accept critical feedback without attributing it to stereotyping or teacher bias. In his research, Yeager et al. (2013) found that when students were encouraged through values affirmation to see critical feedback as a sign of the teacher's high standards and the belief in their potential, students no longer perceived bias.

**Faculty Professional Development**

As the literature suggests, improving students' mindsets may be facilitated by faculty (Boaler, 2013; Brooks et al., 2012; Dweck, 2012; Dweck & Boaler, 2013; Farrington et al., 2012; Rattan et al., 2012; Sparks, 2013; Spitzer & Aronson, 2015; Yeager et al., 2013; Yeager & Walton, 2011). Considering the amount of influence that faculty have on participants at the case study site, providing the faculty with strategies that improve mindset is a potentially effective approach to addressing the problem of low persistence among underprepared, African American students. The strategies for improving students' mindset will be shared through a professional development training program for faculty at the case study site.

In general, professional development refers to the development of a person within his or her professional role (Lino, 2014). More specifically, professional development is an "intentionally designed, ongoing and systematic process that aims to enhance the individual's professional knowledge, skills and attitude so the students' learning outcomes can be improved" (Saleem, Masrur, & Afzal, 2014). At the core of faculty

development is changing the beliefs of the faculty, as one cannot focus on behavioral skills without addressing attitudes and beliefs (Saleem et al., 2014). Similarly, Zwart, Korthagen, and Attema-Noordewier (2015) posited that professional development is more effective when it connects to a person's deeper values and beliefs. This process leads to changes in mindset, which in turn leads individuals to see things from new perspectives (Saleem et al., 2014).

Faculty development can be accomplished through a variety of approaches, but most of the literature focuses on five principles: (a) building on the needs and concerns of participants, (b) practicing in authentic situations, (c) promoting individual reflection, (d) enhancing/promoting transfer, and (e) promoting engagement at the team and school level (Zwart et al., 2014). These principles provide the framework in which this project is designed. It is anticipated that by applying these principles to the training program, there will be deeper learning by faculty. In addition, the training program is expected to change faculty perspectives and result in behavior changes that lead to improved outcomes for students.

**Building on the Needs and Concerns of Participants**

Building on the needs and concerns of participants means that faculty must see congruence between their individual needs, as well as their goals for student learning, institutional goals, and the goals of the professional development (Allen & Penuel, 2014; Bayer, 2014). Closely related to goal congruency is relevance, which is important for professional development to be effective (Bernhardt, 2015). Bayar (2014) asserted that

professional development is most beneficial when teachers see the links between what they are learning and their own classroom. Bayer believed that the current paradigm of teacher development is “one-size fits all” and tends to be overly prescriptive, causing faculty to resist development efforts (p. 2). Ideally, faculty would have a role in the design, implementation, and evaluation of training to ensure that they are invested in the content and find it relevant and useful. Also, it is important to allow methods for participants to provide feedback. This may include quick surveys or faculty meetings where teachers can talk freely about their perceptions, beliefs and suggestions, as well as express whether or not they think that the development content is beneficial (Bernhardt, 2015).

**Authentic Practice**

Authentic practice involves faculty applying the professional development content in real work situations (Zwart et al., 2014). The concept of authentic practice was supported by Lisbon (2014), who proposed that professional development be a more experiential and integrated process that happens in a particular context. This represents an “ecological” model of professional development, where teachers and their work contexts influence each other (p. 202). Another important component of any effective professional development activity is the opportunity for participants to learn by doing (Bayer, 2014). Faculty should engage in hands-on and minds-on activities so that they can gain process skills, rather than just learning terminology. Further, faculty should personally experience

and witness theoretical concepts in action, so that they are able to implement them successfully when they return to their classrooms (Kazempour & Amirshokoohi, 2013).

**Individual Reflection**

The third principle is individual reflection, which promotes deep learning. Participants may reflect on work situations, their ideals and beliefs, their core qualities, and obstacles they encountered (Zwart et al., 2014). Lino (2014) claimed that "reflection on and about action is a central dimension of teachers' professional development" (p. 205). Reflection allows processing of information in order for it to be more easily contextualized and applied by the learner.

**Enhancing and Promoting Transfer of Knowledge**

Enhancing and promoting transfer of knowledge is the fourth professional development principle. Transfer of knowledge occurs when participants continuously apply what they learned in their work with their students and colleagues. This can be facilitated by participants keeping journals of their experiences and sharing them through sessions with trainers and colleagues (Lisbon, 2014). This can also take place through collaborative activities (Kazempour & Amirshokoohi, 2014) and through mentoring and coaching sessions that take place in the teacher's work environment. Effective transfer of knowledge requires time- a resource that is often lacking in professional environments. This leads to a common criticism of professional development activities, which is that they are often short-term and tend to lack the depth necessary to have a lasting impact on teaching skills (Bayar, 2014). In order to have a lasting impact on learners, professional

development must allow for long term-engagement (Bayar, 2014), or follow-up sessions as educators seek to implement their ideas (Lino, 2014).

### Engagement at the Team and Institutional Level

An effective professional development facilitator encourages learners to critically reflect on their role within the institution and how they support the institution's mission. Participants who are deeply engaged form a common language that is used to connect theory, vision, and practice. As a way to deepen commitment and engagement, participants are encouraged to publically share the learning processes that were taking place with others at the institution. This helps them form a sharper identity within the institution, and helps them critically reflect on their progress and what still needs to be achieved (Zwart et al., 2014).

## Implementation

The faculty development program will be implemented in the fall semester of 2016. The training will be organized into five sessions, for a total of 24 contact hours. It is expected that 24 contact hours will allow for in-depth review of the content, as well as sufficient opportunities for discussion, hands-on activity, group work, reflection, and information processing. Each session may accommodate up to 30 participants. There will be several offerings of each session per campus, which will make it convenient for faculty to attend. I will invite a faculty member to co-facilitate the training sessions. Involving one of their peers as a co-facilitator will increase credibility and make the faculty more receptive to the training (Bernhardt, 2015).

The sessions will be scheduled throughout the semester so that participants can practice the strategies in their classrooms and reflect on what they learned. This is an approach that is recommended in the literature (Kazempour & Amirshokoohi, 2013). Further, multiple sessions will allow for long-term engagement and successful transfer of knowledge, which are essential features of professional development (Bayar, 2014; Lino, 2014). Sessions 1 through 3 will take place during the week before classes begin, which is typically when faculty assemble for professional development activities. Session 4 will be conducted during the eighth week of the semester and the final session will take place just after the conclusion of the semester, before the faculty leave for break. Faculty will be asked to attend all five sessions.

**Training Session 1**

Training Session 1 is a full day of activities totaling 7.5 hours. The goals of the first training session are three-fold: (a) provide participants with context on the persistence of underprepared, African American students, (b) make participants aware of the impact that faculty have on students' mindsets, and (c) provide background on mindset and introduce four key mindsets that promote persistence. The first goal will be accomplished by providing background on the low retention and persistence of African American students, and how it affects the college and the local community. Next, I will share the data from the institution's African American persisters. Providing background on the problem and how it affects the institution is intended to provide relevance, which is a key component of effective professional development (Bayar, 2014; Bernhardt,

2015). The third goal involves the introduction of four academic mindsets. Based on the literature, these are (a) *I Belong in This Academic Community,* (b) *This Work Has Value for Me,* (c) *I Can Succeed at This,* and (d) *My Ability and Competence Grow with My Effort*.

Session 1 will begin with introductions, and then a discussion on ground rules, or ways in which colleagues are expected to communicate and work with each other. It is anticipated that some of the conversations and topics in the training may be controversial or sensitive in nature, and the ground rules are intended to promote an environment that is safe and comfortable for all learners. The proposed ground rules are as follows:

- Respect our colleagues' feelings and world views
- Disagree respectfully
- Address the issue; not the person
- Help create a safe place for learning and exploration

Participants may add additional ground rules as they see appropriate. Once the ground rules are agreed upon by the facilitator and participants, then the training will proceed.

The training will begin with an overview of the issue of African American persistence. The data for these students will be presented, and the problem will be further demonstrated with a discussion on the institutional impact. In addition, information will be shared about the community, state, and national implications of the problem. Finally, participants will receive some of the feedback from the study participants' interviews, and learn the conclusions that were drawn from the data. A significant portion of Session

1 is dedicated to providing context, relevance, and developing a sense of urgency in participants, which is intended to generate deeper interest in the forthcoming content.

During Session 1, participants will reflect on the material and process it through table activities and open dialogue, which are some examples of *hands-on, minds-on* activities that are suggested by Kazempour & Amirshokoohi (2013). For the second half of the session, participants will begin to explore four academic mindsets. During Session 1, participants will be introduced to the first academic mindset, which is *I Belong in this Academic Community*. Before a mindset is presented, participants will engage in brief table activities where they reflect on a set of questions that relate to the specific mindset. The questions are intended to encourage self-reflection and make the content more relevant. For the first mindset, the questions are as follows:

1) Describe a situation where you felt out of place, or like a "fish out of water." How did that feeling affect you?
2) In the situation you described, what made you (or would have made you) feel differently?

Participants will share their responses and engage in an open dialogue about sense of belonging. This conversation will provide context and a transition to the *I Belong in this Academic Community* presentation. Session 1 will conclude with a brief review of the day's activities and a preview of Session 2. Finally, participants will be encouraged to provide feedback on the training through a brief, formative evaluation (see Appendix A).

**Training Session 2**

Training Session 2 is a full day of activities totaling 7.5 hours. The goals of the second training are to: (a) provide an in-depth overview of three more mindsets that promote persistence, and (b) learn teaching strategies that promote positive mindsets in specific disciplines. Session 2 will focus on applying psychosocial theory and research in a way that is meaningful and practical for the faculty, and will take into account the faculty members' respective disciplines and classroom situations. Addressing these individual needs is important, because professional development is most effective when teachers see the links between what they are learning and their own classrooms (Bayar, 2014). Session 2 will begin with a discussion of the second mindset, which is *This Work has Value for Me*. Just like with the first mindset, *This Work has Value for Me* will be introduced using a reflection activity in which participants partner with a table mate to discuss the following questions:

1) Reflect on some activities that you enjoy. Why do you enjoy doing them?
2) Why do you enjoy teaching?
3) Describe some activities that you don't like, but that you complete anyway. What makes you complete those activities?

Participants will share their responses and engage in an open dialogue about values. This conversation will provide context and a transition to the *This Work Has Value for Me* presentation. The remaining mindsets will be presented in similar fashion to the previous ones. For the third mindset, which is *I Can Succeed at This*, the reflection questions are as follows:

1) Recall a task you attempted where you felt very confident in your ability to succeed. How did having confidence make you feel?
2) Recall a recent task that you attempted where you had little or no confidence in your ability to succeed. How did you feel when you first attempted that task?
3) What does it take to increase or decrease your confidence?

For the final mindset, which is *My Ability and Competence Grow with My Effort,* participants will be asked to partner and reflect on the following:

1) Think of something that you were once not very good at, but is easy for you to do now. When you were new at that activity, how did you feel when engaging in it?
2) How do you feel now that you can do that activity very easily?
3) What brought about those changes in your feelings?

The *My Ability and Competence Grow with My Effort* presentation will include a brief assessment (using PowerPoint) to gauge participants' mindsets. Handheld clicker devices will be used to conduct the assessment. This will allow for some anonymity among the participants, and it will keep them engaged through hands-on activity. This brief exercise is intended to make participants aware of their own theories of intelligence and how their beliefs may influence students' mindsets.

The second half of Session 2 begins the application phase of the training, where participants learn and apply specific teaching strategies that promote positive mindsets.

After all of the mindsets are presented, participants will reflect on how they have observed academic mindsets at work in their own classes. Also, they will reflect on how they may already promote or undermine the mindsets we discussed, perhaps without even knowing it. This discussion will provide a transition into the final presentation, which is *Teaching Strategies that Promote Positive Academic Mindset.* Some of the teaching strategies that will be discussed are providing positive feedback, clearly communicating expectations, maintaining high but achievable standards, grading for growth, and clarifying goals. The final activity of the day will involve participants assembling into groups by academic discipline. Faculty will work with their colleagues to determine how to promote positive mindsets in ways that are appropriate for the subjects they teach. Participants will then share their strategies with the rest of the room. This open discussion will allow participants to build on others' ideas, as well as help colleagues address specific concerns or logistical challenges. Session 2 will conclude with a brief summary of the day's content and a preview of Session 3. Participants will be encouraged to provide feedback on the training through a brief, formative evaluation (see Appendix A).

**Training Session 3**

Session 3 will be a half-day training, totaling 3.5 hours. The goal of Session 3 is to refine the work that began in Session 2. In Session 3, participants will develop action plans for how they will promote the four academic mindsets in their courses. A template will be used to facilitate this activity (see Appendix A). Next, participants will report on their action plans during an open sharing session where they may ask questions or share

observations or concerns. At the conclusion of the session, the facilitator will explain the journaling process, whereby participants will record their observations, successes, and challenges and bring them to the remaining sessions. Participants will be asked to reflect on how their action plans were implemented and address the following in their journals:

- What did I observe?
- What did I learn?
- What went well?
- What were the challenges?
- What will I adjust?
- What additional support do I need?

