# Student Success and Geography: An Analysis of Contributing Factors that Determine College Academic Achievement and Persistence of Black Males

by

#### LaMarcus D. Howard

#### Dissertation

Submitted to the College of Education

Eastern Michigan University

in partial fulfillment of the requirements for the degree of

#### DOCTOR OF PHILOSOPHY

in

Educational Leadership

Dissertation Committee:
Rema Reynolds, PhD, Chair
Carmen McCallum, PhD
David Anderson, PhD
Calvin McFarland, EdD

March 27, 2020 Ypsilanti, Michigan



ProQuest Number: 27831717

#### All rights reserved

#### INFORMATION TO ALL USERS

The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



#### ProQuest 27831717

Published by ProQuest LLC (2020). Copyright of the Dissertation is held by the Author.

All Rights Reserved.

This work is protected against unauthorized copying under Title 17, United States Code Microform Edition © ProQuest LLC.

ProQuest LLC 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 - 1346



ProQuest Number: 27831717

#### All rights reserved

#### INFORMATION TO ALL USERS

The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



#### ProQuest 27831717

Published by ProQuest LLC (2020). Copyright of the Dissertation is held by the Author.

All Rights Reserved.

This work is protected against unauthorized copying under Title 17, United States Code Microform Edition © ProQuest LLC.

ProQuest LLC 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 - 1346



#### Dedication

This dissertation is dedicated to the following individuals:

To my wonderful mother, sister, and brother, I love you from the bottom of my heart! To my nephews, godsons, and great niece; this is for you! This is evidence that with faith, hard work, and dedication anything is possible. I also dedicate my dissertation to my late grandparents, William and Rose Howard and late mentor Dr. Chiara Hensley.



#### Acknowledgements

## To God be the glory!

Over the past four and half years, I have received nothing but love, support, and encouragement from a number of special individuals in my doctoral pursuit. I could not ask for a more inspirational, motivating and authentic dissertation committee chair like Dr. Rema Reynolds. Her guidance through my dissertation journey was met with nothing but trust that I make it to the finish line and that is exactly what I did. I would like to thank the other members of my dissertation committee for their patience and guidance, Dr. Carmen McCallum, Dr. David Anderson, and Dr. Calvin McFarland. I cannot help but to appreciate the support of Dr. Anderson as we spent hours crunched data together and Dr. McFarland as he has had my back since I started the doctoral program, I am forever grateful of your personal and professional support.

I would be remiss not to thank my Central Michigan University and Eastern Michigan University family and friends. Dr. Traci Guinn-Buckley, thank you for giving me a chance at pursing my postsecondary education as a conditional admit in the ACE program and being the reason that I work in higher education. Dr. Eric Reed, thank you for being a brother and inspiration to me. Future Dr. Julia Heck, since our first class in the doctoral program together, you have always had my back and I cannot thank you enough. To my Howard and Patterson family and close friends that supported me throughout my journey, thank you! Last but not least, the Wilson family. Thank you, Shawn and Gina for your love and encouragement. I would have never pursued my doctoral degree if it was not for the guidance and mentorship of Dr. Shawn Wilson.



#### **Abstract**

The purpose of the study was to analyze the relationship between academic and nonacademic determinants of academic achievement and persistence and to identify how university geographic location influences the likelihood of Black male persistence. Quantitative data was drawn from the 2012/14 Beginning Postsecondary Students (BPS) Longitudinal Study (BPS: 12/14) conducted by the U.S. Department of Education National Center for Educational Statistics (NCES) to explore third-year academic achievement and persistence for Black males. This study identified two research questions, guided by the theoretical frameworks of Tinto's student institutional departure model and Astin's Input-Environment-Output model to assess Black male decisions to stay or leave college.

Descriptive statistics were used to calculate the means and percentages for all independent and dependent variables included in this analysis. Additionally, a multiple regression was used to predict the relationship between academic and non-academic determinants of academic achievement for Black males. Furthermore, a binomial logistic regression was used to predict the probability that university geographic location influences the likelihood of Black male persistence.

The findings from this study indicated that when controlling for academic achievement (third-year), high school GPA had a positive effect on Black male third-year persistence, while financial aid (federal and private student loans) had a negative effect on Black male GPA their third year of college. Additionally, this study indicated that geographic location did not influence the likelihood of third-year persistence. In fact, the findings in this study demonstrated that having a job on campus during the first year of college positively influenced Black male third-year persistence.



## Table of Contents

Dedication	ii
Acknowledgements	iii
Abstract	iv
List of Tables	vii
List of Figures	viii
Chapter One: Introduction	1
Statement of the Problem	2
Purpose of the Study	4
Research Questions	5
Definition of Terms	5
Significance of the Study	6
Chapter Two: Literature Review	9
History of Higher Education Retention	9
Student Success and Departure	15
University Type	19
Academic Factors of Persistence	24
Nonacademic Factors of Persistence	29
University Geographic Location	33
Theoretical Framework	40
Conceptual Framework	42
Chapter Three: Methodology	45
Research Design	45

Data Collection45
Population and Sample
Variables
Data Analysis51
Limitations and Delimitations54
Chapter Four: Results
Descriptive Statistics
Research Question 1
Research Question 2
Summary60
Chapter Five: Discussion61
Summary of the Study61
Interpretation of the Findings62
Implications for Policy and Practice
Critique of Study and Limitations69
Recommendations for Future Research71
Conclusion
References
Appendix: IRB Approval Letter



## List of Tables

Table 1: Description of Variables	50
Table 2: Statistical Analysis for Each Research Question	53
Table 3: Descriptive Statistics of Input Academic and Nonacademic Variables	56
Table 4: Descriptive Statistics of Input Environmental Variables	57
Table 5: Descriptive Statistics for the Outcome Variables	57
Table 6: Summary of Multiple Regression Analysis Predicting Academic	
Achievement (GPA)	59
Table 7: Summary of Binomial Regression Analysis Predicting Persistence	60



## List of Figures

Figure 1: Tinto's (1993) Longitudinal Model of Institutional Departure	<b>1</b> 2
Figure 2: Applied Astin's I-E-O model	<b>1</b> 4



## **Chapter One: Introduction**

Numerous benefits are associated with the attainment of a college education: increased earning potential, career opportunities, job security, and increased social capital (Palmer, Wood, Dancy, & Strayhorn, 2014). People with bachelor's degrees earn 31% more than those with an associate's degree and 84% more than those with a high school diploma, and on average, a bachelor's degree is worth \$2.8 million over an individual's lifetime (Carnevale, Rose, & Cheah, 2011). Across the United States, statistics about increased income associated with a college degree are promoted, enticing students to pursue postsecondary education with the intent to achieve these benefits. Unfortunately, blanket statements of prosperity are not suitable for everyone. Inequalities present in the pursuit of a college degree impact students' ability to reach degree attainment, particularly for Black males.

Over the past two decades, research on the academic achievement and persistence of African American males in the collegiate setting has rapidly expanded. The African American male experience and educational achievement outcomes at 4-year colleges and universities have garnered considerable attention from journalists, educators, and foundations (Harper, 2014; Harper & Harris, 2012; Palmer, Wood, Dancy, & Strayhorn, 2014; Shah & Sato, 2014). Due to this research, African American males in higher education have garnered significant attention from stakeholders, researchers, practitioners, and policymakers, and concerns have been raised about the lack of progress of African American males in accessing and succeeding in postsecondary education (Bonner & Bailey, 2006; Cuyjet, 2006; Harper, 2006, 2012; Harper & Harris, 2012; Palmer, Davis, & Hilton, 2009; Strayhorn, 2008, 2010). As college and university administrators continue to significantly recruit, moderately retain, and minimally graduate African American males, these students are constantly faced with challenges including, but not



limited to, stagnant enrollment, patterns of disengagement, and low graduation completion rates (Amechi et al., 2012).

#### Statement of the Problem

Numerous researchers have recognized persistence gaps between African American males and their White counterparts (Berryhill & Bee, 2007; Cuyjet, 2006; Harper, 2006a, 2012, 2015; Steele & Aronson, 1995). African American males graduate at lower rates than their female counterparts (Harper, 2012), and as a student population, African American students have the highest undergraduate gender gap in graduation rates comparative to all other ethnic minority groups, Furthermore, researchers attribute the academic achievement of African American students to the success of African American females. African American females significantly outperform African American males in college enrollment, retention, and degree attainment (Harper, 2009). In 2010, African American females earned baccalaureate degrees at approximately twice the rate of African American males (66% vs. 34%, respectively; U.S. Department of Education, 2012). Persistence researchers most commonly present data disaggregated by race, but not by gender. However, it is important that researchers are attentive to the homogeneity of African American intracultural and intercultural experience in postsecondary education (Grice, 2015). As university leaders at higher education institutions attempt to diversify their campus student populations, African Americans are known to experience significant disparities of success compared to their White counterparts, specifically African American men. To this end, gaps in postsecondary persistence and graduation rates for African American males are disproportionately larger than many other racial/ethnic groups.

According to Tinto (2005), most researchers of persistence and degree attainment highlight several critical factors that contribute to persistence and degree attainment:



demographic and individual characteristics of students, family background, high school preparation, college experiences, and institutional characteristics. Despite this growing body of research, there is a lack of persistence literature on the phenomenon of geographical locations of institutions. According to Sparks and Nunez (2014), research on the role of institutional location in postsecondary attainment has either described gaps in postsecondary educational attainment between residents of urban and rural areas or explored how the residential location where students live during high school, or urbanicity, influences their college aspirations, enrollment, and persistence. Theorists have suggested that structural demographic characteristics relevant to postsecondary institutional location may be critical to the process of student persistence, especially African American men. Berger and Milem (2000a) posited postsecondary institutional location (regarding factors like urbanicity) independently affect postsecondary persistence above and beyond individual-level characteristics as a set of structural demographic characteristics relevant to the persistence process. Relatively little empirical literature exists on African American male persistence in relation to institutional geographic location. For these reasons, it is crucial to expand research on African American males' college persistence to account for geographic contexts in relation to factors of success. As enrollment rates of Black males increase in the United States, it is imperative these students understand how geographical location of their selected higher education institution is impacting their academic achievement and persistence to graduation.

Qualitative research methods are predominately used to study African American males' transitional education experiences in postsecondary institutions (Lewis, 2016). According to Lewis (2016), qualitative researchers focus on social, interpersonal, and intrapersonal experiences, while quantitative researchers investigate academic achievement and student levels



of adjustment. Diversifying the type of research methods (i.e., quantitative and qualitative) used to explore experiences of African American males, including more specific, large-scale, precise and generalizable evaluations, is important in the evolution of persistence research of African American males (Weiss, 1998). Qualitative studies have been successful in capturing the experiences of African American males; however, qualitative researchers may neglect to find the understanding of satisfaction trends around grades, support, and identity experienced by Black males (Lewis, 2016).

Black male retention, persistence, and graduation is a significant problem and warrants serious attention (Strayhorn, 2013a). Approximately 40-60% of college students drop out before earning their bachelor's degree (Tinto, 1993), and Black males make up a considerable percentage of this population. It is important to understand the complexities of demographics, environmental impacts, and current research as it pertains to Black males so scholars and practitioners can better attempt to explain the complexities of Black male student departure. Researchers must be attentive to and contribute to reverting the currently significant disparities of success for Black students. To this end, closing the disproportionately large gaps in postsecondary persistence and graduation for Black males is critical.

## **Purpose of the Study**

My purpose for this study is to examine the relationship between academic and nonacademic determinants of academic achievement and persistence for African American males. I seek to examine the relationship of how university geographic location influences the likelihood of African American male persistence. Ascribed independent factors (e.g., high school grade point average [GPA], remedial courses, employment, financial aid) were divided into academic, nonacademic, and environmental variables, while dependent factors consisted of



academic achievement and persistence. The examination of academic, nonacademic, and environmental variables was important because it would hopefully assist in identifying characteristics and factors that contribute to significant academic achievement and persistence of African American males in their third-year of college.

#### **Research Questions**

The following questions will be investigated in this study:

- 1. What is the relationship between academic and nonacademic determinants of academic achievement and persistence for African American males?
- 2. Does university geographic location influence the likelihood of African American male persistence?

#### **Definition of Terms**

- Academic Achievement: Learned proficiency as measured by college grade point average,
   which indicate a more academically integrated student.
- African American: For the purpose of this study, African American is defined as an American citizen of African descent, also used interchangeably with "Black."
- College or University: A postsecondary higher education institution, which grants associate, bachelor's, master's, and/or doctoral degrees.
- *Commuter*: A student that typically resides at home with a parent or relatives or in private housing without parents or relatives (Chickering, 1974).
- *Degree Attainment*: The process of receiving a diploma awarded to students by a college or university after the successful completion of a program or study.
- *Full-time Student*: A student who is enrolled at a college or university and is taking the minimum number of credits required by the school to maintain full-time status.



- *Geographical Location*: The specific location of a college or university in the United States.
- Historically Black College or University (HBCU): A college or university originally founded to educate African American students, comprised of predominantly African American students.
- Persistence: Continued enrollment or degree completion at any institution within the higher education enterprise; persistence specifically focuses on student enrollment (U.S. Department of Education, 2013).
- Predominantly White Institution (PWI): A college or university established with enrollment comprised of predominantly White students.
   Race: A person's racial identity; African American, Caucasian, Hispanic, American Indian, Asian, or other (U.S. Department of Education, 2013).
- Region: An area or division, especially part of a country or the world, having definable characteristics, but not always fixed boundaries (i.e. New England, Mideast, Great Lakes, Plains, Southeast, Rocky Mountains, Far West, and South West; U.S. Department of Education, 2013).
- *Remedial Education*: Coursework that compensates for lack of basic reading, writing, and arithmetic skills necessary to succeed in college-level courses (Stewart, Lim, & Kim, 2015).
- *Retention*: Percentage of first-time students who return to the same institution to continue their studies the upcoming fall semester (U.S. Department of Education, 2019).
- *Urbanicity*: The location of college and universities specifically, urban, suburban, or rural.

## **Significance of the Study**

Limited research examines African American males' academic and nonacademic determinants of persistence in higher education as it relates to geographic location. With this



study, I intend to contribute new knowledge to the study of African American males in three ways. First, I focused on utilizing quantitative analysis to examine Black male academic achievement and persistence at 4-year postsecondary institutions, which is far less common as a research methodology in studying this student population but critically important to gain a better understanding of this phenomenon. Lewis (2016) explained qualitative researchers seek to understand social, interpersonal, and intrapersonal transitions, while quantitative researchers measure rates of college satisfaction on the basis of grades, support, and identity. According to Lewis (2016), quantitative research is the less common approach to African American male postsecondary studies. Additionally, literature intended to explore the academic success of African American students in postsecondary education tends to combine both male and female experiences. I will solely focus on the examination of third-year academic achievement and persistence of Black males using a nationally representative sample.

Secondly, geographic context matters in understanding Black male persistence.

Researchers discovered student and institutional factors vary according to an institution's location, which is significantly associated with persistence (Sparks & Nunez, 2014). According to Sparks and Nunez (2014), location impacts many of the factors (economic capital, social capital, academic and social integration, intentions, human capital, and academic preparation) associated with individual persistence. Researchers may be able to identify regional areas of the United States where Black males are more or less likely to persist at 4-year postsecondary institutions with the results of this study. Researchers may be able to influence future higher education policy and practice with the gained understanding of geographical location and its impact on African American male persistence. Thus, this knowledge creates a vested societal



interest spanning state and local governments, practitioners, policymakers, and researchers in providing access and resources for Black males.

Finally, the integration of scholarly theoretical framework assists in facilitating the understanding of student departure phenomena and maturation (Strayhorn, 2013b). The integration of the theoretical models of student persistence from Tinto (1993) and the conceptual framework of Astin (1991) will guide my understanding of Black males' decisions to stay or leave college by their integration into the college academic and social realms (Astin, 1975; Bean, 1982; Tinto, 1975, 1987, 1993). The impact of their experiences of integration into varying environmental conditions will be assessed. Findings supported by these two frameworks will contribute to understanding academic and nonacademic factors of academic achievement and persistence for Black males at postsecondary, 4-year institutions.



## **Chapter Two: Literature Review**

My purpose for this chapter is to present literature on academic and nonacademic factors as they relate to retention and persistence of Black males. A brief historical context describing relevant research studies conducted on academic achievement, student persistence and retention is covered and focused around findings from studies on Black male retention at historically Black colleges and universities (HBCUs) and predominantly White institutions (PWIs). Most importantly, literature on the relationship between Black male persistence in relation to university geographic location is examined. Additionally, to understand both academic and nonacademic factors that contribute to Black male academic achievement and persistence, literature on student GPAs, attendance at 4-year universities, remedial courses, employment, off-campus commuter living, and financial aid will be addressed.

#### **History of Higher Education Retention**

Since the formal establishment of the U.S. college system, the student retention phenomenon has been critical issue in higher education (Habley, Bloom, & Robbins, 2012; Seidman, 2005). Both low and high attrition at colleges and universities have contributing factors that affect financial plans and academic reputations. Prior to the 1960s, this phenomenon went without formal theoretical models and empirical studies as retention research was in its infancy. With that said, the last four decades has proved retention and persistence to be critical to colleges and universities survival, specifically analyzing factors that contribute to student departure. During this time, researchers and educators have judiciously analyzed and added to the development of retention studies into era's that chronologically explore their theoretical and conceptual frameworks.



In the 1960s and 1970s, through the conceptualization of theoretical frameworks and systematic studies, the field of higher education retention research in the United States started to take shape (Bean, 1980; Feldman & Newcomb, 1969; Panos & Austin, 1968; Spady, 1970, 1971; Terenzini & Pascarella, 1977; Tinto, 1975). During this time, increased postsecondary access contributed to increased enrollment and higher education enrollment started to diversify and transform into postwar institutions of robust education environments. Furthermore, over the last five decades, the exploration of student enrollment and commitment to stay in college has been at the forefront of higher education research. Currently, student retention is one of the most widely studied areas in higher education (Tinto, 2006).

