5-1-2023

The Influence of Social Capital on College Persistence and Completion for African American Males

Jacquelyn Carlotta Strickland
Georgia State University

The Influence of Social Capital on College Persistence and Completion for African

American Males

by

Jacquelyn Strickland

Under the Direction of Tomeka Davis, PhD

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

in the College of Arts and Sciences

Georgia State University

2023

ABSTRACT

Alarming national statistics reveal the scope and trajectory of inequality that exists for African American men completing bachelor's degrees. Public institutions confer bachelor's degrees to Black males at a rate of just under 35% within the six-year benchmark, the lowest completion rate among all racial groups and for male and female students. Of interest to this work is whether social capital – in the form of informal faculty mentoring and peer network support – has a significant impact on college persistence for African American men who successfully attain bachelor's degrees. The study investigates the influence of social class, pre-college attributes, such as educational attainment aspirations, and propensity to seek social support, as contributors to college completion. The theoretical framework informing this study draws from social capital theory, Tinto's retention theory, Harper's anti-deficit achievement framework, intersectionality theory, and the academic resilience perspective. This study takes a mixed-methods approach using nationally representative data from the 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09). It also uses qualitative data from interviews with African American men who attempted bachelor's degrees at colleges and universities in the state of Georgia – 20 who successfully completed the degree programs they started, and 5 who did not finish the programs they started (although 1 of these 5 went on to complete his degree at a different, out-of-state university). Findings contribute to the limited sociology of education literature on African American male students' college experiences, and inform higher education administrators' efforts to implement or improve policies that promote increasing Black men's retention and completion rates. Further, what is learned from this research will help administrators to address strengthening the graduate school pipeline for Black men. These objectives are important for bridging postsecondary education attainment disparities.

INDEX WORDS: African American men, Black men, Social capital, College persistence, Degree attainment, Informal faculty mentoring, Peer support

The Influence of Social Capital on College Persistence and Completion for African

American Males

by

Jacquelyn Strickland

Committee Chair: Tomeka Davis

Committee: James Ainsworth

Jonathan Gayles

Electronic Version Approved:

Office of Graduate Services

College of Arts and Sciences

Georgia State University

May 2023

DEDICATION

Thank You, GRACIOUS, ALMIGHTY GOD, for allowing me to reach this milestone!! I pray that this work will bear fruit that blesses others, in the Name of Jesus.

Thank you to the best husband in the world, my hero and best friend, Marques Strickland! You have been right there with me every step of the way. Thank you for your tremendous patience with me, and for helping keep my feet on the ground in the midst of all my big, crazy, bright ideas! Thank you for listening, for believing in me, for all the technical and logistical support, for the encouragement, and everything in between. Your love and support mean the world to me. This accomplishment also belongs to you. I am so grateful to God for you. I love you, Babe!

Thank you to my mother and father, Mr. and Mrs. Crist and Jacquelyn Watts, for being the best parents in the world to my brother and me! You sowed the seeds from the very beginning that developed our strengths, and you encouraged us to dream big. You taught us the importance of investing our best in all areas of life to get the best out of life. We saw your hard work and the sacrifices you made for us every single day. You always did everything you could to make sure we were happy and well-positioned to take good care of ourselves and be successful. You have cheered me on throughout this entire endeavor. Your love, support, and encouragement are with me every day. This accomplishment also belongs to you. I love you, Mama and Daddy!

Thank you to my brother, Crist Watts II. You're the best brother anyone could ever hope for. You are one of the most optimistic, hardworking, kindhearted, and loving people I know. Thank you for your listening ear, the tech support, and the great suggestions. You are always interested in and supportive of everything that others are doing, and willing to help everywhere you can. You are such a bright light and a blessing to everyone in your life. I love you, Crist!

Thank you to my amazing mother-in-law, Patricia Strickland, and to all the rest of my beautiful family in Fairhope, AL, and Mobile, AL, for your unbelievable love and support. I am blessed with the kindest and most wonderful in-laws in the world. I love you all so much!

I want to express my love and deepest gratitude for these loved ones who have gone home to be with God: Mary Moncrief, Shirlon Ann Moncrief, Robert Moncrief, Curtis Strickland, and Jordan Bolden. They helped me to become the person I am today, and without them I would not have achieved this success.

I am endlessly grateful to all of my family and friends who have continually prayed for and with me, sown seeds into me, and propelled me to follow my dreams. Among them are LaWanda Cole. Also among them are friends who earned graduate and professional degrees, and whose journeys helped guide me to mine. They have inspired, encouraged, and paved the way for me follow in their footsteps. You all are fierce! I love and admire you more than I could ever say. Thank you for your lived example, and for your friendship.

I wish that I could name and give my thanks to every single person in my life who has blessed me and contributed to this journey. I am indebted to each of you. I wish you love and blessings, and I express my deepest, most sincere appreciation for you.

ACKNOWLEDGEMENTS

Thank you to my advisor and dissertation chair, Dr. Tomeka Davis, and to my committee members: Drs. James Ainsworth and Jonathan Gayles. It is a tremendous blessing to work with such a dedicated committee of outstanding, accomplished, and brilliant faculty members. I am deeply grateful for my committee's guidance, support, and enthusiasm for this project. I want to express my appreciation to Dr. Davis for agreeing to serve as my faculty advisor when I first approached her to ask this of her, although she already had a heavy doctoral student advising load. I am especially thankful to Dr. Davis for taking a chance on me and for believing in my potential, despite my being a non-traditional student. I sincerely appreciate everything she has taught me, and her flexibility in welcoming me to reach out to her with questions literally at any time: day, night, on weekends, and even whenever the university was closed for breaks.

Thank you to the Georgia State University faculty – in the Department of Sociology and in other departments – from whom I have learned so much in classes, and in meetings outside of class. I am grateful for Dr. Anthony Hatch, currently faculty in the Department of Sociology at Wesleyan University. I want to express special thanks to Dr. Meredith Greif, currently faculty in the Department of Sociology at Johns Hopkins University. Her classes were invaluable, and she served as my faculty advisor prior to transitioning from GSU. Dr. Greif seemed to immediately see something in me as a new doctoral student that she sought to nurture. She took me under her wing and encouraged me, challenged me to dig deeper as a critical thinker and writer in our discipline, and went out of her way to invest in my development and growth as a researcher. Along with everything I learned from Dr. Greif about sociology, academia, and professionalism, the example she set through her integrity and dedication to every aspect of her work showed me the importance of believing in the best *in everyone* and *for everyone*. She demonstrates for all her

students her passion for teaching, and she exemplifies that pressing forward in our work – with compassion and grace – is important even though there is messiness, contention, adversity, and regardless that we still will not have all the answers. I will always hold her in high regard as my first mentor and role model as a doctoral student. I would not be the sociologist that I am, nor would I have been successful in this program, without her. I share this accomplishment with her.

I want to thank all of my past professors and teachers who invested in me and influenced me to realize the potential they saw in me. Drs. Wendy Ruona and Laura Bierema, who were my professors in my M.Ed. program in Human Resource and Organizational Development at the University of Georgia, nurtured my hopes and dreams and helped me to find my way. Everything I gained from time spent with them in their classes and outside the classroom contributed to my pursuit of and success in this doctoral program. Thank you to Ms. Karen Utz, one of my favorite history instructors at the University of Alabama at Birmingham. She took the time to encourage me and instill confidence in me that I could earn my Ph.D., and that I could go on to have a great impact on students, just as I admired that gift in her. I owe a debt of gratitude to all of these great teachers – those I have mentioned above, and others from preschool and forward – who have modeled excellence, sown seeds into me, and have motivated and brought out the best in me.

I am so grateful for everyone in my Georgia Tech family who has extended me the utmost support and encouragement along my graduate school journey, and that includes past and present colleagues. You all are such wonderful friends, mentors, and everything in between. Dr. Felicia Benton-Johnson, thank you for believing in me, and for everything you have taught me. I am so thankful to everyone in the GT College of Engineering Dean's Office, everyone in the GT Center for Engineering Education and Diversity (CEED) office, and past colleagues in the GT Office of Graduate Education and in the GT School of Building Construction.

I want to extend a special thanks to all of the wonderful, splendid Black men who took the time to participate in the qualitative interviews for my dissertation research. I include in this all of those who also assisted with helping me market the opportunity and make connections with the formal participants, and those who helped me with insight into conducting the interviews prior to my officially beginning that phase of the research. I respect and admire each of you so much, and I deeply appreciate your time and everything you shared with me to make this research project possible. All of this work is for you, and it is to carry forward your contributions to help other Black male college students to be successful. I could never repay you for the gift that each of you has given me in this work. This accomplishment also belongs to you.

I also want to thank the following two dissertation consulting firms: Elite Research, LLC, and Dissertation Angels. Specifically, I am deeply grateful to Dr. Ryan Krone at Elite Research, and to Dr. Jessica Bell at Dissertation Angels, for their outstanding, excellent consulting services. Their kindness, patience, and expertise has been invaluable to my successful completion of this project. They have been so wonderful and pleasant to work with – absolutely the best. I am so appreciative that I found them when I did, and that they were available and more than willing to assist me with my project. I would highly recommend them to anyone.

I am grateful for the Tuition Assistance Program (TAP) made possible by the University System of Georgia. Thank you to Georgia Tech and to everyone in the GT Office of Human Resources who has assisted me with the administration of TAP support for my graduate programs. TAP allowed me to accomplish two graduate degrees free of debt. TAP is an invaluable resource for me, and for so many other USG employees like me. I cannot express how important TAP has been to my peace of mind, and to my professional goals and success.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 INTRODUCTION

In an increasingly knowledge-based, global economy, postsecondary education is highly critical for countries to be competitive. The United States has fallen behind relative to other countries in postsecondary education and degree attainment (Palmer, Davis, Moore III, and Hilton 2010). According to an international assessment by the Organisation for Economic Cooperation and Development (OECD), in 1995, the U.S. was ranked second behind only New Zealand in the number of students beginning and completing postsecondary education (OECD 2012). The most recent OECD assessment shows the U.S. ranked 14th in this metric. The ranking of the U.S. is also low compared to other nations in the number of students graduating in Science, Technology, Engineering, and Mathematics (STEM) – critical fields that drive economic growth and development – and thus, has regressed in producing scientists and engineers (Palmer et al. 2010). The most recent available results from a Programme for International Student Assessment (PISA) report show that in 2015, the U.S. ranked a lackluster 38th out of 71 countries in math and ranked 24th in science (OECD 2019). Adding to this dilemma are widening gaps in degree attainment among racial groups and income levels (Palmer et al. 2010).

Policy makers realize that it is now more urgent than ever before to address inequality in degree completion rates to ensure there are enough qualified, college-educated individuals who can help sustain the nation's ability to compete in the global marketplace (Palmer et al. 2010). A college-educated population is important to a healthy economy and prosperous future at the state and local level, as well. The U.S. can no longer afford to leave certain demographic groups behind, not only in the interest of social equity, but also because increasing degree completion rates has major implications for the nation's ability to harness and develop its full population's

talent and to position itself as an effective global competitor (Palmer et al. 2010). Blacks make

up 12% of the U.S. population over age 21, but represent only 5% of the nation's scientists and

engineers (National Science Board 2016). Hispanic Americans make up 15% of the population

over 21, but only 6% of scientists and engineers (National Science Board 2016). Further, with

U.S. racial minority population percentages projected to rise dramatically by the year 2050 while

its percentage of Whites decreases, higher education must adjust to these significant

demographic shifts and educate an increasingly diverse student population (Palmer et al. 2010).

To that end, ensuring that historically underrepresented minorities (URMs) have the

opportunities and support to succeed in postsecondary education represents a necessary

investment in human capital that is vital to the nation's success. Increasing the number of

Americans with college degrees and quality postsecondary credentials, along with closing

educational attainment gaps for traditionally underrepresented populations, are now national

priorities (Complete College America 2014b).

Relative to all other demographic groups, the U.S. does the poorest job of ensuring

positive educational outcomes for African American[1] males (Palmer et al. 2010; Shapiro 2017).

Alarming national statistics reveal the scope and trajectory of inequality that exists for African

American men pursuing postsecondary education and completing degrees (Strayhorn 2010).

While most racial/ethnic subgroups have experienced substantial progress in postsecondary

enrollment, participation rates for Black men have seen little to no increase in recent decades

(Strayhorn 2008b). Notably, gender disparities are most glaring among African Americans

---

[1] The terms "African American" and "Black" are used interchangeably. I acknowledge that individuals attach different and varying degrees of social and cultural distinctions to these terms in the context of racial and ethnic identity; however, I do not address that discourse within the scope of this work. I personally choose to self-identify using both terms interchangeably; however, I understand and support others' right to disagree with or to reject this choice.

(Cuyjet 2006; Jackson, Moore III, and Leon 2010; Palmer et al. 2010; Strayhorn 2008b), with Black women enrolled at a proportion of 2 to 1 and persisting to bachelor's degree completion at nearly the same proportion compared to Black men (Cuyjet 2006; Jackson et al. 2010; Strayhorn 2016; U.S. Department of Education, National Center for Education Statistics 2016, 2013). During the fall of 2015, Black males were enrolled at a rate of 59% of Black females' enrollment, whereas White males were enrolled at a rate of nearly 80% of White females' enrollment (U.S. Department of Education, National Center for Education Statistics 2016a). Also during that timeframe, persistence to bachelor's degree completion rates by gender were markedly disparate for Black male and female graduation percentages when compared to White male and female graduation percentages (U.S. Department of Education, National Center for Education Statistics 2016b). The growing gap between enrollment and graduation rates among Black men and Black women subsequently contributes to a profound imbalance in college-educated Black men compared to Black women, to the detriment of the social dynamics of the Black community (Roach 2001). In the U.S., most people date and marry within their own racial group and social class, so the diminishing presence of Black men on college campuses has a deleterious effect on the pool from which other Black college students might choose potential partners (Cuyjet 2006; Strayhorn 2015). Black males' attrition and falling short of graduation also seriously threatens their capacity for upward social mobility and job security, which jeopardizes their positioning to support families, and consequently their chances of being seen as desirable partners (Strayhorn 2015).

Black men who do enroll in college, particularly those who are from low-income families, are generally congregated at historically Black colleges and universities (HBCUs), community colleges, and less-selective four-year degree-granting colleges (Baum and Payea

2004; Strayhorn 2010; Walpole 2003). Systemic inequity across the education pipeline contributes to the overrepresentation of Black men at institutions with open admission standards, including community colleges and for-profit colleges, but underrepresentation at colleges and universities with selective admission standards, including many HBCUs (Toldson 2014). African American males comprise nearly 40% of all students enrolled at HBCUs (Toldson 2014). Of the more than 1.2 million Black males enrolled in college, nearly half are at community colleges, while 11% attend HBCUs, and another 11% attend for-profit universities such as the University of Phoenix (Toldson 2014). According to an education longitudinal study, two postsecondary institution choice factors – easy admission standards and racial/ethnic makeup – were reported as very important by 23% and 14% of respondents, respectively (Ross, Kena, Rathbun, Kewal Ramani, Zhang, Kristapovich, and Manning 2012). Although no statistically significant differences emerged between males and female overall or between males and females within each racial/ethnic group, significant differences did materialize across race/ethnicity (Ross et al. 2012). Compared to 17% of Whites, easy or open admission was reported as a very important factor for 41% of Black students, 31% of Hispanics, 27% for students of two or more races, and 21% for Asians (Ross et al. 2012). The percentage of African American students who preferred to choose less selective institutions was substantially higher than that of other racial groups.

Although an array of possible definitions of institutional quality or excellence exists, perhaps the most used and widely accepted measure is the institution's selectivity (Astin and Oseguera 2004). Students from URM groups, who are more likely to be low-income (Corrigan 2003), generally have greater access to postsecondary education now than 50 years ago; however, policymakers have paid little attention to the hierarchical arrangement of higher education institutions and the distribution of students within that system (Astin and Oseguera

2004). Regardless of how well a singular institution may educate its students, it is well known that the most coveted employers, along with most graduate and professional schools, favor and recruit graduates of prestigious colleges and universities (Astin and Oseguera 2004; Henson 1980). Persistent racial and social class inequity at the most selective institutions of higher education continues a pattern of excluding URM groups from post-baccalaureate preparation and the recruiting pools of employers for the most sought-after and high-demand jobs.

HBCUs face marked inequities in terms of resources, infrastructure, and operating budgets relative to predominantly White institutions (PWIs). Despite the lack of resources and lower positionality on the spectrum of the hierarchical higher education landscape, many maintain that the significance of HBCUs for African Americans cannot be overstated (Palmer and Gasman 2008). Comparative research on HBCUs and PWIs revealed that Black colleges foster more nurturing, familial environments in which faculty and staff members are more supportive of African American students (Harper and Gasman 2008). Researchers have argued that African American students at HBCUs are more satisfied, engaged with the community, and more confident and well-adjusted than those attending PWIs (Palmer and Gasman 2008). Research also shows that African American students at HBCUs perform well academically, despite coming from low-income backgrounds or possessing less academic preparation (Palmer and Gasman 2008).

Some sociological researchers concerned with inequality and the persistence of racism and discrimination in higher education have posited that Black students feel isolated and alienated at PWIs due to the lack of a critical mass of Black faculty and students from which to select potential role models (Strayhorn 2008b). Extant literature suggests that any observable prejudiced behaviors towards underrepresented groups, e.g., racial minorities, will not begin to

diminish until enough individuals from those groups constitute a critical mass and are present on campus (Astin 1993). Research indicates that Black men at PWIs face significant challenges when trying to establish meaningful and supportive relationships with others on campus, though further research is warranted to illuminate the nature and dynamics of those challenges (Strayhorn 2008b). Of interest to this project is whether there is a significant difference in African American male college graduates having received or sought informal faculty mentoring and peer network support at PWIs versus at HBCUs.

The persistent underrepresentation of Black males, as well as the declining enrollment of low-income students in general at highly selective, nationally elite institutions, work to exclude Black men from the kinds of educational credentials and corresponding opportunities for careers that are in increasing demand in the competitive global market. Furthermore, once enrolled at any institution, African American males are met with several daunting and arguably unique challenges that have the capacity to impede their successful college experience and degree completion (Strayhorn 2008a). The attrition rate for African American male students who enroll in bachelor's degree programs also represents a vital concern. Two-thirds of Black men who begin college drop out (approximately 65%); this is the highest dropout rate among all racial groups and both sexes (Strayhorn 2010). In comparison, the dropout rate for Black women is 56% (U.S. Department of Education, National Center for Education Statistics 2018). Dropout rates for White men and White women are 42% and 36%, respectively; for Hispanic men and women 52% and 44%, respectively; for Asian men and women 33% and 26%, respectively; and for Native American or Alaskan Native men and women 64% and 58%, respectively. In combination with coming from a low socioeconomic background, belonging to a racial minority group creates notable threats to college persistence (Corrigan 2003; Strayhorn 2008a).

Strayhorn (2008a) described low-income African American males as an "invisible" college student population that resides on the margins of two invisible worlds and is rarely examined in empirical research. Aside from financial challenges, low-income students are more likely to enter higher education with additional persistence risk factors related to their academic preparation, such as not having taken rigorous high school courses, having delayed their college enrollment, or being first-generation college students (Adelman 1999; Corrigan 2003; hooks 1990; Strayhorn 2008a). Consequently, low-income students often face the additional challenges resulting from less college preparatory experience and fewer information resources to ready them for the social and academic demands of postsecondary education (Corrigan 2003).

Institutional agents and peers, however, can provide a means to social capital that empowers underprepared students for success (Stanton-Salazar 2011). Socializing agents, such as faculty and their peers, can transmit or facilitate the transmission of highly valued resources that are differentially allocated on college campuses, such institutional support, opportunities, privileges, and services (Stanton-Salazar 2011; Strayhorn 2008a). Strayhorn (2008a), however, noted an important finding following a study of low-income Black male students: those who aspired to earn a graduate degree were five times more likely to persist in college than those who aspired to attain less education. This project will explore the relationship between bachelor's degree attainment aspirations and the likelihood of seeking supportive relationships with faculty and peers.

The dominant discourse about Black males in the education literature portrays them as maligned, deficient, and otherwise undesirable students (Harper 2009; Strayhorn 2008a, 2008b). Researchers have focused disproportionate attention on Black males' problems, failures, inadequacies, disadvantaged social status, and underperformance across the education pipeline

(Strayhorn 2016). In comparison, the body of empirical research on successful African American males is small and underdeveloped (Strayhorn 2016). Illuminating and further examining the factors that contribute to Black men's successful college completion is necessary and strategically indispensable to ensuring they graduate with bachelor's degrees in greater numbers. Given their unique challenges in the context of their social positionality within higher education, it is imperative to gain a better understanding of the types of positive socialization that African American men receive, along with the constructive behaviors in which they engage, which most contribute to their success in college.