The process of journaling promotes deep reflection, which is another essential feature of effective professional development (Lino, 2014; Zwart et al., 2014). Participants will be asked to bring their journals with them to the Session 4 training, which will take place at mid-term. Finally, participants will be encouraged to provide feedback on the training through a brief, formative evaluation (see Appendix A).

**Training Session 4**

Session 4 will be a half-day of activities and it will take place at the mid-point of the semester. At this point in the term, it is anticipated that faculty will have had opportunity to implement their action plans, observe some results, and record them in their journals. Session 4 will be less formal than the previous ones, and will primarily serve as an outlet for faculty to share successes, address concerns, regroup, and prepare

for remainder of the term. Since two months will have passed since the previous training, it may be helpful to re-acclimate participants to the work that they have engaged in so far. Therefore, Session 4 will begin with the facilitator providing a review of the previous activities:

- Before the start of the semester, we examined persistence factors in our underprepared, African American students.
- You learned that mindset affects students' persistence, and that faculty can deeply influence students' mindsets.
- You learned four mindsets that promote persistence, and how to nurture those mindsets in the classroom.
- You developed action plans to promote mindsets in your classes and recorded your experiences through journaling.

After this brief review, participants will use their action plans and journals as a reference to engage in small group discussions and open dialogue on the following:

- What have you observed?
- What have you learned so far?
- What is going well?
- What are the challenges?
- What will you do differently next time?
- What adjustments, if any, did you make to your action plan? Why did you make those adjustments?

This discussion will allow participants to build on others' ideas, as well as help colleagues address specific concerns or logistical challenges. The facilitator will create a "parking lot," or a highly visible place to write down concerns that need further investigation or follow up. Shortly after the session ends, the facilitator will research the concerns and follow up with participants as appropriate.

Participants will be reminded to continue implementing their action plans and journaling their experiences. They will bring their journals to the final training (Session 5), which will take place in approximately eight weeks, just after the semester ends. At the conclusion of the session, participants will be encouraged to provide feedback on the training through a brief, formative evaluation (see Appendix A).

**Training Session 5**

Session 5 is the final portion of the training and will be very similar in format to Session 4. This brief, 2-hour session will take place just after the conclusion of the semester, and it is anticipated that faculty will have had opportunity to fully implement their action plans, observe the results, and record them in their journals. Like in Session 4, the goal of Session 5 is to provide an outlet for faculty to share successes and challenges; however, Session 5 will also involve participants reflecting on what they learned from their experiences and determine how they can improve their practices in future courses. Also, since the semester will have concluded, faculty will be able to review their students' retention and success data to determine if there is measurable improvement. Faculty will receive folders with data (with comparisons to previous

semesters) for the students in their courses. The data will be categorized by race and gender, and will include course pass rates and average GPAs. First-time instructors will receive anonymous, comparative data using a similar course. Through small group discussions and open dialogue, participants will be encouraged to share the following:

- What are your thoughts concerning your students' performance?
- What immeasurable outcomes have you observed, such as student attitude, motivation, engagement, or interest in the course materials?
- What challenges need to be addressed?
- Based on what you learned, how will you adjust your practices in the future?
- What can the institution do to help you continue to improve?

This discussion will allow participants to build on others' ideas, as well as help colleagues address specific concerns or logistical challenges. The facilitator will create a "parking lot," or a highly visible place to write down concerns that need further investigation or follow up. Shortly after the session ends, the facilitator will research the concerns and follow up with participants as appropriate.

At the conclusion of this final session, participants will be congratulated for their commitment and participation in the training. As a small token of appreciation, participants will be presented with certificates of completion acknowledging that they have completed the training. Finally, participants will be encouraged to complete a summative evaluation (see Appendix A) of the training and provide recommendations for improving the experience for future training participants

## Potential Resources and Existing Supports

The resources that are needed for the training are a large classroom space with round tables, a screen, and computer with PowerPoint. Photocopies of the training materials will be required, including the presentation slides, worksheets, and evaluation forms. Each participant will receive a binder. The binders will be used a way of keeping the training materials neat and organized for participants. The binders will be used throughout the training, and they are intended to be kept as a resource to participants after the training concludes. Also, reports from the Institutional Research department will be needed to provide comparative data on student retention and success rates, which will be used to measure effectiveness. Resources should also be dedicated to faculty compensation, which will be discussed in more detail in the Potential Barriers section.

Political and administrative support from institutional leadership will also be required. Faculty leaders from the union and senate will be important allies in encouraging their colleagues to participate. Also, the presidents, deans, and associate deans, to whom the faculty report, must endorse the training program as a worthwhile activity and provide the logistical and administrative support for faculty to be able to participate.

## Potential Barriers

The time and expense associated with the 24-hour training program will be major barriers. First, the amount of lead time required may be an issue. The institution's budgets are prepared in the spring, so the training program would need to be factored into

the institutional budget no later than March of 2016. Furthermore, faculty plan their service activities as much as six months ahead, so the training will have to be available as an option to them well before it is actually delivered. Also, as with most development activities, compensation for time is an important consideration. The institution has several methods for compensating faculty; these include stipends, release time, and service credits. Any one of these options is feasible; however, it is acknowledged that compensating faculty for 24 hours of training time will have significant budget implications.

Another potential barrier is securing earnest participation from the faculty. The study findings revealed that faculty played a significant role in encouraging students, thereby supporting their retention and persistence. One could infer that there are also instances where faculty may have had the opposite effect on students, resulting in them leaving the institution. Both of these phenomena were discussed in the study findings. The proposal of faculty training as a way to improve student outcomes, particularly for a specific racial group, must be approached with great care and will require the proper framing. The issues around the faculty’s impact on student persistence must be presented tactfully and in a way that will minimize defensiveness and resentment, which could cause resistance to participate in the training program.

**Proposal for Implementation and Timetable**

The proposal for the training will be presented to administrators and faculty union and senate leaders in early spring, 2016. As discussed, these leaders will help garner

participation from the faculty. The training will be promoted to the faculty in the late spring of 2016. Training sessions 1 through 3 will take place in August of 2016, just before the fall semester begins. Session 4 will take place at midterm and Session 5 will take place at the end of the semester (December, 2016). A second round of training for a new group of faculty will begin in January, 2017. In June of 2017, a meeting will take place with administration and faculty leaders to review the evaluations and student success data and determine the future of the training program.

**Roles and Responsibilities of Student and Others**

In my role as researcher, I will be responsible for sharing the study findings and the training proposal with key leaders and administrators. A faculty co-facilitator and I will be responsible for presenting the trainings. Full-time faculty who teach developmental courses, and other faculty, if feasible, will be the training participants. The faculty will be active learners, participating in all five sessions of the training, applying the concepts in their classes, and journaling their experiences. Finally, the faculty will be responsible for continuously improving their techniques and applying what they learned to each successive course. Division chairs, deans, associate deans, campus presidents, faculty union leaders, and faculty senate leaders will promote the training program and encourage faculty to participate. Administrative personnel in the associate deans' offices will manage the logistics of faculty registration, compensation, and release time. The key stakeholders for the project are college administration, who manage the institution's

resources, the faculty, who will be the recipients of the training, and the students, who are expected to benefit from improved interactions with the faculty.

## Project Evaluation

Evaluations will be conducted at various points in the training process. Evaluation is the systematic collection of information about a program that enables stakeholders to better understand the program, improve its effectiveness, and/or make decisions about future programming (Innovation Network, Inc., n.d., p. 3). Bernhardt (2015) asserted that faculty should have the opportunity to evaluate development programs to ensure that they are invested in the content and find it useful. Accordingly, faculty will be asked to evaluate each training by way of a brief, written survey (see Appendix A). In addition, the faculty will complete a summative evaluation after the final training session (see Appendix A). Where appropriate, evaluation questions will be based on the Likert scale, while others will be open-ended. The questions for both the summative and formative evaluations will be framed by the faculty development research that was discussed in the literature review. Specifically, the questions will investigate whether or not participants' needs and concerns were met (Bayar, 2014; Bernhardt, 2015), if there were opportunities to engage in authentic practice (Bayar, 2014; Kazempour & Amirshokoohi, 2013; Zwart et al., 2014), deep reflection (Lino, 2014; Zwart et al., 2014), and collaborative activities (Kazempour & Amirshokoohi, 2013). Finally, the evaluation will determine if participants felt that the training led to changes in their perspectives (Saleem et al., 2014; Zwart et al., 2015).

The formative evaluations that will be completed at the end of Sessions 1 through 4 will be used to make adjustments to the delivery of the successive training sessions. The summative evaluation, which will be administered after the final training, will be used to determine the strengths, limitations, and overall effectiveness of the training. The evaluation feedback, along with comparative student success and retention data (provided by the Institutional Research department), will help determine if the training should be extended, enhanced, revamped, or discontinued. The meeting with administration to review the evaluation and success data and determine the future of the training program will take place in June of 2017, at which time, two cycles of the training will have occurred. This will allow sufficient time to collect data and gauge the effectiveness of the training.

## Implications Including Social Change

This project addressed the problem of the low persistence of underprepared, African American students at a Midwest community college. The study findings provided the rationale and basis for the professional development training, since participants indicated that faculty had enormous impact on their attitudes and decisions to persist. It is anticipated that by equipping faculty with strategies to provide more positive and consistent impact on students' attitudes, it will lead to improved academic outcomes. Since over one-third of the case study site's student population is African American, and nearly all of them enter the institution underprepared, this project has enormous potential to improve the institution's overall effectiveness and economic stability. As discussed in

Section 1 of this project study, the case study site is operating under a performance-based funding model that makes it imperative to retain and graduate this large and highly vulnerable population.

This project also has implications for the local community. The college serves a high-need community in which large numbers of African Americans lack the education and skills needed to earn a living wage, which leads to poverty and limited opportunities for social mobility. If the college can improve the retention, persistence, and graduation rates for African American students, then it will improve the circumstances for a significant portion of the community, thus fulfilling the institution's mission. In the larger context, low persistence of underprepared, African Americans is a persistent and pervasive issue that affects many community colleges. If this project is successful, then it may serve as a model for other community colleges to improve outcomes for this high-risk population.

## Conclusion

This section described the rationale, goals, implementation, and logistical concerns for the culminating project, which is a 24-hour faculty development training program. A literature review was conducted to provide the background and framework to develop rich, relevant content and ensure the most effective presentation for the training. The resulting project is intended to meet the following goals: (a) provide participants with context on the persistence of underprepared, African American students, (b) provide background on mindset and introduce four key mindsets that promote persistence, (c)

develop action plans for faculty that will promote the four key mindsets in their courses, and (d) share successes, address concerns, and prepare for future courses.

Time and financial resources were discussed as potential barriers, in addition to the potential resistance to the training from faculty. The evaluation plan for the project was also discussed, which will involve using summative data, formative data, and measurable student performance data as ways to indicate the effectiveness of the project. These data will be considered in decisions to extend, enhance, revamp, or discontinue the training. Finally, the implications of the project were presented, the most impactful being the potential to create positive social change for African Americans in the local community and across the community college sector. The next section of this study will discuss the project's strengths and limitations, as well as my reflections, conclusions, and recommendations for future research.

# Section 4: Reflections and Conclusions

## Introduction

Section 4 consists of my reflections and the conclusion of the study. In this section, the project's strengths are discussed and potential solutions are offered to address its limitations. In addition, I share my thoughts on how this project has allowed me to grow as a scholar, leader, and community college practitioner. This section concludes with a discussion of the project's impact on social change, and provides recommendations for future research that may build on this important work.

## Project Strengths

The strength of this project is its ability to address the problem that was identified in Section 1. The case study site serves a large proportion of underprepared, African American students who experience poor persistence and graduation rates. From the research on persisters, it was concluded that the primary reason that students stay in school (as opposed to dropping out) is because of attitude, or *mindset*- a term commonly used by social psychologists. The findings also revealed that student mindset could be made more positive or negative through faculty interactions. The project addresses the case study problem by providing faculty with strategies to improve students' mindsets, thereby improving students' academic behaviors and performance.

Another strength is the project's alignment with institutional structure and culture. Professional development is a highly valued practice at the institution, and it has been the primary method of improving institutional performance. About 75% of the training will

occur prior to the start of the term, a period when faculty typically engage in professional development activities, so there would be minimal disruption to teaching schedules. The project is designed so that it can be easily adapted to and implemented in the college's existing system.

Finally, the project is well-grounded in research. Sharing the background and implications of the problem, as discussed in Section 1, is expected to provide context and develop a sense of urgency in participants. Further, the research findings that will be shared from Section 2 will provide relevance and credibility. The project is designed around five principles of effective development, as identified in the literature, and the training content is based on an extensive review of timely and relevant research. Thus, the project is expected to be highly informative, engaging, and create a positive change in faculty perspectives and behaviors.