#### 1960s—Preventing Dropout

The rapid growth of student enrollment contributed to the movement towards educational access beginning in the late 1940s and continuing throughout the 1950s. From veterans enrolling in colleges and universities using their GI Bill in the 1950s, to an influx of students from middle and lower-income families, the 1960s sparked an increasing stream of students enrolling in colleges and universities. During the early 1960s, student retention focused on the characteristics of individual students, rather than on their interactions with the college environments. This phenomenon was often explained in terms of the students' characteristics, personal attributes, and shortcomings (Spady, 1970, 1971; Tinto, 1993, 2006). Early research studies focused on student's personality attributes consistent with maturity, motivation, and disposition as the main reasons for student persistence or non-persistence (Seidman, 2012). Seidman (2012) stated that the latter part of the decade indicated a shift in research as initial efforts to understand the role of affective characteristics and social contexts in student departure had begun.



Leaders in higher education raised many questions in the 1960s about who had privileged access to college, who was succeeding in college, and who were the college graduates in U.S. society (Berger & Lyon, 2005). Events such as the Civil Rights Movement, the War on Poverty, and student unrest due to war were significant influences on such debates on college access. The Civil Rights Movement, combined with the Vietnam War, led to student discontentment with both political and functional aspects of campus life, consequently causing student unrest. As a result, postsecondary opportunities for African Americans and other racial and ethnic minorities were created in this era.

Activists during the 1960s Civil Rights Movement worked to form and promote opportunities for postsecondary education not previously offered to African American students due to inadequate educational preparation, given the inequities in school systems throughout the United States (Seidman, 2012). Segregation and racial indifference were very prominent prior to the 1960s Civil Rights Movement (Thelin, 2011). Not only in segregated states in the south, but nationwide, enrollment opportunities for African American students were limited (Thelin, 2011). Thelin (2011) states, "Prior to World War II a white person between the ages of eighteen and twenty was four times more likely than a Black person of the same age group to enroll in college" (p. 232). Nevertheless, African Americans and other racial and ethnic minorities faced many challenges as higher education institutions were not prepared for such expansion in the 1960s. Though desegregation efforts at both the state legislation and state universities during the 1960s took effect, African American students were faced with segregation and exclusion in admissions and through campus life (Thelin, 2011). Seidman (2012) stated, "Many campuses were unprepared to deal with a more diverse student body and many were unable or unwilling to create supportive environments for students of color" (p. 20). As African American students



remained marginal and proportionately underrepresented at desegregated institutions in the United States, they relied on enrolling in HBCU's during this time to fulfill their goals of pursuing a bachelor's degree (Thelin, 2011).

## 1970s—Building Theories

The 1970s is considered the dawn of theory in the study of college student retention, coupled with retention becoming an increasingly common focus area in college and university campuses (Seidman, 2012). Researchers' increased their efforts in conceptualizing retention frameworks for student-college relationships. William Spady (1971) is considered one of the first sociologists to develop a theory on persistence (Metz, 2004). Spady's (1971) work, "Dropouts from Higher Education: An Interdisciplinary Review and Synthesis," was the first widely recognized sociological model of student dropout and retention in higher education.

Spady investigated the student dropout process, and he suggested that students display unique and specific characteristic and goals. Thus, the dominant influence affecting student behavior is academic performance in college (Metz, 2004). Spady explained the process of student departure as an interaction between the student and college environment (Spady, 1971). This sociological model expressed that student attributes are exposed to the norms of an environment. Moreover, if the student and the environment are receptive to the norms, the student will assimilate both socially and academically, increasing the likelihood of persistence (Seidman, 2012).

Tinto's (1975) student departure theory is the most well-known sociological perspective on student retention. This theory focused on 4-year college students and suggested that students arrive at college with certain expectations and aspirations. Based in part on Durkheim's suicide model (1951), Tinto (1975) also used emerging sources of student departure studies as influences



for the student integration model. Tinto proposed both social and academic integration are essential to student retention in the interactionalist theory of student departure. Tinto suggested that institutional variables such as peer group interaction, faculty-student interaction, and extracurricular involvement help shape a student's progression through college (Metz, 2004). According to Tinto, student outcomes (e.g., degree attainment) are influenced by how the student integrates into the college environment. Tinto's work has become one of the most known and most often cited theories relating to student departure (Seidman, 2012). Since the initial publication of Tinto's interactionalist theory, it has been revised, added to, criticized, and praised.

Kamens and Astin also contributed to the study of student retention in the 1970s.

Kamens' (1971, 1974) sociological perspective of student retention was derived from multiinstitutional data used to demonstrate how institutions with greater size and complexity have
lower rates of attrition than others types of postsecondary institutions (Seidman, 2012). Astin
(1977, 1985) suggested that the amount of physical and psychological energy a student invests in
the collegiate experience (both social and academic) directly influenced departure decisions. By
the end of the 1970s, retention theory was well established and served as the basis of the student
departure research. This foundational work would be the beginning of future retention studies for
decades to come.

## 1980s—Managing Enrollment

The concept of enrollment management was developed during the 1980s. Although the study of retention accelerated in the 1980s due to the empirical and conceptual contributions of scholars in the 1970s, the number of students enrolling into college began to decline. In the mid-1970s, higher education enrollment exceeded 11 million, while followed by stagnation (Seidman,



2012). During this time, higher education administrators explored better ways of attracting and recruiting students. As a result, Maguire, the Dean of Enrollment at Boston College, coined the concept of *enrollment management* in 1976 (Seidman, 2012). Enrollment management takes a university-wide approach to student marketing and recruitment, including admissions, financial aid, student retention, and graduation (Hossler, 1984). Due to the increased attention to enrollment management, noticeable theorists emerged in the 1980s, such as John Bean.

Bean's (1980, 1982) causal models of student attrition were based on theoretical models by researchers Spady, Astin, and Tintop. Bean (1980) used concepts adapted from organizational studies of worker turnover to explain student departure. Similarities between leaving work and leaving college were uncovered. Bean focused on the importance of student background characteristics in determining student departure, such as prior academic performance, distance from home, student satisfaction, and socioeconomic status (Seidman, 2012). Bean's (1980, 1982) work was considered a key contribution to how universities maintained and optimized student bodies through enrollment management.

## 1990s-2000s—Encountering the 21st Century

In the 1990s, the understanding of experiences for students with different backgrounds during their postsecondary pursuits was advanced (Allen, 1992; Bennett & Hurtando, 1994; Hurtando & Carter, 1996; Thompson & Fretz, 1991). Theorists moved away from traditional research models and questioned retention theory based on the assumptions that students must adopt the values and norms of a particular campus to succeed (Seidman, 2012).

Further research by Tinto (1993) expanded departure theory by the development of a longitudinal and more explanatory model of departure. Tinto (1993) analyzed the longitudinal process by which students leave institutions of higher education through, "adjustments,"



difficulty, incongruence, isolation, finances, learning, and external obligations or commitments" (p.112). In sum, Tinto stated that colleges consist of academic and social systems. For students to persist, they must be integrated into both systems at their academic institution. Furthermore, Tinto's model of institutional departure (1975, 1993) has been used extensively in the study of college student departure (Pascarella & Terenzini, 2005).

Astin's (1997) book, *What Matters in College*, is an example of the development of student retention literature as he concluded that keys to student success and graduation relied on the student involvement and connection. Building on unique research efforts like Astin's, the 21st century is the era of studying institutional contexts in the retention literature. According to Seidman (2012), these contexts are racial and ethnic oriented, focusing on campus racial climates on PWIs and the impact of organizational behavior on different groups of students. In the study of higher education, retention and persistence have become significant areas of research interest and have grown rapidly from the 1960s to the current day.

Higher education has been transformed from the 1960s to the current day. Currently, the emergence of distance education, online, and e-learning has created both new opportunities and challenges for student access, retention, graduation and degree completion. Also, the price of higher education has skyrocketed. Thus, students are challenged in the college or university they choose due to affordability. Therefore, retention literature will continue to expand as the complexities of an everchanging higher education system are discovered and a diverse array of students either enter and graduate or enter and drop out.

#### **Student Success and Departure**

One of the primary goals of colleges and universities is to retain students to degree completion. The focus of this goal has led student persistence to be one of the broadest research



subject areas in higher education (Tinto, 2006). Marginal success of student retention and attrition efforts have been recognized as critical issues across 4-year colleges and institutions in the United States in the past four decades (Habley, et al., 2012). In the attempt to retain students, the effects of attrition have led researchers to critically examine the role of accountability in student retention and persistence. In doing so, it has led researchers to examine whether it is the responsibility of students to enter post-secondary institutions well equipped to persist to degree completion or the responsibility of the institution to prepare students as they enter and matriculate through. These examinations have become the catalyst of past and present research of persistence and retention in higher education.

#### **Retention and Persistence**

According to Habley et al. (2012), "The terms associated with institutions differ markedly in a number of ways from the definitions associated with students" (p. 7). In understanding student progress and departure, both retention and persistence must be defined, as these two terms are used interchangeably in higher education and throughout this study.

Retention is defined *organizational* phenomenon— the rate at which students graduate from an institution they first entered as freshmen at any given point (Tinto, 2012). Integrated Postsecondary Education Data System (IPEDS, 2019) defines retention as a measure of the rate at which students persist in the educational program at an institution; the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. Institutional terms like retention do not define a behavior but are aggregate descriptors (Habley et al., 2012). Notably, the term retention, as applied to higher education was not widely used until the 1970s (Habley et al., 2012).



Persistence, on the other hand, is an *individual* phenomenon—the rate at which students who begin higher education at a given point in time continue in higher education and eventually complete their degree, regardless of where they do so (Tinto, 2012). As a qualifier of persistence, Astin (1975) adds full-time status and pursuant of a degree. Persistence defines the behavior of students. Thus, the term can be used to describe a student who persists, a student who leaves a college or institution, or a student who leaves a particular institution but persists elsewhere (Habley et al., 2012). Students may persist in higher education without being retained to graduation (Tinto, 2017). Although assumed institutional goals are to retain students to graduation, researchers that have studied student retention and persistence also understand the effects of student stop-out, the interruption of education for a relative brief period of time and return to complete a degree, and drop out, a student who is not enrolled, has not earned a degree, and is no longer pursuing a degree and transfer (Astin, 1975). These factors are critical in examining persistence and retention predictors as student enrollment, departure, and progress are essential in understanding the variability related to student completion and graduation rates.

#### **Graduation Rates of African American Males**

Student departure is very prevalent in higher education. Between 40% and 60% of bachelor's degree-seeking students leave college without earning their degree (Astin, 1975; Braxton, 2000; Tinto, 1993). According to Strayhorn (2013a), historically underrepresented racial minorities, such as African Americans, can exemplify even higher portions of this percentage. Significant challenges in academic and social adjustments and factors such as sense of belonging, co-curricular involvement and engagement, academic achievement, and persistence, among others, have created disparities in rates of Black male retention, persistence, success and graduation (Harper, 2006a, 2015; Steele, 1999, 2010; Steele & Aronson, 1995;



Steele, 2010; Steele &; 1993). According to national data, two thirds of Black men who start college never finish (Cuyjet, 2006; Harper, 2006a; Palmer et al., 2009).

The National Center for Educational Statistics (2019) indicated that Black male students accounted for only 5% the fall 2016 total undergraduate postsecondary enrollment.

Comparatively, in 2006, Black males comprised of the exact percentage as in 1976—less than 5% (Mortensos, 2001; Palmer & Strayhorn, 2008; Strayhorn, 2010). Black student enrollment increased from 10% in 1976 to 14% in 2016 (U.S. Department of Education, 2019). However, the 2016 percentage reflects a decrease in enrollment since 2011. In 2011, Black students made up a high 15% (3,079,200) of all enrolled U.S. residents compared to 13% (2,588,200) in 2016 (U.S. Department of Education, 2019). According to Strayhorn (2013a) little to no progress has been made in postsecondary enrollment of Black males in the last quarter of a century unlike the significant growth of most other racial/ethnic subgroups.

Cuyjet (2006) has indicated that Black males graduate at a lower rate than their female counterpart. The 4-year graduation rate of Black full-time, bachelor's degree seeking students (2011 cohort) at 4-year post-secondary institutions was 18.9% and the 6-year graduation rate was 40.9% (U.S. Department of Education, 2019). More specifically, Black males graduated at 13.6% and Black females at 22.5% in four years while in six years, Black males graduated at 34.1% and Black females at 43.9% (U.S. Department of Education, 2019). Furthermore, the number of bachelor's degrees awarded to Black students between 2005-2006 and 2015-2016 increased at 37% (U.S. Department of Education, 2019). While this is a promising increase in degrees awarded to Black students, according to national data, two thirds of Black men who start college never finish (Cuyjet, 2006; Harper, 2006a; Palmer et al., 2009).



Research on college retention and persistence has existed for over 40 years (Tinto, 2012) with an increase in literature specifically to Black students. However, over the past 20 years, rates of college completion in the United States have relatively stayed the same. According to Strayhorn (2013b) "African American male attrition is a significant problem that warrants serious attention" (p. 283).

## **University Type**

Over the past few decades, a considerable amount of scholarly research has been conducted on the social, academic, success and failures experienced by African American students attending historically Black colleges and universities (HBCUs) or predominately White institutions (PWIs); (Cuyjet, 1997, 2006; Dancy & Brown, 2012; Harper, 2006, 2012; Palmer, Davis, & Hilton, 2009; Palmer & Wood, 2012; Strayhorn, 2008, 2009, 2010; Wood, 2012; Wood & Turner, 2011). According to the U.S. Department of Education (2019), Black student enrollment at HBCUs accounted for 9% of the overall Black enrollment in 2016. Thus, an overwhelming number of Black students attend PWIs, in which the majority of studies on Black males have been examined (Smith, Allen, & Danley, 2007). Yet, the environment of both institution types produces advantages and disadvantages for Black students. Therefore, Fries-Britt and Turner (2002) indicate that increased analysis of Black male students academic and social experiences at these institutions is critical in improving both their experiences and degree attainment rates.

## **Historically Black Colleges and Universities**

Established in 1837, post-Civil War era, HBCUs were founded specifically to support the education of Black Americans (Allen & Jewell, 2002; Anderson, 1988; Evans, Evans, & Evans, 2002). By 1960 there were nearly 130 institutions classified as HBCUs (Hirt, Strayhorn,



Amelink, Bennett, 2006). As of 2016, there were 102 HBCUs, including twelve 2-year institutions and ninety 4-year institutions (U.S. Department of Education, 2019). Despite representing only 3% of all institutions in higher education, HBCUs have played a significant role in the success of African Americans in higher education (Lundy-Wagner & Gasman, 2011; Palmer & Gasman, 2008). HBCUs have accounted for 9% of the degrees awarded to Black students by all institutions. Additionally, per degree level, the percentage of degrees conferred to Black students by HBCUs were 2% of associate, 14% of bachelor's, 6% masters, and 11% of doctorate (U.S. Department of Education, 2019).

Numerous scholars have contributed in the exploration of student departure and success of African American males at HBCUs (Allen & Jewell, 2002; Berger & Milem, 2000a; Brown, 1999a; Fries-Britt & Turner, 2002; Palmer & Gasman, 2008). Subsequently, in contextualizing the effect of institution type at HBCUs, they too provide a layer of complexity in African American males' success.

By all accounts, the impact that HBCUs have contributed the retention and persistence of Black students have be supported by many scholars (e.g., Gasman, 2008; Gasman, Lundy-Wagner, Ransom, & Bowman, 2010; Ross, 1998). According to Kim and Conrad (2006), a factor that make HUBUs unique, unlike their PWI counter is their ability achieve outcomes consistent with Black student success while lacking comparative funding. As research supports the impact that HBCUs have on the success of Black students, more importantly are the social and academic experiences of the Black male.

Palmer and Young (2009) sought to understand African American males experience at a research-based public HBCU on supportive relations. A total of 11 African American male juniors and seniors enrolled in an academic skills preparatory program were interviewed. Results



from this study indicated that student's commitment to the university and on-campus activities helped students gain a sense of belonging. For Black males attending HBCUs, engagement in educational activities and social support opportunities can contribute to Black male social integration and persistence at HBCUs (Palmer & Young, 2009).

Also using the qualitative research method of interviews, Palmer and Gasman (2008) examine the presence of social capital resources for African American males who attended HBCUs. The results of the 11 juniors and seniors sampled indicated that reports of positive experiences with faculty, staff, mentors, peers, and the general campus climate supported their perception on social capital opportunities at their institution. Fries-Britt, Burt, and Franklin's (2012) qualitative study on the experiences and challenges of 44 Black men in STEM programs at HBCUs indicated the positive correlation of peer interactions as well. Flowers (2012) research found African American males, like their White counterparts, also find peer relationships valuable and an indispensable factor in achieving success for African American males at HBCUs (Fries-Britt, Burt, and Franklin's, 2012).

On the contrary, Palmer, Davis, and Hilton (2009) explored challenges African American men faced in succeeding at HBCUs. These researchers found factors that impeded the participants in their study were poor help-seeking behavior, insufficient financial aid, and problems at their home or community. According to Palmer and Wood (2012), the campus culture of HBCUs can become unsupportive as well. In a study by Kimbrough and Harper (2006), African American males at HBCUs faced challenges in finding mentors and role models who were caring and committed. Participants from their study noted that only a few faculty and staff were committed mentors and role models and, as a result were sought out by an overwhelming number of students, which created a burden for the faculty and staff in terms of



students seeking support.