Fundamental to the positive college experience and likelihood of degree attainment for undergraduate students are their interactions with student peers and institutional agents, particularly faculty (Strayhorn 2008a). Students benefit from positive and frequent interactions with faculty both inside and outside the classroom (Strayhorn 2008a, 2010). It is also important to examine how the pre-entry characteristics of those who successfully attained degrees, including parents' level of education, related to their patterns of seeking supportive relationships in college. Existing literature affirms the need to explore the pre-college characteristics and conditions that contribute to historically underrepresented racial groups' unique patterns of student-faculty interaction, including students' pre-college attributes that may explain variations in rates of interaction (Kim 2010). *The present study sought to advance this recommendation by exploring the pre-college characteristics that may impact student-faculty interaction and peer interaction, while considering variations by social class/family income.*

Students who report positive, meaningful, and frequent supportive interactions with faculty, staff persons, and peers are more likely to successfully complete college (Strayhorn 2008a, 2008b). These supportive interactions and relationships are forms of social capital. Social

capital refers to the productive, supportive relationships or networks that provide access to opportunity and lead to advantageous outcomes (Coleman 1988; Stanton-Salazar 1997; Strayhorn 2010). Building on the assertion that social capital in the form of informal faculty mentoring and peer network support can have a compensatory effect on racially, ethnically, and culturally diverse and marginalized students, my expectation was that these key forms of social capital would significantly impact college completion for African American male students who successfully attained bachelor's degrees. I also expected the absence of strong support to increase the likelihood of dropout for African American male students. Among African American males who successfully completed college, I explored whether lower-income students benefitted most from this social capital. I expected that more economically disadvantaged students would be more likely to seek or receive informal faculty mentoring and peer network support. I also expected that the effect of social capital on persistence to degree attainment for African American men, in general, would more impactful at PWIs, especially for low-income African American men.

1.1   Research Questions

Sociological scholars who are principally interested in issues of race, gender, and class tend to focus on college access rather than college retention (Strayhorn 2008a). College access must not be the sole criteria for evaluating educational equality; rather, persistence and retention must be assessed, as well (Donovan 1984; Strayhorn 2016). In addition, most college retention studies do not devote attention to low-income minority groups, such as low-income Black men (Strayhorn 2008a). Improving college completion rates for African American males, including those from low-income families who are rarely represented in empirical research, is also a form of social justice (Kahlenberg 2004; Strayhorn 2008a). *This work contributed to the sociology of*

education literature by exploring the major influences on persistence behaviors for Black men at

varying income levels, which had implications for educators, policymakers, and other

stakeholders working towards the elimination of inequality in postsecondary education.

The following research questions guided this study:

1. *A qualitative exploration of Black men's supportive relationships*:
   a.) What are the predominant contexts of informal faculty mentoring relationships for African American male undergraduates?
   b.) What are the predominant contexts of peer network supportive relationships for African American male undergraduates?

2. *The impact of social capital on persistence for Black men*: To what extent is *social capital* (informal faculty mentoring, and peer network support operationalized as extracurricular activities and participation in study groups) associated with bachelor's degree attainment in a sample of African American male U.S. citizen undergraduates within six years of matriculation, controlling for student pre-entry attributes and other covariates?

3. *The impact of pre-entry social factors on social capital*: To what extent are *social class* (as measured by family income*), educational aspirations*, *institution type* (as measured by PWI or HBCU enrollment), and *parents' educational attainment* associated with *social capital* (informal faculty mentoring, and peer network support operationalized as extracurricular activities, and participation in study groups) in a sample of African American male U.S. citizen undergraduate college graduates, controlling for student pre-entry attribute covariates?

2 LITERATURE REVIEW

2.1 Social Capital

2.1.1 Theoretical Foundations of Social Capital

Social capital can be defined as the productive, supportive relationships or networks that provide access to opportunity and lead to advantageous outcomes such as successful academic achievement and degree attainment (Coleman 1988; Stanton-Salazar 1997; Strayhorn 2010). The concept of social capital arose from the work of French sociologist, Pierre Bourdieu (1977, 1986, 1987), and American sociologist, James Coleman (1988). Bourdieu (1986) defined social capital as the aggregate of actual or potential resources connected to one's possession of a durable network of institutionalized relationships, or their belonging to a group. Bourdieu's definition of social capital referred to the modes by which some individuals are privileged based on membership in social networks (Palmer and Gasman 2008).

Bourdieu (1986) emphasized the ways some individuals experience advantage through group membership (Perna and Titus 2005; Portes 1998). Bourdieu argued the amount of social capital accessible to an individual through social networks and relationships was a function of the size of the networks and the amount of economic, cultural, and social capital possessed by members of those networks (Bourdieu 1986; Perna and Titus 2005). Social capital is determined by the size of one's networks and by the capital possessed by those to whom one is connected (Lin 2001a). Still, it represents "… a collective asset shared by members of a defined group, with clear boundaries, obligations of exchange, and mutual recognition" (Lin 2001b:22). Bourdieu conceptualized social capital as a mechanism by which dominant class groups maintained their positions of power (Lin 2001a; Perna and Titus 2005).

Coleman presented a somewhat different conceptualization of social capital (Dika and Singh 2002; Perna and Titus 2005). Whereas Bourdieu was more concerned with the way social capital functioned to reproduce hierarchies that privileged dominant groups while excluding and perpetuating disadvantage for others, Coleman focused on the positive aspects of social capital, viewing its accompanying norms and sanctions as a beneficial form of social control (Sallee and Tierney 2007). Coleman focused on the benefits enjoyed by members of groups (Sallee and Tierney 2007). Coleman's approach to social capital is the one most frequently used in educational research (Dika and Singh 2002; Perna and Titus 2005).

Social capital theory has the capacity to explain the close association between educational attainment and access to supportive relationships and networks (Stanton-Salazar 2004). The following three elements comprise the basic components of social capital: a network, which is defined as a set of social actors along with a set of relational ties that connects those actors (Borgatti and Ofem 2010); a set of norms, values, and expectations shared by a group; and sanctions, which are rewards and punishments that help reinforce the norms and maintain the network (Halpern 2005). Social capital represents the resources, whether actual or potential, that an individual gains from social connections (Lin 2001b). Social capital can be converted into tangible resources and opportunities that are socially valued, such as emotional support, recognition via formal institutional roles, and access to privileged information (Harper 2008; Stanton-Salazar 1997). Further, the quality and quantity of relationships that an individual has with members who hold power and the ability to provide those resources can determine the convertibility of the individual's capital (Dika and Singh 2002; Harper 2008; Portes 1998).

In Coleman's view, social capital could be represented as both a structural social element and a behavioral element (Coleman 1990; Lin 2001b). A structural element of social capital

might be manifested as a relational connection, such as a dyadic bond between a student and a

faculty member (Coleman 1990; Lin 2001b). As a behavioral element, social capital might be

symbolized as a standard of behavior or set of customary practices that govern and give meaning

to individuals' actions within a social sphere (Coleman 1990; Lin 2001b); an example might

include the mutual expectations that frame the nature of conversations and interactions that take

place when faculty members provide academic or career development advice to students.

According to Coleman's illustrations, social actors exert control over resources that align with

their interests, and are concerned with events or outcomes that are at least partially controlled by

other social actors (Coleman 1990; Lin 2001b). Faculty members make time outside of class to

share their knowledge and guidance with students in whom they are interested in investing their

resources. These faculty members are also concerned with effecting successful degree attainment

and professional outcomes for students, although it is understood students are responsible for

much of the effort and action required to bring about those outcomes.

　　　　The relationships between social actors are important to facilitating the behavior of

individual actors, and form the basis of social capital (Coleman 1990; Lin 2001b). Coleman

argued that social capital is not found in individuals, but in the links between individuals, or "the

potential for information that inheres in social relations" (Coleman 1990:310; Sallee and Tierney

2007:8). Coleman surmised that certain obligations, or social debts, along with expectations and

trustworthiness could be inherent in relationships. These aspects of the relationships enable the

process by which resources and valuable forms of support possessed by some in given social

network are made available to others in that network (Stanton-Salazar 1997). Through this

process, social ties and networks are cumulative and convertible into resources and support

(Stanton-Salazar 1997). Therefore, individuals in need of the resources receive them within an

ongoing exchange relationship, either upon their request or because someone in the network perceives their need (Stanton-Salazar 1997). Involvement in certain social networks helps members obtain information needed to accomplish goals (Sallee and Tierney 2007). For example, students may connect with a study group of class peers to establish a sense of accountability, remain on task with assignments, or receive assistance with challenging material. Participating in the study group would align with the goal of successfully mastering the material and passing the course.

Coleman emphasized the role of social capital in socialization (Perna and Titus 2005). Socialization encompasses the processes whereby socializing agents model norms, trust, authority, and social controls that one must understand and adopt to be successful (Coleman 1988; Perna and Titus 2005). From Coleman's lens, the norms and sanctions of a college campus function to facilitate desired behavior, including learning, engagement, and progression toward degree completion. Students are expected to be academically and socially integrated, attentive and respectful to faculty, involved with student organizations and other peer groups on campus, and to persist to degree completion. These norms constitute the academic and behavioral standards by which students are asked to conform, whether implicitly or explicitly. The sanctions may be conceived of as both the rewards and punishments resultant from students' behaviors. Positive sanctions include the assignment of good grades, selection to participate in exclusive events or groups, and receipt of recognition, awards, encouragement, or praise. Negative sanctions would include being punitively removed from course participation or enrollment altogether, at varying degrees of severity. If a student does not show up for a class in accordance with the attendance requirements, they could be dropped from the course. If a student fails to maintain satisfactory or adequate academic progress, they are in jeopardy of academic dismissal

from the institution. Any student who behaves in a disrespectful or threatening manner toward others would be subject to disciplinary action that could also include dismissal from the institution. Collectively, these norms and sanctions are constructive and necessary to steer students towards healthy and productive behaviors that ultimately result in a positive college experience and degree attainment.

The faculty and peers with whom a student interacts on a college campus work to socialize them toward the pro-academic and prosocial expectations and behaviors that align with degree attainment goals. Those modeled behaviors, such as challenging students to perform to their full potential on assignments and promoting good study habits, encourage students to put forth effort to accomplish academic tasks (Stanton-Salazar 2004). The primary sanction is not living up to what faculty members and peers expect, e.g., academic progress and degree attainment. The array of a student's personal, proacademic interactions with faculty members and peers constitute their social capital. The current project examined the extent to which social capital has a compensatory effect for Black men in their pursuit of bachelor's degrees, and particularly for those who are from low-income backgrounds. In broad terms, this study examined whether this social capital was more important overall to Black men's persistence than it was to the persistence of other racial and gender groups. The study also examined whether this social capital was more important to persistence for Black men at PWIs than at HBCUs, given the greater critical mass of African American faculty and students at HBCUs than at PWIs.

Using Coleman's (1988) conceptualization of and approach to social capital, this study revealed more about the development and nature of the relationships and networks between Black men who successfully attain degrees and their informal faculty mentors and peers. Some critics of Coleman's theory argued it did not devote adequate attention to historic social and

economic inequality, including the social dynamics and conditions that allow privileged

individuals and communities to accumulate multiple forms of capital while leaving others to

contend with inferior services, residential segregation, failing schools, and severely limited

employment opportunities (Stanton-Salazar 2011). The network-analytic approach to social

inequality rested on the concept of the uneven distribution of opportunities for those entering

various social and institutional contexts, and for forming relationships with agents who exert

varying degrees of control over institutional resources, such as administrative authority, career-

related tools and leads, and opportunities for specialized training and development (Stanton-

Salazar 1997). The significance of such institutional agents and advocates is apparent and

underscored in the observable ways in which members of dominant groups consistently depend

on their social ties with these agents to secure their privileged participation and mobility within

mainstream institutional domains (Stanton-Salazar 1997). Earlier work of Stanton-Salazar

promoted application of the network-analytic conceptual framework and approach to highlight

the institutional and ideological forces that make access to social capital problematic for minority

youth in educational settings (Stanton-Salazar 1997). Stanton-Salazar asserted the importance of

addressing structural and ideological constraints on minority youth's access to critical

institutional resources, highlighting the important role of individual and cultural agency, which

he defined as the ways young people learn to overcome exclusionary forces and to accumulate

valuable and productive social capital (Stanton-Salazar 1997). While my work addressed the

constraints to Black men's formation of supportive relationships and their differential access to

and accumulation of social capital, I used a network-analytic approach to qualitatively

investigate how successful students overcame these constraints and highlighted the importance

of social capital to their persistence behavior en route to college completion. This work took a

central interest in whether Black men's supportive relationships with faculty and peers were more critical to their successful college completion, in the context of lower social status, limited resources, and poor exposure to information and resources.

Access to many of the valued resources and opportunities that are obtained via social networks comes through "… the messy business of commanding, negotiating, and managing many diverse … social relationships and personalities, and which usually entails skillfully negotiating the rules and constraints underlying the social acts of help-seeking and help-giving" (Stanton-Salazar 1997:4). Network construction, network negotiation, and help-seeking behavior is very different across social classes and other status groups, including across various racial, ethnic, and gender groups (Stanton-Salazar 1997). For members of lower status groups, attempts toward help-seeking and relationship and network building within mainstream spheres usually occur within the context of differential power relations and social contexts that are culturally different from, and potentially alienating to, cultural outsiders (Eisenstadt and Roniger 1984; Stanton-Salazar 1997), e.g., African American students negotiating help-seeking and relationship-building at PWIs. This project accounted for social and economic inequality as they related to African American male undergraduates' formation of relationships and networks and the connection to their degree attainment outcomes. My keen interest was in illuminating the ways successful Black men formed relationships and networks in the face of inequality and barriers, as well as how those relationships supported persistence to graduation. The project focused on differing class groups of Black men and how their acquisition of key forms of social capital compensated for the negative effects of inequalities on their likelihood of college persistence and predicted greater odds of college completion.

The premise of this study aligned with Coleman's (1988) by principally highlighting and valuing the constructive and beneficial aspects of social capital. Individuals who hold more social capital have greater odds of success in educational institutions than those who hold less social capital (Harper 2008). Although it is noted that many social networks promote exclusion, such that only certain individuals manage to gain membership (Stanton-Salazar 1997), social capital appears to be important and instrumental to the success of African American men – who generally hold low social status – particularly at PWIs (Harper 2008). For African American male undergraduates, social capital in the form of positive, supportive relationships with faculty members and peers are essential to helping them feel more connected to the campus community and committed to successfully finishing college.

2.1.2   *Significant Other Effects, Educational Attainment, and Social Capital*

Early scholarship on "significant others" and educational attainment may have provided the foundation for current interpretations of social capital, such as Coleman's (1988), which emphasized socialization, social integration, and student involvement (Simmons 2013; Stanton-Salazar 1997). Close relationships or connections with teachers, administrators, and proacademic peers in the K-12 school setting all have the potential to play important roles by way of socialization processes that help elementary and secondary school students form proacademic identities and long-term educational aspirations (Dreeben 1968; Parsons 1959; Sewell and Hauser 1980; Stanton-Salazar 2011). These connections also facilitate adherence to the educational system's values and ideological foundations, beginning with early childhood (Dreeben 1968; Parsons 1959; Sewell and Hauser 1980; Stanton-Salazar 2011). In the same way, relationships with faculty members, administrators, and proacademic peers at the college level are important to students as they facilitate the socialization processes that strengthen and enhance

proacademic identities and postsecondary education aspirations. Coleman's approach and other similar conventional theorizations of social capital emphasized the inculcation of proacademic values and the enforcement of proacademic norms (Stanton-Salazar 2011). Coleman's conceptualization of social capital can be linked to the dynamics of "significant other effects," whereby students adhere to the norms and sanctions maintained by their significant others in educational settings, thereby obtaining benefits that help them accomplish the educational goals expected of them by significant others.

Significant others are people who are important and influential to an individual, such as parents, teachers, peers, and professors (Stanton-Salazar 1997), and whose assessment of that individual is important to them. The reflected appraisal process, also known in social psychology as "the looking glass self," is the dynamic by which significant others communicate their appraisals of a person, thereby influencing the way that person views themselves (Felson 1993; Cooley 1956). Cooley (1956) asserted that beginning as a toddler, a child begins to acquire a self-concept through development of the looking glass self in order to exert control over their environments and the people around them. According to Cooley, as the child continues to grow and develop, they become concerned with not only basic survival and physical necessities, but also with the satisfaction obtained when an important person, such as a parent, exhibits positive responses or behavior toward them. This forms the origin of the child's concern for others' evaluations of them. Along these lines, this concern for significant others' evaluations, or reflected appraisals, develops into socially desirable behavior.

Others who are important to an individual become instruments used in the creation of their looking glass self. The individual's perception of significant others' reflected appraisals of them generates information used to create self-feelings such as happiness or pride. Although

social structures create certain relationships and dynamics in which some have power and influence over others, individuals also independently render certain people in power to be significant others who are agents in the creation of their looking glass self. The extent to which those important to an individual want, encourage, and expect them to do well in school has a powerful impact on their success.

This project made a principal assertion that college students are concerned with the evaluations they perceive from their professors and peers, who are their significant others, because they desire to receive positive, affirmative assessments and responses from individuals who are important and influential in their lives. This concern then contributes to the students' socialization towards academic achievement and degree attainment. My project expanded this concept to assert that a student's concern with positive evaluations from professors and peers fosters relational interactions with, and encouragement and guidance from, significant others. These relational elements, such as the positive reinforcement of proacademic and prosocial behavior in college, whether expressed to the student explicitly or implicitly, strengthen the meaning and importance of the social bonds students have with their faculty and peer significant others. Consequently, the foundation is laid for the student to sustain supportive relationships and networks that provide access to opportunity and lead to successful educational outcomes in college. A student's positive, supportive interactions with faculty members and peers constitute encouragement and expectations on the part of the significant others for the student to perform well academically and to persist to degree completion. The encouragement and expectations have a powerful impact on the student's determination to be successful and to persist to graduation.

At the high school level, there is evidence that positive relationships and positive teacher-student interactions raise teachers' expectations and students' motivation towards academic achievement (Irvine 1990; Russell and Atwater 2005). Research indicates the quality of student-teacher interaction is particularly important to the success of African American high school and college students (Ford and Harris 1995). An important premise in literature is that the academic retention and success of Black students are determined by person-environment interactions and related sociocultural dynamics at the institution, rather than by factors traditionally associated with academic achievement, such as test scores and high school preparation (Prillerman, Myers, and Smedley 1989). According to Russell and Atwater (2005), African American students who attend large PWIs as freshmen encounter large classes and unaccommodating teaching styles that are typically lecture-based, fast-paced, and impersonal, particularly in STEM classes. Russell and Atwater (2005) conducted a phenomenological investigation in which they interviewed 11 African American undergraduate seniors – 8 male and 3 female – in a biology degree program at a PWI in the Southeastern United States. The researchers sought to illuminate the factors that successful African American students described as primary reasons for their persistence and perseverance in the P-16 science pipeline. Most participants said they had received a significant amount of encouragement and motivation to succeed from their high school teachers. The students also expressed cognizance of their racial minority status and described racist experiences with high school teachers, college professors, and academic advisors. The researchers asked the students follow-up questions about how to persevere in the face of adversity or others' negative perceptions of African Americans. One student responded in depth about how support and friendship with other students in the same major were key, noting that sticking together and studying for tests in groups were also important. The students' successful

management of their stigmatized racial minority identity, along with their constructive navigation through the negative experiences related to racial discrimination, was determined to be partially attributable to reflected appraisals from significant others. To the extent that the reflected appraisals of students' faculty member and peer significant other conveyed positive and encouraging responses to their college success, the students' navigation of adverse experiences and college perseverance were positively reinforced. An alternate conclusion was that reflected appraisals from significant others might be characterized as long-standing background factors that helped establish or contributed to students' intrinsic motivation to constructively overcome stigmatized identities and discriminatory experiences. For African American students, supportive relationships with faculty and peer significant others were the more important, especially on PWI campuses, in light of the unique challenges and stressors involved in managing racial minority status. In parallel, the social capital that African American students gained from those relationships with significant others, particularly at PWIs, was critically important to their academic and social adjustment and degree completion.

2.1.3   *Mentoring in Postsecondary Education*

Mentoring research and practice have emerged from a multidisciplinary community of scholars, each focusing their work on a specific population (Eby and Allen 2008). As there are differing views and perspectives concerning exactly what constitutes a mentoring relationship, both across and within disciplines, mentoring scholarship features several defining concepts (Eby and Allen 2008). Mentoring is generally conceptualized as a strong social tie and dyadic relationship between a more experienced and usually older mentor and a less experienced protégé or mentee (Eby and Allen 2008). The mentoring relationship is reciprocal, but asymmetrical (Eby and Allen 2008). Although both parties may benefit, the primary goal of

mentorship is the positive growth and development of the mentee (Eby and Allen 2008).