## Recommendations for Remediation of Limitations

One limitation of the project is the amount of time that is required for the training program. Twenty-four hours of training can be very costly, especially if it involves large numbers of faculty. Ideally, all faculty should participate in the training, as they have extensive exposure to and extensive impact on the target population. However, giving training priority to full-time faculty who teach developmental courses may be the most practical, economical, and effective way to address the problem at the case study site. Also, having full-time faculty participation (as opposed to adjuncts) may increase the probability that the training will have a more lasting impact on the institution.

Another limitation is the potential for faculty resistance. As discussed in the Potential Barriers section, proposing a faculty training as a way to improve student outcomes, particularly for a specific racial group, could lead to defensiveness and resentment. As a way to mitigate these risks, I will engage in early and frequent discussions with faculty leaders and other influential stakeholders to garner their support for the training program and help ensure that it is embraced by the faculty.

## Alternative Approaches to Addressing the Problem

In an attempt to address the research problem, I proposed changing students' mindsets as way to improve their academic behaviors, performance, and persistence. An alternative way of viewing this proposal is that it seeks to change *faculty* mindset as a way of improving student persistence. Either perspective lends itself to the desired outcome, which is to increase the persistence of underprepared, African American students at the case study site. A faculty training program is just one of many approaches that could improve outcomes for these students.

Since the data revealed that students' attitudes are impacted by numerous factors, there are a number of projects that could address the problem at the case study site. One approach would be to craft a detailed list of recommendations for policies and practices that promote more positive attitudes in students. These recommendations could include enhancing the recruitment and onboarding processes, changing the language in written communication, and improving the written and verbal interactions between the students and faculty, staff, and administration. An example would be to revise the college's

communication to academic probation students. The letter could be enhanced with messages that encourage growth mindset and sense of belonging, which may encourage more productive academic behaviors. Another approach would be to revise the college's First Year Experience program, which includes new student orientation, new student convocation, a student success course, and peer mentoring. This comprehensive system of onboarding presents a plethora of opportunities to mold the mindsets of new students and set them on an early path to success. A third approach would be to extend the conversations around mindset to the entire institution. Although commuter students' college experiences happen primarily in the classroom, there are numerous interactions that occur outside of class that may influence their mindsets. The participants in this study mentioned tutors, counselors, advisors, staff, and administrators who impacted them in significant ways; therefore, enhancing students' co-curricular experiences may be a worthwhile endeavor. All of the aforementioned approaches would positively affect significant numbers of students.

## Scholarship

The most important things that this project study taught me are discipline and patience. Returning to school after over a decade, and having to juggle a demanding job and the responsibilities of family were major challenges. I learned very quickly to follow the advice that I often give to my first-year students, which is to get organized, establish a routine, develop a plan, and follow it. These strategies have served me well throughout this journey, but especially while writing this project study.

Identifying my research topic was the most challenging part of this process. Just 18 months ago, I was struggling to narrow down a topic. There was so much to explore and so many problems to address. I was interested in pursuing a topic unrelated to my professional field because I wanted to reduce my biases, as well as challenge myself to take on an issue that was outside of my experience. The topic came to me one day after sitting in a presentation by the Institutional Research department at my college. We reviewed the data on hundreds of students (mostly African American) who had recently departed the college, many within a year of entry. I was disheartened by the problem, but I was also motivated to help solve it. Most of the students repeatedly failed developmental education courses, and I presumed that they either gave up and left, or that they were dismissed for poor performance. I was determined to find out the issue and improve the outcomes for these students.

The process of interviewing participants taught me to be a better listener and communicator. Recording the field notes was very helpful, as it reminded me that communication is more than verbal exchanges. I observed many communications that were not spoken, such as facial expressions and posture. This process also made me more aware of my communication habits. I noticed that I tend to interrupt when people are talking, or I get distracted by trying to think of what I will say next. The interview process disciplined me to give my full attention to the people with whom I am speaking and to let them express their entire thought, even if they take time to pause.

The data analysis process was another exercise in discipline. In order to provide an accurate analysis of the data, I had to suspend my biases and expectations of what the data would reveal. The member checks and peer debriefer sessions helped tremendously with this effort. Because of these steps to ensure credibility, I am confident that my analysis is an authentic and accurate representation of the data.

## Growth as a Scholar, Practitioner, and Leader

This doctoral journey has transformed me and renewed my passion for writing, teaching, and lifelong learning. My coursework challenged me to think critically about the purpose of higher education, my institution's role in the higher education landscape, and my contributions as a practitioner. Also, thanks to the guidance of my professors, my writing has improved a great deal, which has increased my confidence to write for journals and to share this research more broadly. This project study, in particular, has helped me develop my skills in brainstorming, drafting, refining my ideas, and writing clearly. As a result of this program, I am better able to discern scholarly research and engage in scholarly conversations with other higher education practitioners. Also, I have developed friendships and mentoring relationships with classmates that will hopefully extend well beyond this program. Those connections have enriched my educational, professional, and personal life.

The most promising transformation has been in how I approach my professional work. This project has presented a tremendous opportunity to address a pervasive problem at my institution. My research has generated great interest, and has given me

opportunities to provide insight into this phenomenon to audiences at the highest levels of the institution. Further, I expect that my research will be shared across the community college sector, which is an exciting opportunity that I am grateful to Walden for providing. This project study has also helped me improve my teaching. My interviews with students gave me a new perspective on how their interactions with the institution shape their attitudes and subsequent performance. Reflecting on those conversations, and even reviewing the transcripts have helped me improve my instructional techniques and how I design educational programs. Based on my research, I have made adjustments to our new student convocation program and my First Year Experience course. As a result, I have observed more positive attitudes in students, and their satisfaction surveys have improved immensely. This study has provided me with a foundation on which to improve academic outcomes and create positive social change for my students.

## Growth as a Project Developer

Implementing a project of this type and magnitude will be a demonstration of my leadership skills. The potential barriers that were discussed, such as faculty resistance, will require me to draw upon my emotional intelligence, political aptitude, and negotiation skills- competencies that were discussed throughout this program. Outlining the potential barriers and addressing the limitations was a useful exercise. I feel more prepared to propose my project, and having acknowledged the potential concerns and roadblocks will help ensure that the project is implemented successfully.

Utility was a primary consideration when developing this project. As a professional who has participated in numerous trainings, I appreciate the importance of having content that is useful and relevant to my everyday work. The training program was designed to be informative and useful, but also fun and engaging. Also, recognizing that faculty have very unique needs, the training program content and methodology is grounded in faculty professional development research. The goal is for the faculty who participate in this training to gain practical tools, strategies, and have their journals and training notes as resources to help them apply positive mindset strategies in their classrooms. Also, since participant feedback is important, faculty will have the opportunity to provide both formative and summative feedback throughout the training process. I look forward to reviewing their comments, learning from them, and adjusting the training delivery as appropriate.

If this project is successful, the impact will be immense. It will transform faculty perspectives about students' abilities to learn and grow, as well as transform their teaching strategies. For students, these changes are expected to lead to more positive attitudes, increased confidence, and increased will to persist.

Working on this project was a deeply humbling experience, and it has made me better appreciate my role as a teacher and professional. I am privileged to have glimpsed into the lives and the experiences of the participants in this study. They gave me renewed inspiration and hope for the work that my colleagues and I do every day. At first, I was overwhelmed by the thought of completing such an extensive project. It was a

painstaking process, but I am appreciative of the intellectual effort and integrity that went into it. The result is a project of which I am extremely proud, and now I can use my leadership role within the institution to lend expertise and insight into the persistence of underprepared, African American students.

## Project's Potential Impact on Social Change

This project can potentially impact social change in a number of ways. First, the project is intended to instill more positive mindsets in the faculty. Having more faculty who adopt a growth-oriented mindset can have tremendous impact on students. Faculty will have more positive interactions with students, provide better coaching and feedback, and encourage students to continue to develop and persist, even if they enter the institution with skill deficits. The findings from this study demonstrate that the students who have benefited from these kinds of experiences with faculty were more motivated to persist. Further, increased student persistence, and consequently, increased graduation rates, will improve the performance and fiscal health of the institution. Retaining and graduating more underprepared, African American students will also help the institution advance its mission to improve the quality of life in the local community. Finally, since the persistence of underprepared, African American students is a pervasive issue in the community college sector, I expect that other institutions may use this training as a model to improve outcomes at their sites.

## Implications, Applications, and Directions for Future Research

When I began researching underprepared, African American persistence in community colleges, there very few studies on this topic. There was a great deal of research on persistence of four-year students, African American males, and community college students in general, but few studies examined the particular phenomenon in this study. Two of the most obvious gaps in the research involve the persistence of African American women and persistence of underprepared community college students. These topics need further exploration, especially since these populations of students are quickly growing in higher education.  The literature review also revealed that persistence factors vary depending on context, which means that institutional type, race, gender, and other variables may affect students' persistence. This presents opportunities to investigate persistence using different combinations of variables. Such variations were evident in this study's findings, which showed slight differences in students' persistence factors, and those appeared to be related to age and gender. Isolating those variables in future studies may be worthwhile, as one may find that in addition to faculty influence, other factors may be more or less impactful for certain sub-groups of students.

The project for this study may be adapted and applied to other community college settings, but K-12 and four-year institutions may benefit as well. Most of the research on mindset has been conducted in the K-12 realm, so this project is a natural fit for faculty in that sector. Further, since community college students' experiences with institutions extend beyond the classroom, it may be useful to adapt this project to other college

personnel, such as advisors, front-line staff, and administrators. Their interactions with students may be improved to promote more positive mindsets and encourage persistence.

## Conclusion

This final section of the project study outlined project strengths and provided suggestions for addressing the project's limitations. This section also discussed the ways in which this project study promoted my growth as scholar-practitioner and leader. Additionally, an explanation was provided concerning the project's potential impact on social change and its application in other contexts. Finally, there was a discussion of the gaps in research on the study topic and the recommendations for future study.

This project study sought to address the research problem, which is the low persistence of underprepared, African American students at the case study site. The study findings revealed that mindset was the primary factor in students' persistence, and that students' mindsets were deeply influenced by their faculty. The culminating project, a faculty training program, is intended to provide faculty with tools and strategies to instill more positive mindsets in students and encourage their persistence. Given the powerful influence that faculty have within the institution, this project has the potential to provide extensive and long-term impact on the case study site.

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Appendix A: The Project

# Promoting Positive Mindsets in Underprepared, African American Students Faculty Training Session 1 (7.5 hrs.)

Facilitator: Denise McCory
Co-Facilitator: Faculty Member

## Learner Objectives

At the conclusion of Session 1, faculty will:

- Recognize the implications of poor persistence in underprepared, African American students
- Recognize the factors that influence persistence of underprepared, African Americans at the institution
- Recognize the ways that mindset affects students' persistence
- Recognize the ways that faculty influence mindset
- Identify key mindsets can affect student persistence

## Training Resources and Materials

- Large classroom with round table seating for 30 (6 seats per table)
- Screen and computer with PowerPoint
- White board with dry erase markers
- Flip chart paper with sticky backing (6 flip charts)
- 30 1-inch binders with 5 tabs (one tab for each training session)
- 30 copies of agenda (3-hole punched for insertion in binder)
- 30 handouts of PowerPoint slides (3-hole punched for insertion in binder)
- 30 evaluation forms
- 30 notepads (3-hole punched)

## Agenda

- Welcome, Introductions, and Training Overview
- Presentation on Persistence of Underprepared, African American Students
- Table Discussion
- Report-Out and Open Dialogue
- Break
- Factors That Help Students Persist
- Lunch
- Table Discussion
- Report-Out and Open Dialogue