Harper and Gasman's (2009) qualitative study of 76 African American males across 12 HBCUs explored the interpretation of norms and social boundaries at their institution. Results from this study conferred participants identified the presence of norms and social boundaries on the basis of sexuality, self-expression, and positional subordination. Such restraints on the presence of social expression can create perceptions of unwelcoming environments due to institutional climate. Subsequently, this increases the likelihood of Black males leaving their institution as a result of their negative perception (Harper & Gasman, 2009).

The need to examine Black male experiences and gain insight into their academic achievement at HBCUs is imperative as it lacks in contemporary research (Kimbrough & Harper, 2006). Furthermore, retention and persistence literature of African American men at HBCUs that exist has mixed results. Researchers have found numerous social factors that critically impact the experiences of African American males, such as interpersonal relationship building, campus disengagement (Kimbrough & Harper, 2006), conservative institutional climate (Harper & Gasman, 2008), parent support, access to positive role models, and religious beliefs (Ross, 1998). Although quantitative research methods occur less frequently in contemporary research (Lewis, 2016), Weiss (1998) has asserted that more specific, larger-scale, precise, and generalizable evaluations into the lifestyles of African American males will benefit the research community with an increase in quantitative studies. Nevertheless, the increase in quantitative analysis of African American male satisfaction with respect to grades, support, and identity during their colleges experience can contribute to the absence of research of academic factors of success for this critical population.



#### **Predominantly White Institutions**

As Black students attend PWIs at a higher rate than HBCUs, research has indicated strikingly different student experiences (Cuyjet, 2006; Strayhorn, 2008). According to Strayhorn (2012) and Jackson and Moore (2008), researchers of African American male achievement focus on deficit (negative attributes reinforced in media, academic research journals, and education practice) with little attention to solving educational problems for this student population.

Scholars have noted that the environment of PWIs for African American students can be cold, uninviting, inhospitable, hostile, and unwelcoming (Allen, 1992; Cuyjet, 1997, 2006; Feagin, Vera, & Imani, 1996; Fries-Britt & Turner, 2001; Harper et al., 2011; Strayhorn, 2008).

Additionally, African American males at PWIs have experienced alienation, unsupportive relationships with faculty, and are most likely to view the university curriculum as culturally exclusive.

Delago (1998) stated that once Black students enroll in colleges and universities, they must learn to adjust both academically and socially to their new environment. This new environment consists of Black students being surrounded by White people (Delago, 1998). Tinto (1993) asserted that students should be integrated into both academic and social systems to successfully persist at their academic institution. However, the social and academic adjustments for African American males are uniquely different and found to be much more complicated. Terenzini, Pascarella, and Hagedorn (1999) believed that if African American males struggle or have problems with social adjustment, it can be detrimental to their success at PWIs.

In addition to social adjustment, other factors such as college environment, faculty-student relationships, and experiences of isolation and alienation and social support networks are predictors of African American male student success (Feagin et al., 1996). In contrast to negative



experiences explored by scholars, Shook and Fazio (2008) indicated that cross-racial integration with PWIs has predicted achievement benefits for African American students. African American freshman students earned higher GPAs when paired with White roommates (Shook & Fazio, 2008). Strayhorn (2008) also looked at data from the College Student Experience Questionnaire (CSEQ; Pace, 1990) and concluded that Black men who socialized with peers from various races and ethnicities were more likely to exhibit a stronger sense of belonging on campus.

Campus engagement is known to be associated with academic success, a concept reinforced in the research literature on Black males (Strayhorn, 2008). In a qualitative study, Harper (2012) examined success factors across institutional contacts for African American males and documented 219 African American males' academic achievement at 43 colleges and universities across 20 states. Harper sought to explore the effects of individual prowess in gaining social capital to support the participants' academic goals, institutional programs, and familial and peer support. Participants shared factors that contributed to their academic success, such as the ability to navigate a racially charged campus, becoming engaged on campus, the development of peer and mentor relationships, and precollege programs and scholarship opportunities.

## **Academic Factors of Persistence**

Understanding academic factors such as GPA, institution type, and remedial course integration will further help uncover salient factors that contribute to Black male persistence.

Academic outcomes are critically important for Black males as this population possesses some of the lowest achievement gaps of all races (Harper, 2012). Despite the continuously growing body of research on the Black male college experience, too little emphasis has been placed on exploring their academic achievement and outcomes.



## **High School Grade Point Average**

Entry into college is a critical transition point for graduating high school students. For 4-year postsecondary consideration, students must have an established GPA and additional standardized test scores (ACT or SAT). High school performance such as GPA has been identified as an indicator for persistence in higher education by many researchers during the early years of persistence research (Blanchfield, 1971; Chase, 1970; Coker, 1968; Jaffe & Adams, 1970; Lavin, 1965; Lawhorn, 1971; Panos & Astin, 1968; Smith, 1971; Taylor & Hanson, 1970). Likewise, Black male students' academic preparation prior to college has been indicated as significantly related to access and succeed in higher education (Cuyjet, 1997, 2006; Davis, 2003; Garibaldi, 2007; Harper, 2006b, 2012; Jackson & Moore, 2006, 2008; Strayhorn, 2008).

Tinto (1975, 1993) and Bean (1980) stressed the importance of background characteristics in relation to student retention. Specifically, high school experience and academic preparation prior to postsecondary enrollment. Tinto (1975) stressed that academic integration was necessary in decreasing student dropout. Thus, high school experience along with individual attributes and family background directly influenced student's departure decisions. Tinto (1993) also asserted that past performances such as high school experiences and individual ability are often associated with academic dismissal. It was also asserted by Astin (1975) that academic failure is caused by a student's low ability and inferior high school grades. Bean (1980) emphasized that the quality of a student's academic preparation and instruction influenced whether or not a student succeeds in a higher education institution. Adelma (1999) believed GPA, as a high school academic achievement indicator positively related to undergraduate retention.



Furthermore, according to Habley et al. (2012), both standardized achievement and high school GPA are important predictors of college readiness and student success. According to a comprehensive retention study by Astin and Osefuera (2005), over 90,000 students, their findings revealed that high school grades were identified as a student characteristic that predicted their chances of completing a degree. Additionally, Allen and Robbins (2010) demonstrated that performance (high school GPA) was critical in predicting the likelihood of first-year college success.

Despite recent research asserting that academic preparation prior to postsecondary education is advantageous for Black males, many factors impede both access and success of Black males in K-12. Research indicates that Black males are overrepresented in remedial courses, more likely to be found in special-education, and underrepresented in gifted education programs such as AP courses (Cuyjet, 1997, 2006; Garibaldi, 2007; Harper, 2006, 2012; Jackson & Moore, 2006, 2008). Yet, scholars have indicated that Black males are not well prepared to engage in collegiate-level coursework (Hagedorn, Maxwell, & Hampton, 2001), thus suggesting that some of these students may not possess the skills needed to be successful college students.

#### **Remedial Courses**

Colleges and universities face significant barriers when serving traditional-aged students that are underprepared and underrepresented (Bettinger & Long, 2007). The first year of undergraduate studies is critical to their success as they transition from secondary to postsecondary education (Bettinger & Long, 2007). Deficiencies in students reading, writing, and mathematics skills have been addressed by colleges and universities over the years Stewart et al., 2015). This type of developmental education is also known as remedial education.



Remedial education is defined as coursework that compensates for lack of basic reading, writing, and arithmetic skills necessary to succeed in college-level courses (Stewart et al., 2015).

Researchers have reported mixed findings in the remedial education literature. Opponents of remedial education have argued the cost to educate students who should have mastered developmental education components are increasing the expenses of students and taxpayers (Hoyt & Sorenson, 2001; Terry, 2007). Livingston's (2007) study of Virginia's public colleges and universities and the factors related to graduation such as demographic, financial, and educational revealed that students enrolled in remedial courses were less likely to persist and graduate than those not enrolled in remedial courses.

In contrast, Weissman, Silke, and Bulakowski (1997) found that short-term benefits are associated with universities and colleges providing remedial education by increasing the academic performance of underprepared students during the first year in college while also providing long-term retention benefits. Adelman (2006) indicated the number of remedial courses taken does influence the time to receive a degree from college. However, this study did not find a significant relationship between remedial courses taken and successful degree completion.

Adelman (2006) stated that students with lower quality high school preparation are least likely to persist in the pursuit of receiving a college degree. Greene and Foster (2003) found that 80% of African America students leave high school being minimally prepared. Attewell et al. (2006) suggested that African American students are more likely to rely on remedial courses during their transition from secondary to postsecondary education. Remedial education is not limited to minority students. White students comprise of most remedial program participants; however, underrepresented minorities are disproportionately represented in remedial programs



(Attewell et al., 2006; Boylan, 1999). Data from the National Center for Educational Statistics (NCES, 2002) showed that African Americans are more likely to enroll in remedial courses during their college career compared to students from all other racial and ethnic backgrounds.

College remediation has played a critical role in facilitating access and success for minority students (Attewell et al., 2006; Davis & Palmer, 2010; Kimbrough & Harper, 2006; Palmer & Davis, 2012). Studies show that, of the 61% of African American students enrolled in remedial courses, 50% completed their degree (Attewell et al., 2006). Harvey (2008) and Jackson and Moore (2006, 2008) believed that due to the educational barriers that African American males face and levels of under-preparedness, the need for postsecondary remediation is most apparent. Palmer and Davis (2012) have echoed concerns that elimination of remedial programs would significantly affect African American males' access to higher education.

## **College Grade Point Average**

One's postsecondary cumulative GPA, according to Spady (1970) and Tinto (1975), is hypothesized to be the extrinsic reward for variations in academic performance. Academic performance includes, but is not limited to, admission tests scores, high school rank, GPAs and placement scores (Habley, et al., 2012). A student's GPA is used for, university GPA requirements, specific degree programs, future educational mobility (graduate school), financial aid, and graduation requirements (Tinto, 1993).

Student GPA is "perhaps the closest surrogate to pay in work organizations" (Bean, 1983, p. 133). Also, grades may have some tangible value that can be used for future educational and career mobility. DesJardins et al. (1999) stated that a higher GPA lowers the risk of dropout. Pickering, Calliotte, and McAuliffe (1992) found that first-year grades, along with academic integration, were strong predictors of retention among African American students.



According to Hu and St. John (2001), grades and persistence are positively linked for all students. Sadly, African American and Hispanic students on average have lower grades and are more likely to leave college (Bowen & Bok, 1998). Harper (2016) explained that over the last 15 plus years, there has been more published about African American men than any other racialized sex group. However, too little emphasis has been placed on African American male academic experience and outcomes (Harper & Newman, 2016).

#### **Nonacademic Factors of Persistence**

According to Astin and Oseguera (2004), environmental contingencies such as students' place of residency, financial concerns, and employment are factors related to undergraduate degree completion. As for Black males, college success has been linked to correlates ranging from involvement to social support (Strayhorn, 2017). For these reasons, this section explores nonacademic factors that influence Black male persistence.

## **Off-Campus Living and Commuter Students**

College students have a choice of living arrangements as they enroll in colleges and universities. Some institutions require specific students to live on campus, while others do not. Horn and Nevill (2006) discovered 85% of the U.S. college students represent the commuter community, or those who choose to live off campus. Typically, commuters live off-campus with family, friends, relatives, or by themselves (Chickering, 1974; Hintz, 2011; Horn & Nevill, 2006; Jacoby, 2000).

According to Jacoby (1989), the breadth of literature on commuter students is very limited, which is true to this day. Early researchers, such as Chickering (1974), concluded that commuter students are more likely to fail courses and were less engaged in academic activities. Chickering's literature was supported by the work of Kuh's (Kuh, Kinzie, Buckley, Bridges, &



Hayek, 2007) analysis of the National Survey of Student Engagement (NSSE) data. Kuh (2007) stated commuter students cannot and do not engage as much as their peers living on campus.

Factors of student success and positive influences on degree completion are described by both Astin (1984) and Tinto (1993) as they relate to the commuter college experience. Astin (1982) asserted that how much time and energy a student puts into an experience will determine their success. Tinto (1993) concluded that the characteristics of student engagement have a positive effect on degree completion. Laskey and Hetzel (2011) stated that on-campus support services are strategically used by commuter students as compared to residential students due to their limited time on campus.

According to Kodama (2015), the literature on commuter students of color is rare and most was written in the 1990s. Harper, Smith, and Davis, 2017 have asserted that limited research is known about the racial dynamics at 4-year colleges that enroll commuter students. Yearwood and Jones' (2004) examined influences of Black commuter student engagement at the City University of New York (CUNY) and confirmed that Black student-faculty engagement, involvement with fraternities and sororities, and participation in co-curricular activities led to significantly more engaged students on their campuses. Much literature on commuter student success is correlated with student engagement and with less attention to academic factors (Kodama, 2015). The gap in knowledge of commuter student success, especially African American students, needs to be filled by the development of theoretical frameworks and innovative strategic decision making. Institutions and educators must develop thorough understandings of the needs of African American commuter students to invest in their academic success and retention.



## **Employment**

The cost of college tuition is steadily on the rise (U.S. Department of Education, 2019). As college students continue to access higher education, the expenses associated with their collegiate education must be paid to persist. As some students encounter unmet financial need and insufficient amounts of financial aid, this may require students to obtain employment to finance their education. Over 80% of all undergraduate students work while in school (Scott-Clayton, 2012). However, most researchers of student employment focused on employment after college and focused less attention on the experience of employment during a student's time in higher education (Darolla, 2014).

The research on student persistence and college employment have both mixed and contradictory results. Choy (1999) found students who work more than 15 hours a week may negatively affect their persistence. Astin (1993) also agreed with the sentiments from Choy (1999), concluded that working had an adverse effect on students. Triventi (2014) stated that students' level of institutional academic and social involvement may be hindered by time spent working. Pascarella (2001), on the other hand, stated that limited on or off-campus work does not appear to inhibit student success severely.

Financing college has been found as a critical factor for minority student persistence and, in particular, African American men. Researchers have stated that on-campus or work-study employment is associated with student success as they assist students in navigating the educational system along with providing a channel of communication to other students (Institute for Higher Education Policy, 2001; Kuh, Kinzie, Schuh, Whitt, 2005). As for African American males and their experience with employment, Shannon (2006) found that African American men



who did not have children and worked less than 35 hours a week were able to use campus support services more and were more likely to complete their coursework.

#### **Financial Aid**

The effects of financial aid on student persistence have varied in retention literature. Some researchers have found economic factors influence student decisions on where they should attend college along with how long they remain (Paulsen & St. John, 2002; Tinto, 1993). In 2016-17 the average price for undergraduate tuition, fees, room, and board were estimated at \$17,237 at public institutions; a 31% increase from 2006 (U.S. Department of Education, 2019). Approximately 86% of full-time undergraduate students received financial aid (grants, loans, work -study, or aid of multiple types and about 70% of full-time undergraduates received federal financial aid and 67% from nonfederal sources (U.S. Department of Education, 2019). As higher education becomes more expensive each year, finances and financial support have been identified as influencers of student retention and persistence, in particular for low-income students (Heller, 2003; Pascarella & Terenzini, 2005; Paulsen & St. John, 2002), and African American males at public universities (Strayhorn, 2008).

Heller (2003), Perna (2006), Titus (2006), and Hu and Weber (2001) conducted a great deal of research to expand the literature on financial factors and its relationship to minority students and retention. Financing college is critical for minority students as it can be the deciding factor of where minority students attend college (St. John & Starkey, 1995). Gross, Cekic, Hossler, and Hillman (2009) found that substantial amounts of research support the claim that students with significant amounts of financial aid are associated with higher rates of student retention.



Also, many minority students enroll into either a community college (Doyle, 2010) or an HBCU due to the cost efficiency (Palmer et al., 2009). Mason (2008) found financial barriers play a significant role in inhibiting African American male success in colleges and universities. Many researchers (Heller, 2003; Perna, 2006; St. John & Starkey, 1995; Titus, 2006; Wood et al., 2011) have found financial factors are significant contributors to why minority students leave college.

African American male undergraduates in 2012 applied for federal financial aid at a rate of 80%, compared to 63% of White male undergraduates (U.S. Department of Education, 2012). Pell grants were received by African Americans males at 66% in 2012, double that of White male undergraduate students (30%). An additional \$1,000 in grants lowered the probability of African American students leaving college by 7-8% according to an analysis by the U.S. Government Accountability Office (1995).

## **University Geographic Location**

University geographic location unquestionably plays a significant role in Black male graduation rates. Nichols and Evans-Bell (2017) examined the graduation rates of Black students and the completion gap between Black and White students at unique higher education institutions throughout the nation. Of the 676 traditional 4-year public and private nonprofit colleges used in the study, the graduation rate for Black students was 45.4%, a total of 19.3 percentage points lower than their White counterparts (64.7%). Of the recognized 18 topperforming institutions, over half are in the Southeast region of the country while over half of the 18 lowest-performing institutions are located in the Great Lakes region. Nichols and Evans-Bell (2017) believed that, to close the completion gap between White and Black students, inequalities in graduation completion in individual institutions should be addressed, selective institutional



enrollment patterns towards Black students should be changed, and institutions where Black students are most likely to attend should improve their rates of Black student completion.

# **Regional Characteristics**

According to the Integrated Postsecondary Education Data System (IPEDS, 2019) by the NCES, a total of 6,642 Title IV institutions were accounted for in the United States in 2017-18. Title IV is defined as institutions that receive federal student aid (federal financial aid) programs such as Pell grants or Stafford loans. Title IV institutions include 4-year colleges and universities; 2-year institutions; and for-profit, non-degree-granting institutions, among others (U.S. Department of Education, 2019). Categorized by regions, these specific areas throughout the United States were identified as the Rocky Mountains, Far West, Southwest, Plains, Great Lakes, New England, Southeast, and Mideast. Of the total 6,642 institutions, 2,836 were identified as 4-year public, private nonprofit, and private for-profit. The Southeast region, the largest region of all eight (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia), had the largest number of 4-year public college and institutions at 541, while the smallest, Rocky Mountains (Colorado, Idaho, Montana, Utah, and Wyoming) had 81, respectively. These institutions are made up of public selective, regional, historically Black, predominantly White, and religiously affiliated colleges and universities totaling 751.