Mentoring is also dynamic, as its associated goals and relationships may change over time (Eby

and Allen 2008). Most researchers agree that support, guidance, and encouragement are central

and fundamental elements of mentoring relationships (Hurd and Zimmerman 2010; Levinson,

Darrow, Klein, Levinson, and McKee 1978; Rhodes, Ebert, and Fischer 1992; Zimmerman,

Bingenheimer, and Notaro 2002).

Student attrition is a persistent issue in higher education in general (Nora and Crisp 2007;

Swail, Redd, and Perna 2003), and is especially troubling in terms of outcomes for marginalized

groups. Bachelor's degree attainment for URMs and low-income students continues to lag

behind that of White and middle-class students (Nora and Crisp 2007). As noted in the preceding

chapter, the attrition rate for African American male students in particular is a vital concern, as

they experience the poorest educational outcomes relative to all other U.S. demographic groups.

In response to the problem of attrition, colleges and universities across the U.S. have established

mentoring programs (Nora and Crisp 2007). While the components and scope of these mentoring

programs vary by institution, student persistence is largely the underlying goal of most programs

(Nora and Crisp 2007). Many mentoring programs target particularly underrepresented student

populations and/or those with specific needs, such as women, URMs, or students needing

remedial assistance (Johnson 1989; Nora and Crisp 2007), and many of these programs have

experienced success in both the recruitment and retention of URM students (Strayhorn and

Terrell 2007).

Although the aim of mentoring programs to increase student persistence is clear and

commendable, the underlying conceptualization of how mentoring should guide program

development and the determination of activities and interventions is lacking (Nora and Crisp

2007). A significant amount of time and money have been devoted to supporting these initiatives, with expectations of great benefits and high reward (Nora and Crisp 2007). Yet, however well-intentioned, mentoring programs that lack a substantive framework guiding program activities might amount to nothing more than hit-or-miss financial investment, "… or hoping that something might stick from an array of actions" (Nora and Crisp 2007:338). The common shortcomings of mentoring programs guided Nora and Crisp's (2007) efforts to establish a theoretical framework for mentoring. The scholars endeavored to establish the parameters of successful mentoring experiences in the higher education context for undergraduate students, including the defining characteristics and underlying domains that comprised their mentoring experiences.

Several theoretical models of student persistence have been developed in recent decades to identify factors that influence students' decision to remain enrolled in college (Nora and Crisp 2007). Overall, research findings consistently support the importance of student-faculty interactions, which contribute to students' social integration and promote persistence (Nora and Crisp 2007). It is highly likely that students' informal socializing interactions with faculty bear similar aspects to formal mentoring program experiences (Nora and Crisp 2007). While some researchers draw strict boundaries around the definition of mentoring, others define mentoring as any relationship that teaches and guides an individual and allows for that individual's growth (Nora and Crisp 2007). The current project assumed the latter, broader approach by characterizing the mentoring relationship for undergraduate students as inclusive of any informal student-faculty interactions, particularly outside of class. For the purposes of this project, I did not include academic/research mentoring in the form of guidance that a faculty member provided

to a student in an undergraduate research program, which is similar to the faculty member-graduate student advising relationship that exists at the doctoral level.

Nora and Crisp (2007) presented a theoretical conceptualization of mentoring for undergraduate students that arose from several frameworks and perspectives, and consisted of four major domains or latent constructs identified in the interdisciplinary mentoring literature. The four latent constructs are: 1.) emotional support; 2.) support for goal-setting and for choosing a career path; 3.) academic subject knowledge, including bridging that knowledge to the student's chosen career field; and 4.) provision of a role model (Nora and Crisp 2007). The first construct, emotional support, encompasses the mentor engaging in active listening, identifying problems and coaching students in problem-solving, and providing moral support and encouragement (Nora and Crisp 2007). The second construct, goal setting and career paths, represents the concept that mentoring involves the assessment of students' strengths, weaknesses, and abilities, as well as assistance with decision-making around setting academic and career goals (Nora and Crisp 2007). The third construct, academic subject knowledge support, captures the teaching and learning process focused on the student's acquisition of necessary knowledge and skills, and on evaluating and challenging the student, academically (Nora and Crisp 2007). The fourth construct, the role model, focuses on the student's ability to learn from the mentor's present and past actions, accomplishments, and failures, and is the avenue whereby the mentor shares life experiences and perspectives that enrich their relationship with the student (Nora and Crisp 2007).

2.1.4 *Mentoring as Social Capital*

To reiterate, the components of social capital include: a network, which is a set of social actors along with a set of relational ties that connects those actors (Borgatti and Ofem 2010); a

set of norms, values, and expectations shared by a group; and sanctions, which are rewards and punishments that help to reinforce the norms and maintain the social network (Halpern 2005). Using Nora's and Crisp's (2007) theoretical conceptualization of mentoring, including the aforementioned domains, I argue that mentoring equates to social capital in the educational context. The network consists of the social actors – the professors/faculty members and students – who are connected by way of relational ties via the mentoring relationship. The faculty mentors and the students share norms of behavior, both implicit and explicit. Due to significant other effects, students adhere to the norms displayed and maintained by their professors. They also share common values and expectations that center on the importance of the students mastering certain knowledge and skills, performing well academically, and successfully completing their degree courses and programs.

From the student's perspective, rewards include the targeted assistance, guidance, encouragement, and moral support received from the faculty mentor. The reflected appraisal process is also in play, as the student desires the reward of satisfaction obtained when their significant other – the professor – exhibits positive responses and behaviors towards them. The student's desire for positive interactions with the faculty mentor forms the basis of the student's concern for the faculty member's positive evaluations of them. The student is also concerned with avoiding the punishment of falling out of favor with the faculty mentor. If the student fails to listen and accept the guidance of the mentor and/or fails to perform in accordance with the mentor's expectations, they might experience negative sanctions of expressed disappointment or the discontinuation of the mentoring relationship. In turn, the student may lose the benefits of positive engagement and privileged information or opportunities the mentor elects to no longer share with the student.

The interactions that occur between professors and students outside of class time can be conceptualized as mentoring relationships, as mentoring constitutes a valuable extension of social capital. Out-of-class interactions and relationships with faculty are characterized as informal mentoring because they generally do not emerge by way of formally established mentoring programs that facilitate the faculty-student connection. The literature on African American men who are successful in college indicates that nonacademic or noncognitive factors (Sedlacek 2004; Strayhorn 2008b), including having a relationship with a strong support person at the institution, are especially instrumental to their success. Thus, informal faculty mentoring may be of particular importance to Black men who ultimately attain bachelor's degrees.

It is possible that the support Black men receive from faculty mentoring could be more significant to their adjustment and success because it offsets some of the unique challenges they face. Some challenges reported by Black male students include difficulty establishing a sense of belonging on campus, and the perception of predominantly White institutions as having a "chilly" and unwelcoming campus climate (Strayhorn 2008c). Mentoring may be a dynamic way to help Black men adjust to the college environment and culture, particularly those who report feelings of loneliness, isolation, and insufficient levels of support (Cuyjet and Associates 2006; Hurtado and Carter 1997; Lee 1999; Pope 2002; Santos and Reigadas 2004; Strayhorn and Terrell 2007). In addition, informal mentoring may be more critical to those with lower socioeconomic status.

It is reasonable to infer that the benefits of informal mentoring help build the case for supporting the addition and enhancement of formal mentoring programs, provided there is continued improvement in terms of establishing a stronger conceptualization and theoretical framing of mentoring to guide program development as noted by Nora and Crisp (2007). LaVant,

Anderson, and Tiggs (1997) found that African American men were more successful academically at universities that implemented formal mentoring programs. *As the results of this project provided evidence that informal mentoring significantly impacted college completion for Black men, findings support the broader implementation of formal mentoring programs that incorporate the elements and practices of informal mentoring shown to be most beneficial to student persistence.*

2.1.5 Peer Network Support as Social Capital

Just as mentoring equates to social capital in the educational context, so does peer network support. The peer network consists of the social actors – fellow students – who are connected by way of relational ties that often overlap with friendship bonds. The students also share norms of behavior, both implicit and explicit. Due to significant other effects, students adhere to the norms displayed and maintained by their peers. They also share common values and expectations that center on the importance of performing well academically, and successfully completing both current courses, and ultimately, the degree program. Astin (1993) contended that peer relationships were the most influential in terms of the undergraduate student experience.

Similar to the rewards of the faculty-student mentoring relationship, rewards of peer network support include the targeted assistance, guidance, encouragement, and moral support received from fellow students. The reflected appraisal process also exists in peer networks, as the student desires the reward of satisfaction obtained when their significant other – the peer – exhibits positive responses and behavior towards them. The student's desire for positive interactions with peers forms the basis of their concern for peers' positive evaluations of them. The student is also concerned with avoiding the punishment of falling out of favor with the peer

group. If the student fails to behave in accordance with the norms of the peer group, then they might experience the negative sanction of peer disapproval or ostracization. In turn, the student would likely lose the benefits of positive engagement and privileged information or special events or opportunities.

2.2 Tinto's Retention Theory

Tinto (1993) developed retention theory, an interactionalist theory of college student departure that posits student integration into the academic and social domains of college is key to understanding persistence decisions (Strayhorn 2013). According to this theory, a student's decision to remain enrolled is represented by a longitudinal progression of interactions between a student with a certain set of attributes, skills, financial assets, educational background, and commitments, and other actors who represent the academic and social systems of the institution. Tinto surmised that students enter college with pre-college experiences and background characteristics that influence their educational expectations and institutional goal commitments (Strayhorn 2013; Tinto 1993). These commitments are either reinforced or weakened as a result of a student's integration, or how well they "fit" into and become involved with the academic (intellectual) and social culture and life of the institution (Strayhorn 2013:13; Tinto 1993). Tinto proposed that students who do not become socially integrated – e.g., forming friendships, becoming involved in student organizations – and academically integrated – e.g., studying effectively – are more likely to drop out of college (Crisp 2009). Students who do become socially and academically integrated have stronger institutional and goal commitments, which positively influence their decisions to persist (Crisp 2009).

2.2.1   Tinto's Interactionalist Model

Tinto's longitudinal conceptual model of voluntary student departure arises from his interactionalist theory of college student departure (Lundy-Wagner 2012), and also the basis for the causal model used in the present study (see Figure 2.1). Tinto (1993) noted that the model was primarily sociological in nature, focusing on the multiple interactions that occur among institutional members. The model characterizes the social and intellectual context of the institution, including its formal and informal interactional environment, as being central to the longitudinal process of individual student departure behavior (Tinto 1993). Although individual agency undoubtedly affects individuals' decisions to leave school, Tinto purported the impact of individual attributes could only be understood in reference to the social and institutional contexts in which they act (Tinto 1993). In terms of policy, the model can guide institutional officials and help them retain more students through degree completion (Tinto 1993). Tinto's model is structured to allow institutions to identify academic and social elements of the institutional environment that may impede degree completion (Tinto 1993).

Tinto's (1993) model illustrates that college student departure arises from a longitudinal process consisting of both formal and informal interactions between the student and the academic and social environment or system of their institution (Crisp 2011). The student's experience in those systems, as determined by his or her academic and social integration or involvement, continually impacts their intentions and commitments (Tinto 1993). Positive experiences, which are integrative, reinforce persistence by strengthening commitments to both the institution itself and to the goal of college completion (Tinto 1993). Negative experiences, termed malintegrative, weaken a student's commitments to the institution and to the goal of completion, increasing dropout risks (Tinto 1993).
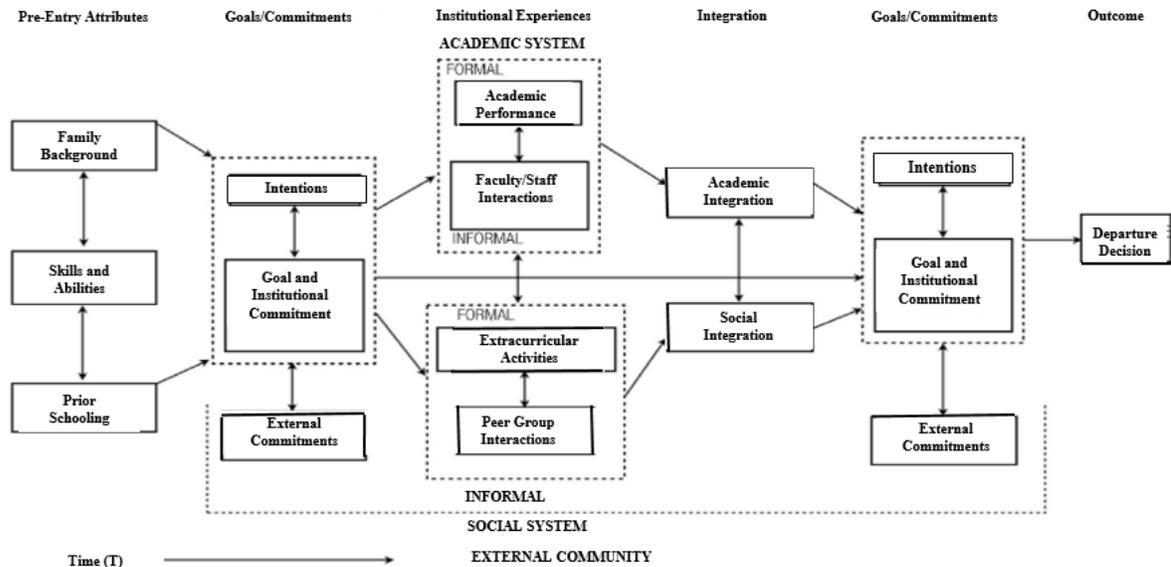
Figure 2.1 Tinto's Interactionalist Model of Voluntary College Student Departure

Tinto (1993) included six broad categories of variables in his model: pre-entry attributes;

goals/commitments (that individuals bring with them into the college environment); institutional

experiences; integration; goals/commitments (reformulated, strengthened, or altered as a result of

integrative experiences); and outcomes (persistence/degree completion, or dropout). The second

through fifth categories of his model are broadly classified into either the academic system or

social system. The causal model in the current study employed most elements of Tinto's model,

was modified in two key places: the first broad category column, Pre-Entry Attributes, and the

third broad category column, Institutional Experiences. The reason for this modification was to

add in specific demographic and educational background variables, and to add in specific social

capital variables to capture informal mentoring and peer network support interactions. Tinto's

model did not allow for delving into these specifics, as the variable items existed on a much

broader, surface level. Tinto categorized pre-entry attribute variables into three groups: family

background; skills and abilities; and prior schooling. My model arranged the pre-entry attribute

variables into two groups: demographic characteristics (including race, gender, social class, and age when enrolling) and educational background/college preparation, including parents' level of education; whether college enrollment was delayed after high school; whether the student transferred from another institution; SAT/ACT scores; and high school GPA.

Tinto's (1993) model divided the institutional experiences category into academic system and social system variables. The scholar's formal academic system variable was academic performance; his informal academic system variable was faculty/staff interactions. His formal social system variable was extracurricular activities; his informal social system variable was peer group interactions. My model defined all interactions comprising the institutional experiences category as social capital for the student. In particular, my emphasis was on the informal academic system variable, faculty/staff interactions, and my definition of those interactions as informal faculty mentoring. I combined Tinto's formal social system variable, extracurricular activities, with the informal social system variable, peer group interactions. My combination of these peer variables was represented by my variable, peer network support, which included extracurricular involvement and participation in study groups.

Much of the empirical research on student departure from college supports Tinto's (1993) theoretical explanation (Strayhorn 2013). Overall findings suggest academic integration, social integration, and goal commitments influence the persistence decisions of traditional college students (Crisp 2011). However, Tinto's theory has been critiqued by some scholars who feel the theory is based on assimilationist assumptions that ignore the perspectives of students of color (Strayhorn 2008a). For example, existing data supports that the SAT and ACT, routinely used standardized college entrance exams, are consistently racially and culturally biased against African American and Latinx students, who generally have lower scores than White students

(Rendón, Novack, and Dowell 2005). Tinto's theory does not account for such bias, which could impact students at the pre-entry attribute level in his model. Although some argue that Tinto's model does not adequately capture the cultural differences of racial minority students, others suggest the constructs fail to capture these students' unique experiences, such as the ways African American and Latinx students might socially integrate themselves once on campus (Crisp 2011). Still, evidence indicates Tinto's model is the most widely used perspective for studying college student departure (Strayhorn 2008a, 2013,). Tinto's model provides a reliable theoretical and sociological lens through which to better understand how social capital affects students' persistence decisions (Strayhorn 2013).

2.3 Intersectionality

A key premise of Tinto's (1993) retention model rests on the assumption that students' individual college persistence decisions are only understood as they relate to the individual's social and institutional context. That context is comprised of a complex set of elements and dynamics, particularly for African American men, that can be examined through the lens of intersectionality. Intersectionality is defined as a way of analyzing and understanding the complexity of social phenomena and human experiences (Collins and Bilge 2016). The conditions of social life, including social inequality, are rarely shaped by a single factor (Collins and Bilge 2016). Structural intersectionality alludes to the ways social domains intersect to influence individuals' experiences, which can include sustained oppression (Crenshaw 1991). Feminist scholarship increasingly asserts that race, gender, and class are closely intertwined, and that these forms of social stratification should be studied in relation to one another (Choo and Ferree 2010). Scholars refer to this nonadditive way of analyzing social inequality using a variety of terms, including the intersectional approach (Crenshaw 1991). Lundy-Wagner (2012)

highlighted the continuing gaps in degree completion rates by race, gender, and social class (as measured by income). The scholar noted that disparate bodies of work indicate race/ethnicity, gender, and social class contribute to differential degree attainment outcomes, yet few researchers have recognized these factors, together (Lundy-Wagner 2012). Intersectionality provides a means to explore the ways race, gender, and class interact and impact degree attainment outcomes for African American male students.

Museus and Neville (2011) argued that higher education researchers were limited in their comparisons of the experiences of marginalized and majority groups, as most students, faculty, and college administrators identify in multiple ways. Thus, an individual's self-concept may be based on their identification with many groups. People may also define themselves simultaneously by their race, gender, class, and other elements of their identities (Jones 2009). In recent decades, feminist scholarship shifted toward conceptualizing race, gender, and class as intertwined (Choo and Ferree 2010). Building on the work of Collins (1990), who critically labeled these intertwined social constructs as a matrix of domination, Choo and Ferree (2010) approached intersectionality as an analytical tool, creating a nonadditive process of recognizing demographic variables and the interactivity of their effects on social outcomes. The scholars asserted that this approach effectively moved beyond merely the listing and addition of race, gender, and class as separate factors that were connected to disparate outcomes (Choo and Ferree 2010). They provided three dimensions of theorizing that they believed encompassed what intersectionality signified: attending to the importance of including the perspectives of multiply-marginalized individuals; shifting from the addition of multiple independent elements of inequality toward a multiplication and thus transformation of their effects into interactions; and seeing multiple social institutions as overlapping in their rendering of inequalities that produce

complex unequal structures at the foundational level, rather than simply producing "additional" inequalities that are immediately observable in the here and now (Choo and Ferree 2010).

Collins and Bilge (2016) ascribed two organizational focal points to intersectionality: critical inquiry and critical praxis. Critical inquiry alludes to the criticism of existing bodies of knowledge, including established theory and methodology in relation to social inequality (Collins and Bilge 2016). Critical praxis includes critical inquiry, but explicitly seeks to challenge the status quo and transform power relations (Collins and Bilge 2016). The scope and purpose of my study allowed for use of the critical inquiry focal point of intersectional analysis as part of its qualitative inquiry. A key theme that encapsulated the way scholars in race/class/gender studies have established intersectionality as a form of critical inquiry was treating it as an approach to understanding human behavior that was undergirded by the lived experiences and challenges of disenfranchised people (Collins and Bilge 2016).

For African American men, their racial minority status, gender, and social class standing all intersect to contribute to inequalities in the educational context. Racism is an integral feature of the fabric of American life, culture, and institutions (Howard 2008). The nation's socio-historical legacy of racism is reflected in racial oppression and subjugation in all social domains, including education (Howard 2008). The resultant power differences and conflicts are manifested and reproduced in educational settings (Reynolds 2010). Ample evidence exists of inequalities in access to higher education, as well as success stratified by race and class (Strayhorn 2008a).

An increasing number of scholars, particularly critical race theorists and women's studies theorists, have promoted examination of the intersectionality of race, gender, and class, and subordination on the basis of these social positionalities as represented in the education system and in its curriculum (Museus and Griffin 2011). It is particularly important to focus on the

constructs of race, gender, and class for African American males (Museus and Griffin 2011). Using exclusively race in the analysis of Black men's experiences of inequality does not adequately set their social realities apart from the experiences of Black females or other racial minority groups (Museus and Griffin 2011). By the same logic, using exclusively gender or exclusively class does not allow the effects of race to be understood in their experiences (Museus and Griffin 2011). Although extensive research exists on the social, emotional, and academic challenges that male students of all racial and ethnic groups face in school settings, a clear racial hierarchy emerges among these groups and warrants particular attention (Museus and Griffin 2011).