- Introduction to Mindset
- Reflection Activity
- Mindset #1- “I Belong in This Academic Community”
- Brief Review of the Day / Preview of Session 2
- Evaluation

| Session 1 Lesson Plan | |
|---|---|
| 8:30 am to 9:00 am | **Welcome, Introductions, and Review Agenda, and Discuss Ground Rules**<br><br>Review housekeeping items and start introductions. Participants will introduce themselves by providing the following:<br>• Name<br>• Subjects taught<br>• Length of time teaching at institution<br>• What interests you in this training<br><br>Discuss the ground rules that will be applied throughout the training:<br>▪ Respect our colleagues' feelings and world views<br>▪ Disagree respectfully<br>▪ Address the issue; not the person<br>▪ Help create a safe place for learning and exploration |
| 9:00 am to 9:30 am | **Presentation of the Persistence Problem and Implications (PowerPoint Slides 4-14)** |
| 9:30 am to 9:50 am | **Table Discussion**<br><br>Each table will identify one person be the scribe and one to be the reporter. On separate sheets, participants will respond to the following questions:<br>1) What have you observed in your own classrooms concerning persistence of underprepared, African American students?<br>2) What do you perceive to be the cause of student attrition? |
| 9:50 am to 10:20 am | **Report-Out and Open Dialogue**<br><br>When they complete the discussion activity, groups will post their flip chart sheets on the walls around the room. The reporter from each table will reference his group's sheets, and share the group's observations and conclusions. |
| 10:20 am to 10:35 am | **Break** |

| | |
|---|---|
| 10:35 am to 12:00 pm | **Persistence Factors for Successful Students (PowerPoint Slides 15-33)** |
| 12:00 pm to 1:00 pm | **Lunch** |
| 1:00 pm to 1:30 pm | **Table Discussion**<br><br>Each table will identify one person to be the reporter. Groups will discuss the following:<br>1) What are your thoughts about the factors that cause persistence in our underprepared, African American students?<br>2) How do these factors align or conflict with the observations and conclusions that you discussed earlier?<br>3) What evidence have you seen of these persistence factors in your own classes? |
| 1:30 pm to 2:00 pm | **Report-out and Open Dialogue**<br><br>The reporter from each table will share his or her group's responses to the prompts. Facilitate open discussion about the groups' responses. |
| 2:00 pm to 2:15 pm | **Break** |
| 2:15 pm to 3:15 pm | **Introduction to Mindset (PowerPoint Slides 34-50)** |
| 3:15 pm to 3:35 pm | **Reflection Activity**<br><br>Encourage participants to work with a partner at their tables to answer the following questions:<br>1) Describe a situation where you felt out of place, or like a "fish out of water." How did that feeling affect you?<br>2) In the situation you described, what made you (or what would have made you) feel differently?<br><br>Invite 3 or 4 participants to share their responses. Facilitate an open dialogue among participants and segue into the presentation on "I Belong in This Academic Community." |
| 3:35 pm to 4:15 pm | **Mindset #1- "I Belong in This Academic Community" (PowerPoint Slides 52-61)** |
| 4:15 pm to 4:30 pm | **Review Today's Content / Preview Session 2** |

| | |
|---|---|
| | Remind participants to bring binder to Session 2 |
| 4:30 pm to 5:00 pm | **Complete Formative Evaluation** |

Session 1 Training PowerPoint, Slides 1-2

# Promoting Positive Mindsets in Underprepared, African-American Students

## Training Session 1

Facilitator: Denise McCory

1

## Ground Rules

- Respect our colleagues' feelings and world views
- Disagree respectfully
- Address the issue; not the person
- Help create a safe place for learning and exploration

2

Session 1 Training PowerPoint, Slides 3-4

## Objectives

- Recognize the effects and implications of underprepared, African-American students
- Recognize the top factors that influence persistence of underprepared, African-American students at this institution
- Recognize the ways that mindset affects students' persistence
- Recognize the ways that faculty influence mindset
- Identify key mindsets that can affect student persistence

3

## Part I: African-American Persistence Problem and Implications

4

Session 1 Training PowerPoint, Slides 5-6

## How Are We Performing?

- Fall to spring retention rate lingers around 67%; Fall to fall retention is 44%
- College has a 4% graduation rate- well below national average for 2-year colleges
- Average full-time student takes 6 years to graduate

5

## Poor Persistence in Developmental Ed.

- Over 80% of students test into developmental math or English
- Less than 50% of incoming students enrolled in dev. ed. persist to next year
- Outlook is bleak for remedial students; nearly half will never complete
- Attaining a degree is highly unlikely for remedial students

6

Session 1 Training PowerPoint, Slides 7-8

## Performance of African-American Students

- African-Americans are overrepresented in developmental education; they represent 30% of enrollment, but 40% or developmental education program.
- Attrition of African-American students in remedial courses can be as high as 70%
- African-American students are less successful than White students in:
  - Completion of developmental courses (47% and 67%, respectively)
  - Year to year retention (41% and 50%, respectively)
  - Three-year graduation rate (2% and 7%, respectively)

7

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7

Session 1 Training PowerPoint, Slides 9-10

# National Impact

- Racial diversity is increasing; African-Americans will make up 15% of U.S. population by 2050.
- African-Americans represent a significant portion of the nation who need skill development

9

# State Impact

- Half of state residents who enter college fail to earn a degree
- State faces potentially devastating skills gap; we rank 38th in country for degree attainment
- Colleges and universities will need to increase graduates by 10% annually to meet workforce demands for 2018

10

Session 1 Training PowerPoint, Slides 11-12

## Local Impact

- Number of under skilled and undereducated citizens is disproportionality high in surrounding community
- Number of college graduates in our community is only one-fourth of national average
- Local city has 35% poverty rate

11

## Institutional Impact

- High default rate of 23% puts Title IV funding at risk
- Performance-based funding model affects economic stability
- College may not meet national Completion Agenda mandate
- Ability to fulfill institutional mission is at risk

12

Session 1 Training PowerPoint, Slides 13-14

## Impact on African-Americans

- African-Americans have lowest median income in the state
- 1 in 3 African-Americans in the state lives at or below the poverty level
- In the state, unemployment rate for African-Americans is 4 times the national average

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## Impact on African-Americans

- Only 27% or African-American, community college students complete a degree or certificate, in 6 years compared to average of 36%
- College graduation rates for African-Americans has remained virtually unchanged for the last 25 years
- U.S. unemployment rate for African-Americans is more than twice that of Whites

14

Session 1 Training PowerPoint, Slides 15-16

# Part II:
# Persistence Factors for Successful Students

15

## A Study of Successful Students

- Interviewed 20 African-American students who completed dev. ed. in 2 years or less
- Participants attend the West, East, and Metro campuses
- Ninety percent placed into developmental math
- Sixty percent placed into developmental English
- Fifty percent needed both math and English remediation
- All participants needed at least two levels of remediation in a subject

16

Session 1 Training PowerPoint, Slides 17-18

## Research Question

What psychosocial (non-cognitive) factors led to students' persistence?

17

## What I Learned

The following factors influence our African-American students' persistence:

- Finding a degree useful or necessary
- Wanting to set an example or not let others down
- Having clear goals and plans
- Attitude
- Supportive internal and external relationships
- Supportive institutional environment
- Negative stereotypes

18

Session 1 Training PowerPoint, Slides 19-20

## Most Influential Factors in AA Persistence

1) Students' Attitudes
2) Faculty

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## Factor #1- Attitude

*Attitude* is organized into 5 categories:

- Love of learning
- Attitude towards developmental education
- Confidence
- Approach to challenges
- Commitment to excellence

20

Session 1 Training PowerPoint, Slides 21-22

# Love of Learning

- Love of learning involves having an inquisitive nature, as well as appreciating new and different perspectives
- Participants embraced differences and enjoyed learning new things, so the educational environment energized and motivated them to persist

*"There are all kinds of people here. Once you get to know them, you start to understand their culture and try to compare it with yours. I like that." – AL6624*

21

# Attitude Towards Developmental Education

- Remediation was viewed as a means to an end
- Many were surprised and disappointed by placement level
- Regardless of initial perceptions, students ultimately accepted the courses as unavoidable steps to degree completion
- Approached developmental courses with the same dedication as they had in their college-level classes

*"I just figured that it was something I had to do to get where I needed to be. So I thought "get over it and get through it" -RS8325*

22

Session 1 Training PowerPoint, Slides 23-24

## Confidence

- Students entered developmental courses with varying degrees of confidence
- Some confidence was innate; others came by way of personal interactions, mostly with faculty

*"I thought I wasn't going to be able to do it because I was older, but my instructor said 'yes you can- you're going to do this.'"- AL6624*

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## Approach to Challenges

- Demonstrated adaptability, resilience, and tenacity
- Challenges included death of a loved one, transportation issues, academic difficulties, and disabilities
- Six students failed a developmental course at least once, but immediately repeated it
- Did not dwell on mishaps
- Learned from mistakes

*"A challenge is just another thing you have to get over. I'm not going to let it break me."- VL5014*

24

Session 1 Training PowerPoint, Slides 25-26

# Approach to Challenges

- Attributed their resilience to attitude and mindset
- Believed that challenges could be overcome with will and mental fortitude
- Viewed challenges as temporary setbacks; improvement was within their control
- Did not assign blame to others for failures
- Hated failure; quitting was not an option

*"I don't glorify my struggles. I glorify my successes." –LN5828*

25

# Commitment to Excellence

- Students exercised discipline and awareness of successful habits
- Concerned with avoiding procrastination
- Sacrificed time, sleep, relationships, and recreation

*"I don't understand when people say 'All I need is a 'C.' I couldn't be farther from that. You're already putting a celling on yourself."- EC3382*

26

Session 1 Training PowerPoint, Slides 27-28

# Factor #2- Faculty

- Faculty influence is evident across all persistence factors
- Faculty were often credited with helping students persist
- Best teachers described as approachable, available and willing to help outside of class
- Faculty were the primary resource for students when they struggled with course material
- Faculty served as mentors and guides

*"My English teacher did a great job. She cared about her students and made sure they knew what they were doing. If you had any issues, you could call her at any time and she would help you. Without her, I don't know where I would be" – AL6624*

27

# Factor #2- Faculty

- Students recalled having both positive and negative experiences with faculty
- Students with negative experiences said they persisted in spite of unsupportive faculty

*"I ran across a couple of teachers who were not willing to help students. You email them and they never email you back, and that's very unprofessional. That's probably why students fail. It's not fair" – CB1770*

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Session 1 Training PowerPoint, Slides 29-30

## Faculty are Powerful Motivators

Faculty are powerful conduits for stimulating student's motivation to learn

(Afzal et al., 2010; Kamarraju, et al., 2010)

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## Evidence in the Literature

- Faculty serve as cultural agents to help students persist (Museus & Quaye, 2009; Walker, et al., 2010)
- Faculty encouragement is a powerful predictor of academic self-concept among AA students (Cole, 2007)
- Faculty mentoring has been shown to be relatively more important that peer support, especially for minorities (Harmon, 2013)
- Positive faculty interaction could help recruit, retain and promote academic achievement of African-American students and other students of color (Cole, 2007)

30

Session 1 Training PowerPoint, Slides 31-32

# Evidence in the Literature

- Effective faculty are understanding, respectful, encouraging, and accessible (Deil-Amen, 2011)
- AA students may be particularly sensitive to certain teaching styles, responding more positively to some styles and less to others (Harper & Hurtado, 2007; Swail, 2003)
- Students of color benefit from faculty who refrain from criticism and use growth mindset strategies to boost students' self-confidence (Cole, 2007)
- African-American students perceive supportive faculty as going above and beyond their duties, enhancing students' psychosocial and emotional development (Palmer, 2009)

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# Evidence in the Literature

- Faculty should provide a safe environment for students to ask questions without risk of embarrassment. This important for underprepared AA students who may suffers from feelings of inadequacy of lack of confidence (Sandoval-Lucero et al., 2014)

*"I had teachers who talked to students like toddlers, or didn't talk to them at all." – KC1558*

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Session 1 Training PowerPoint, Slides 33-34

## Faculty are Instrumental in African-American Students' Persistence

Faculty interaction is perhaps the most significant factor in minority student retention (Grimes, 1997)

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## Part III: Introduction to Mindset

34

Session 1 Training PowerPoint, Slides 35-36

# Background on Mindset

- In social psychology, *mindset* is often used as a proxy for attitude
- Mindsets are how students frame themselves as learners, their learning environment, and their relationship to the learning environment
- Mindsets are beliefs, attitudes, dispositions, values, and ways of perceiving oneself, and these beliefs and assumptions about ourselves guide our behaviors
- Empirical research on mindset is limited, but has promising implications for community colleges

*"I think the thing that holds most students back is mindset, not the lack of knowledge" – EC3383*

35

# Implicit Theories of Intelligence

- Mindset is grounded in implicit theories of intelligence
- Implicit theories are core assumptions about the malleability of personal qualities, including intelligence
- These theories influence how people respond to challenging situations
- Implicit theories affect mental health, life satisfaction, sense of purposes, and enjoyment of work or school
- People can vary in their implicit theories, ranging from having an entity (fixed) to incremental (growth) theory

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Session 1 Training PowerPoint, Slides 37-38

# Entity Theorists

- Believe that intelligence is fixed and unchangeable
- Are more oriented toward diagnosing peoples' stable traits, often from preliminary information
- Believe that everything is a measure of their abilities, including challenges, effort, and setbacks
- Believe that the world is full of threats and defenses

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# Incremental Theorists

- Believe that intellect can be grown or developed over time
- See setbacks as a result of poor effort or strategy, as opposed to ability
- View challenges as a way to help them grow

*"When I failed, I was really scared at first and then I said, 'I can't believe I did this bad.' But then I thought 'next time I'm going to study, focus and put a lot of hours into it.'"-CT0708*

38

Session 1 Training PowerPoint, Slides 39-40

# Impact of Mindset on Academic Behavior

- Student attitudes, beliefs, and dispositions determine the level at which they engage in academic behaviors and utilize strategies that help them learn
- Positive academic mindsets motivate students to persist at schoolwork, which manifests itself through better academic behaviors

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# Mindsets are Malleable

- Mindsets are shaped by context and can be changed through psychological interventions
- The goal of mindset interventions are to help students:
    - Perceive the teacher as supportive
    - Believe that whether they learn is primarily based on their own motivation, persistence and effort
    - Recognize that making mistakes and not immediately grasping material are expected parts of the learning process

40

Session 1 Training PowerPoint, Slides 41-42

## Changes to Environment Affect Mindset

- Difficulty adjusting to a new academic environment can lead to academic underachievement
- Without proper intervention, a reinforcing loop can form between subpar school performance and decreased motivation, ultimately leading to school departure
- African-American students may be more vulnerable because they face particular challenges of stress, limited support, lack of critical resources, psychological disempowerment, and disenfranchisement

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## Impact of Mindset on Academic Behavior

"When a student feels a sense of belonging in a classroom community, believes that effort will increase ability and competence, believes that success is possible and within his or her control, and sees school work as interesting or relevant to his or her life, the student is much more likely to persist at academic tasks despite setbacks and to exhibit the kinds of academic behaviors that lead to learning and school success. Conversely, when students feel as though they do not belong, are not smart enough, will not be able to succeed, or cannot find relevance in the work at hand, they are much more likely to give up and withdraw from academic work, demonstrating poor academic behaviors which result in low grades" (Farrington, et al., p. 8).