Enrollment trends can be affected both by changes in population and by changing rates of enrollment (U.S. Department of Education, 2019). According to the U.S. Department of Education (2019), enrollment was higher in 2016 than in 2011 in six states, including the District of Columbia. The largest enrollment increases were in New Hampshire (72%), followed by Idaho (37%), Utah (18%), and Delaware (8%). States that exhibited declining enrollment were in



Iowa and Arizona between 2011 and 2016. The drop in enrollment resulted primarily from declines among private for-profit institutions, while the enrollment increases in New Hampshire, Idaho, Utah, and Delaware during the same period resulted primarily from increases among private nonprofit institutions.

Four-year public postsecondary institutions in each region of the country have unique demographic characteristics. According to Baryla and Dotterweich (2001), institutions located in the Northeast, on average, are more selective, smaller, and include more private than public institutions. Additionally, institutions in this region host a higher percentage of nonresidential students. Institutions located in the West have a higher percentage of nonresidential students, comparatively larger campus sizes, and a greater percentage of the schools are public (Baryla & Dotterweich, 2001). The Southeast region has the largest number of HBCUs at 20 (NCES, 2017). According to the NCES, 102 HBCUs were located in 19 states, including the District of Columbia, and the U.S. Virgin Islands. Furthermore, 51 were identified as public institutions, in which 39 were 4-year public institutions.

The Southern Region Education Board (SREB, 2019) stated Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas Virginia, and West Virginia will represent 39% of the nation's population by 2026. In 2015, this region also accounted for 57% of the nation's Black population. In the fall of 2014, 83% of first-time, full-time freshmen in the United States remained in their home state for college (SREB, 2019). The percentage of Black student enrollment decreased from Fall 2010 to Fall 2015 across all regions (SREB, Midwest, West, and Northeast; SERB, 2019). In Fall 2015, 311,000 fewer Black students attended college in the United States than in Fall 2010. Student enrollment in the SREB region decreased by 9%



(128,000 students), 16% in the West, 23% in the Midwest, and 0.2% in the Northeast. Black students represent 21% of college student enrollment in the SREB region, and 15.5% of Black students in the SREB region enrolled at HBCUs.

# Urbanicity

Hillman and Weichman's (2016) study on education deserts raises essential questions about how geography shapes educational equity and opportunity. Education deserts are defined as places with zero colleges or universities located nearby, or one community college is the only public broad-access institution nearby (Hillman & Weichman, 2016). Most education deserts are located in the Midwest and Great Plain states while the fewest are located in the Mid-Atlantic and New England states. Furthermore, education deserts tend to be in rural communities rather than in metropolitan areas. According to Hillman and Weichman (2016), one in 10 Black and Hispanic adults live in education deserts. Unfortunately, the scarcity of 4-year colleges and university accessibility negatively affects students' choices and opportunity for those who live in education deserts. For both Hispanic and Black students, educational opportunities are limited at a higher rate than their counterparts. More so, due to limited opportunities of attending a 4-year postsecondary institution, over half of students living in educational deserts attend community colleges (Hillman and Weichman, 2016)

As technology advances, the importance of colleges' and universities' geographic location may be overlooked. However, both geographic location and place shape opportunity for students in the United States in their attempts to attend and graduate from a postsecondary institution. According to Perna and Ruiz (2016) and using data from the 2016 U.S. Census Bureau *American Community Survey 2015*, regions in the United States with the highest levels of college attainment are in the Mid-Atlantic, Southern California, and East Coast. Furthermore,



Perna and Ruiz (2016) asserted that metropolitan areas in the United States typically have high college attainment while college attainment is lower in rural counties.

According to Berger and Milem, (2000), theorists have posited that postsecondary institutional location (urbanicity) independently affects postsecondary persistence above and beyond individual-level characteristics important to the persistence process. Thus, the location of urban, suburban, and rural institutions is important. Ratcliffe et al. (2016) stated that according to the 2016 U.S. Census Bureau, 12% of the population lives in completely rural areas. Regions such as the upper Midwest and South, located in the interior of the United States, contain mostly rural counties. Whereas, the Mid-Atlantic, South Florida, Southwest, and West Coast have primarily urban counties. Eighty-seven percent of the United States' population live in predominantly urban counties, which represent 40% of all counties (Ratcliffe et al. 2016).

# **Impact of Location**

James and Mingchu (2010) indicated multifaceted factors influence geographic characteristics of student persistence, such as urbanicity, the proximity of a student's home city to the university, and the university location. However, according to Tinto (2005), most literature highlights the impact of high school preparation, college experiences, characteristics of students, family background, and institutional characteristics on persistence and degree completion.

Sparks and Nunez (2014) concluded the role of institutional location in postsecondary attainment has either (a) described gaps in postsecondary educational attainment between residents of urban and rural areas or (b) explored how the residential location where students live during high school in terms of urbanicity influences their college aspirations, enrollment, and persistence.

Additionally, Sparks and Nunez (2014) added that little, if any, research has been empirically



tested on whether attending an urban, suburban, or rural postsecondary institution plays an independent role in persistence after students enroll in college.

Geographic restrictions remain a concern for university administrators as they attempt to recruit and enroll Black students at 4-year colleges across the country. Franklin (2013) stated that different types of colleges and universities have different profiles, such as expense, religion orientation, public school status, or selectivity that will impact the minority student population, and, therefore, the overall diversity of the student body. On a larger scale, geographic and demographic compositions are closely linked, whereas some parts of the United States are more diverse or have larger minority populations than others (Franklin, 2013). Of incoming freshmen attending 4-year universities, 54.7% enrolled within 50 miles from their permanent home (Egan et al., 2014). Therefore, school location is important, as rural areas are less likely to attract minority students, and undergraduate diversity tends to be higher in urban locations than in noncity locations (Franklin, 2013).

Tinto's (1975, 1982, 1993) analysis of retention (interactionalist theory of college student departure) proved that a student's integration into college influences persistence. Furthermore, a student's likelihood of persisting is supported by the student's academic and social integration, which builds the student's commitment to the university and personal commitment to degree attainment. However, researchers Rendon, Jalomo, and Nora (2000) identified a limitation to this approach. These researchers stated that, in shaping the meaning of integration, limited attention to the role of demographic factors like race and ethnicity are considered in this theory, particularly for students from historically underrepresented groups in higher education.

Adding to the point of Rendon et al. (2000), Just (1999) found the community in which an institution is located has a tremendous influence on minority students' feelings of acceptance.



As it relates to HBCUs, the majority of these colleges and universities are located in the southeast region of the United States. Additionally, over 50% are private institutions (Brown & Davis, 2001; Evans et al., 2002). According to Freeman and Thomas (2002), students attending HBCUs are more likely to have attended predominately Black high schools and have been raised in Black neighborhoods. Studies have also indicated that African American students who hail from urban neighborhoods are disproportionately unprepared for college (Fine, 1991; MacLeod, 1995).

Strayhorn (2014) asked the question, what accounts for high attrition rates among African American males attending 4-year colleges and universities? The experience of students at public universities is qualitatively different from those at private institutions according to existing literature (Strayhorn, 2014). On average, these institutions tend to be geographically located in the Northeast region of the country, very well resourced, more or less diverse, and expensive to attend (Strayhorn, Tillman-Kelly, Suddeth, & Williams, 2013; Thelin, 2004; Volkwein & Parmley, 2000). Griffith and Rothstein (2009) indicated that Northeastern states have approximately 46% of the more highly competitive institutions in the United States.

Furthermore, many of the low-income students that attend these institutions are located in geographically distant states away from the Northeastern region. Allen (1992) and Hirt (2006) stated that African American student experiences can be influenced by institutional control, selectivity, campus racial composition, and ethos.

Strayhorn (2017) affirmed the current literature of African American male collegians is based on research generally at HBCUs or PWIs with little attention given to the locale of the school in which they are enrolled. Furthermore, Harper (2006a) stated that 4-year public institutions vary in their geographic setting and African American male representation. Strayhorn



(2017) studied the identifying factors that influence the persistence and success of Black men in urban public universities and suggested that background traits, academic readiness, and access provided by urban public universities, support systems, and close connections influenced Black male persistence. A significant finding from this study is that retention rates are generally higher at non-HBCU and predominantly White, urban, public universities across all groups (first-year, men, women, White, Black, and Asian students; Strayhorn, 2017).

In summary, retention literature has expanded tremendously over the last 40 years and will continue to do so for years to come. With this expansion came the adjustments in postsecondary institutions' quest to analyze contributing factors that relate to student departure, persistence, and graduation. Contributing factors were found to be remedial courses, GPA, 4-year colleges and universities, living off campus, and financial aid. Additionally, scholars have extensively researched the persistence of African American males in colleges and universities. While the geography of college opportunity and success is largely unexplored in the field of higher education, it is important for today's Black male college student. If the current attrition rate for Black males remains consistent, increased departure from postsecondary institutions will continue. Finding accessible institutions equipped to meet the needs of Black male students will assist these students in ensuring increased success and opportunities for upward mobility such as increased wages, social networks, employment skills, professional standing, and more.

#### **Theoretical Framework**

Two fundamental questions underlie the theoretical models of retention and persistence:

(a) Why do students leave? and (b) Why do students stay? (Noel-Levitz, 2018). Tinto's (1975) institutional departure model (see Figure 1) and Astin's (1991) college impact model (see Figure 2) were applied to guide theoretical and conceptual frameworks of this study. Tinto's



institutional departure model, also known as the student integration model (1975) was the first longitudinal model to make an explicit connection between student academic and social integration in the institutional environment. Built upon the prior research of Durkeim's (1951) theory of suicide and Spady's (1971) theoretical views on the student dropout process, Tinto theorized that students who socially integrate into the campus community increase their commitment to the institution and are more likely to graduate.

In subsequent renditions of his theory, Tinto (1987, 1993) placed more emphasis on the academic and social systems of the institution, the individuals who shaped those systems, and student retention over different periods of time. For students to persist in their university setting, they should be integrated into both academic and social systems. According to Tinto (1993), the immediate focus of the model is understanding how and why some students depart from their institution prior to completing their degree program. Additionally, the longitudinal process of voluntary student withdrawal and interactional character of the model is explained.

Tinto (1993) argued that social integration is measured by students' interactions with college society (peers and faculty) and academic integration can be measured by the students' grade performance and intellectual development. Students' grade performance and intellectual development is measured as academic integration while student interaction with college society is measured as social integration. Tinto (1993) identified numerous significant predictors of student retention and persistence: precollege attributes, individual goals and outcomes, family background, and academic and social integration into college.

The student integration model suggests that students' academic and social integration experiences in college will continuously modify (weaken or strengthen) a student's initial goals



and commitments. In doing so, the subsequent (modified) level of goal and commitment affects the student's decision to stay or leave college (Tinto, 1975, 1993).

The primary focus of this study is to learn if any ascribed identity, performance, or environmental variable can predict whether African American male college students will successfully persist during their time in college. As Tinto has indicated, both academic and social integration have an effect on student persistence. For the purpose of this study, academic factors (remedial courses, high school GPA) and nonacademic factors (off-campus living, employment, financial aid) coincide with Tinto's theory of academic and social integration and thus have a collaborative impact on subsequent persistence.

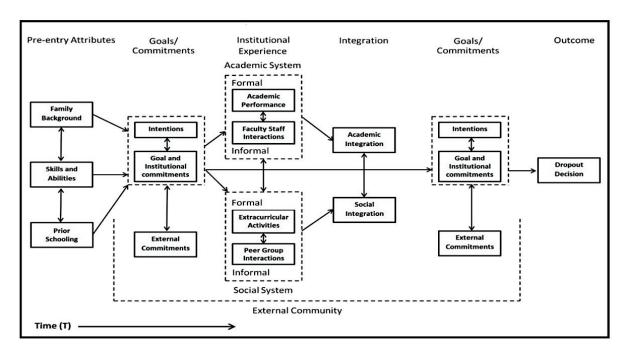


Figure 1. Note Tinto's (1993) Longitudinal Model of Institutional Departure. Adopted from Leaving college: Rethinking the causes and cures of student at attrition (p. 114), V. Tinto, 1993. Chicago: University of Chicago Press. Copyright 1993. Adopted with permission

## **Conceptual Framework**

Predicting student retention has proven to be a complex issue. Many conceptual and theoretical frameworks (Astin, 1993; Chickering & Reisser, 1993; Pascarella, 1985) have been



developed to estimate the effects of college programs, services, and experiences on students (Strayhorn, 2012). In guiding this study of African American male retention, the adoption of a theoretical framework that will assist in the exploration and analysis of how student retention is implied. Astin's (1991) college impact model is referred to as the input-environment-outcome (I-E-O) model and will be used in this study. Astin's model is considered one of the most influential models in examining factors influencing student outcomes for researchers and practitioners (Pascarelia & Terzezini, 2005).

The I-E-O model explores student outcomes, in which these outcomes are functions of two factors including inputs (e.g., demographic traits) and the environment (e.g., experiences in college; (Astin, 1993). According to Astin (1993), inputs refer to characteristics of the student at the time of initial entry to the institution; environment refers to the various programs, policies, faculty, peers, and educational experiences to which the student is exposed; and outcomes refers to the student's characteristics after exposure to the environment. Astin's I-E-O model allows for the theoretical explanation for operationalizing academic and nonacademic variables to integrate into the university environment.

The purpose of Astin's (1993) I-E-O model is to assess the impact of various environmental experiences by determining whether students grow or change differently under varying environmental conditions. For this study, as illustrated in Figure 2, inputs are identified as high school GPA, third-year GPA and remedial courses; the environment is identified as, off-campus living, employment, financial aid, HBCU and geographic location; and student outcomes is identified as academic achievement and persistence. Comparing African American male academic achievement and persistence (outcome) with high school GPA and remedial course completion (input) determines the growth or change of these students during their time in



college. Thus, this study aims to assess the impact of various environmental experiences (off-campus living, financial aid, employment, HBCU, and geographic location) of African American males by determining whether they will grow or change differently under varying environmental conditions.

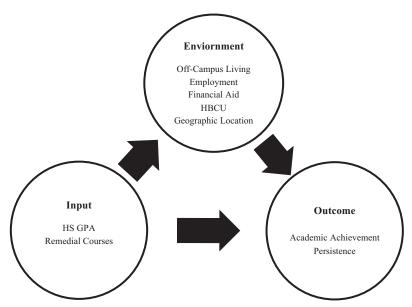


Figure 2. Applied Astin's I-E-O model.

# **Chapter Three: Methodology**

For the purpose of this study, I seek to determine whether there is a statistically significant relationship with African American males and third-year postsecondary academic achievement and persistence. For this purpose, I (a) analyze the relationship between academic and nonacademic determinants of academic achievement and persistence for African American males and (b) identify how university geographic location influence the likelihood of African American male persistence.

## **Research Design**

This study seeks to explore Black male third-year academic achievement and persistence by using secondary quantitative data from a national longitudinal survey. Respondents in this sample are first time in college, Black undergraduate males who enrolled in 4-year postsecondary institutions throughout the United States from 2012-2014. Creswell (2012) states that in "quantitative research, the investigator identifies a research problem based on trends in the field or on the need to explain why something occurred" (p. 13). Furthermore, Creswell (2012) suggested that the attribute of variables in quantitative research allows the researcher to explore the determination of whether one or more variables influence another variable.

#### **Data Collection**

This study uses secondary data from the 2012/14 Beginning Postsecondary Students (BPS) Longitudinal Study (BPS: 12/14) conducted by the U.S. Department of Education National Center for Educational Statistics (NCES). NCES is considered the primary federal entity for collecting, analyzing, and reporting data related to education in the United States. The BPS cohort provides longitudinal data that allows the examination of persistence progress, and attainment after entry into postsecondary and work force entry. For each BPS collection, the



2012 National Postsecondary Student Aid Study (NPSAS:12) regularly collects student aid information from the U.S. Department of Education's Federal Student Aid Central Processing System (CPS), the National Student Loan Data System (NSLDS), and program data files, such as from Pell and other grant programs. The nationally representative sample of first-time beginning (FTB) students for BPS:12/14 is drawn from NPSAS:12.

The fourth BPS collection obtained data in 2014 (BPS:12/14) and again in 2017, which is used in this study. BPS:12/14 included a multimode student interview component that collected information on student's education and employment since their first year in postsecondary education. BPS: 12/14 also focused on student enrollment patterns since 2012, including any transfers to other institutions stop-out periods, attendance intensity and other certificates and degrees earned.

Data from BPS:12/14 specifically used in this study included African American male enrollment status, institution type, high school, and third-year GPAs, course type, campus living, employment type, institutional location and financial aid status. Permission to gain access to the BPS data came from the successful application of Eastern Michigan University Human Subjects Review Committee Institutional Review Board (see the Appendix). Furthermore, the BPS:12/14 data used in this study was considered restricted-use data by U.S. Department of Education NCES. Restricted-use data is survey and research data collected by the Institute of Education Science (IES) which is data protected by law, which contains confidential and individually identifiable information of its respondents. Individually identifiable information is considered personal data such medical, education and employment information. The IES loaned Eastern Michigan University restricted-use of BPS:12/14 through the successful completion of a strict licensing application.