The examination of Black males' pursuit of U.S. education through an intersectional lens is also critical, given the distorted social perceptions of this population (Museus and Griffin 2011). African American males are often trapped in a snare of stereotypical notions that place them at considerable disadvantage in school and society (Museus and Griffin 2011). Exploring the social construction of the image of Black males in the U.S., formed over a period of centuries, uncovers a highly problematic portrayal that ranges from the docile slave to the hyper-sexual brute, to being valued solely as a super athlete or entertainer (Museus and Griffin 2011), to being criminal-minded and pathological in nature (Howard 2008). African American male students are often described with disparaging terms, such as uneducable, at-risk, lazy, and threatening (Strayhorn 2008a). These negative perceptions and imagery influence the racial, gendered, and classed politics that play out across the education pipeline (Museus and Griffin 2011) and reinforce negative stereotypes, prejudices, and disparate treatment of Black male students, on the part of some educators (Strayhorn 2008a). In the K-12 system, African American male students are much more likely to be classified as needing special education, more

likely to be assigned to in-school and out-of-school suspension, and more likely to be expelled

from school (Strayhorn 2008a). Black males are also more likely to be raised in lower-income

communities and attend schools in which they often do not have access to or are discouraged by

teachers and counselors from participating in, college preparatory courses and activities

(Strayhorn 2008a).

For Black males who overcome the odds and make it to college, enrollment and degree

attainment rates are still relatively low and reveal no progress over the last several decades

(Strayhorn 2008a). Increased attention to research on inequality in higher education at the

intersection of race, gender, and class may change the discourse around disparities in degree

attainment for Black men (Museus and Griffin 2011). Intersectional analyses can enable policy

makers to make wiser decisions about where to invest their funding and efforts towards

improving attainment outcomes (Museus and Griffin 2011). *The current qualitative exploration*

sought to better understand the persistence behaviors and the lived experiences of African

American men in college, as influenced by key forms of social capital, recognizing that African

Americans are historically disenfranchised and marginalized in multiple ways in the broad

social domain of education (Choo and Ferree 2010).

2.4   Anti-Deficit Achievement Framework

Although Black men's low enrollment, disengagement, underachievement, and poor

college completion rates are among the most crucial and complex issues in higher education, few

solutions have emerged from amplifying the problems of Black male students across the

education pipeline (Harper 2012). Rather, educational outcomes have remained stagnant or have

declined for this population in recent years (Harper 2012). Harper (2012) contended that this was

partially attributable to the overemphasized deficit orientation that is relentlessly reinforced in

media, academic journals, and education discourse and practice. There is much to be learned

about Black male student success from Black men who have been successful (Harper 2012). Not

enough research focuses on the African American men who persist to baccalaureate degree

attainment, and especially those who maximize their college experiences on the campuses of

PWIs, which at one time were racially exclusive (Harper 2012). Few studies have focused on

high-achieving African American college students in general, and on male high achievers, in

particular (Harper 2008).

      To improve educational attainment outcomes for African American men, it is critical to

counterbalance the popular one-sided emphasis on Black male undergraduates' failures and

underperformance with insights from those who managed to successfully navigate their college

experiences and persist to completion, despite their unique issues and difficult odds (Harper

2012). Harper's (2010) anti-deficit achievement conceptual framework, informed by theories

from multiple disciplines, emerged from his approach to and recommendations for understanding

how successful undergraduate students of color managed to succeed, including in STEM, and to

overcome obstacles that typically disadvantage their peers. Such obstacles included: low teacher

expectations and insufficient academic preparation in their K-12 schooling; racist and culturally

insensitive campus environments; the consequences of acute underrepresentation; the burden of

identity conflicts; and exposure to negative stereotypes about their racial group (Gayles 2006;

Harper 2012, 2010). Though most researchers have justifiably chosen to focus on illuminating

the conditions that continually inhibit college access and positive outcomes, the current study

employed an anti-deficit achievement framework approach to explore and highlight the ways key

forms of social capital – informal faculty mentoring and peer network support – were integral to

the success of Black men who overcame the odds and attained bachelor's degrees.

The framework (illustrated in Figure 2.2) inverted questions commonly presented about educational disadvantage, underrepresentation, inadequate academic preparation, academic underperformance, disengagement, and African American male student attrition (Harper 2012). It offered recommendations for some questions that researchers might explore to better understand how Black male students successfully access and navigate their way through higher education, as well as beyond to successful post-college pathways (Harper 2012). It was not intended to be an exhaustive or rigidly prescriptive list of research questions and topics; rather, it was meant to provide examples of the anti-deficit questions employed in Harper's (2012) National Black Male College Achievement Study.

The insights from which these questions were developed illuminate three points in the educational pipeline: pre-college socialization and preparedness; college achievement; and post-college success (Harper 2012). It also included eight dimensions of achievement that represented fertile ground for future research: familial factors; K-12 school forces; out-of-school college preparation resources; classroom experiences; out-of-class engagement; enriching educational experiences; graduate school enrollment; and career readiness (Harper 2012). Several sample questions were provided with each of these dimensions. Given what was noted in extant literature about the significant impact of faculty and peer influence on college student development and success, Harper (2012) asserted that efforts to understanding their role in the undergraduate experiences of Black male students deserved targeted attention.

Figure 2.2 shows a sample of commonly used research questions that Harper reframed to "amplify the upside of achievement" (2010:66). These sample questions are flexible, exchangeable, and designed to be "'instead of' queries," such that researchers should actively and deliberately uncover how students of color have managed to succeed, academically (Harper

2010:68). The anti-deficit achievement framework holds that each of the theories by which it was informed, which arise from the disciplines of sociology, psychology, and education, may be explored with an *instead-of* framing (Harper 2010).

PRE-COLLEGE SOCIALIZATION AND READINESS	COLLEGE ACHIEVEMENT		POST-COLLEGE SUCCESS
FAMILIAL FACTORS How do family members nurture and sustain Black male students' interest in school? How do parents help shape Black men's college aspirations?	**CLASSROOM EXPERIENCES** What compels one to speak and participate actively in courses in which he is the only Black student? How do Black undergraduate men earn GPAs above 3.0 in majors for which they were academically underprepared?	Which instructional practices best engage Black male collegians? How do Black men craft productive responses to stereotypes encountered in classrooms?	**GRADUATE SCHOOL ENROLLMENT** What happened in college to develop and support Black male students' interest in pursuing degrees beyond the baccalaureate? How do Black undergraduate men who experience racism at predominantly white universities maintain their commitment to pursuing graduate and professional degrees at similar types of institutions?
K-12 SCHOOL FORCES What do teachers and other school agents do to assist Black men in getting to college? How do Black male students negotiate academic achievement alongside peer acceptance?	PEERS — PERSISTENCE — FACULTY		
OUT-OF-SCHOOL COLLEGE PREP RESOURCES How do low-income and first generation Black male students acquire knowledge about college? Which programs and experiences enhance Black men's college readiness?	**OUT-OF-CLASS ENGAGEMENT** What compels Black men to take advantage of campus resources and engagement opportunities? What unique educational benefits and outcomes are conferred to Black male student leaders? How do achievers foster mutually supportive relationships with their lower-performing same-race male peers?	**ENRICHING EDUCATIONAL EXPERIENCES** What developmental gains do Black male achievers attribute to studying abroad? How do Black men cultivate value-added relationships with faculty and administrators? What do Black male students find appealing about doing research with professors?	**CAREER READINESS** Which college experiences enable Black men to compete successfully for careers in their fields? What prepares Black male achievers for the racial politics they will encounter in post-college workplace settings? How do faculty and other institutional agents enhance Black men's career development and readiness?

Figure 2.2 Harper's (2012:5) Anti-Deficit Achievement Framework

For those using social capital theories, rather than exploring how students who attended low-resource schools in the K-12 system lacked high-level college preparation, Harper (2010) suggested an anti-deficit inquiry can be used to explore how achievers from those backgrounds, especially those from low-income families, overcame barriers and made the necessary connections to enter and succeed in college. While stereotype threat theory focuses on how racist stereotypes negatively affect minority students' academic performance, an anti-deficit inquiry searches for insights into the strategies those students used to resist internalizing discouraging misconceptions about their racial group and respond positively when negative stereotypes are encountered on campus (Harper 2010). Researchers using critical race theory would recognize students of color as experts on their lived realities and empower them to share counternarratives

about their academic success, rather than accept the dominant deficit-laden perspectives of

minority student underachievement that is reinforced in the social science and education

literature (Harper 2010).

At the core of the postsecondary pipeline phase in the anti-deficit achievement

framework (see the column labeled "College Achievement" in Figure 2.3) is a variable for

persistence toward degree attainment (Harper 2010). Higher education researchers have

consistently found that student-faculty interaction and student-peer interaction are extraordinarily

powerful influences on college achievement and persistence (Harper 2010).

Deficit-Oriented Questions	Anti-Deficit Reframing
Why do so few Black male students enroll in college?	How were college aspirations cultivated among Black male undergraduates who are currently enrolled?
Why are Black male undergraduates so disengaged in campus leadership positions and out-of-class activities?	What compelled Black male students to pursue leadership and engagement opportunities on their campuses?
Why are Black male students' rates of persistence and degree attainment lowest among both sexes and all racial/ethnic groups in higher education?	How did Black men manage to persist and earn their degrees, despite transition issues, racist stereotypes, academic underpreparedness, and other negative forces?
Why are Black male students' grade point averages often the lowest among both sexes and all racial/ethnic groups on many campuses?	What resources proved most effective in helping Black male achievers earn GPAs above 3.0 in a variety of majors, including STEM fields?
Why are Black men's relationships with faculty and administrators so weak?	How did Black men go about cultivating meaningful, value-added relationships with key institutional agents?

Figure 2.3 Sample Reframed (Anti-Deficit Framed) Research Questions from Harper's (2010:68) National Black Male College Achievement Study

Of special note, a nexus exists between student-faculty interaction and academic success in STEM, particularly among students of color (Harper 2010). Because relationships with faculty and peers are vital to persistence, those social connections are represented at the center of the framework (Harper 2010). An overarching assumption that is fundamental to the anti-deficit achievement framework, and to the premise of the current project, is that scholars, faculty, and policymakers intent on improving college student achievement and attainment outcomes would be well-served by investing in the study of those who have been successful (Harper 2010).

2.5 Academic Resilience

The premises of the anti-deficit achievement framework run parallel to the concept of academic resilience. Gayles (2005) offered the following definition of academic resilience as part of a qualitative study on high-achieving African American male students who had attended a violent, non-affluent, and low-performing high school, yet earned substantial college scholarships. According to the scholar, academic resilience is indicated by academic achievement that occurs when such achievement is atypical for those who are experiencing comparable circumstances or sociocultural contexts (2005). Other qualitative research by Gayles (2006) on high-achieving Black male students provided rich data which suggested conventional conceptions of academic achievement should not assume that achievement holds some inherent meaning or value that is consistent across social, cultural, and economic contexts. Gayles suggested that *failure* was an inaccurate term in the context of examining academic resilience and achievement for Black men, as "… it implies the absence of ability" (2005:251). In addition, the role of negative stereotypes about Black males' academic abilities emerged as a salient reference point for all case study participants (Gayles 2006). The students in that study who were situated on the lower end of the socioeconomic spectrum tended to have more racial

interpretations of their environments and educational experiences than did more

socioeconomically privileged students.

Gayles (2006) concluded it was likely that the degree to which the students experienced

their worlds as racialized held relevance to the fact that negative stereotypes were a motivating

factor for one group to prioritize positive academic achievement, while negative stereotypes did

not contain that salience for the others. I expect that my qualitative analysis may also uncover

that part of successful African American men's motivation to take full advantage of social capital

and achieve academically is based on their efforts to defy negative social stereotypes about them,

especially at PWIs. Those efforts and their resultant success can also be interpreted as a form of

academic resilience, particularly for those who came from lower-income backgrounds. *It is*

through the lenses of the anti-deficit achievement framework and academic resilience

perspectives that the present study investigated the relationship between two key elements of

social capital – informal faculty mentoring and peer network support – and college completion

for successful African American male undergraduate students, and the relative importance of

this social capital to degree attainment for this population.

2.6   Empirical Literature on Social Capital and Postsecondary Educational Attainment for African American Males

A relatively small number of studies have examined the effects of nonacademic factors

on facilitating the success of African American men in college (Strayhorn 2008b). A few have

studied the impact of noncognitive variables on student success, but they have combined Black

women and men, collectively compared students of color to White students, or have yielded

inconsistent results (Fleming 1985; Strayhorn 2008b). Most of the studies involving Black

student populations tended to treat African Americans as a monolithic entity, with the same

characteristics loosely attributed to all within the group (Fleming 1985; Strayhorn 2008b).

Several qualitative studies have explored the influence of nonacademic factors including social capital on the persistence of African American men. Hamilton (2005) studied the experiences of 12 African American men who graduated from two 4-year universities in Southern California, which were part of the California State University System. The researcher uncovered several noncognitive variables that the graduates perceived to be key to their successful persistence to degree completion, one of which was the availability of a strong support person at their university. Another key to success cited by the graduates was participation in ethnic and minority programs and campus organizations, including holding leadership positions in those campus organizations.

Other qualitative studies yielded similar findings. Palmer and Gasman's (2008) work illustrated forms of social capital at an urban public doctoral research intensive HBCU that positively influenced the persistence and baccalaureate degree completion of 11 African American men who had been academically underprepared when they entered college. The participants indicated that their relationships with supportive faculty and administrators, who served as mentors and role models for many of the students, encouraged their persistence because they knew those mentors cared about their success. The mentors also directed and encouraged the students' participation in student support services, student organizations on campus, internships, and scholarship program opportunities. The participants shared that they relied on student peers to sustain motivation, provide emotional support and outlets to vent frustration and provide opportunities for academic and social networking. Harper's (2008) study of 32 high-achieving Black male undergraduates and social capital at six large public research universities made a direct connection between serving as leaders in campus organizations, being actively engaged outside of class, and acquiring social capital for goal actualization and success.

Museus and Neville (2012) conducted semi-structured interviews with 60 Asian American, Black, and Latinx undergraduates to explore the ways key institutional agents provided those students with social capital and positively influenced their success at four PWIs with varying institutional characteristics. The participants highlighted the importance of developing trust with the institutional agents, receiving holistic support from the agents, and the agents personally investing in their success.

Previous empirical work that employed only qualitative methods of data collection and analysis used appropriate methodology given the study design and aims, but the findings have not been generalizable (Strayhorn 2010). Subsequent studies have contributed to existing knowledge using quantitative methods and nationally representative data to measure the effects of social capital on academic achievement, with grades frequently used as a proxy for achievement. Using nationally representative data, Strayhorn (2008b) investigated the association between the following variables: supportive relationships with major socializing agents on campus, including peers, faculty, and staff; academic achievement as measured by college grades; and satisfaction with college. The scholar found a significant relationship between supportive relationships with others and higher levels of satisfaction with college, with satisfaction being an important precursor to persistence decisions. In another study, Strayhorn (2010) sought to understand the influence of social capital on college grade point average (GPA) for African American and Latinx males. The researcher found that African American men appeared to benefit significantly from their involvement in extracurricular activities, such as student government and volunteer work, with this involvement positively affecting engagement and academic achievement. Those who participated in fraternities, however, earned lower grades on average than their same-race counterparts who did not participate in fraternities.

Wells (2008) studied the effects of the amount of social capital that students possessed coming into college on levels of first-to-second year college persistence, and how previously acquired levels of social capital differed for racial and ethnic groups. This study was also concerned with establishing a better understanding of the mechanisms by which social class affected retention, as it was the first college student retention study to examine social class variables as specific constructs of social capital. Wells found that, on average, Hispanics entered college with the least amount of traditionally valued social capital. African Americans, though lower than Asians and Whites for some measures of social capital, had higher levels of test preparatory tool usage, on average. Given that the African American students in this study were already enrolled in college, a possible interpretation of that outcome was that strategies such as test preparation may serve as means by which Black students are able to overcome other disadvantages and obstacles to successful college entry. Wells suggested that future research should explicitly analyze how various elements of social capital may affect persistence differently by racial and ethnic groups.

Museus and Neville (2012) conducted a qualitative study consisting of semi-structured interviews with 60 Asian American, Black, and Latinx undergraduate students to investigate the characteristics of the key institutional agents who provided them with access to social capital and positively influenced their success in college. The researchers based their conceptual framework on Bourdieu's conceptualization of social capital as well as Coleman's perspective of how social capital was created and maintained through trusting relationships (Museus and Neville 2012). Findings indicated that the institutional representatives who provided the students with access to social capital all had four common characteristics: a) shared common ground with the students, such as shared cultural backgrounds and similar undergraduate challenges; b) provision of

holistic support for the students, such as transcending their professional roles to speak with them about concerns that went beyond curricular topics; c) efforts to humanize the educational experience, described as showing authenticity and genuine caring about the students' success; and d) provision of proactive support for the students, such as taking the initiative to check on the students and offer information and support, including an affective component in terms of the agents demonstrating a personal investment in the students' well-being and success (Museus and Neville 2012).

Taken together, the findings from these studies suggest social capital can have a compensatory effect on low-SES African American males, and that involvement in campus organizations may help Black male students overcome academic and socioeconomic disadvantages. Strayhorn (2010) emphasized that more comparative research on the collegiate experiences of Black men was warranted. He highlighted that generally, not enough attention has focused on the effects of race on undergraduate students, and that future researchers should also attend to the challenges that Black men face in establishing the kinds of supportive relationships on campus that have been shown to contribute to their success (Strayhorn 2008b). *The present study addressed these gaps by employing qualitative and quantitative methods to investigate the comparative effects of social capital acquired in college by way of informal faculty mentoring and peer network support on Black men who successfully completed college, and by exploring their means and challenges to forming those supportive relationships.*

2.6.1 *Empirical Literature on Informal Mentoring for URMs/African American Students*

Although sociological research has long recognized the contributions of parents, teachers, and peers in the educational process, little attention has been devoted to non-parental adults in

the social networks of youth who serve as mentors, including informal mentors in postsecondary education (Erickson, McDonald, and Elder, Jr. 2009). Perhaps the most influential sociological piece on mentoring in education emerged from the work of Williams and Kornblum in the pre-college context (Stanton-Salazar and Spina 2003; Williams and Kornblum 1985). The scholars conducted an ethnographic study of 900 African American youths living in seven economically distressed communities across the United States. The researchers identified informal mentors as instrumental to predicting positive educational outcomes, as they insulated groups of mentored youth from the violence and despair that plagued these urban areas. The personal intervention and involvement of informal mentors emerged as the strongest predictor of overcoming poverty and other adverse circumstances and making it to college (Stanton-Salazar 2003; Williams and Kornblum 1985).

Few studies have investigated informal mentoring, though most young people report a relationship with an informal mentor (Erickson et al. 2009). In addition, most research has neglected to examine the interdependence of informal mentors and other social relationships, including in postsecondary education (Erickson et al. 2009). Sociologists Erickson, McDonald, and Elder, Jr. (2009) also took an interest in informal mentoring in the K-12 context, defining mentors as non-parental adults who take a special interest in the lives of youths. According to part of their description, a mentor steps outside their normal social role as a teacher, relative, minister, or employer by helping to guide a young person in the transition to adulthood with advice and emotional support, and by serving as a role model. In their quantitative study on informal mentors and education outcomes, Erickson et al. (2009) sought to expand on the extent to which mentoring relationships reduced inequality by either enabling disadvantaged youths to compensate for the lack of social resources, or promoting inequality by serving as a

complementary resource for advantaged youth. Their findings uncovered what they described as an interesting paradox – that informal mentors may simultaneously represent compensatory resources for disadvantaged youth and complementary resources for youth who already possess a wealth of social resources. *Of interest to my study was a possible key parallel to what I expected to find, Erickson et al. (2009) concluded that informal mentors had a powerful net influence on the educational success of youth; they also concluded that informal mentoring was an important and understudied resource for youth in their educational careers*.

Nearly all mentoring studies in postsecondary education have been conducted at four-year institutions and have involved formal mentoring programs (Crisp and Cruz 2009). The influence of mentoring on numerous dependent variables, from retention rates to adjustment to the educational environment, have been studied more widely in recent years (Crisp and Cruz 2009). Study findings have largely shown positive relationships between mentoring and undergraduate student persistence and/or GPA (Crisp and Cruz 2009). One study involving faculty mentoring, which was conducted by Strayhorn and Terrell, did not yield an entirely positive impact on students (Crisp and Cruz 2009). In that study, Strayhorn and Terrell (2007) examined the impact of both research-focused and informal faculty mentoring relationships on African American students' satisfaction with college. They found that while research-focused mentoring relationships had a positive significant effect on students' satisfaction with college, informal mentoring relationships had no significant effect on students' satisfaction with college.