42

Session 1 Training PowerPoint, Slides 43-44

# Stereotype Threat and Mindset

- Stereotype threat is "the arousal, worrying thoughts, and temporary cognitive deficits evoked in situations where a group member's performance can confirm the negative stereotype about his or her group's ability in a domain."
- Stereotype threat can impact many different identities, including socioeconomic status, age, race, and gender
- Stereotyped students contend with *belongingness uncertainty*, which is the fear the one does not fit into a setting where academic ability is prized.

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# Stereotype Threat and Minority Students

- The underperformance of African-Americans and other students of color may be related to them internalizing social stereotypes or being afraid of confirming negative stereotypes through their own actions and language.
- The worry that one could be perceived through the lens of a negative intellectual stereotype can undermine academic performance, and cause common measures of academic performance to systematically underestimate the ability of negatively stereotyped students

*"When students here who are White see us walking around, they just have the expectation that all we're here to do is to listen to music, or talk about sports and musicians, nice cars, money, and women. That's what they always think of us if we don't try to fit in their shoes and be better than them."-WP9652*

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Session 1 Training PowerPoint, Slides 45-46

## Stereotype Threat and Minority Students, Continued

For minority students, academic feedback can be threatening. As a way to protect themselves, those who face stereotype threat may:

- Scrutinize a teacher's nonverbal behavior for evidence of bias
- Attribute teacher feedback to discrimination rather than ability
- Avoid activities that facilitate learning but pose a risk of failure and rejection

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## Impact of Remediation on Mindset

- Placement into remediation has the potential to lead students to conclude that math especially, is a fixed ability that they do not possess.
- Academic skills that remedial programs teach could be blocked by mental filters that students possess that tell them that they cannot change in significant ways.
- Because of the potential effects of being sorted into a remedial environment, underprepared students may benefit the most from mindset interventions.

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Session 1 Training PowerPoint, Slides 47-48

## Mindset is an Effective Approach to Improving Performance

- Learning is a highly social and psychological process, so mindset plays a critical role in students' performance
- Given the impact of mindset on academic performance, it would be unwise to attempt to alter the external behaviors of students without also paying attention to their internal mental frameworks
- Changing students' mindsets can be done more efficiently than administering broad, expensive policy approaches traditionally used on underperforming groups

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## How Mindset Intervention Improves Learning

- Psychological interventions help students cope with threats to identity, which can impair intellectual functioning and motivation
- Psychological interventions can raise students' confidence and increase their willingness to work harder, while improving their feelings of belonging in school.
- They change students' mindsets to allow them to seize opportunities to learn

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Session 1 Training PowerPoint, Slides 49-50

## How Mindset Intervention Works

- Interventions provide reinforcement when beliefs about ability and expectations for success can be fragile, especially when students face a challenge they have never encountered before
- Students who undergo psychological interventions experience a "snowball" effect, whereby small differences at an early stage can get magnified over time. The snowball effect can be particularly salient in science and math
- The snowball effect can also be seen as coursework gets more challenging and the potential for difficulty increases

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## Four Mindsets That Promote Persistence

- "I Belong in This Academic Community"
- "This Work Has Value for Me"
- "I Can Succeed at This"
- "My Ability and Competence Grow with Effort"

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Session 1 Training PowerPoint, Slides 51-52

Part IV:
Mindsets that Promote Persistence

51

Mindset #1: “I Belong in This Academic Community”

52

Session 1 Training PowerPoint, Slides 53-54

## Sense of Belonging

- Belonging involves the sense that one feels he or she fits in with the academic setting and feels like a member of the classroom community
- Having a sense of belonging in a school or classroom improves academic performance
- Sense of belonging is closely tied to perceptions of competence and autonomy, intrinsic motivation, and willingness to adopt established norms and values
- Students who have strong sense of academic belonging see themselves as members of a social an intellectual community
- Students with sense of belonging initiate more social interactions and form better relationships on campus

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## When Sense of Belonging is Compromised

- Sense of belonging is compromised when students perceive threats in the educational environment.
- Brought about when students feel left out, criticized, or disrespected, it can serve as proof that they don't belong
- When sense of belonging is compromised, it can increase students' stress and hinder their ability to fully participate in learning
- The earlier that sense of belonging is protected from environmental threats, the more positive the outcomes

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Session 1 Training PowerPoint, Slides 55-56

## African-Americans and Sense of Belonging

- Sense of belonging is an important reason for students making the decision to withdraw, and some studies have shown it to be more vital for minority students
- In culturally incongruent environments, African-Americans were much more likely to explicitly articulate a desire for a cultural or a personal connection with an individual or group on campus

*"I haven't had any negative experiences [at this school]. Everywhere I've gone, everyone has been helpful. I can't name an instance where I've felt out of place or uncomfortable." -VC6080*

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## African-Americans and Sense of Belonging, Continued

- African-American students are sensitive to messages and subtle cues that they do not belong in the educational environment. These include harsher disciplinary actions, social alienation, and patronizing praise
- One consequence of having this perception is that they withdraw their effort, fearing that they will not be evaluated fairly

*"It's not the case that African-Americans lack motivation in school. Rather, they understandably may be uncertain as to whether they should invest their effort and identity in tasks where they could be subjected to biased treatment" -Yeager, et al., p. 805.*

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Session 1 Training PowerPoint, Slides 57-58

## Mitigating Threats to Sense of Belonging

- Self-affirmation interventions have been frequently used to mitigate identity and stereotype threat and instill a sense of belonging.
- Self-affirmation theory is based on the premise that people are fundamentally motivated to maintain their self-integrity and self-esteem
- A threat to any component of one's self-esteem, such as a criticism of academic performance, may lead to rejection of negative feedback, or to attributing the poor performance to external circumstances

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## The Power of Self Affirmation

- The psychology of self-affirmation is that even simple reminders of self-worth can reduce the normal tendency to respond to threats defensively
- Self-affirmation exercises help people "change the stories they tell themselves"
- Affirmations enable a person to pull back and see a challenge or stressor in a larger context, making it less psychologically threatening

58

Session 1 Training PowerPoint, Slides 59-60

## How Self Affirmation Interventions Work

- Writing about values such as relationships, religion, or music can change diverse aspects of a psychological experience over time
- Affirmations help remind people of the whole self, and other things that are important to them. This helps to mitigate the effects of an attack on a more narrow (i.e. academic) self.
- These exercises can help students reflect on the non-academic aspects of their self-worth, so that they will be less affected by negative feedback.
- With academic threats being less disruptive, students are able to focus on the tasks at hand, such as studying, learning, and test-taking, as opposed to the implications of success or failure at those tasks, which leads to better academic outcomes

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## Effects of Self Affirmation Interventions on African-American Students

- Studies show that self-affirmed students' that their brains were more oriented towards learning activities
- Affirmations serve as catalysts to unleash useful forces that were once restrained by threat
- African-American students benefit from affirmation because it decouples their identities and sense of belonging from their academic performance, so that lowered performance is not as detrimental to their psychological state.
- Researchers have found that affirmations affect African-American students more dramatically than other races (Cook et al., 2012)

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Session 1 Training PowerPoint, Slides 61-62

## Sample Self-Affirmation Exercises

- Identify one of your strengths. If you were writing a movie or book chapter about your strength, how would it be portrayed?
- List the ways that you have demonstrated your creativity. How might you solve problems using this talent?

61

# Questions?

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**Training Session 1 Reference List**


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**Promoting Positive Mindsets in Underprepared,**
**African American Students**
**Training Evaluation (Session 1)**
**Date: ________________**

| Please indicate how well the **content** met the following goals: | 1<br>Poor | 2<br>Fair | 3<br>Good | 4<br>Excellent |
|---|---|---|---|---|
| Content was useful | | | | |
| Content was practical to my needs and interests | | | | |
| Material was organized | | | | |
| Presentation was well-paced | | | | |
| Activities were effective | | | | |
| Visual aids and handouts were useful | | | | |
| Please indicate how well the **presentation** met the following goals: | | | | |
| Presenter was knowledgeable | | | | |
| Presentation was interesting | | | | |
| Material was presented clearly | | | | |
| Presenter responded to questions effectively | | | | |
| Activities and discussions were engaging | | | | |
| Overall, how would you rate this workshop? | | | | |
| How could this workshop be improved? | | | | |
| Any other comments or suggestions? | | | | |

# Promoting Positive Mindsets in Underprepared, African American Students
# Faculty Training Session 2 (7.5 hrs.)

Facilitator: Denise McCory
Co-Facilitator: Faculty Member

## Learner Objectives

At the conclusion of Session 2, faculty will:

- Identify 3 additional mindsets that can encourage persistence
- Recognize their own theories of intelligence
- Identify teaching strategies that promote positive mindsets

## Training Resources and Materials

- Large classroom with round table seating for 30 (6 seats per table)
- Screen and computer with PowerPoint
- White board with dry erase markers
- Flip chart paper with sticky backing (6 flip charts)
- 30 copies of agenda (3-hole punched for insertion in binder)
- 30 handouts of PowerPoint slides (3-hole punched for insertion in binder)
- 30 evaluation forms
- 6 Table Tents
- I-Clicker system with 30 handheld transmitters

## Agenda

- Welcome and Agenda Review
- Reflection Activity
- Mindset #2- "This Work Has Value for Me"
- Reflection Activity
- Mindset #3- "I Can Succeed at This"
- Reflection Activity
- Mindset #4- "My Ability and Confidence Grow With Effort"
- Table Discussion and Report Out
- Lunch
- Teaching Strategies that Promote Positive Mindset
- Group Work by Discipline and Report Out
- Review Session 2 / Preview Session 3
- Complete Evaluation

<table>
<tr><th colspan="2">Session 2 Lesson Plan</th></tr>
<tr><td>8:30 am to 8:40 am</td><td>Welcome/ Review Agenda</td></tr>
<tr><td>8:40 am to 8:50 am</td><td>Brief Review of Session 1</td></tr>
<tr><td>8:50 am to 9:10 am</td><td>Reflection Activity<br><br>Ask participants to work with a partner at their tables to answer the following questions:<br>1) Reflect on some activities that you enjoy. Why do you enjoy doing them?<br>2) Why do you enjoy teaching?<br>3) Describe some activities that you don’t like, but that you complete anyway. What makes you complete those activities?<br><br>Invite 3 or 4 participants to share their responses. Facilitate an open dialogue among participants and segue into the presentation on “This Work has Value for Me.”</td></tr>
<tr><td>9:10 am to 9:25 am</td><td>Mindset #2- “This Work has Value for Me”<br>(PowerPoint Slides 4-11)</td></tr>
<tr><td>9:25 am to 9:45 am</td><td>Reflection Activity<br><br>Ask participants to work with a partner at their tables to answer the following questions:<br>1) Recall a task that you attempted where you felt very confident in your ability to succeed. How did having confidence make you feel?<br>2) Recall a recent task that you attempted where you had little or no confidence in your ability to succeed. How did you feel when you first attempted that task?<br>3) What does it take to increase or decrease your confidence?<br><br>Invite 3 or 4 participants to share their responses. Facilitate an open dialogue among participants and segue into the introduction on “I Can Succeed at This.”</td></tr>
<tr><td>9:45 am to 9:55 am</td><td>Mindset #3- “I Can Succeed at This”<br>(PowerPoint Slides 12-14)</td></tr>
<tr><td>9:55 am to 10:10 am</td><td>Break</td></tr>
</table>