## **Population and Sample**

The full-scale BPS:12/14 study consisted of all eligible students for the inclusion in NPASA:12 who began their postsecondary education for the first time during the 2011-12 academic year at any postsecondary institution in the United States. The final NPASA:12 sample consisted of approximately 37,170 students. The target population for this study consisted of African American male first-time, beginning students enrolled at 4-year postsecondary institutions in the United States. Respondents self-identified as Black/African American and is a subsample of BPS: 12/14. The subsample included 690 male respondents. BPS:12/14 is a nationally representative sample, so the findings from this survey can be generalized to the corresponding U.S. population.

BPS:12/14 applied the Bureau of Economic Analysis of the U.S. Department of Commerce Region to identify and analyze U.S. regional specifications. University regional location used in this study were described as the following: New England region included Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Mid-East region included Delaware, the District of Columbia, Maryland, New Jersey, New York, and Pennsylvania. The Great Lakes region included Illinois, Indiana, Michigan, Ohio, and Wisconsin. The Plains region included Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. The Southeast region includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. The Southwest region included Arizona, New Mexico, Oklahoma, and Texas. The Rocky Mountains region included Colorado, Idaho, Montana, Utah, and Wyoming. The Far West region included Alaska, California, Hawaii, Nevada, Oregon, and Washington.



#### Variables

For this study there were two dependent variables. The first dependent variable included respondents third-year persistence. Derived from BPS: 12/14, the variable "PROUT 3" included categories of cumulative persistence and attainment through 2013-14 (third-year): (a) attained bachelor's degree; (b) attained associate's degree; (c) attained certificate; (d) no degree, still enrolled; (e) no degree, not enrolled, (f) no degree, left without return. In this study, third-year persistence was recoded as 0 = did not persist, and 1 = did not persist. Only the category of no degree, still enrolled was defined as 1 = did not persist while all other categories were defined as 0 = did not persist.

The second dependent variable for this study included respondents 2014 GPAs (third-year GPA), described in this study as academic achievement. Derived from BPS: 12/14, the variable "GPALAST14" included continuous categories of GPA estimate when last enrolled through June 2014: (a) skipped, (b) mostly A's (3.75 and above), (c) A's and B's (3.25-3.74), (d) Mostly B's (2.75-3.24), (e) B's and C's (2.25-2.74), (f) mostly C's (2.25-2.74), (g) C's and D's (1.25-1.74), (h) mostly D's or below (1.24 or below), (i) don't know grades, and (j) school does not award grades. In this study, categories b, c, d, e, f, g, and h were recoded as b = 7, c = 6, d = 5, e = 4, f = 3, g = 2 and h = 1 for consistency as variables from b to h showed a positive correlation and not negative. Categories "a" and "i" were recoded as "missing."

# **Independent variables**

**Remedial courses.** In this study, the academic categorical variable "REMEV3Y" was used from the BPS: 12/14 study. This variable included whether a respondent has ever taken remedial or developmental courses to improve basic skills through 2013-14: 0 = no and 1 = yes.



**HBCU.** This environmental categorical variable indicated respondents first institution in 2011-12 as an historical Black institution or college. This variable was coded as 0 = no and 1 = yes. **Financial Aid.** This nonacademic categorical variable indicated respondents use of taking out

any student loans (federal government or private lender). For this study, 0 = never took out student loans and 1 = yes, took out student loans.

*Off Campus Living (Commuter)*. Respondents residence while attending primary school in 2013-14 was indicated by this nonacademic categorical variable. 1 = on campus or collegeowned housing, 2 = with parents or guardians, 3 = off campus (not college-owned housing). Categories 2 and 3 were recoded as 2 = off campus living (commuter).

*On-Campus Employment*. Respondent's employment while enrolled on or off campus 2011-12, 2012-13, and 2013-14 was indicated by this nonacademic categorical variable. These variables were recoded as: LOCJOB12\_ONCAMPUS, LOCJOB13\_ONCAMPUS, and LOCJOB14\_ONCAMPUS.

Off-Campus Employment. For all three years enrolled in school, 1 indicated on campus and 2 for off campus. This nonacademic categorical variable indicated respondent's employment while enrolled on or off campus 2011-12, 2012-13, and 2013-14. These variables were recoded: LOCJOB12\_OFFCAMPUS, LOCJOB13\_OFFCAMPUS, and LOCJOB14\_OFFCAMPUS.

Region. This environmental categorical variable indicated respondent's region of first institution 2011-12: 1 = New England, 2 = Mideast, 3 = Great Lakes, 4 = Plains, 5 = South East, 6 =

*High School GPA*. This continuous academic variable indicated respondents GPA in high school: 1 = (0.5-0.9, D- to D), 2 = (1.0-1.4, D to C-), 3 = (1.5-1.9, C- to C), 4 (2.0-2.4, C to B-), 5 = (2.5-2.9, B- to B), 6 = (3.0-3.4, B to A-), and 7 = (3.5-4.0, A- to A).



Southwest, 7 = Rocky Mountains, and 8 = Far West.

Table 1

Description of Variables

Independent Variables	Type of Variable	Level of Measurement
High School GPA	Academic	Continuous
Third-Year GPA	Academic	Continuous
Remedial Courses	Academic	Categorical
Off-Campus Living (commuter)	Nonacademic	Categorical
Employment (on-campus) 2012 on-campus employment 2013 on-campus employment 2014 on-campus employment	Nonacademic	Categorical
Employment (off campus) 2012 off-campus employment 2013 off-campus employment 2014 off-campus employment	Nonacademic	Categorical
Financial Aid	Non-Academic	Categorical
Historically Black Colleges	Environment	Categorical



Table 1 continued

Geographic Location	Environment	Categorical

**Great Lakes** 

Mid-East

North East

Far West

**Rocky Mountains** 

Plains

South-East

South-West

Independent Variables	Type of Variable	Level of Measurement
Dependent Variable	Type of Variable	Level of Measurement
Academic Achievement	-	Continuous
Persistence	_	Categorical

# **Data Analysis**

Data analysis proceeded in three stages in this study. First, according to Creswell (2012), descriptive statistics are used to indicate general tendencies in data such as mean, median, and mode. Descriptive statistics were used to calculate the means and percentages for all independent and dependent variables included in this analysis. Second, a multiple regression was used. A multiple regression is designed to predict a continuous dependent variable based on multiple independent variables (Laerd Statistics, 2017). Finally, binomial logistic regression was used to predict the probability that an observation falls into one or two categories of a dichotomous dependent variable based on one or more independent variables that can be either continuous or categorical (Laerd Statistics, 2017). Most importantly, per IES restricted-use guidelines, all unweighted sample sizes are rounded to the nearest 10.



Various significant student outcomes in higher education are appropriately conceptualized as dichotomous outcomes, including student persistence (Peng, So, Stage, & St. John, 2002). According to Peng et al. (2002) the research method of logistical regression is well suited for the study of categorical outcome variables such as staying in or dropping out of college. By using predictive analysis, this study seeks to establish the relationship between both independent and dependent variables measuring academic and nonacademic factors of persistence and geographic locations as indicated in Table 2. Advanced computer software SPSS version 24 was used to analyze statistical procedures.



Table 2
Statistical Analysis for each Research Question

Research Question	Type of Variable	Statistical Analysis
1. What is the relationship between academic and nonacademic determinants of academic achievement and persistence for African American males?	High School GPA (Independent)  Third-year GPA	Multiple Regression
American maies.	(Independent)  Remedial Courses	
2. How does university goographic location	(Independent)	Binominal
2. How does university geographic location influence the likelihood of African American male persistence?	Off-Campus Living (Independent)	Logistic Regression
	Employment (Independent)	
	Financial Aid (Independent)	
	HBCU (Independent)	
	Geographic Location (regions) (Independent)	
	Academic Achievement (Dependent)	
	Persistence (Dependent)	



#### **Limitations and Delimitations**

Like all research studies, this study is limited in numerous ways. Creswell (2012) defined limitations as the potential weaknesses or problems with the study identified by the researcher. If advanced, these limitations provide a useful bridge for recommending future studies (Creswell 2012). First, findings and results from this study were limited to African American males who participated in the BPS: 12/14 longitudinal study. Results were not generalized beyond first-time undergraduate African American males. Returning, professional, and graduate students excluded from this study. Secondly, secondary data was analyzed in this study, and I was not able to control the procedures used by BPS:12/14 to collect any data or control for the type of questions administered to respondents. Finally, this study was limited by the number of respondents from the unique geographical location (region) analyzed.



## **Chapter Four: Results**

The primary questions in this study focused on the relationship of academic and nonacademic factors and how they influence the likelihood of African American male academic achievement and persistence. The first section of this chapter consists of an overview of descriptive statistics, which will indicate general tendencies described in both demographic and input variables. The second section of this chapter consists of two separate regression analyses that will answer (a) what is the relationship between academic and nonacademic determinants of academic achievement for African American males and (b) how does university geographic location influence the likelihood of African American male persistence. The final section of this chapter concludes with a summary of the study results.

# **Descriptive Statistics**

A total of 690 African American male respondents were sampled. Academic (high school GPA, remedial courses) and nonacademic (employment, commuter, financial aid) variables were used in this study. Additionally, environmental factors, such as HBCUs and university regional location (Northeast, Mideast, Great Lakes, Southwest, Rocky Mountains, Far West, Plains) were analyzed. Variables measured were identified as categorical, with the exception of the continuous variables of GPAs.

Table 3 demonstrates the descriptive statistics of input variables. Most male respondents averaged a high school GPA of A's and B's (3.25-3.74) with a mean of 29.4%. Additionally, respondents reported a majority college GPA of A's and B's (3.25-3.74) with a mean of 27.9% in the year 2013-14. In their third year, respondents reported attending at least one remedial course (34.7%) during their time in college. Of employed respondents, the majority worked off campus rather than on campus each of three periods (75.9% in Year 1; 77.7% in Year 2; and



79.9% in Year 3). Approximately, 87.2% of respondents received some form of financial aid (e.g., federal loan, private loan). Furthermore, 44.1% of respondents identified as commuters. Table 3

Descriptive Statistics of Input Academic and Nonacademic Variables	ď

			Year 1	(2012)	Year 2	2 (2013)	Year 3	3 (2014)
Variable	N	%	N	%	N	%	N	%
Academic								
High School GPA								
Mostly A's	90	15.1	-	-	-	-	-	-
A's and B's	180	30.2	-	-	-	-	-	-
Mostly B's	110	18.4	-	-	-	-	-	-
B's and C's	170	28.5	-	-	-	-	-	-
Mostly C's	40	6.7	-	-	-	-	-	-
C's and D's	10	1.6	-	-	-	-	-	-
Mostly D's or below	-	-	-	-	-	-	-	-
Remedial Courses	-	-	-	-	-	-	240	34.7
Non-Academic								
Employment On-campus	-	-	50	21.9	70	21.3	80	21.6
Employment Off-campus	-	-	170	74.5	230	70.1	280	75.8
Off Campus Living (Commuter)	-	-	-	-	-	-	200	45.6
Financial Aid	530	86.8	-	-	-	-	-	_

SOURCE: 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14): Data File Documentation (NCES 2016-062), "2011–12 National Postsecondary Student Aid Study (NPSAS:12): Student Financial Aid Estimates for 2011–12" (NCES) 2013, U.S. Department of Education, National Center for Education Statistics.

Environmental variables were examined in this study. Descriptive data based on institutional type and regional location is outlined in Table 4. Overall respondents attended 4-year postsecondary institutions, with over 38.4% of respondents attending institutions in the Southeast region, followed by 16.9% in the Mideast, and 12.2% in the Great Lakes region. Furthermore, only 1.9% of respondents attended an institution in the Rocky Mountains region. Only 7.8% of respondents attended a HBCU.



Table 4

Descriptive Statistics of Input Environmental Variables

Variable	N	%
Environment		
Historically Black Colleges (HBCU)	60	8.6
Northeast Region	40	5.7
Mideast Region	120	17.3
Great Lakes Region	90	13.0
Southeast Region	260	37.6
Southwest Region	60	8.6
Rocky Mountain Region	10	1.4
Far West Region	70	10.1
Plains Region	34	4.9

NOTE: Individual HBCUs are also indicated the regional locations

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated "Postsecondary Education Data System (IPEDS)," Fall 2011

Descriptive statistics used in this study for the observation of the outcome variables of third-year GPA and persistence are highlighted in Table 5. Over 50% of respondents received grades between A's and B's and mostly B's. Following this group, 24.9% of respondents received grades of B's and C's. Additionally, of the 690 respondents, a total of 440 persisted to their third year of college at a rate of 64.1%.

Table 5

Descriptive Statistics for the Outcome Variable

Variable	N	%
Grade Point Average	-	-
Mostly A's (3.75 and above)	70	10.5
A's and B's (3.25-3.74)	190	28.5
Mostly B's (2.75-3.24)	170	25.5
B's and C's (2.25-2.74)	170	25.5
Mostly C's (1.75-2.24)	60	9.0
C's and D's (1.25-1.74)	20	3.0



Table 5 continued

Mostly D's or below (1.24 or below) 10 1.5

Persistence

Third-year persistence 690 64.1

SOURCE: 2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14): Data File Documentation (NCES 2016-062), "2011–12 National Postsecondary Student Aid Study (NPSAS:12): Student Financial Aid Estimates for 2011–12" (NCES) 2013, U.S. Department of Education. National Center for Education Statistics.

# Research Question 1: What is the relationship between academic and non-academic determinants of academic achievement and persistence for African American males?

To answer the first research question, a multiple regression analysis was ran to predict academic persistence from 19 variables (HBCU, remedial courses, high school GPA, financial aid, 2012 on-campus employment, 2013 on-campus employment, 2014 on-campus employment, 2012 off-campus employment, 2013 off-campus employment, 2014 off-campus employment, off-campus living, Great Lakes, Southeast, Southwest, Rocky Mountains, Far West, Mideast, Northeast, and Plains). Linearity was assessed by partial regression plots and a plot of studentized residuals against the predicted values. There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values. The assumption of normality was met, as assessed by a Q-Q plot. Regression results indicated the overall model of two predictors (high school GPA and financial aid) significantly predicted third-year GPA. The multiple regression model statistically predicted academic achievement,  $F(2, 380) = 21.143, p < .001, adj. R^2 = .095$ . This model accounted for only 10% of the variance in GPA. Regression coefficients and standard errors can be found in Table 6.



Table 6
Summary of Multiple Regression Analysis Predicting Academic Achievement (GPA)

		Grade Point Average			
Variable	$R^2$	B	Sig		
High School GPA	.095	.300	.000		
Financial Aid	.095	098	.045*		

NOTE: \*P<0.05

SOURCE: U.S. Department of Education, National Center for Education Statistics, Data File Documentation (NCES 2016-062), "2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14)"

# Research Question 2: How does university geographic location influence the likelihood of African American male persistence?

A binomial logistic regression was performed to ascertain the effects of the variables on the likelihood that respondence would persist to their third year of college. A total of 18 variables (HBCU, remedial courses, high school GPA, financial aid, 2012 on-campus employment, 2013 on-campus employment, 2014 on-campus employment, 2012 off-campus employment, 2013 off-campus employment, 2014 off-campus employment, off-campus living, Great Lakes, Southeast, Southwest, Rocky Mountains, Far West, Mideast, Northeast) located in Table 7. Linearity of the continuous variables with respect to the logit of the dependent variable was assessed via the Box-Tidwell (1962) procedure. The logistic regression model was statistically significant,  $\chi^2(4) = 65.613$ , p < .001. The model explained 3% (Nagelkerke  $R^2$ ) of the variance in on-campus jobs in 2012 and correctly classified 71.0% of cases. Sensitivity was 100%, specificity was 0%, positive predictive value was 82.2%, and negative predictive value was 0%. Of the numerous predictor variables analyzed, on-campus jobs in 2012 was indicated as the only statistically significant variable. The binominal logistic regression analysis indicated geographic location did not have an influence on likelihood of African American male



persistence. Furthermore, of the total 690 respondents analyzed, 305 missing cases were identified in this binomial logistic regression analysis.

Table 7
Summary of Binomial Regression Analysis Predicting Persistence

		Persistence	
Variable	$R^2$	Beta	Sig
On-Campus Job 12	.030	1.569	.033*

NOTE: \*P<0.05

SOURCE: U.S. Department of Education, National Center for Education Statistics, Data File Documentation (NCES 2016-062), "2012/14 Beginning Postsecondary Students Longitudinal Study (BPS:12/14)"

### Summary

Academic, nonacademic, and environmental variables were used to determine a specific set of input and environmental variables used to predict the outcome of academic achievement and persistence of African American males in 4-year postsecondary institutions. The results of the logistic regression indicated that the independent variable high school GPA had a significant relationship in predicting academic achievement (third-year GPA). Conversely, financial aid had a negative impact in predicting academic achievement (third-year GPA). The results of the binomial regression in this study indicated that the environmental input variables Northeast, Mideast, Great Lakes, Southwest, Rocky Mountains, Far West, and Plains did not influence persistence of African American males. In fact, on-campus employment during the first year of college was indicated as the independent variable that significantly predicted respondent's persistence to their third-year of college. The findings also revealed that of the total 690 African American male respondents, 64% persisted to their third year of college.



## **Chapter Five: Discussion**

My purpose of this study was to analyze the relationship between academic and nonacademic determinants of academic achievement and persistence and to identify how university geographic location influence the likelihood of African American male persistence. Specifically, I focused on academic variables, such as high school GPA and remedial courses, and nonacademic variables, including living off campus (commuter), on- and off-campus employment, financial aid, institution type, and regional geographic location. In this final chapter, I synthesized and analyzed quantitative data discussed in the previous four chapters and use the analysis to develop a concise understanding of factors that indicate academic achievement and persistence of African American males. Six sections inform this chapter: summary of study, interpretation of findings, implications for policy and practice, critique of the study and limitations, and recommendations for future research and conclusion.