A few studies have focused on uncovering more about Black men who have been successful in college, although not specifically isolating degree attainment as an outcome variable. Strayhorn (2008b) examined the relationship between academic achievement (operationalized as college grades), satisfaction with college, and students' supportive

relationships with major socializing agents on campus (including peers, faculty, and staff). Strayhorn employed an ex post facto survey design using a large, nationally representative, random sample of students ($n = 231$) who participated in the 2004 administration of the College Student Experiences Questionnaire (CSEQ) (Pace 1984). Strayhorn's main independent variable, students' interaction with a strong support person in various situations and circumstances, was operationalized using 14 items from the survey. Survey items included the following: "Talked with a faculty member or staff member about personal concerns," with response options ranging from "never" to "very often." The findings show empirical evidence that having a relationship with a strong support person who provided guidance and encouragement throughout the student's college career was positively related to satisfaction in college for Black men. These kinds of supportive relationships closely paralleled informal mentoring relationships with faculty. A noted limitation of the study was that the data did not provide insight into the challenges that might have existed with respect to Black men forming supportive relationships with mentors.

Hamilton (2005) agreed that extant research had failed to adequately inquire of successful African American male students who persisted and graduated. The scholar conducted a qualitative study using a descriptive research design. Data were collected via interviews with 12 African American men who graduated from two universities that are part of the California State University system. Purposive sampling was used to identify interview participants who had persisted to baccalaureate degree completion at those institutions. Several nonacademic or noncognitive (Sedlacek 2004) factors were determined to be instrumental to the graduates' success, including having a strong support person. Nonacademic factors were dimensions of students' experiences, such as racial identity, that are not quantified in the way that strictly

academic factors have traditionally been measured, such as GPA. All noncognitive variable categories that Hamilton (2005) used (availability of a strong support person, academic adjustment, attachment to college, personal emotional adjustment, and social adjustment) had an impact on the participants' college experience. All participants surmised that interaction with strong support persons would help other Black men successfully complete college.

Warde (2008) conducted a similar qualitative examination to investigate the factors that contributed most significantly to African American men's successful completion of baccalaureate degrees. Purposive sampling was used to obtain a sample of graduate students. Data were collected via focus groups. Four major themes were identified as significant contributors to participants' successful degree completion. One of those themes was having a mentor who played a part in helping students navigate college and helped during critical points in their journeys. Brooms and Davis (2017) conducted a qualitative study to examine how 59 African American male undergraduate students at three different PWIs constructed meaning from their collegiate experiences and their efforts toward success in college. The researchers found the students articulated two critical components of their college experience that positively impacted their persistence: informal mentoring from Black faculty members, and peer bonding and associations with other Black male students.

Addressing the dearth of knowledge about African American males' experiences at HBCUs, Palmer and Gasman (2008) conducted a qualitative study in which they interviewed Black men described as academically underprepared for college, who were attending a public, urban HBCU. The researchers endeavored to better understand how the students were able to graduate with their bachelor's degree despite their disadvantaged academic status upon enrollment. The purpose of the study was to illuminate the forms of social capital at HBCUs that

positively influenced persistence for African American men in college, and which they asserted had not been replicated at PWIs. Findings indicated the students cited professors' accessibility and palpable willingness to form supportive relationships with them as key to their persistence, because the students perceived professors to care about them and their success. Both faculty and administrators served as role models for the students and also directed and encouraged their participation in student support services, campus organizations, internships, and scholarship competitions and programs. The students also reported relying on peers to help sustain their motivation and for both academic and social networking. The authors mentioned the low response rate of 11 participants, relative to the 73 eligible graduates who were contacted and how that compromised generalizability of the findings. They speculated that potential participants may have been reluctant to share personally sensitive information about having been academically underprepared in an interview setting.

Crisp (2011) studied the effect of mentoring relationships on the persistence decisions of undergraduate Hispanic students as compared to White students at a large four-year Hispanic-serving institution (HSI). Although the research did not involve African American male students, it has relevance as Hispanic male students are also URMs with respect to enrollment and college completion. Crisp's study replicated a prior investigation that used a community college sample to test the degree to which mentoring was critical to shaping students' persistence decisions by predicting social and academic integration and the influence of those factors on their commitment to both the institution and to academic goals. Findings indicated mentoring may provide students attending HSIs with a support system that helped them overcome obstacles that could inhibit their academic and social integration, as well as their persistence to college completion. The major limitations of this study were that the results did not explain the source of

the students' mentoring experiences. It was also unclear how the sources of mentoring might have been different for Hispanic students versus White students, and generalizability was low because the research was limited to a single institution.

2.6.2 *Empirical Literature on Peer Network Support for African American Students in Postsecondary Education*

Peer network support is a form of social integration, and Stanton-Salazar (2004) asserted that social integration was integral to students' learning, development, and persistence. Beyond consideration of the value of study groups for social integration and college student retention, however, little research exists on the effect of peer study groups, which represent an element of academic integration, on success in college (Arum and Roksa 2011). The well-known Mathematics Workshop Program (MWP) began in 1974 after an informal study by Treisman (1992), which aimed to understand group performance differences among first-year calculus students at the University of California, Berkeley. The study specifically focused on the reasons Black and other URM students were disproportionately underperforming first-term calculus (Tsui 2007; Treisman 1992). Treisman found group performance was tied to differing approaches in test preparation and homework assignment completion. In preparing for homework and exams, Treisman found Black students were more inclined to study alone and keep their study activities separate from their social lives. The researcher also noted that Asian American students were more likely to combine their study activities with their social activities (Treisman 1992). African American students did not usually seek out assistance from fellow students, nor from the graduate teaching assistant. When they encountered difficulty, Black students tended to spend significant time searching for computational errors in their own work or by consulting the textbook example problems and the corresponding answers (Treisman 1992).

Treisman (1992) proceeded to find that informal study groups were effective for stimulating the broader exchange of academic and institutional information among students, as well as a faster grasp of course material (Treisman 1992; Tsui 2007). Program evaluation results demonstrated that MWP participants were not only two to three times more likely to earn higher grades in mathematics, but they were also more likely to persist and graduate (Fullilove and Treisman 1990; Tsui 2007). In addition, African American and Latinx participants not only outperformed their non-participant same-race peers, but also their White and Asian classmates who were not in the program (Tsui 2007).

Existing literature also provides evaluations of other programs targeted toward offering peer network academic support to African American and other historically URM undergraduate students in STEM disciplines. The success of these programs, in terms of student learning and degree attainment, is well documented. However, there is a dearth of literature on the mechanisms behind the success of such programs designed for non-STEM majors. There is also little research specifically focused on peer study groups and college achievement outcomes, or study groups and academic success or degree completion for African American male undergraduates. This project examined the relationship between participation in peer study groups, a provision of peer network support, and degree attainment for Black men.

Strayhorn (2008b) found that supportive relationships, including those with peers, were positively associated with positive educational outcomes for Black men, notably satisfaction with college. Results from his research "suggest that positive, supportive relationships can have a compensatory effect on ethnically and culturally diverse students whose background may be different from the dominant campus milieu" (Strayhorn 2008b:39). Harper (2006a) concluded that Black male undergraduates who were actively involved in student clubs and organizations

gained more from their college experiences. Such campus organizations connected students to exclusive social networks, such as executive university administrators, and helped students develop useful practical competencies (such as effective time management) that were critical to success during and after college (Kuh, Palmer, and Kish 2003; Strayhorn 2010).

Supportive peer interactions are also consequential to a positive college experience and the likelihood of degree attainment. Student peer culture is theorized to dramatically affect persistence (Thomas 2000). Some scholars have asserted that peers have the most influence on undergraduates' college experience (Astin 1993; Harper 2013; Pascarella and Terenzini 2005). Tinto postulated that higher levels of social integration led students to persist in college (Simmons 2013). Social integration is sustained through interactions with both faculty and peers, as well as involvement in intellectual and social activities (Simmons 2013; Stage and Hossler 2000). However, very limited research exists on the impact of peer support on college achievement and persistence among African American students (Harper 2006b).

Some research indicates social integration is more relevant to degree completion for men than it is for women (Astin and Oseguera 2005; Simmons 2013). Pascarella and Terenzini (2005) found that early engagement with campus culture was significant to persistence to degree attainment for African American men. Strayhorn's (2008a) work affirmed that for African American students, campus involvement and social networks provided the social capital necessary to be successful at PWIs or HBCUs. Simmons (2013) also concluded that sustained involvement and networking could stimulate Black men to successfully navigate their college experiences and persist to degree attainment.

Simmons (2013) took a qualitative case study approach to understand how a student support organization, "Project Empowerment," impacted the persistence decisions of two

African American male students. The researcher employed semi-structured interviews to understand the factors students perceived as most critical to their persistence toward bachelor's degree completion, and how the Project Empowerment program components helped foster persistence. One of the principal themes that emerged from the findings was that both students perceived that their peer relationships, which developed from their involvement in student clubs, organizations, and other campus activities (such as participation in leadership development programming and in a living-learning community), were critical to both their college persistence and to their future success. Another theme was that both young men viewed their participation in student organizations as being important to their academic experiences and persistence.

Having supportive relationships and frequent positive communication with peers on campus was associated with higher levels of satisfaction with college for African American men (Strayhorn 2008b). Yet studies that examine the experiences of academically talented African American youth in K-12 school contexts abound with descriptions of negative peer interactions (Harper 2006b). High-achieving Black students sometimes struggle to negotiate and integrate their social, racial, and academic identities (Cooley, Cornell, and Lee 1991; Ford and Harris 1997; Harper 2006b). Fries-Britt (1998) determined that many academically talented African American students entered college with few or no relationships with other high-achieving African American students. Fordham and Ogbu (1986) contended that academically successful African American students were burdened by peer accusations of "acting White," in both predominantly White and in racially integrated educational settings. Others have framed this dynamic as the oppositional culture explanation (Ainsworth-Darnell and Downey 1998), presenting oppositional culture theory to account for the academic disengagement of African American students. Ainsworth-Darnell and Downey (1998) found that the main premises and

claims of the oppositional culture explanation did not hold, based on their conclusions following a study using nationally representative data.

Oppositional culture theory posits that Black students have developed an oppositional culture as a result of the racial oppression and discrimination they have experienced in America (Palmer et al. 2010). According to this theory, African Americans are provoked to dissuade their same-race peers from valuing or pursuing academic success due to its negative association with "acting White" (Palmer et al. 2010). Internalized racism, or internalized oppression, is a related concept that refers to the dynamic that occurs when socially stigmatized groups, such as Black males, accept and rehearse negative messages about themselves regarding their aptitude and societal place, which results in both lower self-esteem and the invalidation of others within their social group (Essed 1991; Harper 2006b; Jones 2000; Lipsky 1987; Pheterson 1990; Pyke and Dang 2003).

A qualitative study by Harper (2006b) of high-achieving African American men on six PWI campuses, however, found no evidence of internalized racism in the domains of academic achievement and leadership of student organizations. The purpose of the phenomenological study was to understand the experiences of high-achieving African American male college students at large, public research universities, including their relationships with and support provided by others. The 32 participants were selected with the assistance of administrators in key executive leadership positions at the six universities, who were asked to recommend high-achieving Black male student leaders. The sample included sophomores, juniors, and seniors, from a wide variety of academic majors. The findings indicated the peers played a significant role in the students' collegiate success, enhancing the quality of their experiences as high achievers in the learning environment.

Harper's (2006b) results directly challenged oppositional culture theory and showed that, peer support for student achievement was exchanged within African American peer groups. Also, although they formed meaningful relationships with a diverse racial array of students, the Black male subjects from the study attributed much of their college success to support from their same-race peers. Other researchers have also rejected the oppositional culture theory and the internalized racism concept, presenting consistent findings that African American students valued education and school achievement to the same degree as their White peers from similar SES backgrounds, and that many high-achievers had high self-esteem, high goal orientations, and strong racial identities (Harper 2006b).

2.7 Causal Model

My causal model, derived from Tinto's (1993) model, addressed my research questions by connecting Black men's institutional experiences, in the form of informal faculty mentoring and both formal and informal peer interactions, to the likelihood of them persisting to degree completion (see Figure 4.4). The general premise was that the greater the positive, integrative interactions with faculty and with peers, the greater the likelihood that the student would persist in college. The model should bear out that the higher the social class and overall socioeconomic status standing of the student entering college, the greater the likelihood that the student experienced positive, integrative interaction with faculty and peers, and thus the greater significance of social capital to the student's success. However, I expected to find a stronger correlation between low-income Black male students and my measures of social capital important to their success. My inquiries about age, race, and gender as considerations in examining the impact of institutional experiences on persistence decisions went beyond the scope of Tinto's (1993) model, which aggregated these demographic measures loosely under its

pre-entry attributes variable. In contrast, my modified causal model and quantitative analysis

incorporated those specific demographic variables.
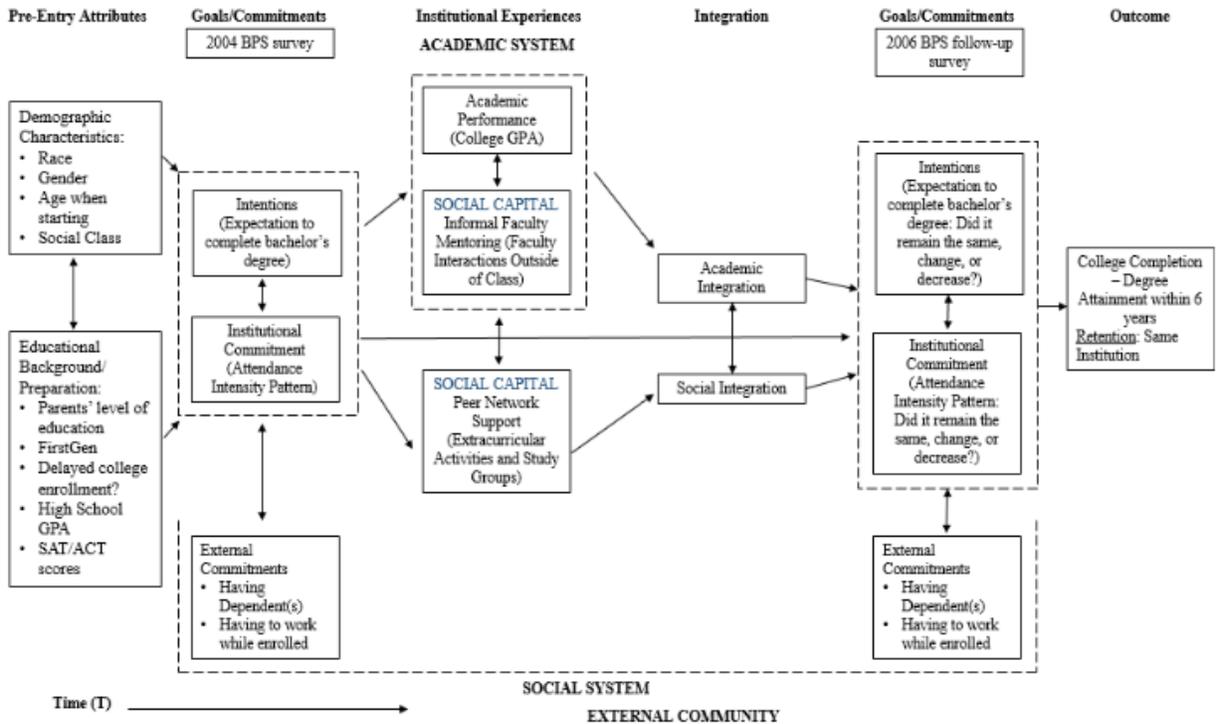
Figure 4.4 Causal Model – Modified Form of Tinto's Interactionalist Model of Voluntary College Student Departure

3 DATA AND METHODS

This study employed a two-phase exploratory, sequential mixed methods design, similar to the design used by Strayhorn's (2015) mixed-methods study that investigated factors influencing Black males' preparation for college and success in STEM. This design employed a combination of quantitative and qualitative data gathering techniques. For the purposes of my study, the mixed method design was intended to help fill in the gaps left by the use of existing nationally representative survey data.

3.1 Parameters and Specification of Terms

The population of interest for the purposes of this study consisted of U.S.-born males who self-identified as African American or Black. This was not to devalue Black men who were not born in the U.S. or whose origins were different; rather, it was to acknowledge that their family backgrounds, perspectives, and experiences were unique and distinct from those of my target population. There were elements of the ethnicity of Black non-U.S. citizens that may render their views to be very different than those of Black U.S. citizens in terms of education, race, gender, and other social institutions and dynamics.

This project referred to college completion as attainment of a bachelor's degree within six years, which is a commonly-accepted national timeline benchmark for measuring college completion from four-year degree programs (U.S. Department of Education, National Center for Education Statistics 2014). Some studies operationalize *persistence* as continued enrollment to degree completion at *any* higher education institution, "… allowing for movement between and within institutions (i.e., transfer, major change)" (Strayhorn 2016:3; U.S. Department of Education, National Center for Education Statistics 2013). Persistence is distinct from *retention*, as retention is "… typically defined as continued enrollment at the *same* institution where one

began studies although we know that about one in nine students transfer institutions" (National Student Clearinghouse 2014). In addition, retention denotes the position or action on the part of the institution – the institution retains (or fails to retain) students. Persistence denotes the position and behavior on the part of the student. This work aligned with a core conceptualization of persistence as referenced in the above operational definition, in that my degree attainment outcome variable captured students who continued to completion whether or not they ever transferred. In general, however, this project defined and used persistence as a behavioral attribute to refer to perseverance towards degree attainment. The project generally referred to *success* as successful college completion as bachelor's degree attainment within the six-year benchmark period.

Retention at the same institution for respective respondents was the focus for this work, as the major elements of my theoretical framework centered on student retention. The attention of the project centered on four-year/bachelor's degree granting institutions, as they educate approximately 90% of the nation's undergraduate students (Carey 2004). Part of my motivation for committing to this work stemmed from my being a part of the University System of Georgia (USG), both as a graduate student and as a staff administrator. Most of the USG units are four-year degree granting institutions. The USG schools mirror the variety and structure of public bachelor's degree granting institutions at a national level.

The USG has also placed a high priority on increasing retention and graduation rates for Black males in recent years. In 2011, the State of Georgia launched the Complete College Georgia initiative with the goal that by 2020, 60 percent of young adults (25-34 years of age) in the state would hold a college degree or certificate (Complete College Georgia 2012). The Georgia's Higher Education Completion Plan emerged from this initiative as a joint effort

between the USG and the Technical College System of Georgia (TCSG). A specific planning goal involved improvement in overall college completion rates, with special attention devoted to populations with historically low rates (Complete College Georgia 2012). African American men graduate college at low rates both nationally and within the state of Georgia, relative to their White, Asian, and female counterparts (Complete College Georgia 2012; Strayhorn 2008). Therefore, understanding the factors that most impact the academic achievement and persistence of African American men at four-year degree granting institutions was an important and timely research focus (Strayhorn 2008) that will hopefully make an important contribution not only to the sociology discipline in broader terms, but to higher education institutions in my state and local communities, as well.

3.2 The University System of Georgia (USG) and Graduation Rates for African American Men

USG college completion rates provided perspective at the state level to help contextualize the nationally representative dataset that was used for the quantitative phase of this project. Current data on the six-year graduation rate of African American males pursuing bachelor's degrees at USG institutions, reflected for the fall 2009 cohort which graduated by spring 2015, showed a rate of 34.8% (University System of Georgia 2018). As a point of reference, national data on the six-year graduation rate for Black males pursuing bachelor's degrees at public institutions also reflected for the cohort beginning in fall 2009, happened to show the same rate of 34.8% (U.S. Department of Education, National Center for Education Statistics 2018). The national six-year graduation rate for the 2009 cohort was also slightly lower than that of the 2008 cohort, which was 35.4% (U.S. Department of Education, National Center for Education Statistics 2018). The most recently available data, which is for the cohort beginning enrollment

in fall 2009, showed that USG six-year graduation rates for African American men was very closely aligned with national six-year graduation rates at public institutions.

The USG's current six-year graduation rate of 34.8% for African American men actually represented a 5.85% increase in its graduation rate for Black men since the 2002 inception of its African American Male Initiative (AAMI). As noted in the preceding section, the USG recognized the need for urgency and action in the interest of addressing racial and gender disparities with regard to college completion, which was part of the impetus for the implementation of AAMI. "AAMI is a nationally recognized statewide network of programs that has a documented track record of increasing the enrollment, retention, and graduation of African-American males within Georgia's public colleges and universities" (University System of Georgia 2018). AAMI was the first statewide effort specifically created with the goal of increasing postsecondary educational attainment for Black males, and operated programs on 26 of the 29 USG campuses (University System of Georgia 2018). While much more remains to be done to increase retention and graduation rates for Black men in the USG and nationally, the USG credits AAMI for the increase in its annual number of bachelor's degrees conferred upon Black men, which rose by 108.8% between fiscal year 2003 and fiscal year 2015 (University System of Georgia 2018). Enjoying the sustained commitment of AAMI program officials, civic partners, and funding sponsors, AAMI and the USG continue the labor of enhancing educational attainment outcomes for African American men (University System of Georgia 2018).