| | |
|---|---|
| 10:10 am to 10:30 am | **Reflection Activity**<br><br>Ask participants to work with a partner at their tables to answer the following questions:<br>1) Think of something that you were once not very good at, but is very easy for you to do now. When you were new to that activity, how did you feel when engaging in it?<br>2) How do you feel now that you can do that activity very easily?<br>3) What brought about those changes in your feelings?<br><br>Invite 3 or 4 participants to share their responses. Facilitate an open dialogue among participants and segue into presentation on "My Ability and Competence Grow with Effort." |
| 10:30 am to 11:20 am | **Mindset #3- "My Ability and Competence Grow with Effort" (PowerPoint Slides 15-33)**<br><br>Begin the presentation with a brief mindset assessment (embedded in PowerPoint). Participants will use clicker devices to respond to the assessment questions. After reviewing the group's responses, discuss whether or not each statement reflects growth or fixed mindset. |
| 11:20 am to 11:40 am | **Table Discussion**<br><br>Each table will identify one person be the reporter. Groups will discuss the following:<br>1) In what ways do you see these mindsets demonstrated in your students?<br>2) In what ways have you promoted these mindsets in your classes? |
| 11:40 am to 12:00 pm | **Open Dialogue and Report-out**<br><br>The reporter from each table will share his or her group's responses to the prompts. Facilitate open discussion about the groups' responses. |
| 12:00 pm to 1:00 pm | **Lunch** |
| 1:00 pm to 2:00 pm | **Teaching Strategies that Promote Positive Mindset (PowerPoint Slides 34-47)** |

| | |
|---|---|
| 2:00 pm to 2:15 pm | **Break** |
| 2:15 pm to 3:15 pm | **Group Work by Discipline**<br><br>Participants will assemble at tables by discipline (i.e. Liberal Arts, Natural Sciences, Business and Technology, Math, etc.) Groups will designate one person to be the scribe, and another person to be the reporter.<br><br>Groups will respond to the question: What teaching strategies can I use in my discipline to promote the 4 positive mindsets in students? Connect each teaching strategy to a specific mindset. Post responses on the classroom wall. |
| 3:15 pm to 4:15 pm | **Report out Concerns and Troubleshooting**<br><br>The reporter from each table will share his or her group's strategies to promote the positive mindsets. Facilitator will lead a group dialogue about the strategies. Invite participants to present concerns or logistical challenges, and encourage the group to help address them. |
| 4:15 pm to 4:30 pm | **Review Today's Content / Preview Tomorrow**<br><br>Remind participants to bring binder to Session 3 |
| 4:30 pm to 5:00 pm | **Complete Formative Evaluation** |

Session 2 Training PowerPoint, Slides 1-2

# Promoting Positive Mindsets in Underprepared, African-American Students

## Training Session 2

Facilitator: Denise McCory

1

## Objectives

- Identify three additional mindsets that promote persistence
- Recognize your own theories of intelligence
- Identify strategies to promote more positive student mindsets

2

Session 2 Training PowerPoint, Slides 3-4

**Part I:**
**Mindsets that Promote Persistence, Continued**

3

**Mindset #2: "This Work Has Value for Me"**

4

Session 2 Training PowerPoint, Slides 5-6

## "This Work Has Value for Me"

- It is important for students to have a sense that the material that he or she is learning is interesting and has personal value
- Value has a variety of meanings:
  - Doing well on a task (attainment value);
  - Gaining enjoyment by doing a task (intrinsic value)
  - Completing a task to meet an end or goal (utility value)

5

## How Value Relates to Academic Performance

- Students value academic tasks that connect in some way to their lives, future careers, or interests
- When students value their coursework, they are much more likely to put effort into completing it
- When goals are extrinsically motivated or unimportant to the student, setbacks and challenges can impose stress, anxiety, and distraction, leading to impacts on students' learning and psychological well-being

6

Session 2 Training PowerPoint, Slides 7-8

## How Value Relates to Academic Performance

- Students may not see value in developmental courses because they do not count towards degree requirements
- Students who do not see the value in their coursework often behave in counterproductive ways, for example, by failing to complete assignments or by dropping required courses

7

## The Role of Value/Utility in African-American Persistence

- Utility is a core motivational driver for community college students, but particularly for African-Americans
- African-Americans in community college are more likely to succeed when they determine that their academic efforts are worth the time and effort.
- Students are motivated when they engage in academic behaviors that have an explicit purpose, but they are unmotivated when they do not see their behaviors linked to any beneficial outcomes

8

Session 2 Training PowerPoint, Slides 9-10

## The Role of Value/Utility in African-American Persistence

- A particularly worthwhile outcome for African-Americans is the probability of finding a job
- African-American students who persist typically maintain hopes and dreams for the future, regardless of real or perceived barriers. These aspirations involved being employed, and in some cases, securing an upper management position or a position with high responsibility
- One study found that for African-American males, having clear educational plans was a stronger predictor of persistence than socioeconomic status (Kim & Hargrove, 2013)

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## The Role of Value/Utility in African-American Persistence

- African-Americans, especially those who are academically underprepared, may come from backgrounds that lack a college-going culture. As a result, they may have a limited sense of the importance of college and the ways that it can help them reach their goals
- Many African-American students would benefit from seeing a clear connection between their coursework and their desired outcomes

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Session 2 Training PowerPoint, Slides 11-12

## How Values Reflection Works

- Writing about how a subject relates to student's life and future goals leads to higher perceptions of utility value, and heightened expectations of success in that subject
- Goal setting helps students find value in their work. Goal clarity increases persistence by making people less susceptible to the negative effects of anxiety, disappointment, and frustration

11

## Mindset #3: "I Can Succeed at This"

12

Session 2 Training PowerPoint, Slides 13-14

## "I Can Succeed at This"

- Based on the degree to which students feel confident in their ability to succeed at a given task.
- Individuals tend to engage in activities where they feel confident in their ability and avoid those where they feel incompetent
- The extent to which students believe they are good at a task or subject is strongly related to academic perseverance.
- Self-efficacy and one's belief in the likelihood for success are generally more predictive of academic performance than measured ability

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## "I Can Succeed at This"

- When students believe that they can be successful, then they are much more likely to persevere and complete academic tasks, even when they find the work challenging or do not experience immediate success
- The same affirmation exercises that are used to instill sense of belonging may be used bolster students' confidence in their ability to succeed

14

Session 2 Training PowerPoint, Slides 15-16

**Mindset #4: "My Ability and Competence Grow with My Effort"**

15

To What Extent Do You Agree or Disagree with This Statement?

Intelligence is something people are born with and can't be changed

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

16

Session 2 Training PowerPoint, Slides 17-18

To What Extent Do You Agree or Disagree with This Statement?

Musical talent can be learned by anyone

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

17

To What Extent Do You Agree or Disagree with This Statement?

Only a few people will be truly good at sports- you have to be "born with it"

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

18

Session 2 Training PowerPoint, Slides 19-20

To What Extent Do You Agree or Disagree with This Statement?

You are a certain kind of person, and there is not much you can really do to change that

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

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To What Extent Do You Agree or Disagree with This Statement?

Math is much easier if you come from a culture that values math

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

20

Session 2 Training PowerPoint, Slides 21-22

To What Extent Do You Agree or Disagree with This Statement?

Truly smart people do not need to try hard

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

21

To What Extent Do You Agree or Disagree with This Statement?

I often get upset when I get negative feedback about my performance

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

22

Session 2 Training PowerPoint, Slides 23-24

To What Extent Do You Agree or Disagree with This Statement?

You can do things differently, but the important parts of who you really are do not change

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

23

To What Extent Do You Agree or Disagree with This Statement?

Trying new things is stressful for me and I avoid it

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

24

Session 2 Training PowerPoint, Slides 25-26

## To What Extent Do You Agree or Disagree with This Statement?

You can always substantially change how intelligent you are

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

25

## To What Extent Do You Agree or Disagree with This Statement?

The harder you work at something, the better you will be at it

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

26

Session 2 Training PowerPoint, Slides 27-28

## To What Extent Do You Agree or Disagree with This Statement?

You can learn anything under the right conditions

A- Strongly Agree

B- Agree

C- Disagree

D- Strongly Disagree

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## Growth Mindset and Fixed Mindset

- Growth mindset relates to one's ideas about the nature of intelligence
- About 40% of U.S. students display a growth mindset and 40% have a fixed mindset. The remaining 20% of students show mixed profiles

28

Session 2 Training PowerPoint, Slides 29-30

## Characteristics of Growth Mindset

- Students with a growth mindset believe that the brain is like a muscle, and gets stronger with use
- Likely to interpret challenges and mistakes as opportunities to learn and develop their brains
- Motivated by wanting to learn as much as they can about a subject in order to master the material
- Perceive challenges as being mere "bumps in the road," instead of reflections of their academic ability
- Overall more tenacious, resilient, and more successful academically

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## Characteristics of Fixed Mindset

- Believe that intelligence is fixed and outside of their control
- Motivated by the desire to show off their smarts or to not look dumb
- Tend to give up quickly when success does not come easily, because they want to hide what they perceive to be substandard intelligence
- Refrain from participating in a task to avoid public failure
- Because intelligence is believed to be stable and uncontrollable, then expending more effort is seen as futile

30

Session 2 Training PowerPoint, Slides 31-32

## How Educational Systems Undermine Growth Mindset

- Educational systems can reinforce or undermine growth mindset
- U.S. schools group students according to ability and bombard them with messages that ability is fixed, with some students having talent and intelligence, while some do not.
- Remediation may have similar effects

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## Effects of Growth Mindset Interventions

- Interventions strategies have included a workshop, interactive software a mentoring program, and pen pal activity
- A recent study conducted by the Carnegie Alpha Lab, found that university students who received a growth mindset intervention had experienced lower course dropout rate in intermediate algebra than the control group (Farrington, 2012)
- In a rigorous study that used experimental design with random assignment, Sriram (2010) found that for academically high-risk students, participating in a mindset intervention influenced effort behaviors

32

Session 2 Training PowerPoint, Slides 33-34

## Effects of Growth Mindset Interventions, Continued

- A study of community college students revealed that remedial students who participated in a mindset intervention withdrew from developmental math class at less than half the rate of students from the control group (Paunesku et al., Walton, 2012)
- It was concluded that Paunesku et al.'s intervention was effective for students because it changed the meaning of challenges from being dumb, to a way of getting smarter.

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## Part II: Teaching Strategies that Promote Positive Mindset

34

Session 2 Training PowerPoint, Slides 35-36

## Faculty Mindset Matters

- The mindsets that educators hold about the basic components of motivation and engagement will determine their expectations, teaching practices, and relationships with students
- Faculty can have an incremental (growth) or entity (fixed) view of intelligence, which affects their behaviors and messages they send to their students
- A good start to changing one's mindset is to reflect on ineffective teaching strategies by asking "what is it that I can do differently?" rather than waiting on the student to change first

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## Faculty Mindset Matters

- Educators should take the student's perspective when trying to address underperformance, looking beyond how they communicate material and to try to understand how students experience school.

- A good start to changing one's mindset is to reflect on ineffective teaching strategies by asking "what is it that I can do differently?" rather than waiting on the student to change first

36

Session 2 Training PowerPoint, Slides 37-38

## The Danger of Entity Theory

- Faculty who endorse an entity theory often try to comfort low-performing students
- Seemingly positive behaviors, such as praise or comfort for struggling students, can lead students to adopt a more fixed, entity theory
- In the presence of stereotype threat, praise and comfort can cause students to disengage
- Sometimes comforting statements and displays of empathy may be construed by students as the instructor having low confidence in them and their ability to succeed

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## The Danger of Entity Theory

- A study found that the more that math instructors subscribed to an entity theory, the more that they perceived a students' poor grade on one test as an indicator that the student was "not smart enough in math" (Rattan, et al., 2012)
- The more that instructors endorsed an entity theory, the more that they attributed the students' low performance to lack of math intelligence as opposed to lack of sufficient effort, and this conclusion was likely to be drawn after just one low test score
- These instructors were more likely to resort to consoling the student for lack of performance, and use teaching strategies that that could reduce engagement and achievement

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Session 2 Training PowerPoint, Slides 39-40

# Messages that Affect Mindset

- Subtle messages from teachers can affect students' mindsets
- It is important that teachers use strategies and language in the classroom that promote a growth mindset. For example, when teaching new material, instead of saying "let's start with an easy one," say "this may take a few tries"

*"When the teacher brings up that it's the last day to withdraw, it's like offering an escape to students. Instead of offering them to leave, offer them something else. Let them know that there is light at the end of the tunnel, because when they hear that it's the last day to withdraw, they think they're not getting it, and they're not confident." –LN5828*

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# Language that Promotes Positive Mindset

Faculty can encourage students to use growth mindset language:

| Instead of | Try |
|---|---|
| "I don't understand" | "What am I missing?' |
| "I give up" | "I'll use some of the strategies I learned" |
| "I made a mistake" | "Mistakes help me improve" |
| "I'm not good at this" | "I'm on the right track" |
| "I'll never be as smart as him" | "I'm going to figure out what he does and try it" |
| "This is too hard" | "This may take some time and effort" |