## **Summary of the Study**

A total of 690 first-time in college African American males enrolled in colleges and universities from across the United States from 2012 to 2014 were analyzed in this study to determine if there were any significant predictors of academic achievement and persistence during their third year of college. I examined a total of 18 input variables: high school GPA, remedial courses, employment on- and off-campus (during 2012, 2013, and 2014), off-campus living (commuter), financial aid, HBCU, and region (Northeast, Mideast, Great Lakes, Southeast, Southwest, Rocky Mountains, Far West, and Plains). I also examined two output variables: academic achievement (third-year GPA) and third-year persistence.

I analyzed descriptive statistics to profile the study's sample input and output variables and demographic and student characteristics. Additionally, a multiple regression and binominal



regression were used to predict factors of third-year academic achievement and persistence of African American males. I studied two research questions, guided by the theoretical frameworks of Tinto's student institutional departure model (1975) and Astin's (1991) I-E-O model.

The findings from this study provide a quantitative outlook on African American male success. These findings are important to the field of higher education research and offer valuable contributions to current and future literature on African American male postsecondary academic achievement and persistence.

# **Interpretation of the Findings**

This section will provide an explanation of the results found in chapter four. Furthermore, this section will provide an interpretation of the two research questions that informed this research study while analyzing these findings based on prior predictions made in the literature and theories.

## **Research Question One**

My first research question was "What is the relationship between academic and non-academic determinants of academic achievement and persistence for African American males?" *High School GPA*. The findings in this study indicate that when controlling for academic achievement (third-year GPA), high school GPA had a positive effect on African American male third year persistence. This finding supports existing research that demonstrates Black male academic preparation prior to college is significantly related to access and success in higher education (Cuyjet, 1997, 2006; Davis, 2003; Garibaldi, 2007; Harper, 2006b, 2012; Jackson & Moore, 2006, 2008; Strayhorn, 2008). Also, findings from this study are partially in line with prior research that indicates that high school performance such as GPA is identified as an indicator for persistence (Blanchfield, 1971; Chase, 1970; Coker, 1968; Jaffe & Adams, 1970;



Lavin, 1965; Lawhorn, 1971; Panos & Astin, 1968; Smith, 1971; Taylor & Hanson, 1970) and that high school GPA is an important predictor of college readiness and student success (Habley, et al., 2012).

The significance of high school GPA has proven to be a germane factor in this study. Of the various academic, nonacademic, and environmental variables analyzed in the multiple regression analysis, high school GPA was the only prominent factor that significantly affected African American males' academic achievement (third-year GPA). Astin and Oseguera (2005) study of over 90,000 students revealed that high school grades were identified as a student characteristic that predicted participants chances of completing a degree. Statistically, the African American males in my study averaged GPAs well above a high A and B range in both high school and their third year of college. Due to such positive high school GPAs, it can be assumed that these students were more well prepared for their high school to college transition, thus allowing them to persist to their third year. Furthermore, this study refutes the claim that by Bowen and Bok (1998) that African American students exhibit lower grades and leave college as 64% of African American males in this study persisted to their third year of college.

High school GPA and standardized test scores have been considered the standard measures of success and ability for secondary and postsecondary students for years. Although the multiple regression analysis indicated that high school GPA had a positive effect on African American male persistence, it did not account for the quality or type of pre-college academic preparation the respondents experienced in high school. Bean (1980) proclaimed the quality of a student's academic preparation and instruction influenced whether or not a student succeeds at a higher education institution. Bean's assertion is relevant to African American male respondents in this study the potential exploration of pre-college background variables such as ACT and SAT



scores and pre-college and academic readiness programs, could have possibly indicated a significant positive or negative towards academic achievement. The exploration of these background variables could likely assist in delineating academic barriers for Black males and lead to the creation of educational programing and opportunities geared towards the identification and elimination of such barriers.

Financial Aid. The receipt of financial aid by African American males in this study was found to be a significantly negative predictor in academic achievement. Findings indicated, when controlling for academic achievement (third-year GPA), financial aid had a negative effect on African American males' GPA their third year of college. Taking out any student loans from the federal government or private lender during their first, second, or third year of school correlated with respondents' grades being negatively impacted.

Although 64% of Black males in this study persisted to their third year, over 85% received financial aid in the form of student loans from the federal government or a private lender. The findings from this study parallel data from the NCES that approximately 86% of full-time undergraduate students received financial aid (grants, loans, work-study, or aid of multiple types), and about 70% of full-time undergraduates received federal financial aid (U.S. Department of Education, 2019). Additionally, in 2012, 68% of Black male undergraduates received federal financial aid (U.S. Department of Education, 2011, 2012).

Literature that addresses the impact of financial aid on student academic achievement is met with mixed results. Mason (2008) suggests that financial barriers play a significant role in obstructing African American male success in colleges and universities. In this study, financial aid is not specifically considered a financial barrier however, as higher education becomes more expensive each year, finances and financial support have been identified as influencers of student



retention and persistence for African American males at public universities (Strayhorn, 2008). Tinto (1993) further asserts that the primary goal of financial aid is to remove finances as a barrier that may cause attrition and that the impact of finances does not alter the skills students bring with them into the college environment. In other words, Black males in this study are faced with the challenge of eliminating the barrier of financial concerns by taking out either federal or private loans, which comes at a cost of receiving lower grades.

## **Research Question Two**

My second research was "How does university geographic location influence the likelihood of African American male persistence?"

*On-Campus Employment.* In this sample of African American males, the regression analysis used in this study that indicated geographic location did not influence the likelihood of third-year persistence. In fact, the findings in this study demonstrated that having a job on campus during the first year of college positively influences third-year persistence.

Research on student persistence and college employment has mixed and contradictory results. After choosing to attend a public postsecondary institution, Black students are faced with financing their decision. With that, comes gaining employment on- or off-campus in an effort to provide financial support for themselves. Triventi (2014) found students' level of institutional academic and social involvement may be hindered by time spent working. Moreover, Astin (1993) indicated student employment has an adverse effect on students. My findings support on-campus employment, as it is associated with student success and persistence (Kuh et. Al, 2005).

Tinto (1993) stated that the influence of financial support is more complex than commonly assumed regarding its impact on persistence. Tinto (1993) further states that the impact of work upon persistent depends on the amount of employment and the degree to which



the student is removed from campus life and that financial consideration can led to students potentially finding part-time employment. The data in this study correlates with findings that address student's likelihood of persisting is supported by the student's academic and social integration, which builds the student's commitment to the university and personal commitment to degree attainment (Tinto, 1993; Cabrera, Nora, & Castaneda, 1992). In this instance, on-campus employment can enhance respondent's social interaction with the university environment (faculty and students) and positively assist with the integration into university life their first year enrolled and beyond. Skills such as time management, work ethic, and consistent interaction with the university community are likely contributors of intangible proficiencies that may have contributed to third year persistence of respondents.

When controlling for third-year persistence in relation to geographic location, regional variables did not have the same impact on persistence as on-campus employment during the first year of college. In fact, there was no impact at all. The data from this study refutes Berger and Milem's (2000) claim that postsecondary institutional location independently affects postsecondary persistence above and beyond individual-level characteristics important to the persistence process. One explanation of this could be that once the binominal regression was analyzed, of the 690 respondents, 305 cases were missing. The impact of missing cases could have contributed to eliminating environmental factors such as regional locations and HBCU as an input value with enough strength to impact persistence.

## **Implications for Policy and Practice**

The findings in this study address the influences of identity, performance, and environmental variables; how these variables predict academic achievement; and whether African American male college students will successfully persist during their third year of



college. Current literature on the experience of African American males focuses on obstacles, challenges, and lack of academic and social adjustment in postsecondary education (Harper, 2014; Harper & Harris, 2012; Palmer, Wood, Dancy, & Strayhorn, 2014; Shah & Sato, 2014). Findings from the *U.S. Department of Education Projection of Education to 2027* predicted enrollment of U.S. residents in degree-granting postsecondary institutions will increase 6% for students who are Black between 2016 and 2027 (2.6 million verses 2.8 million). With such increase, it is important that Black male retention, persistence, and degree completion is met with a dedicated willingness to eliminate academic barriers by institutional stakeholders.

The interrelationship of academic, nonacademic, and geographical factors affects Black males' persistence and academic achievement in different ways. As demonstrated in this study, high school GPA has a positive effect on African American third-year GPA, when controlling for academic achievement (third-year GPA). In other words, high achievement in high school translates into high achievement (grades) in college for Black males. Therefore, this study found that a strong high school GPA can be advantageous for Black males' academic success.

The findings of this study will be useful to policymakers, key decision-makers and institutional leadership, as this study demonstrates how prior high school achievement is positively associated with Black male third-year academic achievement. Policymakers and key decision-makers might consider these findings when supporting state and federal policies that include student achievement initiatives. An increase in access to college-readiness programs and initiatives for underrepresented minorities, specifically Black students in K-12 can assist in the increased enrollment of Black male U.S. residents in degree-granting postsecondary institutions in 2027.



Second, finances have been identified as a factor that influences retention and persistence of students (Cabrera et al., 1992) in particular, Black males at public universities (Strayhorn, 2008). Results from this study indicate that Black males who receive financial aid in the form of federal and private loans during their first, second, or third year of college GPA is negatively affected in their third year of college. Academic support administrators, such as retention specialists and student affairs professionals, might consider collaborating to develop preventative programing and support systems geared at Black male achievement. Because student loans emerged from this study as a negative impact on Black male academic achievement, I recommend that university leadership identity scalable resources associated with financial and academic barriers through early intervention measures in conjunction with university academic advising departments. Tinto (1993) stated that forms of aid such as work-study and grants are more effective in promoting persistence than other forms of aid such as loans. Thus, university leadership should identify and highly recommend that students utilize forms of aid separate from loans in an attempt to increase persistence and contribute to decreasing student debt.

Third, retention seminars geared towards first- and second-year students are common at many institutions, while initiatives for third-year and fourth-year students are scarce. In fact, first-year seminars can be found at 95% of 4-year institutions in the United States with the common goal of increasing academic performance and persistence through academic and social integration (Pascarella and Terenzini, 2006). Furthermore, Pascarella and Terenzini (2006) found participants of first-year seminars are more likely to graduate than nonparticipants. Thus, I suggest that institutional attention should be aimed towards third- and fourth-year persistence initiatives for students, in particular, Black males. Many institutions undertake persistence enhancement programs to encourage student success from first- to second-year; however, the



lack of opportunities for upperclassmen is obvious. Institutions should consider third- and fourth-year attrition intervention programs and initiatives for upper classman, as these years are critical for their academic success as they move towards graduation. As Tinto (1975) proposed both social and academic integration are essential to student retention, these types of programs and initiatives could incorporate career readiness, financial aid awareness, graduate school consideration, and major declaration.

Fourth, institutional leadership should be held accountable by their governing bodies, stakeholders, and students for improving Black male recruitment, retention, academic success, engagement, and graduation rates. These actions should be a priority and guided by strategic university initiatives collaboratively developed by various institutional stakeholders, ranging from undergraduate students to university president. University-led strategic initiatives should include efforts to effectively close the achievement gap of Black males. Furthermore, these initiatives should be integrated into strategic plans of institutions where accountability is assumed by trustees and the university community.

In summary, results from this study have significant implications related to academic achievement and persistence of Black males. Identifying and addressing these implications could play a vital role in assisting educators, university leadership, administrators, researchers, and policy makers in increasing academic success of Black males.

# **Critique of Study and Limitations**

This study contributes to the current academic achievement and persistence literature of Black males by analyzing factors that contribute to their success in post-secondary education.

Academic, nonacademic, and geographic-related factors were analyzed through theoretical frameworks and regression analysis. Additionally, I studied current national data with a



quantitative methodology to generalize rates of Black male academic achievement and persistence.

Through this study, I offer an analysis of factors that contribute to the academic achievement and persistence of Black males; however, the study is not without limitations. This study used secondary data from BPS: 12/14, and the sample size of African American students from this survey can be generalized as one of the largest educational survey data sets in United States. As I used this pre-existing dataset, I did not have control over the research questions used in the surveys. The survey questions used in this pre-existing dataset were limited by the original developers of the numerous surveys applied in BPS: 12/14. The addition of new academic variables (i.e., study hours, tutoring) as supplementary student identifiers would have been useful in allowing for more specific academic and nonacademic factors to be analyzed. Furthermore, this study lacks pre-college measures, such as standardized testing scores (ACT and SAT); high school GPA was used as the pre-college variable studied. The inclusion of additional academic and pre-college variables is recommended for future studies.

The BPS: 12/14 data set is complex, as it is composed of national cross-sectional samples of students from numerous administrative data sources. Missing data was indicated as binominal regressions were analyzed. According to Gyimah (2001), the consensus among methodologists is there is no single most effective technique in handling missing data. However, there were 18 unique variables utilized in this study. Missing data in the form of respondents none responses were indicated in the majority of the variables highlighted in chapter three. Each variable with missing data was recoded to detect missing data prior to the regression analysis. Furthermore, a pairwise deletion was utilized in this study regression analysis as it assumed that data was missing at random. Because of numerous studies accounted for the data in this study,



misinterpretation of missing data may occur in the binominal regression analyses. Thus, the relationship between independent and dependent variables may have been altered and should be interpreted with caution.

### **Recommendations for Future Research**

I sought to analyze the relationship between academic and nonacademic determinants of academic achievement and persistence of African American males and to identify how university geographic location influence the likelihood of African American male academic achievement and persistence. The results of this study have several implications for future research. This section will address recommendations for future research in the following areas: inclusion of quantitative research, reexamination of geographic location relative to academic achievement and persistence and reaffirming of the Black male narrative.

Qualitative analysis is the most commonly used approach to capturing the Black male perspective and college experiences. Qualitative studies limited in sample size (2-32) are common when addressing supportive mechanisms that enable African American males' success (Berry, 2005; Harper, 2003). I believe an increase in well-designed, longitudinal quantitative studies with large-scale sample sizes of Black males in the academic and persistence literature is warranted and can potentially benefit this population's success in postsecondary education. My assertion does not mean that qualitative analysis is less important than quantitative. The increase of quantitative research on Black males' academic achievement and levels of adjustment are critical in addressing their rates of persistence and completion.

In fact, the incorporation of both paradigms and their respective approaches through mixed methods (qualitative and quantitative) could further enhance the overall strength of future Black male persistence and retention studies. By doing so, this design could identify key factors



of developmental outcomes (quantitative) and explore the nature of their experiences (qualitative), thus creating a better worldview and in-depth analysis of the Black voice while providing a better understanding of factors that contribute to their academic success.

Future research on postsecondary academic achievement and persistence of Black males should seek to reexamine how geographic location affects Black male success. Approximately 2,840 four-year public, private nonprofit, and private for-profit institutions are spread across the United States, and Black students made up 15% of all enrolled students in 2016 (U.S. Department of Education, 2019). According to Smith, Allen, and Danley (2007), an overwhelming number of Black students attend PWIs, in which the majority of studies on Black males have been conducted. Sparks and Nunez (2014) concluded the role of institutional location in postsecondary attainment has either (a) described gaps in postsecondary educational attainment between residents of urban and rural areas or (b) explored how students' college aspirations, enrollment, and persistence are influenced by the urbanicity of their residential location during high school. However, little, if any, research has been empirically tested on whether attending a postsecondary institution in a specific region of the United States has an independent influence on academic achievement or persistence of Black males. These topics merit an examination of the geographic location patterns of Black males' college choices, enrollment patterns, selectivity, and academic and nonacademic factors that contribute persistence, retention, and graduation rates.

Lastly, the narrative of Black male experiences in postsecondary literature is presented with negative dispositions of their academic pursuits (Harper, 2012) and at often times researchers attribute the academic achievement of African American students to the success of



African American females. This study was intentional in its pursuit to only identify and not explicitly compare the success of Black males and females' academic achievement.

Extensive research has been conducted on the numerous subpopulations Black males identify with (i.e., athletes, fraternities, honors); thus, Black male students are not a monolithic group (Cuyjet, 2006; Fries-Britt, 2002; Fries-Britt & Turner, 2001; Harper, 2004, 2005, 2006; Strayhorn, 2009). At times, inquired research on the experiences of Black males are interpreted as they are one similar group. Moreover, implications and statistical analyses of African males can be found with distorted facts of Black male achievement or lack thereof. Additional anti-deficit research is warranted to counterbalance popular negative dispositions and to build a robust and inclusive selection of research literature on the positive academic pursuits of Black male students.

#### Conclusion

The results from the study expands what is known about Black males and provided a synthesis and analysis of their academic achievement and persistence in postsecondary education. Black students are one of the most studied populations in higher education persistence literature; however, this population has experienced little academic progress within the last 40 years. Black males are at an alarming risk of education failure as a result of complex academic and social factors experienced during postsecondary educational experiences. Despite these negative factors, scholars must continue to identify and report factors that positively relate to the success of these men to change the narrative and reality of their potential.

Consistent with existing literature, the findings of this study indicate that high school GPA contributes to academic achievement of Black males in postsecondary education.

Surprisingly, findings from this study indicated geographic location was found not to be a



significant factor in predicting third-year persistence. However, on-campus employment during the first year of college was found to be a significant predictor of Black male persistence, in particular, their third year of college.

In summary, a stronger understanding of Black male students' success and how the critical role of academic, nonacademic, and geographic factors play in these students' quest to receive a college degree are highlighted. While the results of this study may not have expressed the full story of Black male academic achievement and persistence, nonetheless, the outcomes inform not only stakeholders, institutional leadership, researchers, practitioners, and policymakers but undergraduate Black males themselves of the factors that contribute to their success. Therefore, what Black male students' can interpret from this study is that their success depends on their ability to academically achieve in secondary education and their attentiveness to finance their postsecondary endeavors through student loans.