3.3 Quantitative Data Analysis

3.3.1 Overview of Data Set

Quantitative data for this project were taken from the 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09). The BPS was a nationally representative study

conducted for the National Center for Education Statistics, which is an entity of the U.S. Department of Education's Institute for Education Sciences, to collect information about students' education and employment outcomes during the six-year period since initial enrollment in postsecondary education. Data were collected in three phases. The cohort included first-time beginners at postsecondary institutions surveyed at three separate time points: at the end of their first year (in 2004), and then at the three-year mark (in 2006) and six-year mark (in 2009) after they began. BPS tracked students' postsecondary education experiences and helped to answer questions that were of interest to policymakers, such as the reasons that students left school, and degree completion percentages for various programs (Wine, Janson, and Wheeless 2011).

The BPS data were available in the form of both publicly accessible files and restricted-use files. My study utilized the publicly available response data. The restricted-use files would have provided the benefit of transcript data; however, for the purposes of my study, the self-reported academic performance measures allowed for exploration of the study's main interests. The target population for BPS:04/09 consisted of students who began their postsecondary education for the first time during the 2003-04 academic year at any postsecondary institution in the U.S., including Puerto Rico (Wine et al. 2011). The data collection for BPS:04/09 took place in several stages. All students in the BPS:04 sample were eligible for the 2003-04 National Postsecondary Student Aid Study (NPSAS:04), and whose first-time beginner status was confirmed during the first follow-up interview, BPS:04/06 (Wine et al. 2011). The process of locating sample members required supplemental activities, including updating address and telephone number information with verification from several sources (Wine et al. 2011). Potential sample members and their parents also received mailings so updated contact information could be collected (Wine et al. 2011).

Following the initial round of recruitment, sample members received information inviting them to participate in the study, including informed consent information (Wine et al. 2011). Data collection commenced and took place in three phases. Sample members who participated in interviews during first and last phases, termed the early phase and the nonresponse conversion phases, respectively, were offered a $30 participation incentive (Wine et al. 2011). Sample members who participated in interviews during the middle phase, referred to as the production phase, were offered a $20 incentive (Wine et al. 2011). For the first follow-up, BPS:04/06, nonrespondents were offered an additional $20 during each phase of data collection (Wine et al. 2011).

Of the total 18,610 sample members in the BPS:04/09 student interview data collection, 16,920, or 91%, were successfully located (Wine et al. 2011). Of those successfully located, 15,160 either fully or partially completed an interview (Wine et al. 2011). This yielded an 82% response rate among the eligible sample (Wine et al. 2011). The majority of completed interviews, 9,630, were obtained via the web, as respondents accessed and completed their interviews online (Wine et al. 2011).

3.3.2   *Final Sample*

The sample for my study encompassed respondents who were pursuing bachelor's degrees at four-year degree granting institutions starting in the 2003-04 academic year and who completed the initial survey in 2004, in addition to both survey follow-ups, which were conducted in 2006 and in 2009. The analysis utilized demographic and family income data reported by respondents, and focused on male students who self-identified as U.S. citizens and as Black or African American.

3.4 Variables and Quantitative Analytic Strategy

The present study explored the influence of two key forms of social capital – informal faculty mentoring relationships and supportive peer network relationships – on college completion for African American male undergraduate students. It examined potential differences in the influence of social capital on degree attainment across social class for Black men. It also compared the potential differences of social capital's influence across social class. The dependent variable for the entire sample was college completion, as indicated by reported bachelor's degree attainment. A comprehensive list of variables is found in Table 3.1.

Table 3.1 shows each independent and control variable to be used in my analysis, a brief description of each, and how each was operationalized in the BPS data set. The study used a variety of quantitative analytical techniques to test for significant outcomes. I used binary logistic regression to measure the influence of the social capital independent variables on the dichotomous dummy variable representing college completion. Also using logistic regression, I positioned social capital as the dependent variable and regressed social capital on pre-entry social factors.

Table 3.1 Variable Table

BPS Variable Name	Description	Labels
Filters		
Gender & Race [Student's characteristics, RACESEX] FILTER	Gender and race group in which respondent self-identifies	5=African American Males
(Citizenship status) [Student's characteristics, Citizenship status 2003-04, CITIZEN2]	Indicates whether respondent was a U.S. citizen as of 2003-04.	1=U.S. citizen
Dependent Variables		
Degree attainment [Bachelor's degree attainment at first institution through 2009, ATBAFI6Y]	Did the subject complete his/her bachelor's degree within 6 years?	0=No degree attainment; 1=Yes, degree attained

Table 3.1 Variable Table (cont.)

BPS Variable Name	Description	Labels
*Social Capital Variables		
(Informal faculty mentoring) [Education: Experiences; Frequency 2004 & 2006: Faculty informal meeting, FREQ04A & FREQ06A]	Did the respondent have informal or social interactions with faculty outside of class?	0=Never 1=Sometimes, Often
(Informal faculty mentoring) [Education: Experiences; Frequency 2004 & 2006: Faculty talk outside of class, FREQ04B & FREQ06B]	Did the respondent have interactions with faculty about academic matters outside of class?	0=Never 1=Sometimes, Often
(Peer network support: extracurricular activities) [Education: Experiences; Frequency 2004 & 2006: Fine arts activities, FREQ04D & FREQ06D]	Did the respondent attend music, choir, drama or other fine arts activities?	0=Never 1=Sometimes, Often
(Peer network support: extracurricular activities) [Education: Experiences; Frequency 2004 & 2006: School clubs, FREQ04E & FREQ06E]	Did the respondent participate in school clubs?	0=Never 1=Sometimes, Often
(Peer network support: extracurricular activities) [Education: Experiences; Frequency 2004 & 2006: School sports, FREQ04F & FREQ06E]	Did the respondent participate in varsity, intramural, or club sports?	0=Never 1=Sometimes, Often
(Peer network support: participating in study groups) [Education: Experiences; Frequency 2004 & 2006: Study groups, FREQ04G & FREQ06G]	Did the respondent attend study groups outside of the classroom?	0=Never 1=Sometimes, Often
Independent Variables/Covariates		
Pre-Entry Attributes – Educational Background/Preparation		
Age first year enrolled [Student's characteristics, AGE]	Indicates respondent's age as of 12/31/2003, first year enrolled.	Continuous measure
(Commuter status) Housing 2003-04 [Student's characteristics or Residence, LOCALRES]	Indicates whether respondent lives in a residence hall on campus or lives off campus and commutes.	0=On campus resident/Lives on campus 1=Commuter/Lives off campus
(Parents' educational attainment) [Parent and family: Characteristics, PAREDUC]	Indicates the highest level of education of either parent of the respondent during the 2003-2004 academic year.	0=Parent(s) attained less than a bachelor's degree/ do not know parents' highest level of education 1=Parent(s) attained bachelor's degree or higher (also professional degree)
(Social class) [Finances: Income; Dependent student's family income 2003-04 FINAL, DEPINC]	Social class as measured by the proxy of dependent student's parents' total income for 2002	0=$100-$25K 1=$25,001-$50K 2=$50,001-$75K 3=$75,001-$100K 4=$100,001-$508,831

Table 3.1 Variable Table (cont.)

BPS Variable Name	Description	Labels
College entrance exam scores (SAT/ACT composite score) [Academic preparation or Academics; TESATDER]	Respondent's SAT I combined verbal and math score, derived from either the SAT I combined verbal and math score or the ACT composite score converted to an estimated SAT I combined verbal and math score using a concordance table.	Interval measure
Educational Aspirations		
Degree goal first year [Student's goals, DGOALY1]	Indicates respondent's bachelor's degree attainment goal in 2003-04: expectation to complete bachelor's degree, versus intent to complete a limited amount of course work for a new/different goal, e.g., a certificate/ associate's degree.	0=No expectation to complete bachelor's degree 1=Expects to complete bachelor's degree
Institutional Characteristics		
(Institutional historical racial make-up) [Institutional characteristics, HBCU]	Indicates whether the first institution the respondent attended during the 2003-2004 academic year is designated as a Historically Black College or University.	0=HBCU 1=PWI
Sample Weights		
Sample weight variable [WTB000]	Analysis weight for respondents to BPS:04/09 (6 years after they first enrolled in postsecondary education), BPS:04/06 (3 years after they first enrolled), and National Postsecondary Student Aid Study (NPSAS:04) (when they first enrolled). Includes 16,123 study members.	

Note: *Social capital acts as both a dependent and independent variable, depending upon the research question.

3.5 Qualitative Methods and Analysis

The qualitative portion of my study was phenomenological in that it sought to understand and describe the lived experiences of African American men who were successful in college, exploring their persistence behavior as influenced by key forms of social capital. This study took interest in the predominant contexts and themes of the informal faculty mentoring relationships and peer network supportive relationships experienced by successful Black male undergraduate students, as well as characteristics of the faculty mentors and peers. The study inquired into constraints which may render it more challenging for Black men to form and sustain supportive relationships, and how students overcome these constraints. It probed the meaning and

importance that Black men assigned to social capital, in the form of these key supportive

relationships, as being a factor in their persistence and success in college.

3.5.1   *Counter-Storytelling Approach*

In parallel to the anti-deficit approach, this project utilized counter-storytelling, an

expansion of critical race theory work which was introduced by Solórzano and Yosso (2002),

which guided the presentation of the data collected from interviews, and which Harper (2009)

also highlighted as a useful qualitative methodological approach to education research. This

qualitative method entailed telling the stories of individuals who were often neglected in the

literature, and provided a means by which to study, critique, and counter the dominant, or master,

narratives produced about people of color (Harper 2009). Master narratives, or mainstream

stories, are prevailing accounts that are often accepted as universal truths about certain social

groups, and that usually cast those groups in a negative light, e.g., generalizations about Blacks

being intellectually inferior (Harper 2009). Research and theoretical models devised for the

purpose of explaining inequities in educational attainment outcomes often reinforce mainstream

views by upholding and amplifying deficiency in reference to students of color (Harper 2009).

Counternarrative stories challenge the deficit-informed research that silences and sometimes

misrepresents the epistemologies of students of color (Harper 2009). Solórzano and Yosso

(2002) outlined three types of counternarratives: personal stories, the stories of other people, and

composite stories. This project employed the stories of others, successful African American men,

to supply qualitative data. In addition to providing important contextual information about the

subjects' lived experiences, the qualitative data were centered to counter deficit-laden

majoritarian narratives about Black men and educational attainment.

3.5.2 Sample and Sites

I used purposive sampling to recruit and arrange virtual interviews with participants. Initially, I planned to interview 25 Black men who had all completed college, as I intended for the study to focus on the factors and dynamics of persistence behavior and success, rather than failure. I entered the project placing emphasis on gaining a better understanding of the dynamics of Black men's success. However, interviewing at least a few who entered school, but did not finish the programs they started, would provide some degree of insight into barriers to persistence and success. With that in mind, I sought to interview 20 who were successfully awarded bachelor's degrees from the programs they started, and 5 who dropped out of the bachelor's degree programs they had started.

I sought representation of individuals who pursued traditional four-year bachelor's degree programs at public and private institutions in the state of Georgia, including PWIs and HBCUs. My solicitation called for participants who were willing to answer questions about relationships with faculty mentors and with peers while in college. By way of my professional work in student services as well as my enrollment as a graduate student, I was acquainted with several young men who completed bachelor's degrees at colleges and universities in Georgia. I was also familiar with many who finished college through my volunteer work as a mentor doing college counseling in my local community and at my church. I invited these young men to participate in the study. To solicit participation from men who started but did not complete their degrees, I contacted administrators at several schools who worked in student support services and asked for their help with extending my advertisement to their former students who might be inclined to engage with me. The assistance of fellow administrators at in-state colleges and universities was a valuable resource. I had access to some of these officers by way of my established professional

network. After securing Institutional Research Board (IRB) approval, I reached out to my

acquaintances and contacted the appropriate officials at the respective institutions to obtain

proper permission to proceed with seeking out participants.

The eligibility criteria for the participants included men who were born in the U.S., self-

identified as African American or Black, and who pursued a traditional (on-campus, not online)

bachelor's degree program at an institution in the state of Georgia. Potential participants were

advised that they would need to be able to reflect on and discuss their supportive relationships

with faculty and peers, as well as any participation in extracurricular activities and student

organizations, in which they might have engaged during their undergraduate enrollment.

I emailed recruitment advertisements which were addressed directly to potential

participants from my community network, and to college or university administrators. The

advertisements solicited men who attempted traditional bachelor's degrees at colleges or

universities in Georgia. I explained the reason for my request. The recruitment communication

included a link to a Qualtrics page that provided the informed consent document for this study,

my contact information, and fields for respondents who wished to participate to indicate their

consent. Participants were offered the option to receive either an electronic copy or a hard copy

of their signed informed consent document by mail if they wished to receive one after their

interview. Each participant was advised they would receive a gift card in the amount of $25.00

for their time, even if they decided to disengage after starting the interview. The informed

consent and sign-up document included a question asking for the participant's mailing address

for me to mail the gift card to them, or alternately to let me know whether they preferred

arranging for me to leave the gift card for them at a secure location of their choosing.

In sharing my recruitment advertisements, I asked administrators if they might select students who met my study's criteria and who may be likely to participate and reach out to those students on my behalf with the email message I had prepared along with the recruitment flyer document that I attached. I requested that administrators send the advertisement out broadly by way of email distribution lists directly to students, and/or through point-persons who would share the messaging with students, e.g., directors, school chairs, or graduate academic advising staff, to include any other means by which they circulate announcements. I included information in the flyer to explain that I was seeking to interview candidates who were willing to speak with me about the connection between their faculty and peer relationships, their undergraduate experience, and either their persistence to degree completion, or their decision to leave school without finishing. I informed participants that I would plan to debrief them at the conclusion of each interview.

3.5.3   Data Collection Procedures

I collected data using semi-structured individual interviews that were conducted virtually and recorded using the Zoom web-based video conferencing tool. An initial brief Qualtrics survey, which each participant could complete prior to their Zoom virtual interview, presented questions to glean more general, demographic and educational background information about each participant. The survey was also designed to gain at least a broad sense of the SES of each respondent's family, as well as his level of academic preparation for college during high school. The virtual interview consisted of open-ended questions asking participants to identify and talk about the individuals with whom they engaged in these relationships during their undergraduate careers. I asked them to fully describe their experiences with these faculty members and peers, including characteristics of both the individuals and of their relationships with these individuals

and peers/peer groups. Of key interest was how those relationships influenced the students, and what the students' bonds with these individuals may have meant to their college persistence decisions. Some interview questions probed the challenges that students may have faced in attempting to seek out and connect with these faculty members and peers, whether the students were prompted or whether they sought the relationships out by way of their own agency and initiative. The interview questions asked the respondents to describe their individual experiences and their meaning-making according to their recollections and interpretations. I anticipated the possibility of the questions leading to the respondents broaching new and unanticipated subject areas. Such areas were be acknowledged and explored, particularly if they related to ideas that are not already accounted for in the questionnaire items.

As noted within the literature review in the preceding chapter, Nora and Crisp (2007) developed a four-factor conceptualization of a successful mentoring experience for undergraduate students, which arises from several theoretical perspectives and frameworks presented in previous literature. They used their four-factor framework in a survey questionnaire to study the mentoring experiences of 200 students at a two-year institution. Broader themes from the same four broader domains were also useful in my qualitative interviews for the portion on informal faculty mentoring relationships.

3.5.4 Data Analysis

Following the groundwork of previous studies that explored the college persistence decisions of African American male students, my study applied an inductive reasoning approach to the qualitative data. I analyzed interview transcripts along with field notes and observations. I recorded the virtual interviews using the enhanced Zoom tool capability for recording video conferences and transcribed them into a protocol. I highlighted, coded, and assigned recurring or

similar statements and reflections to central themes; for example, whenever respondents talked about individual peer relationships which developed and strengthened because of participation in larger student groups, such as a campus organization, I coded that information into a theme of peer supportive relationships. I employed the NVivo qualitative data management software to organize and manage the data.

The rich, detailed information that the questionnaire yielded is a testament to the strengths of this qualitative interview design, which speaks to validity. I asked the respondents to provide detailed insights into the nuances and dynamics of processes about which there is relatively little existing knowledge. This built on aforementioned research that confirmed the need for more information about the formation and characteristics of supportive relationships for Black men in college, and how those relationships may be critical to Black men's college persistence, completion, and success. This research also added to the small body of work centered on overall factors that contribute most to Black men's successful degree completion.

I kept the participant records and recorded virtual interview data private to the extent required by law. I maintain a secure participant key in alignment of privacy of participants' names for study records. At the beginning of each interview, I encouraged participants to avoid using names or any identifying information about anyone else. The interview data were stored on a firewall-protected computer. Participants' names and other pieces of data that could point to individual respondents does not and will not appear in any presentation of this study or in any publication of results. No participant-identifying information was included in any presentation or publication of results of this study. Participants' survey responses and Zoom interview recordings were kept completely confidential and will be deleted at the conclusion of the project.

3.5.5 Trustworthiness and Quality Assurance

In following the precedent found in pertinent literature, which was also included and discussed in the preceding chapter, I adhered to the following criteria set forth by Lincoln and Guba (1986) to evaluate rigor and accuracy in qualitative research: credibility and transferability (Harper 2006; Lincoln and Guba 1986; Strayhorn 2015). According to Denzin and Lincoln (2000), these four metrics "…replace the usual positivist criteria of internal and external validity, reliability, and objectivity…" used in quantitative studies. I addressed credibility by way of member checking, follow-up correspondence, and confidential and secure storage of data so that it was easily retrievable and available to be referenced and retested as needed throughout the entire research process (Harper 2006; Strayhorn 2015). I ensured transferability by including and recording rich descriptions of the participants' experiences in the context of the institutions they attended, so the findings and conclusions drawn from the qualitative data as part of this project were properly contextualized and could transfer suitably to other bachelor's degree granting institutions (Harper 2006; Strayhorn 2015).

4 QUALITATIVE RESULTS

The U.S. has the poorest record for inequality with respect to educational outcomes for African American men relative to all other demographic groups (Shapiro, Dundar, Huie, Wakhungu, and Yuan 2017; Palmer et al., 2010). The growing gap between enrollment and graduation rates among Black men and Black women subsequently contributes to a profound imbalance in college-educated Black men compared to Black women, to the detriment of the social dynamics of the Black community (Roach 2001). Institutional agents and peers can provide social capital that better prepares these students for success (Stanton-Salazar 2011). Socializing agents, such as faculty and their peers, can transmit, or facilitate the transmission of, highly valued resources, including institutional support, opportunities, privileges, and services (Stanton-Salazar 2011; Strayhorn 2008a). Students who report positive, meaningful, and supportive interactions with faculty, staff persons, and peers are more likely to successfully complete college (Strayhorn 2008a, 2008b).

Building on the assertion that social capital, in the form of informal faculty mentoring and peer network support, can have a compensatory effect on racially, ethnically, and culturally diverse and marginalized students, it was expected these key forms of social capital may influence college completion for African American male students. The purpose of this phenomenological study was to understand the experiences of high-achieving African American male college students at large, public research universities, including their relationships with and support provided by others. Specifically, this research explored the forms of social capital that positively influenced persistence for African American men in college.

The qualitative portion of this investigation was guided by the essential question: What are the predominant contexts of informal faculty mentoring relationships and peer network

supportive relationships for African American male undergraduates? The following sub-questions were used to organize the results:

Sub-question 1: What are the predominant contexts of informal faculty mentoring relationships for African American male undergraduates?

Sub-question 2: What are the predominant contexts of peer network supportive relationships for African American male undergraduates?

This chapter provides results of the qualitative portion of this study. First, I describe the sample. Next, I provide an explanation of the data analysis procedural details, followed by a thematic presentation of the results and a brief closing summary of the chapter.

4.1 Sample Description

The study sample consisted of 20 African American men who successfully completed bachelor's degree programs in a generally "linear" fashion, and 5 African American men who decided to leave the bachelor's degree programs they'd started without finishing, for a total of 25 interview participants. (It did turn out that one of the latter five later returned to school and completed his bachelor's degree at a different institution from the one where he started.) Participants included former students who came from a variety of academic backgrounds and majors. I selected the participants in part with the assistance of faculty and administrators in key leadership positions at three universities, who recommended students that fit the following inclusion criteria: (a) U.S.-born males, (b) self-identify as African American or Black, (c) at least 18 years of age, and (d) pursued a traditional (on-campus, not online) bachelor's degree program at an institution in the state of Georgia. Participants also responded affirmatively to my marketing for the study based on having received the flyer that I shared with administrators in my local metro-Atlanta county K-12 school district.