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Session 2 Training PowerPoint, Slides 41-42

## Set High Expectations

- Students perform well in environments in which teachers have high expectations and provide students with challenging but achievable tasks
- Setting high standards conveys the message that students are inherently capable of high achievement, which can effectively combat feelings of incompetence, especially for African-Americans and other vulnerable populations

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## Set High Expectations

- Students who suffer from stereotype threat can mistrust teacher feedback, suspecting that the teacher is biased
- Students may perceive this well-intentioned, inflated praise as the instructor having low expectations. These perceptions may cause students to lose trust in the teacher and disengage from learning
- Students must be assured that they have the potential to meet high standards, which creates an opportunity for them to accept critical feedback without attributing it to stereotype or teacher bias

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Session 2 Training PowerPoint, Slides 43-44

## Evaluation Practices

- Students are more likely to believe that success is possible when grading practices are transparent and teachers explain how different assignments affect grades
- Praising students for their effort (growth mindset) rather than for being smart (fixed mindset) encourages endurance
- The problem with fixed mindset praise is that when students fail a task, they infer that they are not smart, and they withdraw from the task
- Grade for growth; avoid one-shot assessments of performance
- Provide useful feedback that focuses on the things students can control, like their effort, challenge-seeking, persistence, and good strategies

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## Handling Mistakes

- Mistakes are important opportunities for learning and growth, but students routinely regard mistakes as indicators of their low ability
- Students and teachers should value mistakes and move from viewing them as learning failure to viewing them as learning achievements
- Norming struggle is effective because it not only teaches that struggle means growth, but it is also a subtle way to motivate behavior change because it fosters a sense of belonging

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Session 2 Training PowerPoint, Slides 45-46

## Help Students Manage Challenges

- Positive mindset is not enough, students need access to at least the basic educational supports
- Connect students to resources (Tutoring, Writing Center, Counseling, ACCESS)
- Teach time management, study skills, and organization skills
- When effort doesn't yield results, help students think through alternative strategies

*"If you fail a course, you should reflect on what happened; see what you could have done better to get a different outcome. Don't give up, and when you give it a go a second time, do things differently; don't do things the same and expect a different result." - AG9189*

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## Effective Classroom Conditions

- Expect success; set high but realistic expectations
- Offer students choices and provide autonomy in academic work
- Connect the dots between the work students are doing and the purpose it serves in their lives
- Provide clear and frequent feedback
- Learn students' names
- Address students' particular needs or interests
- Structure grading practices and policies to acknowledge growth

46

Session 2 Training PowerPoint, Slides 47-48

## Effective Strategies

- Illustrate the concept of growth mindset by having students write about and share with one another something they used to be poor at and are now very good at
- Teach students the science behind people's potential to increase their intelligence and show them how to apply these insights to their own lives
- Encourage students to not be ashamed of struggling to learn something new
- When you introduce a new topic or assignment, tell students that they should expect to find some things confusing and to make initial errors
- Emphasize challenge instead of success

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# Questions?

48

**Promoting Positive Mindsets in Underprepared,**
**African American Students**
**Training Evaluation (Session 2)**
**Date: ________________**

| Please indicate how well the **content** met the following goals: | 1<br>Poor | 2<br>Fair | 3<br>Good | 4<br>Excellent |
|---|---|---|---|---|
| Content was useful | | | | |
| Content was practical to my needs and interests | | | | |
| Material was organized | | | | |
| Presentation was well-paced | | | | |
| Activities were effective | | | | |
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| Please indicate how well the **presentation** met the following goals: | | | | |
| Presenter was knowledgeable | | | | |
| Presentation was interesting | | | | |
| Material was presented clearly | | | | |
| Presenter responded to questions effectively | | | | |
| Activities and discussions were engaging | | | | |
| Overall, how would you rate this workshop? | | | | |
| How could this workshop be improved? | | | | |
| Any other comments or suggestions? | | | | |

# Promoting Positive Mindsets in Underprepared, African American Students
# Faculty Training Session 3 (3.5 hrs.)

Facilitator: Denise McCory
Co-Facilitator: Faculty Member

## Learner Objectives

At the conclusion of Session 3, faculty will have action plans for promoting four positive mindsets in their classes.

## Training Resources and Materials

- Large classroom with round table seating for 30 (6 seats per table)
- Screen and computer with PowerPoint
- White board with dry erase markers
- 180 Action Plan Templates (3-hole punched for insertion in binder)
- 30 copies of agenda (3-hole punched for insertion in binder)
- 30 Evaluation Forms

## Agenda

- Welcome and Agenda Review
- Develop Action Plans
- Report on Action Plans
- Break
- Report on Action Plans, Continued
- Review Journaling Process and Next Steps
- Complete Evaluation

<table>
<tr><th colspan="2">Session 3 Lesson Plan</th></tr>
<tr><td>8:30 am to 8:40 am</td><td>Welcome/ Review Agenda</td></tr>
<tr><td>8:40 am to 8:50 am</td><td>Brief Review of Session 2</td></tr>
<tr><td>8:50 am to 10:00 am</td><td>Develop Action Plans<br><br>Ask participants to reflect on the following:<br>1) The four mindsets that promote persistence<br>2) Teaching strategies that promote positive mindsets<br><br>Apply what was learned to your own classrooms by developing an action plan to promote more positive mindsets in students. Using the provided templates, create one action plan for each mindset.</td></tr>
<tr><td>10:00 am to 10:30 am</td><td>Report on Action Plans<br><br>Pass a bowl of Lifesavers candies and ask participants to take a favorite flavor. After everyone has selected a Lifesaver, explain that the colors of the Lifesavers correspond with one of the 4 mindsets. Instruct participants to give a 1-minute overview of the action plan for the mindset (Lifesaver) that they selected.</td></tr>
<tr><td>10:30 am to 10:45 am</td><td>Break</td></tr>
<tr><td>10:45 am to 11:15 am</td><td>Report on Action Plans, Continued</td></tr>
<tr><td>11:15 am to 11:30 am</td><td>Review Journaling Process and Next Steps<br><br>Encourage participants to journal their experiences with implementing their action plans by addressing the following questions:<br><br>What did I observe?<br>What did I learn?<br>What went well?<br>What were the challenges?<br>What will I adjust?<br>What additional support do I need?<br><br>Instruct participants to bring their journals to the remaining sessions. Inform them that Session 4 will take place at midterm, and Session 5 will take place at the end of the semester. Encourage participants to call or email the facilitator if they have any questions or concerns throughout the semester.</td></tr>
</table>

Session 3 Training PowerPoint, Slides 1-2

# Promoting Positive Mindsets in Underprepared, African-American Students

## Training Session 3

Facilitator: Denise McCory

1

## Objective

Create an action plan to promote the 4 positive mindsets in your classes

2

Session 3 Training PowerPoint, Slide 3

## Journal Questions

- What did I observe?
- What did I learn?
- What went well?
- What were the challenges?
- What will I adjust?
- What additional support do I need?

3

# Promoting Positive Mindsets Action Plan

Semester ______________ Year______________
Instructor Name
________________________________________________________________________
Course Title ________________________________ Course
Number___________________________

Use the table below to outline your action plan for the semester. Incorporate the four key mindsets: (1) *I Belong in This Academic Community*; (2) *This Work has Value for Me*; (3) *I Can Succeed at This*; and (4) *My Ability and Competence Grow With Effort.* Attach additional sheets as needed to complete your semester-long plan.

| Mindset | Activity Description | Timing |
|---|---|---|
| **EXAMPLE:**<br>" *I Belong in This Academic Community"* | *1) Have students participate in an icebreaker activity where they share their names, major, what makes them proud, etc.*<br><br>*2) Refer to each student by name throughout the semester and reference some of the information that they shared during the icebreaker (as appropriate).* | *Week 1*<br><br>*Weeks 1-16* |
| | | |
| | | |

# Promoting Positive Mindsets Action Plan, Continued

| Mindset | Activity Description | Timing |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**Promoting Positive Mindsets in Underprepared,**
**African American Students**
**Training Evaluation (Session 3)**
**Date: ________________**

| Please indicate how well the **content** met the following goals: | 1<br>Poor | 2<br>Fair | 3<br>Good | 4<br>Excellent |
|---|---|---|---|---|
| Content was useful | | | | |
| Content was practical to my needs and interests | | | | |
| Material was organized | | | | |
| Presentation was well-paced | | | | |
| Activities were effective | | | | |
| Visual aids and handouts were useful | | | | |
| Please indicate how well the **presentation** met the following goals: | | | | |
| Presenter was knowledgeable | | | | |
| Presentation was interesting | | | | |
| Material was presented clearly | | | | |
| Presenter responded to questions effectively | | | | |
| Activities and discussions were engaging | | | | |
| Overall, how would you rate this workshop? | | | | |
| How could this workshop be improved? | | | | |
| Any other comments or suggestions? | | | | |

# Promoting Positive Mindsets in Underprepared, African American Students
# Faculty Training Session 4 (3.5 hrs.)

Facilitator: Denise McCory
Co-Facilitator: Faculty Member

## Learner Objectives

In Session 4, faculty will share and learn how their colleagues implemented their actions plans and gain insight into ways that they can improve their own applications.

## Training Resources and Materials

- Large classroom with round table seating for 30 (6 seats per table)
- Screen and computer with PowerPoint
- White board with dry erase markers
- 30 copies of agenda (3-hole punched for insertion in binder)
- 30 Evaluation Forms

## Agenda

- Welcome and Agenda Review
- Review the Journey
- Share What Was Learned
- Break
- Share What Was Learned, Continued
- Next Steps
- Complete Evaluation

| Session 4 Lesson Plan | |
|---|---|
| 8:30 am to 8:40 am | **Welcome/ Introductions /Review Agenda** |
| 8:40 am to 8:50 am | **Review the Journey**<br><br>1) Before the start of the semester, we examined persistence factors in our underprepared, African American students.<br>2) You learned that mindset affects students' persistence, and that faculty can deeply influence students' mindsets.<br>3) You learned four mindsets that promote persistence, and how to nurture those mindsets in the classroom.<br>4) You developed action plans to promote mindsets in your classes and recorded your experiences through journaling. |
| 8:50 am to 10:00 am | **Share What Was Learned**<br><br>Using their journals as a reference, participants will provide a brief (2-minute) overview of how they promoted one of the four mindsets. During their presentation, participants should address the following questions.<br><br>*What have you observed?*<br>*What have you learned so far?*<br>*What is going well?*<br>*What are the challenges?*<br>*What will you do differently next time?*<br>*What adjustments, if any, did you make to your action plan?*<br>*Why did you make those adjustments?*<br><br>Encourage questions, comments, and open dialogue among participants. Encourage participants to provide their colleagues with suggestions to address challenges. Create a "parking lot" on the board to record challenges or concerns that need further investigation or follow-up. |
| 10:00 am to 10:15 am | **Break** |
| 10:15 am to 11:30 am | **Share What Was Learned, Continued** |
| 11:15 am to 11:30 am | **Discuss Next Steps**<br><br>Remind participants that the final part of the training will occur in about 8 weeks, after the semester ends. In Session 5, we will |

| | |
|---|---|
| | review comparative student success data in an effort to improve practices and outcomes. Participants should continue journaling and bring their journals to the final session. |
| 11:30 am to 12:00 pm | **Complete Formative Evaluation** |

Session 4 Training PowerPoint, Slides 1-2

# Promoting Positive Mindsets in Underprepared, African-American Students

# Training Session 4

Facilitator: Denise McCory

1

## Let's Review

- Before the start of the semester, we examined persistence factors in our underprepared, African-American students.
- You learned that mindset affects students' persistence, and that faculty can deeply influence students' mindsets.
- You learned 4 mindsets that promote persistence, and how to nurture those mindsets in the classroom.
- You developed action plans to promote mindsets in your classes and recorded your experiences through journaling.

2

Session 4 Training PowerPoint, Slides 3-4

## Objective

- Share and learn how your colleagues implemented their actions plans and
- Gain insight into ways that you can improve your own applications

3

## Share With Your Colleagues…

- What have you observed?
- What have you learned so far?
- What is going well?
- What are the challenges?
- What will you do differently next time?
- What adjustments, if any, did you make to your action plan? Why did you make those adjustments?

4

Session 4 Training PowerPoint, Slide 5

## Next Steps

- Final part of the training will occur in about 8 weeks, after the semester ends
- In Session 5, we will review comparative student success data
- Continue journaling

5

**Promoting Positive Mindsets in Underprepared,**
**African American Students**
**Training Evaluation (Session 4)**
**Date: ________________**

| Please indicate how well the **content** met the following goals: | 1<br>Poor | 2<br>Fair | 3<br>Good | 4<br>Excellent |
|---|---|---|---|---|
| Content was useful | | | | |
| Content was practical to my needs and interests | | | | |
| Material was organized | | | | |
| Presentation was well-paced | | | | |
| Activities were effective | | | | |
| Visual aids and handouts were useful | | | | |
| Please indicate how well the **presentation** met the following goals: | | | | |
| Presenter was knowledgeable | | | | |
| Presentation was interesting | | | | |
| Material was presented clearly | | | | |
| Presenter responded to questions effectively | | | | |
| Activities and discussions were engaging | | | | |
| Overall, how would you rate this workshop? | | | | |
| How could this workshop be improved? | | | | |
| Any other comments or suggestions? | | | | |

# Promoting Positive Mindsets in Underprepared, African American Students
# Faculty Training Session 5 (2 hrs.)

Facilitator: Denise McCory
Co-Facilitator: Faculty Member

## Learner Objectives

At the conclusion of Session 5, faculty will have data on their students' performance and gain insight into how they can continue to improve students' mindsets.