#### References

- ACT. (2004, December 13). U.S. colleges falling short on helping students stay in college. *ACT New Release*.
- Adelman, C. (1999). Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment. Washington, D.C.: Office of Education Research and Improvements, U.S. Department of Education.
- Adelman, C. (2002). The relationship between urbanicity and educational outcomes. In W. G. Tierney & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 35–63). Albany, NY: State University of New York Press.
- Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. *US Department of Education*.
- Aljohani, O. (2016). A comprehensive review of the major studies and theoretical models of student retention in higher education. *Higher Education Studies*, 6(2), 1.
- Amechi, M. H., Berhanu, J., Cox, J. M., McGuire, K. M., Morgan, D. L., Williams, C. D. & Williams, M. S. (2015) Understanding the unique needs and experiences of Black male subgroups at four-year colleges and universities. In: Harper, S. R., Wood, J. L. (eds)

  \*Advancing Black male student success from preschool through Ph.D. (pp. 101-124). Sterling, Virginia: Stylus Publishing,
- Anderson, D. (2013). Service learning as personal and social transformation and Social media as disruptive technology in a loosely-coupled system: Nurturing activities at higher education institutions: Problems, effectiveness, and quality. Voronezh, Russia: Voronezh State University.



- Astin, A. W. (1975). *Preventing students from dropping out* (1st ed.). San Francisco: Jossey Bass.
- Astin, A. W. (1982). *Minorities in american higher education* (1st ed.). San Francisco: Jossey-Bass.
- Astin, A. W. (1991). The changing american college student: Implications for educational policy and practice. *Higher Education*, 22(2), 129-143. doi:10.1007/BF00137472
- Astin, A. W. (1993). The Jossey-Bass higher and adult education series. What matters in college? Four critical years revisited. San Francisco, CA, US: Jossey-Bass.
- Astin, A. W., & Oseguera, L. (2004). The declining "equity" of american higher education. *The Review of Higher Education*, 27(3), 321-341. doi:10.1353/rhe.2004.0001
- Astin, A. W., & Oseguera, L. (2005). Degree attainment rates at American colleges and universities. Los Angeles: Higher Education Research Institute, UCLA.
- Aud, S., Hussar, W., Johnson, F., Kena, G., Roth, E., Manning, E., Wang, X., and Zhang, J.
  (2012). The Condition of Education 2012 (NCES 2012-045). U.S. Department of Education, National Center for Education Statistics. Washington, DC. Retrieved [1-1-2019] from http://nces.ed.gov/pubsearch.
- Baryla, E. A., & Dotterweich, D. (2001). Student migration: Do significant factors vary by region? *Education Economics*, 9(3), 269–280.
- Bean, J. P. (1980). Dropouts and turnover: The synthesis and test of a causal model of student attrition. *Research in Higher Education*, *12*(2), 155-87.
- Bean, J. P. (1982). Student attrition, intentions, and confidence: Interaction effects in a path model. *Research in Higher Education*, *17*(4), 291-320. doi:10.1007/BF00977899



- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, *55*(4), 485–540.
- Berger, J. B., & Lyon, S. C. (2005). Past to present: A historical look at retention. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 1-30). Westport, CT: Praeger Publishers.
- Berger, J. B., & Milem, J. F. (2000a). Exploring the impact of historically Black colleges in promoting the development of undergraduates' self-concept. *Journal of College Student Development*, 41(4), 1.
- Berger, J.B, & Milem, J. F. (2000b). Organizational behavior in higher education and student outcomes. In J. C. Smart (Ed.), *Higher Education: Handbook of Theory and Research*, (Vol. XV, pp. 268-338). New York: Agathon.
- Berry, I. R. Q. (2005). Voices of success: Descriptive portraits of two successful African American male middle school mathematics students. *Journal of African American Studies*, 8(4), 46–62.
- Berryhill, J. C., & Bee, E. K. (2007). Ethnically diverse college students' psychological sense of community: Do their perceptions of campus racial climate influence it? *College Student Affairs Journal*, *27*(1), 76-93.
- Bettinger, E. P., & Long, B. T. (2007). Remedial and developmental courses. In S. Dickert Conlin & R. Rubenstein (Eds.), *Economic inequality and higher education: Access, Persistence and Success* (pp. 69-100). New York: Russell Sage Foundation.
- Blanchfield, W. C. (1971). College dropout identification: A case study. *Journal of Experimental Education*, 40, 1-4.



- Bonner, F.A., II, & Bailey, K.W. (2006). Enhancing the academic climate of African American men. In M.J. Cuyjet & Associates (Eds.), *African American men in college* (pp. 24-46). San Francisco, CA: Jossey-Bass.
- Bowen, W. G., Kurzweil, M. A., Tobin, E. M., & Pichler, S. C. (2005). *Equity and excellence in American higher education*. Charlottesville: University of Virginia Press.
- Bratton, J., Jr. (2018). The academic success of african american males at a maryland community college. *Journal of Underrepresented and Minority Progress*, 1(2), 44-72.
- Braxton, J. M., Brier, E. M., & Steele, S. L. (2007). Shaping retention from research to practice. *Journal of College Student Retention*, *9*, 377-399.
- Bush, E. C., & Bush, L. (2005). Black male achievement and the community college. *Black Issues in Higher Education*, 22(2), 44.
- Byun, S., Meece, J. L., & Irvin, M. J. (2012). Rural-Nonrural disparities in postsecondary educational attainment revisited. *American Educational Research Journal*, 49, 412–437.
- Cabrera, A. F., Nora, A., & Castaneda, M. B. (1992). The role of finances in the persistence process: A structural model. *Research in Higher Education*, *33*(5), 571-593.
- Carnevale, A. P., Rose, S. J., & Cheah, B. C. (2011). *The college payoff: Education, occupations, lifetime earnings*. Washington, D.C.: Georgetown University, Center on Education and Workforce.
- Chase, C. I. (1970). The college dropout: His high-school prologue. *Bulletin of the National Association of Secondary School Principals*, 54, 66-71.
- Chickering, A. W. (1974). Commuting versus resident students: Overcoming the educational inequities of living off campus (1st ed.). San Francisco: Jossey-Bass Publishers.



- Clark, W. A. V. (2006). The geography of opportunity: Race and housing choice in metropolitan america. Growth and Change, 37(3), 489-491. doi:10.1111/j.1468-2257.2006.00333\_1.x
- Coker, D. (1668). Diversity of intellective and non-intellective characteristics between persisting students and non-persisting students among campuses. Washington, D.C.: Office of Education Report, BR-6-2728.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Boston, MA: Pearson
- Cuyjet, M. J. (1998). Recognizing and addressing marginalization among african american college students. College Student Affairs Journal, 18(1), 64.
- Cuyjet, M. J. (2006). African American college men: twenty-first century issues and concerns. In M. J. Cuyjet (Eds.), African American men in college (pp. 24-46). San Franscisco: Jossy-Bass
- Dallas, F. I., Howard, L., Wilson, S., & Williams, R. (2019). Reaching across the international aisle: Student motivation to navigating higher education. *Proceedings of the 2019 3<sup>rd</sup> International Conference on E-Education, E-Business and E-Technology (ICEBT 2019)*. (pp. 43-50). doi: 10.1145/3355166.3355173
- Davis, R., Nagle, B., Richards, D. A. R., & Awokoya, J. T. (2013). The impact of the Gates

  Millennium Scholars Program on college choice for high-achieving, low income African

  American students. Journal of Negro Education, 82(3), 226–242.
- DesJardins, S. L., Ahlberg, D. A., & McCall, B. P. (1999). An event history model of student departure. Economics of Education Review, 18(3), 375–390.



- DesJardins, S. L., Ahlberg, D. A., & McCall, B. P. (2006). The effect of interrupted enrollment on graduation from college: Racial, income, and ability differences. Economics of Education Review, 25(6), 575–590.
- Do, Chau. (2004). The effects of local colleges on the quality of college attended. *Economics of Education Review*, 23 (3): 249–257.
- Doyle, W. R. (2010). Open-access colleges responsible for greatest gains in graduation rates.

  National Center for Public Policy and Higher Education.
- Eagan, K., Stolzenberg, E. B., Bates, A. K., Aragon, M. C., Suchard, M. R., & Rios-Aguilar, C. (2015). *The American freshman: National norms fall 2015*. Los Angeles: Higher Education Research Institute, UCLA.
- Feldman, K. A., & Newcomb, T. M. (1969). *The impact of college on students*. San Francisco: Jossey- Bass.
- Flowers, L. A. (2004). Retaining African-American student in higher education: An integration review. *Journal of College Student Retention*, 6(1), 23-35.
- Franklin, R. S. (2013). The roles of population, place, and institution in student diversity in american higher education. *Growth and Change*, 44 (1): 30–53.
- Fries-Britt, S. (2002). High-achieving Black collegians. About Campus, 7(3), 2-8.
- Fries-Britt., & Turner, B. (2002). Uneven stories: Successful Black collegians at a Black and a White campus. *The Review of Higher Education*, *25*(3), 315-330.
- Fries-Britt S. L., Burt B. A., & Franklin K. (2012). Establishing critical relationships: How Black males persist in physics at HBCUs. In R. Palmer & J. L. Wood (Eds.), *Black men in college: Implications for HBCU's and beyond* (pp. 71–88). New York: Routledge.



- Fries-Britt, S. L., & Turner, B. (2001). Facing stereotypes: A case study of Black students on a White campus. *Journal of College Student Development*, 42(5), 420–429.
- Garibaldi, A. (2007). The educational status of African American males in the 21<sup>st</sup> century. *The Journal of Negro Education*, 76, 324-333.
- Gekoski, N., & Schwartz, S. (1961). Student mortality and related factors. *Journal of Educational Research*, 54, 192-194.
- Greene, J., & Foster, G. (2003). Public high school graduation and college readiness rates in the United States (Working Paper).
- Grice, C. (2015). Manifesting status and expectations: determinants of college persistence among African American male students (Doctoral dissertation, Texas Woman's University). Retrieved from https://twu-ir.tdl.org/handle/11274/8631
- Griffith, A. L., and Rothstein S. D. (2009) *Can't get there from here: the decision to apply to a selective college. Economics of Education Review*, 28(5): 620–628.
- Gross, J. P. K., Cekic, O., Hossler, D., & Hillman, N. (2009). What matters in student loan default: A review of the research literature. *Journal of Student Financial Aid*, 39(1), 19.
- Gyimah, S. (2001). Missing data in quantitative social research. *PSC Discussion Papers*Series, 15(14), 1.
- Habley, W. R., Bloom, J. L., & Robbins, S. B. (2012). *Increasing persistence: Research-based strategies for college student success* (First ed.). San Francisco, CA: Jossey-Bass.
- Hagedorn, L. S., Maxwell, W., & Hampton, P. (2001). Using theory and research to improve college student retention. *Journal of College Student Retention: Research, Theory, and Practice*, *3*, 243-264.



- Harper, S. R. (2006a). Black male students at public flagship universities in the U.S.: Status, trends and implications for policy and practice. Washington, DC: Joint Center for Political and Economic Studies.
- Harper, S. R. (2006b). Reconceptualizing reactive policy responses to Black male college achievement: Implications from a national study. *GSE Publications*, 169.
- Harper, S. R. (2007). Peer support for African American male college achievement: Beyond internalized racism and the burden of "acting white". *The Journal of Men's Studies*, *14*(3), 337-358. doi: 10.3149/jms.1403.337
- Harper, S. R. (2008). Realizing the intended outcomes of brown: High-achieving African

  American male undergraduates and social capital. *American Behavioral Scientist*, 51(7),

  1030-1053. doi: 10.1177/0002764207312004
- Harper, S. R. (2009). Niggers no more: A critical race counternarrative on black male student achievement at predominantly white colleges and universities. *International Journal of Qualitative Studies in Education*, 22(6), 697-712. doi: 10.1080/09518390903333889
- Harper, S. R. (2012). Black male student success in higher education: A report from the National Black Male College Achievement Study. Philadelphia, PA: University of Pennsylvania, Center for the Study of Race and Equity in Education.
- Harper, S. R. (2014). (Re)setting the agenda for college men of color: Lessons learned from a 15-year movement to improve Black male student success. In R.A. Williams (Ed.), *Men of color in higher education: New foundations for developing models for success* (pp. 116–143). Sterling, VA: Stylus.
- Harper, S. R. (2015). Black male college achievers and resistant responses to racist stereotypes at predominantly white colleges and universities. *Harvard Educational Review*, 85(4), 646.



- Harper, S. R., & Gasman, M. (2008). Consequences of conservatism: Black male undergraduates and the politics of historically Black colleges and universities. *Journal of Negro Education*, 77(4), 336–351.
- Harper, S.R., & Harris III, F. (2012). A role for policymakers in improving the status of Black male students in U.S. higher education. Washington DC: Institute for Higher Education Policy.
- Harper, S. R., & Kuykendall, J. A. (2012). Institutional efforts to improve black male student achievement: A standards-based approach. *Change: The Magazine of Higher Learning*, 44(2), 23-29. 10.1080/00091383.2012.655234
- Harper, S. R., & Newman, C. B. (2016). Surprise, sensemaking, and success in the first college year: Black undergraduate men's academic adjustment experiences: *Teachers College Record*, 118(6), 1.
- Harper, S. R., Smith, E. J., & Davis, C. H. F. (2018). A critical race case analysis of black undergraduate student success at an urban university. *Urban Education*, *53*(1), 3-25. doi: doi: 10.1177/0042085916668956
- Harper, S. R., & Nichols, A. H. (2008). Are they not all the same? Racial heterogeneity among Black male undergraduates. *Journal of College Student Development*, 49(3), 199–214.
- Harvey, W. B. (2003). *Minorities in higher education: 2003-3004 annual status report*. Washington, DC: American Council on Education.
- Heller, D. E. (2003). *Informing public policy: Financial aid and student persistence*. Boulder, CO: Western Interstate Commission for Higher Education.



- Hill, J., Smith, N., Wilson, D., and Wine, J. (2016). 2012/14 Beginning Postsecondary Students
  Longitudinal Study (BPS:12/14): Data File Documentation (NCES 2016-062). U.S.
  Department of Education. Washington, DC: National Center for Education Statistics.
  Retrieved [1-1-2019] from http://nces.ed.gov/pubsearch.
- Hillman, N. W. (2016). Geography of college opportunity: The case of education deserts.

  \*American Educational Research Journal, 53(4), 987-1021.

  doi:10.3102/0002831216653204
- Hillman, N., & Weichman, T. (2016). Education deserts: The continued significance of "place" in the twenty-first century. *Viewpoints: Voices from the Field*. Washington, DC:

  American Council on Education.
- Hilton, A. A. (2015). Black male collegians: Increasing access, retention, and persistence in higher education by Robert T. Palmer, J. Luke Wood, Elon T. Dancy III, & Terrell L. Strayhorn (Review). *Journal of College Student Development*, 56(4), 414-416. doi:10.1353/csd.2015.0033
- Hilton, A. A., Wood, J. L., & Lewis, C. W. (2012). Black males in postsecondary education:

  Examining their experiences in diverse institutional contexts. Charlotte, N.C: Information Age Pub.
- Hossler, D. (1984). Enrollment management: An integrated approach. New York: College Entrance Examination Board.
- Howard, T. C., & Reynolds, R. (2008). Examining parent involvement in reversing the underachievement of African American students in middle-class schools. Educational Foundations, 22, 79-98.



- Hoyt, J., & Sorenson, C. (2001). High school preparation, placement testing, and college remediation. Journal of Developmental Education, 25(2), 26-33.
- Hu, S., & St. John, E. (2001). Student persistence in a public higher education system:

  Understanding racial and ethnic differences. Journal of Higher Education, 72(3), 256286.
- Hurwitz, M., Smith, J., & Howell, J. S. (2015). Student age and the collegiate pathway. *Journal of Policy Analysis and Management*, 34(1), 59-84.
- Irvin, M. J., Byun, S., Meece, J. L., Farmer, T. W., & Hutchins, B. C. (2012). Educational barriers of rural youth: Relation of individual and contextual difference variables. *Journal of Career Assessment*, 20, 71–87.
- Jackson, J. F., & Moore III, J. L. (2006). African American males in education: Endangered or ignored?. *Teachers College Record*, 108(2), 201.
- Jackson, J. F. L., & Moore, J. L. (2008). Introduction: The african american male crisis in education: A popular media infatuation or needed public policy response? *American Behavioral Scientist*, 51(7), 847-853. doi:10.1177/0002764207311992
- Jaffe, A. J., & Adams, W. (1970). Academic and Socio-Economic Factors Related to Entrance and Retention at Two-and Four-Year Colleges in the Late 1960s. New York, NY. Bureau of Applied Social Research.
- Johnson, C. A., & Rucker, M. L. (2005). Guests at an ivory tower: The challenges black students experience while attending a predominantly white university. Lanham, Md: University Press of America.