A description of the race and gender of each participant, identified by pseudonym, is provided in Table 4.1. Fifteen participants had Black mentors, eight had mentors who were White, one identified their mentor as being of Middle Eastern descent, and one did not specify a primary mentor. In terms of gender, 15 participants had male mentors, eight had female mentors, one had a male mentor and a female mentor, and one did not specify a primary mentor.

Table 4.1 Race and Gender of Participants' Mentors

Pseudonym	Primary Mentor's Race	Primary Mentor's Gender
Anderson	Middle Eastern	Male
Bryce	Black/African American	Female
Perry	White	Male
Marcus	Black/African American	Male
Jamal	White	Male
Russell	Black/African American	Female
Marshall	White	Male
Damien	White	Female
Neal	White	Male
Nasir	Black/African American	Male
Ahmad	White	Male
Carter	White	Male
Hassan	Black/African American	Male
Cade	Black/African American	Female
Wynton	Black/African American	Female
Derrick	Black/African American	Female
Jace	White	Male
Cameron	Black/African American	Male
Emmett	Black/African American	Female
Kareem	Black/African American	Male
Jalen*	Black/African American	Male
Vaughn*	Did not specify a primary influential mentor	Did not specify a primary influential mentor
Dwight*	Black/African American	Male
Darrell*	Black/African American	One male, one female
Mason*	Black/African American	Female

Note: * Participant left bachelor's degree program at initial institution without finishing

Data were also collected from participants in order to develop descriptive statistics of the sample. As depicted in Table 4.2, most participants (*n* = 16) started their undergraduate programs when they were 18 years old. Twenty-one participants completed their degrees, with most (*n* = 10) finishing within 4 years. Regarding household, 15 were raised in single-parent households, and 10 were raised in two-parent households.

Table 4.2 Frequencies and Percentages of Participant College Experience Assessment

Descriptor	*n*	%
Age when you began your undergraduate enrollment		
17 years old	4	16.0
18 years old	16	64.0
19 years old	5	20.0
Did you complete a bachelor's degree?		
No	4	16.0
Yes	21	84.0
How many years did it take for you to complete the degree?		
4 years or less	10	40.0
5 years	7	28.0
6 years	1	4.0
More than 6 years	3	12.0
Missing	4	16.0
Were you primarily raised in a single-parent household, or a two-parent household?		
Single-parent household	15	60.0
Two-parent household	10	40.0

Data were also collected to understand participants' parents (see Table 4.3). The mothers of most parents had completed either master's degrees, bachelor's degrees, or high school. Only two mothers had not completed high school. Fathers were generally less educated, with five not completing high school, and only six earning a bachelor's degree or higher. Questionnaire responses also indicated parents were relatively involved in participants' transitions to college, and most participants felt their parents expected and encouraged them to attend college.

Table 4.3 Education and Expectations among Parents of Participants

Descriptor	*n*	%
What is the highest level of education that your mother (or female guardian) completed?		
Associate's degree	3	16.0
Bachelor's degree	7	64.0
High school diploma or equivalent	5	20.0
Less than high school diploma or equivalent	2	
Master's degree	5	16.0
Some college but no degree	3	12.0
What is the highest level of education that your father (or male guardian) completed?		
Associate's degree	2	8.0
Bachelor's degree	3	12.0
Doctorate or professional degree	3	12.0
High school diploma or equivalent	4	16.0
Less than high school diploma or equivalent	5	20.0
Not known/Unsure, or I was not raised by my father nor by a male guardian	3	12.0
Some college but no degree	4	16.0
Vocational or technical certificate	1	4.0
To what extent did your parent(s)/guardian(s) communicate an expectation for you to attain a college degree?		
Did not discuss, did not encourage me to go to college	1	4.0
Discussed/encouraged college very little	2	8.0
Discussed/encouraged college moderately	4	16.0
Discussed/encouraged college fairly often, and expressed some expectation for me to go to college	9	36.0
Extensively discussed and/or emphatically expressed expectation for me to go to college; expectation for me to go to	9	36.0
To what extent was/were your parent(s)/guardian(s) involved in assisting you with the process of transitioning to college?		
Was not involved, did not guide me	2	8.0
Was involved minimally	5	20.0
Was involved moderately	4	16.0
Was involved pretty actively	3	12.0
Was very actively involved	11	44.0

Finally, two questions were asked to gauge participants' attitudes toward asking their professors and peers for help when they needed it (see Table 4.4). When asked about their attitudes toward asking professors for help, most (*n* = 13) said they were somewhat comfortable, while seven participants said they never hesitated to ask for help. Dive respondents described

themselves as very reluctant to seek help from professors. Regarding their peers, most ($n = 11$)

said they were somewhat comfortable asking for help. Nine respondents said they never hesitated

to ask their peers for help, while five others felt very reluctant to seek the help of their peers.

Table 4.4 Help Seeking Attitudes

Question	n	%
What was your attitude towards asking your professors for help when you needed it?		
I never hesitated to ask my professors for help.	7	28.0
I was somewhat comfortable with asking professors for help.	13	52.0
I was very reluctant to ask professors for help.	5	20.0
What was your attitude towards asking your student peers for help when you needed it?		
I never hesitated to ask my peers for help.	9	36.0
I was somewhat comfortable with asking my peers for help.	11	44.0
I was very reluctant to ask my peers for help.	5	20.0

4.2 Data Analysis

I conducted all participant interviews individually, via Zoom, using the open-ended

questions outlined in the interview protocol. After completing the interviews with the 25

participants, I downloaded audio files from the recorded interviews for professional

transcription. The final qualitative dataset consisted of 206 single-spaced pages of transcription.

Following transcription, I uploaded the qualitative interview data into NVivo to assist with

organization during the analysis. I then conducted thematic analysis, with the guidance of the

procedures described by Braun and Clarke (2006). The first step of analysis involved a close

review of all transcribed data. I read each interview in its entirety, which allowed me to begin

identifying patterns in the data. The second step involved open coding, during I identified and

assigned code names to repeated words, phrases, ideas, and sentiments. The codebook expanded

as I performed the first pass of coding. After coding the 25 transcripts, I performed a second pass

of open coding to ensure all codes were identified and noted in the data. Examples of this open

coding process are provided in Table 4.5.

Table 4.5 Open Coding Examples

Excerpt	Assigned Code
Made sure I was straight with my grades. He was honest with me about certain things, like if I was slacking off he definitely let me know.	Held me accountable
she would always call me in to go over an essay or say, "Hey, I know you can do better."	Pushed or encouraged
And they both gave me the same set of advice. Do the work first and then the activism will come.	Received advice
her goal was really to see people matriculate and be able to graduate from Savannah State and be a proud alumnus of the school.	Wanted me to succeed
That was a small school. It's about 30, 45 minutes away from Kennesaw State University, up in that Woodside area. So when I went up there it was right up my alley. I wanted to go to a smaller institution. So when I went there-because I felt like you would get more of a close relationship with your advisors and teachers in a smaller setting.	Small intimate school culture
They gave me what I needed at the right time because I was in a place where I was struggling. I wasn't sure how to get out, and they helped me through it. They definitely helped me through it.	Friends helped me through struggles
Yeah, [we were] all very motivated, and they all had visions of where they wanted to be. And I think being around that environment, being around that atmosphere, I think it transfers to people. You want to do well, too.	Motivate and support one another

The final codebook consisted of 60 codes, which were organized under three parent

codes: faculty members, students, and school culture. The most common codes included *study*

groups ($f = 54$), *pushed or encouraged* ($f = 47$), *motivate and support one another* ($f = 45$), and

racially similar ($f = 40$). The frequency of each code is illustrated in Table 4.6.

Table 4.6 Code Frequency

Code	*f*	Code	*f*
Faculty members		**Students**	
pushed or encouraged	47	study groups	54
racially similar	40	motivate and support one another	45
connected outside of class or school	34	student groups or societies	31
received advice	29	racially similar peer groups	26
feel supported	23	how I met my friends	18
shared personal stories	22	share information and recommendations	17
open door policy	20	socialize outside of school	17
have conversations	19	small circle of friends	17
develop relationships	18	fraternity	15
provided extra help	18	diversity	13
believed in me	17	roommates	11
laid back approach	15	emotional support	11
direct approach	15	help each other	11
connect with resources	15	conversations outside of schoolwork	9
wanted me to succeed	14	friendships with peers	8
negative interaction with professor	14	friends helped me through struggles	6
mentors	13	held one another accountable	4
long-term mentor or advisor	13		
Caucasian	12		
motivated or inspired me	12		
mentor was also my professor	11	**School culture**	
provided feedback	10	outsider	10
asked questions	9	family feel	9
gave of time	8	HBCU	8
Showed interest in me	8	PWI	6
held me accountable	7	small intimate school culture	5
relationships fostered graduation	6		
taught me	6		
mentor wasn't my professor	5		
professor diversity	4		
became very close	4		

The next step of thematic analysis was axial coding, which involved organizing codes into themes and subthemes that aligned with the research questions. I grouped codes based on similarity and rearranged them until themes and subthemes became evident. A total of three themes and 11 subthemes emerged. The themes, subthemes, and aligned codes are depicted in Table 4.7, and a visual representation of them can be seen in Figure 4.1.

Table 4.7 Alignment Between Themes, Subthemes, and Codes

Theme	Subthemes	Codes
Informal Faculty Mentoring Relationships	Relationships developed from care and support	- Became very close - Cared for me - Develop relationships - Direct approach - Laid back approach - Feel known and recognized - Feel supported - Have conversations - Mentor was also my professor - Mentor wasn't my professor - Mentors - Open door policy - Shared personal stories
	Pushed, motivated, and held me accountable	- Believed in me - Held me accountable - Motivated or inspired me - Pushed or encouraged - Wanted me to succeed
	Went above and beyond to help me	- Connect with resources - Connected outside of class - Gave of time - Long-term mentor or advisor - Provided extra help - Provided feedback - Relationships fostered graduation - Showed interest in me - Taught me
	Mentor's race	- Caucasian - Professor diversity - Racially similar
	I took initiative	- Asked questions - I approached them for mentorship

Table 4.7 Alignment Between Themes, Subthemes, and Codes (cont.)

Theme	Subthemes	Codes
Peer Network Supportive Relationships	Participation in student and study groups	- Fraternity - No student groups or organizations - Student groups or societies - Study groups
	Supportive and motivating peer groups	- Emotional support - Friends helped me through struggle - Friendships with peers - Held one another accountable - Motivate and support one another - Help each other - Share information and recommendations
	Characteristics of peer groups	- Diversity - How I met my friends - Racially similar peer groups - Small circle of friends
	Connect outside of school	- Conversations outside of schoolwork - Friends through work - Roommates - Socialize outside of school
School Environment	Close and warm	- Family feel - HBCU - Small intimate school culture - Welcoming
	Unfriendly and cold	- Outsider - PWI

The main themes included *informal faculty mentoring relationships, peer network supportive relationships, and school environment.* Subthemes included *relationships developed from care and support; mentor pushed, motivated, and held me accountable; mentor went above and beyond to help me; mentor's race; I took initiative; participation in study groups; supportive and motivating peer groups; characteristics of peer groups; connecting outside of school; close and warm school environment; and unfriendly and cold school environment.*

The final step of the analysis involved drafting a narrative of the results, presented in the next section. Pseudonyms were created to protect the anonymity of participants.
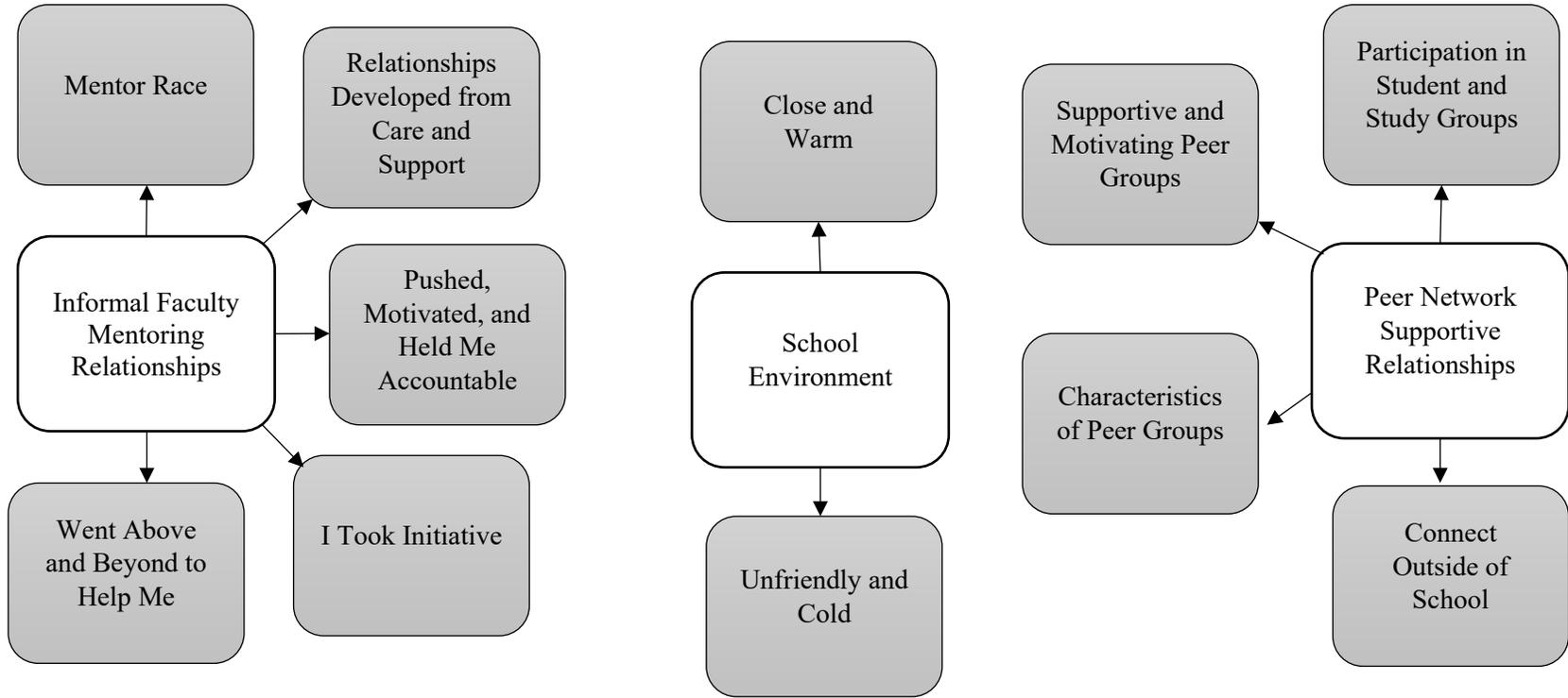
Figure 4.1 Thematic Map

4.3 Thematic Results

Results of the analysis are presented as follows. Findings are organized by theme and subtheme, in alignment with the research questions. Each theme and subtheme is supported with examples and direct quotes from participant interviews.

4.3.1 Informal Faculty Mentoring Relationships

The first main theme focused on the informal faculty mentoring relationships that were described by participants. Data for this theme and its corresponding subthemes directly aligned with the first sub-research question, which focused on the nature and experiences of these relationships. I divided this theme into the following five subthemes, as indicated by the analysis: *Relationships developed from care and support; Pushed, motivated, and held me accountable; Went above and beyond to help me; Mentor race;* and *I took initiative.* The following discussion describes each of the five subthemes.

4.3.1.1 Relationships developed from care and support.

The first subtheme centered on the caring and supportive nature of faculty mentoring relationships described by participants. A strong sense of warmth, closeness, and support emerged from the interviews. Participants described mentors' genuine desires for their mentees' success. For example, Emmett felt staff and faculty at his school were invested in him and his success, both within and outside of school: "People really invested, not just in you academically doing well, but just kind of how you actually are." Derrick described a time when his grandmother had just passed away, and both of his mentors reached out to check on him and help take his mind off the loss. Similarly, Ahmad's mentor had helped him positively redirect his feelings after losing an election he really wanted to win:

I remember I was with my advisor when I lost an election for something and …and I was

mad. I thought I deserved the position. And so, he kind of helped me redirect and focus

on certain things, like you can go after it again next year.

Participants gave many examples of ways they felt recognized, valued, and supported by

their faculty mentors. For example, Anderson explained how the support from his mentors was

pivotal to his graduation:

The overall knowledge and feeling of being able to go to anybody at any time as you go

through this process in and of itself helped me graduate in terms of just knowing there are

people that have my back, knowing that I can have access to the people that have

answers, and things of that sort.

Carter said his mentors gave him a "safe space" when he needed someone to talk to, which

helped him adapt to the college environment, set healthy study habits, and achieve academic

success. A similar sentiment was shared by Marcus: "It was nice to have somebody if I needed

them. I knew that I could go to those guys if I need to talk to someone." Wynton also described

his experience of comfort and support in having a mentor to talk to:

When I had my doubts about completing my program or I was kind of reluctant to kind of

push myself to finish…I kind of leaned on him and…talked to him about all the obstacles

that I was going through, and the things that I was facing. He kind of always was just

there to talk to me.

Cameron described his mentor as "extremely supportive," while Dwight said his mentor was

supportive and that he never felt judged for asking questions in class.

Largely, the supportive mentoring relationships that developed between participants and

their faculty mentors was the result of regular interactions and conversations, which usually took

place outside of class. Speaking of his mentor, Ahmad said he would "just go and chat with him about anything," whether it was something related to a school project or a personal dilemma. Derrick said he and his mentor "always had good conversations and [she] always asked me how I was doing." Marshall would regularly ask his advisor questions about economics and financial freedom, but also felt his mentors were there for him to help with anything he needed to discuss. Wynton discussed his future plans with his mentor, among other topics:

> We talked about the next steps after I graduate and what else I wanted to do, and what I had my heart in. We talked about some of the community work that I was involved in at the time and the balance of life, school and work, and different things like that.

Participants often described the relationships with their mentors as open, friendly, and laid-back. Mentors seemed to welcome students to approach them. Eight participants specifically described open door policies among their mentors, which made them easy to access. As Anderson shared, "Basically my professors had open-door policies, and so if you wanted to be able to interact with them more, you could." Cameron said his mentor's open-door policy applied not just to schoolwork, but also anything personal that he needed help with. Neal explained that his mentor "…was open to and made himself available and he was open to helping the students." Perry knew if he needed to talk to his mentor, all he had to do was call him.

Most participants were able to describe times when their mentors shared personal stories, which not only fostered rapport and closeness, but also helped students feel like they were not alone in their experiences or struggles. These personal stories also helped to inspire students, to see where their professors and mentors had come from. Carter said his professors often gave "testimonies of their experiences in undergrad and how it helped them achieve their later on

career path." Jamal's professor shared personal stories that helped him understand the path to

one's career is not always direct, and that was okay. Speaking of his mentor, Jamal said:

> For example, his whole career path-- he didn't actually start in music. He went to
>
> seminary, and from seminary he was told that he had a voice that needed to be nourished,
>
> and from there on he went to-- back to undergraduate to get a degree in music and then
>
> got his masters and then, ultimately, his doctorate in music.

Also inspiring, Marshall said his mentor had shared a story of working hard to achieve success:

> He didn't grow up in a wealthy family. He grew up in North Carolina. His parents, they
>
> had enough to survive, but they never had enough to thrive. He wasn't in poverty, but he
>
> understood that he may have come from no silver spoons. He understood that-- I think
>
> that would make him a better mentor because he understood that effect you want…
>
> You've got to work hard because he didn't have a silver spoon in his mouth.

4.3.1.2 Mentor pushed, motivated, and held me accountable

The second subtheme focused on the ways mentors pushed, motivated, and held students

accountable. While the undertone of the student-mentor relationships was usually warm and

open, participants described myriad ways they also felt positively pushed by their mentors. Cade

said his mentor "Opened my eyes to see that you've got to be a risk-taker...You've got to get out

of your comfort zone, and don't come ill-prepared. Always over-prepare." Speaking of his

mentor, Cameron said, "He pushed me in a way that I needed to be pushed. Not to make excuses.

Not to look back and feel pity on yourself." Jace said his mentor was his "cheerleader," while

Jamal's mentor encouraged him to "step outside the box." Marshall said his mentor "never

allowed me to make excuses." Similarly, Marcus's mentor instilled "that you don't make

excuses. Anything you need done, you get it done."

Mentors did not just encourage and push students to do things, they would often put them in situations where they had no choice but to leave their comfort zones. Russell described a time when his mentor thrust him into something new and uncomfortable, and how that experience ended up be wonderful and pivotal in his life:

And she came to me and she said, "Well, we got this grant. We're going to go on this conference, but I'm not going to do everything that I actually need to do. You're going to do it." And I was like, "Wait, what?" She's like, "Yes. You're going to drive to Atlanta, Georgia for the initial meeting. You are going to get the information. You are going to bring it back all into state. You are going to present this. You are going to put in the paperwork for travel." I didn't understand why she had me doing all of this, but it became one of the best experiences ever because that got me interested into the field of instructional technology.