## Training Resources and Materials

- Large classroom with round table seating for 30 (6 seats per table)
- Screen and computer with PowerPoint
- White board with dry erase markers
- 30 copies of agenda (3-hole punched for insertion in binder)
- 30 Evaluation Forms
- 30 Certificates of Participation

## Agenda

- Welcome and Agenda Review
- Review Student Performance Data
- Student Performance and Opportunities for Improvement
- Final Remarks
- Complete Summative Evaluation

<table>
<tr><th colspan="2">Session 5 Lesson Plan</th></tr>
<tr><td>8:30 am to 8:40 am</td><td>Welcome/ Review Agenda</td></tr>
<tr><td>8:40 am to 8:50 am</td><td>Review Student Performance Data<br><br>Distribute folders to each instructor that has the comparative success data for their students. The data will include course pass rate and average GPA for students in their courses, and will be categorized by race, gender, and age. First time instructors will receive anonymous, comparative data using a similar course. Allow 10 minutes for participants to review the data.</td></tr>
<tr><td>8:50 am to 10:00 am</td><td>Discuss Student Performance, and Opportunities for Improvement<br><br>Facilitate open discussion to address the following questions:<br>▪ What are your thoughts concerning your students' performance?<br>▪ What immeasurable outcomes have you observed, such as student attitude, motivation, engagement, or interest in the course materials?<br>▪ What challenges need to be addressed?<br>▪ Based on what you learned, how will you adjust your practices in the future?<br>▪ What can the institution do to help you continue to improve?<br><br>Encourage questions, comments, and open dialogue among participants. Encourage participants to provide their colleagues with suggestions to address challenges. Create a "parking lot" on the board to record challenges or concerns that need further investigation or follow-up.</td></tr>
<tr><td>10:00 am to 10:15 am</td><td>Final Remarks<br><br>Congratulate faculty for their participation in the trainings and for their commitment to improving the academic outcomes for students. Distribute certificates. Participants may contact the facilitator for further questions or support. Encourage participants to share their suggestions for improving the training through evaluation form.</td></tr>
<tr><td>10:15 am to 10:45 am</td><td>Complete Summative Evaluation</td></tr>
</table>

Session 5 Training PowerPoint, Slides 1-2

# Promoting Positive Mindsets in Underprepared, African-American Students

## Training Session 5

Facilitator: Denise McCory

1

## Objectives

- Review comparative data on your students' performance
- Gain insight on how you can continue to improve outcomes

2

Session 5 Training PowerPoint, Slides 3-4

## Share With Your Colleagues…

- What are your thoughts concerning your students' performance?
- What immeasurable outcomes have you observed, such as student attitude, motivation, engagement, or interest in the course materials?
- What challenges need to be addressed?
- Based on what you learned, how will you adjust your practices in the future?
- What can the institution do to help you continue to improve?

3

## CONGRATULATIONS!

4

**Promoting Positive Mindsets in Underprepared, African American Students**
**Training Evaluation (Session 5)**
**Date: ________________**

| Please indicate how well the **content** met the following goals: | 1 Poor | 2 Fair | 3 Good | 4 Excellent |
|---|---|---|---|---|
| Content was useful | | | | |
| Content was practical to my needs and interests | | | | |
| Material was organized | | | | |
| Presentation was well-paced | | | | |
| Activities were effective | | | | |
| Visual aids and handouts were useful | | | | |
| Please indicate how well the **presentation** met the following goals: | | | | |
| Presenter was knowledgeable | | | | |
| Presentation was interesting | | | | |
| Material was presented clearly | | | | |
| Presenter responded to questions effectively | | | | |
| Activities and discussions were engaging | | | | |
| Overall, how would you rate today's training? | | | | |
| How could today's training be improved? | | | | |

Please see the next page for additional questions

The following questions relate to the entire training (Sessions 1 through 5)

| Please indicate how well you agree that the training met the following **objectives** | 1 Strongly Disagree | 2 Disagree | 3 Agree | 4 Strongly Agree |
|---|---|---|---|---|
| The training was relevant to my work | | | | |
| The training addressed my specific needs and concerns | | | | |
| The journaling process helped me improve my practices | | | | |
| Engaging in discussions with my colleagues was helpful | | | | |
| This training provided me with techniques that I can easily implement in my classes | | | | |
| The format and length of the training was effective | | | | |
| The trainings provided sufficient opportunity for reflection | | | | |
| The training provided sufficient opportunity for practical application | | | | |
| I recognize the effects and implications of African American persistence at an institutional, local, and national level | | | | |
| I recognize the ways that mindset affects students' persistence | | | | |
| I recognize the ways that faculty influence student mindset | | | | |
| I can identify 4 academic mindsets that affect persistence | | | | |
| I can effectively apply strategies to improve students' mindsets in my classes | | | | |
| This training changed my perspective on students' ability to learn and grow | | | | |
| This training changed my perspective on my own ability to learn and grow | | | | |

Please see the next page for additional questions

| What parts of this training did you find *most* useful? |
| --- |
| What parts of this training did you find *least* useful? |
| Would you recommend this training to another faculty member? Why or why not? |
| How might this training be improved for future participants? |

Please attach additional pages if needed. Thank you for participating in this training.

Appendix B: Letter of Cooperation

Denise McCory
Dean of Student Affairs

April 28, 2015

Dr. Ron Liss

Dr. Terri Pope

Dr. Michael Schoop

Dr. J. Michael Thomson

Dear Drs. Liss, Pope, Schoop, & Thomson:

I am writing to request permission to conduct a research study at during the summer and fall semesters of 2015. I am currently studying Higher Education Leadership at Walden University and am in the process of writing my doctoral study under the supervision of Dr. Elizabeth Bruch, doctoral committee chair and professor at Walden.

I will be conducting a qualitative case study on how psychosocial factors affect African American student persistence. My research will consist of interviews with students who have successfully completed either a math or English developmental sequence, in an attempt to understand the factors that led to their persistence in those courses. As you know, African American students have the worst academic outcomes and the highest attrition at our institution, particularly those in developmental courses. I hope that this study will result in findings that will better support this high-risk population. At the conclusion of my study, I will provide you with a report that summarizes my research and offers recommendations for practice.

It is hoped that you will allow me to interview 18 to 20 currently enrolled students. These interviews may take place on your campus, depending on the student's preference. The data will be collected through 45-60 minute face to face interviews of African American students who have completed their developmental sequence within 2 years. After the

interviews, the participants will be sent an interview summary to verify the accuracy. A second, brief phone interview with each participant will provide the opportunity for the participant to discuss the summary of the first interview and to ask if there is anything else that he or she would like to modify or add. Students who volunteer to participate will be given a consent form to review, sign, and return to me before the interview. Throughout this study, and after its completion, I assure you that the identification of our institution and the study participants will be anonymous and kept in full confidence. Furthermore, once you have approved my study, I will obtain approval from our college's IRB, as well as Walden University's IRB.

I appreciate your consideration of my study. Your approval to conduct this research can be affirmed by signing below and sending the document to my campus email address. Kindly respond by April 30, 2015. If you have any questions or concerns, please call or email me. Thanks once again for your consideration and support.

Sincerely,

Denise McCory

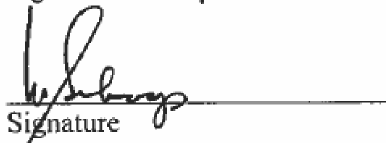
Approved by:

Terri S. Pope Ph.D
Print your name and title here
Campus President, Westshore

Signature

4.28.15
Date

Michel Schoop
Print your name and title here



Signature

4/28/15
Date

Ron Liss - campus president, west
Print your name and title here

Signature

4/28/15
Date

J Michael Thomson
Print your name and title here

Signature

4/28/15
Date

Appendix C: Institutional Review Board (IRB) Approval from Case Study Site

**Human Subjects Review Committee**
**Notice of Review and Approval**

**TO:** **Denise McCory**

**SUBJECT:** **Notice of** ☒ Review and approval
☐ Exemption

The Human Subjects Review Committee of [redacted] has reviewed and approved your proposal entitled:

**Psychosocial Factors and the Persistence of Underprepared, African-American Community College Students**

You are advised that with respect to:

1. the rights and welfare of the individual(s) involved;
2. the appropriateness of the methods used to secure informed consent; and
3. the risks and potential benefits of the investigation.

The Human Subjects Review Committee has reviewed your proposal and does consider your project to be:

- ☐ Exempt
- ☒ Fully acceptable (without reservations).
- ☐ Acceptable with the reservations noted below
- ☐ Not acceptable for the reasons noted below

Approval date: June 10, 2015

Signed for the Committee by:

*G. Robert Stuart*

G. Robert Stuart, Chairperson
Human Subjects Review Committee

Appendix D: Interview Protocol

Name: ____________________________

Date: ____________________________

Time: ____________________________

*Introduction Script:*

Thank you for taking the time to meet with me today. Our interview should take 45-60 minutes and will include a series of questions to find out about factors that helped you complete your developmental education courses. The information from interviews such as this will be used to help other students complete their developmental courses.

With your permission, I would like to audio record our interview so that I may be able to accurately document your experiences and perceptions. Please answer the questions honestly. I will not use your name in the study or the name of the college. Furthermore, your responses will only be used for this research study, and nothing you say will affect your student status. However, if there are any questions that you do not want to answer, you may refuse to do so. You may also ask me to stop the recording at any time. Do you have any questions at this point?

After we conclude our interview, I will put the recorded information in the form of a written summary. Then I will email you a copy of the summary. I ask that you review the summary and then participate in a ten-minute phone meeting with me to verify that the information is accurate. During the phone interview, you will have an opportunity to add additional information or clarify anything that I may have misunderstood.

Prior to this conversation, you signed a consent form that indicated that your participation in this interview is completely voluntary; therefore, you may withdraw your participation at any time without consequence. During the interview, if you would like to take a break or return to a previous question, please let me know. Do you have any questions or concerns before we begin?

Then, with your permission, I will start the recording and we will begin the interview.

**General background questions:**

1. Why did you select this institution for your studies?

2. In which developmental (zero-level) math and/or English classes were you placed when you arrived at the college?

**Questions regarding developmental courses:**

3. What do you think is the purpose of developmental (zero-level) courses?
4. What was your perception of developmental courses?

**Questions regarding purpose and goals:**

5. What are your reasons for pursuing a degree/certificate?
6. How did the reasons you provided affect your decision to finish your developmental courses?
7. What academic goals have you set for yourself?
    a. How do you plan to accomplish those goals?

**Questions regarding persistence:**

8. How were you able to complete your developmental courses in two years or less?
9. What kept you from dropping out of your classes or out of school altogether?

**Questions regarding persistence factors:**

10. What factors (people, resources, situations, etc.) *outside* of the institution supported you in completing developmental courses?
11. What factors (people, resources, situations, etc.) *inside* of the institution supported you in completing your developmental courses?
12. What personal characteristics do you think led to you staying in your developmental courses?

13. When you were taking your developmental courses, how did feel about your ability to complete them?
14. Explain how social activities (study groups, campus events, hanging out with classmates, etc.) may have impacted your decision to finish your developmental courses.
15. Tell me about your friends' and/or family members' experience with college.
    a. How did their college experiences impact you?

**Question regarding overcoming difficulties:**

16. If you found yourself struggling in a class or with a particular subject, how would you handle it?

**Questions regarding race:**

17. Tell me about your experiences being an African American student at this college.
18. Tell me about your experiences being an African American in developmental courses.

**Final Questions:**

19. What can the institution do to help more students finish their developmental courses?
20. Before we conclude our interview, is there anything else that you would like to share?

*Conclusion Script:*
I anticipate having our interview transcribed within the next 5 calendar days. I will email a summary of our interview to you, using your college email address. After you have had opportunity to review the summary, I will schedule the 10-minute follow-up phone call. During the call, you may offer any comments or clarification points as necessary. Again,

thank you for allowing me to interview you about your persistence in developmental courses.

Appendix E: Confidentiality Agreement

**Name of Signer:**

During the course of my involvement in this research project, titled: *Psychosocial Factors and the Persistence of Underprepared, African American Community College Students*, I will have access to information that should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participants.

By signing this Confidentiality Agreement, I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant's name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

**Signature:______________________________________ Date:____________**