- Kim, E., & Hargrove, D. T. (2013). Deficient or resilient: A critical review of black male academic success and persistence in higher education. *The Journal of Negro Education*, 82(3), 300-311. doi: 10.7709/jnegroeducation.82.3.0300
- Kimbrough, W. M., & Harper, S. R. (2006). African American men at historically Black colleges and universities: Different environments, similar challenges. In M. J. Cuyjet (Ed.), *African American men in college* (pp. 189–209). San Francisco: Jossey-Bass.
- Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J., (2005). *Student success in college: Creating conditions that matter*. San Francisco: Jossey-Bass.
- Kuh, G. D. (2001). Organizational culture and student persistence: Prospects and puzzles. *Journal of College Student Retention*, 3(1), 23-39. 127
- Kuh, G. D., & Hu, S. (2001, January/February). Learning productivity at research universities. *Journal of Higher Education*, 72(1), 1-28.
- Kodama, C. M. (2015). Supporting commuter students of color. *New Directions for Student Services*, 2015(150), 45-55. doi:10.1002/ss.20126
- Laerd Statistics. (2017). Binomial logistic regression using SPSS statistics. *Statistical tutorials* and software guides. Retrieved from https://statistics.laerd.com/
- Lavin, D. (1965). The prediction of academic performance. New York: Russell Sage Foundation.
- Lawhorn, J. (1971). A study of persisters and dropouts in the secretarial science program at Miami-Dade Junior College. (Unpublished doctoral dissertation), The University of Miami.
- Lewis, C. L. (2016). Understanding research methods to study African American males in college. *The Journal of Negro Education*, 85(1), 3-15.

  doi:10.7709/jnegroeducation.85.1.0003



- Livingston, C. H. (2007). An analysis of the factors shaping student graduation rates for Virginia's public colleges and universities (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3279986)
- Mason, H. P. (1998). A persistence model for African American male urban community college students. *Community College Journal of Research and Practice*, 22(8), 751–760.
- McDonough, P. M., Antonio, A. L., & Trent, J. W. (1997). Black students, Black colleges: An African American college choice model. *Journal for a just and Caring Education*, *3*(1), 9-36.
- McFarland, C. P. (2017). *College seniors and graduation: The demographic characteristics of college seniors earning a bachelor's degree* (Doctoral Dissertation). Retrieved from https://cmichprimo.hosted.exlibrisgroup.com/permalink/f/1a4i051/01CMICH\_ALMA516 47454150003781
- Means, D. R., Clayton, A. B., Conzelmann, J. G., Baynes, P., & Umbach, P. D. (2016). Bounded aspirations: Rural, african american high school students and college access. *Review of Higher Education*, 39(4), 543-569.
- Metz, G. W. (2004). Challenge and changes to tinto's persistence theory: A historical review.

  Journal of College Student Retention, 6(2), 191-207. doi:10.2190/M2CC-R7Y1-WY2Q-UPK5
- Miller, J. R., & Donlan, M. (2014). Environment and affect: Toward an emotional geography of student persistence. *The William & Mary Educational Review*, *3*(1), 9.
- National Center for Education Statistics. (2005). *Integrated postsecondary education data system*. Washington, DC: U.S. Department of Education, Institute of Education Sciences.



- National Center for Educational Statistics, (n.d.). Integrated postsecondary education data system: Peer analysis system. Retrieved June 24, 2019, from: http://https://nces.ed.gov/ipeds
- Nichols, A., & Evans-Bell, D. (n.d.). A look at Black student success identifying top- and bottom-performing institutions. Retrieved October 22, 2017, from https://edtrust.org/resource/blackstudentsuccess/
- Noel, L., Levitz, R., and Saluri, D. (1985). Increasing student retention. San Francisco, CA: Jossey-Bass.
- Noel-Levitz, Inc. (2008). Student success, retention, and graduation: Definitions, theories, practices, patterns, and trends. Retrieved from www.noellevitz.com
- Oliver, M. D. (1998). Geography, race, and class: A case study of the role of geography at an urban public university. *American Journal of Education*, *106*(2), 273–301.
- Palmer, R. T., Davis, R. J., & Hilton, A. A. (2009). Exploring challenges that threaten to impede the academic success of academically underprepared Black males at an HBCU. *Journal of College Student Development*, 50(4), 429–445.
- Palmer, R. T., Wood, J. L., Dancy, T. E., & Strayhorn, T. L. (2014). Black male collegians:

  Increasing access, retention, and persistence in higher education. *ASHE Higher Education Report* (vol. 40, no. 3). San Francisco: Jossey-Bass.
- Panos, R., & Astin, A. W. (1968). Attrition among College students. *American Educational Research Journal*, 5(1), 57-72. http://dx.doi.org/10.3102/00028312005001057
- Pascarella, E. T. (1985). Students' affective development within the college environment. *The Journal of Higher Education*, *56*(6), 640. doi:10.2307/1981072
- Pascarella, E. T. (2001). Identifying excellence in undergraduate education. Change, 33(3), 18



- Pascarella, E. T. (2006). How college affects students: Ten directions for future research. *Journal of College Student Development*, 47(5), 508-520. doi:10.1353/csd.2006.0060
- Pascarella, E. T., Duby, P., & Iverson, B. (1983). A test and reconceptualization of a theoretical model of college withdrawal in a commuter institution setting. *Sociology of Education*, 56(2), 88-100.
- Pascarella, E. T., & Terenzini, P. T. (1979). Interaction effects in Spady and Tinto's conceptual models of college attrition. *Sociology of Education*, 197-210.
- Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *The Journal of Higher Education*, *51*(1), 60-75.
- Pascarella, E. T., & Terenzini, P. T. (1983). Predicting voluntary freshman year persistence/withdrawal behavior in a residential university: A path analytic validation of Tinto's model. *Journal of Educational Psychology*, 75(2), 215.
- Pascarella, E. T., & Terenzini, P. T. (1991). How college affects students: Findings and insights from twenty years of research. John Wiley & Sons.
- Pascarella, E. T., & Terenzini, P. T. (1995). The impact of college on students: Myths, rational myths, and some other things that may not be true. *NACADA journal*, *15*(2), 26-33.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (vol 2). Ann Arbor: Society for College and University Planning.
- Pascarella, E. T., Terenzini, P. T., & Wolfle, L. M. (1986). Orientation to college and freshman year persistence/withdrawal decisions. *The Journal of Higher Education*, 57(2), 155-175.
- Palmer, R. T., Davis, R. J., & Hilton, A. A. (2009). Exploring challenges that threatento impede the academic success of academically underprepared Black males at an



- HBCU. *Journal of College Student Development*, 50(4), 429–445.
- Palmer, R. T., Wood, J. L., Dancy, T. E., & Strayhorn, T. L. (2014). Black male collegians: Increasing access, retention, and persistence in higher education. *ASHE Higher Education Report*, *56*(3). San Francisco: Jossey-Bass.
- Paulsen, M. B., & St. John, E. P. (2002). Social class and college costs: Examining the financial nexus between the college choice and persistence. *Journal of Higher Education*, 73(2), 189-236.
- Peng, C., So, T., Stage, F., & St. John, E. (2002). The use and interpretation of logistic regression in higher education journals: 1988-1999. *Research in Higher Education*, 43(3), 259-293.
- Perna, L. W. (2010). Understanding the Working College Student: New Research and Its Implications for Policy and Practice. Herndon, VA: Stylus Publishing.
- Perna, L. W., & Ruiz, R. (2016). Technology: the solution to higher education's pressing problems? In *American Higher Education in the Twenty-First Century*, 432–61.

  Baltimore: Johns Hopkins University Press.
- Pickering, J., Calliotte, J., & McAuliffe, G. (1992). The effect of noncognitive factors on freshman academic performance and retention. *Journal of the First-Year Experience & Students in Transition*, 4(2), 7-30.
- Radwin, D., Wine, J., Siegel, P., and Bryan, M. (2013). 2011–12 National Postsecondary Student Aid Study (NPSAS:12): Student Financial Aid Estimates for 2011–12 (NCES 2013-165).

  Institute of Education Sciences, U.S. Department of Education. Washington, DC:

  National Center for Education Statistics. Retrieved [1-1-2019] from http://nces.ed.gov/pubsearch.



- Ratcliffe, M., Burd, C., Holder, K., & Fields, A. (2016). Defining rural at the US Census Bureau. *American community survey and geography brief*, 1, 8.
- Reason, R. D. (2009). An Examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development*, 50(6), 659-682. doi:10.1353/csd.0.0098
- Ross, M. (1998) Success factors of young African American males at a historically Black college. Westport, Connecticut: Bergin and Garvey.
- Rovai, A. P., Gallien, L. B., & Stiff-Williams, H. R. (2007). Closing the African American achievement gap in higher education. New York: Teachers College Press.
- Scott-Clayton, J., & Columbia University, Community College Research Center. (2012). *Do high-stakes placement exams predict college success? CCRC working paper no. 41.*Community College Research Center.
- Seidman, A. (2005). *College student retention: Formula for student success*. Westport, CT: Praeger Publishers.
- Seidman, A. (2012). College student retention: Formula for student success. Lanham, Md:

  Rowman & Littlefield Publishers.
- Shah, S., & Sato, G. (2014). Building a beloved community: Strengthening the field of Black male achievement. New York: Foundation Center.
- Singer, J. N. (2005). Understanding racism through the eyes of African American male student athletes. Race, Ethnicity and Education, 8(4), 365-386
- Smith, W. A., Allen, W. R., & Danley, L. L. (2007). Assume the position. You fit the description. Psychosocial experiences and racial battle fatigue among African American male college students. *American Behavioral Scientist*, 51, 551-578.



- Spady, W. G. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. Interchange, 1(1), 64-85.
- Spady, W. G. (1971). Dropouts from higher education: Toward an empirical model. *Interchange*, 2(3), 38-62.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797–811.
- St. John, E. P., & Starkey, J. B. (1995). An alternative to net price: Assessing the influence of prices and subsidies on within-year persistence. *Journal of Higher Education*, 66(2), 156-186. Retrieved from http://www.jstor.org/stable/2943910
- Stewart, S., Lim, D. H., & Kim, J. (2015). Factors influencing college persistence for first-time students. *Journal of Developmental Education*, 12-20.
- Strayhorn, T. L. (2012). Satisfaction and retention among African American men at two-year community colleges. *Community College Journal of Research and Practice*, 36(5), 358-375. 10.1080/10668920902782508
- Strayhorn, T. L. (2013a). Measuring race and gender differences in undergraduate students' perceptions of campus climate and intentions to leave college: An analysis in black and white. *Journal of Student Affairs Research and Practice*, 50(2), 115-132. doi:10.1515/jsarp-2013-0010
- Strayhorn, T. L. (2013b). *Theoretical frameworks in college student research*. Lanham, Maryland: University Press of America.
- Strayhorn, T. L. (2014b). Modeling the determinants of college readiness for historically underrepresented students at 4-year colleges and universities: A national investigation. *American Behavioral Scientist*, 58(8), 972-993. 10.1177/0002764213515230



- Strayhorn, T. L. (2014). Making a way to success: Self-authorship and academic achievement of first-year African American students at historically black colleges. *Journal of College Student Development*, *55*(2), 151-167. 10.1353/csd.2014.0011
- Strayhorn, T. L. (2015). Factors influencing black males' preparation for college and success in STEM majors: A mixed methods study. *Western Journal of Black Studies*, 39(1), 45-63.
- Strayhorn, T. L., Johnson, R. M., & Barrett, B. A. (2013). Investigating the college adjustment and transition experiences of formerly incarcerated black male collegians at predominantly white institutions. *Spectrum: A Journal on Black Men*, 2(1), 73-98. 10.2979/spectrum.2.1.73
- Strayhorn, T., Williams, M., Tillman-Kelly, D., & Suddeth, T. (2013). Sex differences in graduate School choice for Black HBCU bachelor's degree recipients: A National Analysis. *Journal of African American Studies*, *17*(2), 174-188.
- Solórzano, D. G., & Yosso, T. J. (2002). Critical race methodology: Counter-storytelling as an analytical framework for education research. *Qualitative Inquiry*, 8(1), 23-44. doi:10.1177/107780040200800103
- Taylor, R., & Hanson, G. (1970) Interest and persistence. *Journal of Counseling Psychology*, 17, 506-509.
- Terenzini, P.T., Cabrera, A. F., & Bernal, E. (2001). Swimming against the tide: The poor in American higher education (College Board Research Report No. No. 2001-3). New York: The College Board.
- Terenzini, P. T., & Pascarella, E. T. (1978). The relation of students' precollege characteristics and freshman year experience to voluntary attrition. *Research in Higher Education*, 9(4), 347-366. doi:10.1007/BF00991406



- Terry, B. D. (2007). *The cost of remedial education*. Austin, TX: Texas Public Policy Foundation.
- Thelin, J. R. (2004). *A history of american higher education*. Baltimore: Johns Hopkins University Press.
- Thelin, J. R. (2011). *A history of american higher education* (2nd ed.). Baltimore: Johns Hopkins University Press.
- Tierney, W. G., & Hagedorn, L. S. (2002). *Increasing access to college: extending possibilities* for all students. Albany: State University of New York Press.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research.

  \*Review of Educational Research, 45(1), 89-125. doi:10.3102/00346543045001089
- Tinto, V. (1982). Limits of theory and practice in student attrition. *Journal of Higher Education*, 53(6), 687-700.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tinto, V. (1988, July/August). Stages of student departure: Reflections on the longitudinal character of student leaving. *Journal of Higher Education*, 59(4), 438-455.
- Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student at attrition (2nd ed). Chicago: University of Chicago Press.
- Tinto, V. (2005). Forward. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. IX-X). Westport, CT: Praeger.
- Triventi, M. (2014). Does working during higher education affect students' academic progression? *Economics of education review*, 41, 1-13.



- Ruth N. López Turley. (2009). College proximity: Mapping access to opportunity. *Sociology of Education*, 82(2), 126-146. doi:10.1177/003804070908200202
- U.S. Department of Education. (2001). Federal programs for education and related activities. *In Digest of education statistics 2001* (4): 409: Retrieved April 21, 2018, from the National Center for Education Statistics: https://nces.ed.gov/pubs2002/2002130.pdf
- U.S. Department of Education, National Center for Education Statistics. (2012). *The condition of education 2012 (NCES 2012-045)*. Washington, DC: Author.
- U.S. Census Bureau. (2012). Educational attainment in the United States: 2012 detailed tables. Retrieved from http://www.census.gov/hhes/socdemo/education/data/cps/2012/tables.html.
- U.S. Department of Education, National Center for Education Statistics. (2009, June). *The condition of education*, 2009 (NCES Report No. 2009-081). Washington, DC: U.S. Government Printing Office.
- U.S. Government Accountability Office (U.S. GAO). (1995). Higher education: Restructuring student aid could reduce low-income student dropout rate (GAO/HEHS-95-48).Washington, DC: U.S. Government Printing Office.
- Volkwein, J. F., & Parmley, K. (2000). Comparing administrative satisfaction in public and private universities. *Research in Higher Education*, 41(1), 95-116. doi:10.1023/A:1007094429878
- Weiss, C. H. (1998). Evaluation (2nd ed.). Upper Saddle River, NJ: Prentice-Hall.
- Weissman, J., Silk, E., & Bulakowski, C. (1997). Assessing developmental education policies. *Research in Higher Education*, *38*(2), 187-200.



- Williams, J. E., & Luo, M. (2010). Understanding first-year persistence at a metropolitan university: Do geographic characteristics of students home city matter? *College Student Journal*, 44(2), 362.
- Wilson, S.Y. (2015). The relationship between the use of a student mathematics support service and student achievement (Doctoral Dissertation). Retrieved from https://cmich-primo.hosted.exlibrisgroup.com/permalink/f/1a4i051/01CMICH\_ALMA5160331212000 3781
- Wood, J. L. (2012). Leaving the two-year college: Predictors of Black male collegian departure. *The Journal of Black Studies*, 43(3), 303–326.
- Wood, J. L., & Essien-Wood, I. R. (2012). Capital identity projection: Understanding the psychosocial effects of capitalism on Black male community college students. *Journal of Economic Psychology*, 33(3), 984–995.
- Wood, J. L., & Palmer, R. T. (2015). Black men in higher education: A guide to ensuring student success. New York: Routledge



## **Appendix**



University Human Subjects Review Committee

Jun 12, 2019 3:56 PM EDT

LaMarcus Howard

Disability Resource Center, Leadership and Counsel

Re: Exempt - Initial - UHSRC-FY18-19-319 College Success and Geography: An Analysis of Contributing Factors that Determine College Persistence Towards Degree Attainment in Relation to Geographic Location

Dear LaMarcus Howard

The Eastern Michigan University Human Subjects Review Committee has rendered the decision below for College Success and Geography: An Analysis of Contributing Factors that Determine College Persistence Towards Degree Attainment in Relation to Geographic Location. You may begin your research.

Decision: Exempt

Selected Category: Category 4. Secondary research for which consent is not required: Secondary research uses of identifiable private information or identifiable biospecimens, if at least one of the following criteria is met:

- (i) The identifiable private information or identifiable biospecimens are publicly available:
- (ii) Information, which may include information about biospecimens, is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained directly or through identifiers linked to the subjects, the investigator does not contact the subjects, and the investigator will not reidentify subjects;
- (iii) The research involves only information collection and analysis involving the investigator's use of identifiable health information when that use is regulated under 45 CFR parts 160 and 164, subparts A and E, for the purposes of "health care operations" or "research" as those terms are defined at 45 CFR 164.501 or for "public health activities and purposes" as described under 45 CFR 164.512(b); or
- (iv) The research is conducted by, or on behalf of, a Federal department or agency using covernment-generated or government-collected information obtained for nonresearch activities, if the research generates identifiable private information that is or will be maintained on information technology that is subject to and in compliance with section 208(b) of the E-Government Act of 2002, 44 U.S.C. 3501 note, if all of the identifiable private information collected, used, or generated as part of the activity will be maintained in systems of records subject to the Privacy Act of 1974, 5 U.S.C. 552a, and, if applicable, the information used in the research was collected subject to the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq.

Renewals: Exempt studies do not need to be renewed. When the project is completed, please contact human.subjects@emich.edu.

Modifications: Any plan to alter the study design or any study documents must be reviewed to determine if the Exempt decision changes. You must submit a modification request application in Cayuse IRB and await a decision prior to implementation.

Problems: Any deviations from the study protocol, unanticipated problems, adverse events, subject complaints, or other problems that may affect the risk to human subjects must be reported to the UHSRC. Complete an incident report in Cayuse IRB.

Follow-up: Please contact the UHSRC when your project is complete.

Please contact human.subjects@emich.edu with any questions or concerns.

Sincerely,

Eastern Michigan University Human Subjects Review Committee