Participants were pushed to excel academically by their mentors. Because they genuinely cared and wanted success for students, mentors would not allow students to perform below their abilities. As Wynton shared, "From an academic standpoint, she didn't really want me to get nothing less than an A and she felt that I was way more than capable of doing it." Bryce said his mentor was "always pushing us to be the best we could be, always advocating for us." Damien said of his mentor: "She was super important to really all of us finishing. So, all of us kind of loved her…So, we always never felt like we was just by ourselves when we was going through the program."

Students were also motivated and inspired by their mentors. Harkening back to glimpses into their personal lives provided by some of the participants who had graduated, students discovered they had often risen above struggles and circumstances to achieve their own success.

Learning about their mentors' histories, then, was often motivating and inspiring to students. For example, after learning about the challenges his mentor overcame, Cameron reflected: "I didn't have to go through those similar struggles that he did. And I think the way I looked at it was, if he can do it, I can do it." Marshall was inspired by the hard work of his mentor, and how that had created financial success for himself:

> Working with him taught me that everybody is smart. Being smart just isn't enough because that's how I got by the first through twelfth grade. So having him as a mentor really kept me focused because I saw what education could do with him. He was making, at that time, $200[K] plus.

A similar sentiment was shared by Wynton:

> To see that they're in a place where they're not struggling and they're not living paycheck to paycheck, and I wanted to get there one day and not have to worry about poverty. So, I definitely took his advice and everything he gave me and ran with it.

Accountability was a big part of pushing and encouraging students. Students described ways their mentors held them accountable for their work or performance. As Derrick shared, "He was honest with me about certain things. Like, if I was slacking off he definitely let me know." Russell said his mentor was "integral to ensuring I took care of all the things I needed to take care of." Another part of the push from mentors was their genuine desire to see their students succeed. Speaking of faculty at his school, Carter reflected, "They genuinely want you to do well." Similarly, Cade said his mentors' goal was to see students graduate. Derrick's mentor wanted to help students succeed through understanding what they truly wanted, and then taking the steps to achieve their goals. Derrick said his mentor "was really good at trying to make sure that he understood what people wanted out of life. And trying to make sure that they were

making the best decisions going forward for them." Emmett said he became more motivated to finish school because he saw how his mentors invested in him and wanted to see him do well.

Mentors' abilities to push and encourage students also sprang from beliefs they had in students' abilities to succeed. Further, when students saw their mentors believed in them, they often developed a greater confidence in themselves. For example, Carter described an experience when his mentor, whom he admired, told him they believed in him and wanted to see him succeed. For Cameron, having a mentor who believed in him "gave [me] the confidence to know that I can finish on time." Speaking of the help provided by his mentor, Marshall explained, "he was just trying to help someone who he knew had talent." Kareem said his mentor knew his potential, and described a time when he was pulled aside and encouraged after receiving a failing grade:

> When I got my first F in his class. He pulled me to the side at the end of the class, and was like, "You know, there's something special in you." And I'm looking like, you don't know me from a can of paint. But, he said, "I don't judge a man by his grades. I'll only judge him by personality. And the questions that you ask, and the way you present yourself."

4.3.1.3 Mentor went above and beyond to help me

In addition to motivating and encouraging participants, mentors also seemed happy and willing to go above and beyond to help students. This notion of extending extra assistance or "going the extra mile" emerged as the third subtheme. Within this subtheme, participants detailed many ways their mentors provided assistance that exceeded expectations. For example, many participants described the extra time and help their mentors gave them. Anderson shared how one of his mentors gave of his time to discuss his own research and writing. Carter said his

mentor was always available to him when he had questions. Cameron was impacted by the time his mentors dedicated to him, despite his own busy life. Cameron shared:

> When you see two mentors who are, at the time, pursuing their Ph.D…For them to balance their Ph.D. program with their job and still taking time to mentor you, I think that you have to respect that person no matter what.

> Mentors gave of their time in various ways, whether just talking with students, advising them on academic or personal situations, or even giving feedback on their work. Marshall said his mentor gave "very good constructive criticism," while Bryce noted how his mentor provided suggestions on how to improve his writing. Derrick shared a similar example of how his mentor helped with his writing:

> He helped me with preparing my writing for the writing piece that I had to do, it wasn't a long writing piece but helped me prepare my writing for it. And it was big just I had a guidance for it.

> Knowing they had the support of their mentors, and that those people were willing to go above and beyond for them, had a strong impact on participants in many ways. Not only did they feel more prepared to tackle academic challenges, but they also felt supported if they needed a helping hand in other areas of their lives. As Emmett shared, "So it's more comforting to have those people there close by that you can go to when you need to or that are seeing you go through it, so they'd know when to jump in and help you out." Speaking of his mentor, Jalen said, "He was very helpful. Anything I needed, I asked him. And if he could, he did it to the best of his ability." Mason noted how his mentor "was trying to help me out any way she could." Wynton said his mentor genuinely cared about him and "just always kept track of me."

According to Bryce, he knew his mentor was "all in" with wanting him to succeed, noting, "She really helped me."

Mentors were invested in their students, and participants described their interest and dedication to helping them. Four participants specifically described how their mentors "showed interest" or "took a liking to them." Nine others noted how their mentors connected them with resources, including everything from housing to personal connections. For example, Ahmad explained how his mentor jumped in to assist with a housing issue when he needed to switch residence halls. Carter said his mentor connected him with "Different resources I could use to utilize, to make sure I was successful." Dwight explained that his mentor would point him in the right direction, connecting him with other professors when he needed extra help. Wynton said his mentor was "one of the ones that if I needed something 2:00, 3:00 AM, or if I need anything for books, supplies, anything, he always made a way to try to get that for me."

Several participants described how their mentors worked with them long-term, seeing them through college. Mentors' dedication to students over the course of their college careers was certainly another example of how they went above and beyond to help students. Cameron shared, "We just kind of grew this mentor-mentee relationship from my freshman year until I graduated." Jamal said his mentor "supported me throughout college," and Marshall said he and his mentor "built a relationship from freshman year to senior year." Nasir noted that his relationship with his mentor grew throughout his college years, sharing that he still reached out and connected with him even after graduating. Wynton noted that his mentor was with him "all four years."

Mentors also went above and beyond by connecting with students outside of school or class. They often made themselves available, showing vested interest and concern that students

felt and appreciated. Ahmad noted that he often met with his mentor before and after class.

Speaking of the extra time his mentor spent with him outside of class, Carter explained, "I would

sit in their office, and we would set aside academia, and I would talk about their life and how

they got where they were." Derrick explained that although his mentor was a political science

professor, he took the time outside of class to help him study to become certified to teach middle

grade science. Jalen said his mentor "helped me out with filling the applications and anything

that I really needed help with, I could just call his phone. He was there." Jamal's mentor checked

in with him to make sure "everything was okay… as far as paying bills and stuff like that."

Marshall's mentor took the time to write a letter of recommendation for law school, and

Kareem's mentor helped him create an "emergency credit plan" to help him catch up on some

missing assignments. Neal's mentor helped him with his job search, and Marcus explained that

his mentor often met him at fundraising and community service events. Perry credited his mentor

with helping him develop his career.

4.3.1.4 Mentor's race

The race of mentors also emerged as a subtheme, as participants often shared substantive

observations about the races of their respective mentors in response to being asked to describe

the mentor(s) and race with which they self-identified. Because participants had attended a

variety of institutions in the past, both HBCUs and PWIs, mentor and professor race was

sometimes discussed in terms of diversity. For example, Anderson described racial diversity

among professors at one of his schools:

> They were all African American except for one and that was a math instructor. Math?
>
> Physics? Physics? Well, he did both. I think I had him for physics. He was Middle
>
> Eastern. But at [university name], as a matter of fact, no, I had one, two, three Caucasian

instructors. One Middle Eastern instructor. I remember one African American instructor.

One true African instructor. Actually, I think I had two true African instructors. African

American, I only recall one at [university name].

Anderson later described his professors as "a bit of a melting pot."

For Darrell, most of his professors were Black women. Darrell shared,

There was no one that I can think of that was openly LGBT or queer…at the time, the

chair was a Black man. And the majority of my professors, especially at undergrad, were

Black women. I would probably say 70 to 80 percent.

Several participants noted that their mentors were White men. Despite great mentor-

student relationships with White faculty, the majority of the participants noted working with

Black mentors. A preference toward Black professors was discussed, based on racial similarity.

For example, Hassan noted having conversations in the hall with his mentor, and being drawn to

him because he "looks like me." Hassan went on to note how he had become more comfortable

in his school setting because it was increasingly diverse. He shared:

And that would make me feel more comfortable in those spaces because okay, I'm not the

only one anymore. I'm not this little, lost student. I mean, I am this little, lost student. But

I'm not the only person that looks like me in that case.

Similarly, Emmett noted that having an African American man as a professor helped increase his

sense of comfort at school. Wynton said it "was kind of a relief" to have Black professors and

mentors who "can understand the culture, me, and just where I come from." Cameron noted that,

for him, a benefit of going to his school was that most of the professors were Black. Cameron

was thankful for the brotherhood he experienced at his school, adding, "I'm fortunate enough to

have young Black and male teachers who looked like me to kind of carry me through." P6 went

on to explain:

> I think that brotherhood at [university name] was a blessing that not a lot of Black men
>
> have, especially if they're going to a PWI. I was fortunate enough to have a strong faculty
>
> connection and network that held me accountable, and kind of carried me through to the
>
> graduation stage.

Derrick felt a kinship toward his mentor, a Black man who was also his RA. As a Black man,

Derrick's mentor was able to share wisdom and advice that individuals of other racial

backgrounds may not understand. Derrick explained: "We don't get away with some of the things

other people will. And he made that clear and eventually we saw that…it's kind of how to- goes

with the territory in a country town like that." Kareem shared a similar anecdote about how his

Black mentor warned him that his skin color could undermine other's perceptions of him.

Kareem shared,

> He was like, "I get emails all the time from people under me that are Caucasian, that are
>
> testing my knowledge and my brain capacity…if I pass this bill for the students, would
>
> this be right…just all kinds of stuff." But he said, "It boiled down to, unfortunately,
>
> trusting the color of your skin to do a job."

4.3.1.5   I took initiative

The final subtheme to emerge was focused on the initiative taken by participants to

establish relationships with their mentors and get the most out of those relationships. Some

participants took initiative and approached faculty to be their mentors. For example, Jamal

shared:

I approached [my mentor]. When I first started at [university name], I started as a

computer science major. But I still wanted to be involved in chorus and all kinds of

things like that. So, I actually found out who the director of the choruses was and I went

to him. And from that day, the relationship grew.

Mason also prompted the relationship with his faculty mentor. He shared, "I decided I wanted to

talk to her about how at times, it was difficult for me, at the time. And after [that] we had kind of

talked a few times." When asked how the relationship with his mentor started, Nasir replied, "I

definitely initiated with him."

Not only were participants proactive in establishing relationships with mentors, but they

also took opportunities to ask questions, learn, and receive guidance from their mentors.

Participants seemed to often view their mentors as people who already achieved things they

desired to achieve, themselves. There was a sense of respect and deference that was often

expressed by participants. They wanted to learn from their mentors and were eager to soak up

and advice or wisdom mentors were willing to share. For this reason, participants often asked

their mentors questions about various things. As Carter shared,

So come senior year, I would go up to him a lot, much more because I was asking

questions on-- I was taking courses from him. I was getting ready for my senior

presentation. And I wanted to figure what I wanted to do to have a successful future after

undergrad, basically.

Derrick picked his mentors mind to learn more about human behavior and psychology:

And because I knew she was a psychology professor-- she knew about the mind and

people's behavior-- I would talk to her, at times, about why do people act this way? Why

do you see this type of behavior in certain people? She did her best to explain it to me

and then I took for what I could, my understanding of it.

Neal knew how important it was to seek out the advice of his mentor: "It was definitely

imperative that I go and ask for help, meet with the professor one-on-one to ask all the questions

and get all the insights that I needed." Similarly, Nasir said, "Outside of the class and office

hours, it was definitely room to ask questions, get help."

4.3.2   Peer Network Supportive Relationships

The second main theme that emerged was related to the supportive relationships

participants developed within their peer networks. This theme encompassed various aspects of

these relationships, within the context of academic success and persistence. Four subthemes

emerged under this theme, including *Participation in student and study groups; Supportive and*

motivating peer groups; Characteristics of peer groups; and *Connect outside of school.* Each of

these subthemes is discussed, as follows.

4.3.2.1   Participation in student and study groups

Most participants took part in various student and study groups, which not only helped

them meet and develop relationships with their peers, but also fostered academic success. The

study groups described by participants were generally small and participation in them usually

depended on individual needs and the weight of the test for which they were preparing. Wynton

said his study groups were mostly comprised of his "inner circle," while Russell said his study

group was "between three to five different people, at most." Nasir's study groups typically

stayed under six people. Vaughn said his participation in study groups varied, "depending on the

severity of the test."

Participants described camaraderie and support from their study groups. Neal said his group was "very pivotal to my success." Emmett felt a sense of comfort from his study group, which was comprised of his friends:

> When it was my personal friends who I'm still friends with today - we were taking the same classes - it was probably the most comfortable environment just because we were all doing the same work and kind of learning. And some were further ahead; some were behind. But either way, it kind of made it more comfortable to kind of figure out the gaps because we can talk with people who didn't judge us.

Dwight described connecting with peers in his math class for help, and how he specifically sought out those who were doing well in math to help him: "When I was in Math class, I would start linking up with other peers, who I've seen were doing extremely well. And I would try to get with them outside of class to get the help that I needed." Derrick had study group meet-ups with other students he knew, and explained that they would all meet at various places to study together:

> Some other students that were around the school that we have a relationship with who were in the class with us, probably six of us, we all just hung out and studied. We will meet in the library. We would try to get over there before that class started early, work on what we were going to talk about in the class. We was studying. We was meeting up in the dorms and people's rooms. I had one of the home campus apartments and so did the other basketball player. So, we would meet in his room. And it was like six of us that will meet.

Cameron said he and a few other students would "grab a little huddle room and study," explaining they typically got together for midterm and final exams. Cameron became very close

with the members of his study group, sharing, "They changed my whole life. Great friends…we would study all the time, together."

In addition to study groups, participants described participating in a variety of student organizations and groups. Seven participants specifically mentioned being in fraternities. When asked about his participation in student groups, Anderson shared, "The biggest of all, in my head, was the fraternity. I don't think I was a part of any kind of science club or education club." Vaughn and Ahmad were both members of Phi Beta Sigma, and Marshall explained that being in a fraternity, he naturally did a lot with his fraternity brothers.

In addition to fraternities, participants described a wide range of student groups and societies in which they participated. Anderson and Cameron were in an honors society, Hassan mentioned a society for Black Engineers, African American students, and tech student ambassadors. Ahmad was in a leadership society for Black men and served as a member of student government. Dwight was in a Bible talk group and Emmett was in an association for Black graduate students. Other clubs and groups mentioned by participants included the technology club, an international student association, drama group, student activity board, a youth leadership academy, biology club, economics society, marching band, a center for engineering diversity, and the Hopps Scholars program. Many participants also played team sports. Only two participants said they had not been a part of any student groups or societies, suggesting that campus involvement may have played a role in the academic success of many of the participants.

4.3.2.2 *Supportive and motivating peer groups*

All participants described having close friends or peer groups that provided them with encouragement, motivation, and many other forms of support. One of the most common codes in

the data was *motivate and support one another,* which helps illustrate how pronounced this sentiment was across the interviews. For example, Bryce described some of the challenges he had with one of his courses, and how fervently his peer group encouraged him to not give up: "They kept motivating me and encouraging me not to just stop doing what I'm doing." Similarly, Perry said of his peer group: "We just always encouraged one another." Neal explained how encouraging and motivating one another resulted in success for everyone in his peer group:

> If nothing else, it was motivation as we were all grinding and trying to do the best that we could in the course. We could encourage each other and encourage each other to keep on fighting through those courses and do very, very well. And we all succeeded, we all did really well.

Marcus found encouragement and motivation in the conversations he had with his peers – those conversations where others shared their own challenges and triumphs, which helped him feel like he was not alone:

> It may motivate you just by having a conversation. And they may not even know that they're motivating you, but just still being there and experiencing the same thing you're experiencing. And if they overcome it, it encourages you.... When we share similar experiences, that was encouraging to me.

A similar sentiment was shared by Jalen:

> Like in any given situation, everybody had a positive input to what may be going on, and they could give me some advice if they experienced that [situation] before, and what they did, and how they felt. So that did come in handy, sometimes.

> Nasir and Derrick both shared that their peer groups held them accountable, which pushed them both to succeed, academically. Peer support and motivation often manifested

through sharing information, resources, and recommendations with one another. For example, Hassan reached out to his peer group for advice on professors before he signed up for classes. Similarly, Carter shared: "So if we had taken a course a previous semester, and they'd say, 'Hey, bro, I'm taking the same course you took last semester. Got any advice? You got anything?' And we would send them everything. Everything." According to Derrick, "So we shared information with each other that we knew would help one another and they shared some things with me." Cade explained that his peer group would recommend which professors to take and then offered to help one another if a friend was struggling with a class they had already taken. Bryce said his friends "would always come to me for advice and vice versa."

There was a strong sentiment among all participants, which involved helping one another in various ways. Whether it was just to be a friend and provide emotional support, or connect one another to resources, or help each other with classes, participants in this study seemed to have strong, supportive bonds with their friends which were likely instrumental in their academic success. As Neal aptly put it, "We were here to help each other." The notion of emotional support was strong. Hassan said he and his friends would help one another work through emotional challenges: "If you were stuck in your emotions, then it's like okay, well let me come get you. Let me come drag you through that." Darrell shared how one of his friends helped him cope with imposter syndrome and other challenges in his personal life. Emmett explained that his friends helped him with school, as well as anything personal he was going through. Mason described his personal struggle with depression, and how one of his friends was instrumental in helping him through:

> I would sometimes just stay in my room. He would like come to my room, call me, "Hey, man, let's go. Let's just go walk. Let's get out. Let's go to the track. Let's go to the gym.

Let's go water pool," anything to just make sure that I wasn't deep into depression.

Really, I got legitimately depressed for a good three months while I was there. And yeah,

I feel like I let everybody down. It was a rough time.

Dwight also explained how his friends helped him through dark times while he was in school:

There were a few times I felt tense, and I've had a few people-- I won't say they were

friends, but they were more like associates, people that would encourage me or lift me,

and say, "Hey, look, this is not over. You can still do well if you study, and if you ask

questions, if you enter study groups." Or sometimes, there will be people that will just

say, "Hey, look. I want to pray for you and just hope all is well."

4.3.2.3   Characteristics of peer groups

Another subtheme to emerge under the theme of peer network relationships was

descriptive of participants' peer groups. Within this subtheme lies information about the makeup

of peer groups and how those groups were formed. Close peer circles seemed to organically

emerge. These groups were made up of five to ten individuals in virtually all cases where

respondents reflected on their close circles. Participants met their friends in many ways. Carter

met his closest friend at the gym and Cade became very close with a woman who was in many of

his classes. Cameron explained that many of his friendships were made within his dorm:

I would say the relationships started out on campus, but they grew in the dorms. I think

that was kind of the place where you could have the conversations in your room with

your friends. You could laugh and joke. You could have deep conversations. I think that

was the place where my relationship with those guys grew in freshman year and to kind

of continue to grow throughout the years.

Jamal met most of his friends in his music classes and at church. Neal also said many of his friends came from his church. Friendships were also often forged with classmates, through interactions in class, studying together outside of class, and even getting together to socialize.

Similar to their descriptions of study groups, participants often described their circle of friends as small. Darrell described himself as an introvert, explaining that his group of close friends only included four people. Jace's group was a bit bigger, at "about 10 people," while Jalen said his peer groups was comprised of "five guys who I really connected with." Marshall similarly shared, "I've always been a close-knit kind of-- I don't believe everyone you meet is a friend, and so I did have a close circle but I kept my circle very intentional."

Eight participants described the racial and gender diversity of their peer groups. When asked about the demographic composition of his peer groups, Ahmad said, "It was diverse. It was mixed. Males. Females. And both Black and White." Cameron said his friend group was diverse in terms of regional cultures: "We all had kind of a mixture of cultures that we kind of shared with one another. And I think that helped us grow as brothers." Jace's peer group was also diverse: "Majority of us were IT majors, and we are from different backgrounds, both gender, male and female." Marshall said his peer group consisted of "four Blacks and two Whites."

Despite the diversity described by many participants, there definitely seemed to be a preference for racially similar peer groups. When participants interacted with others who shared their racial background, they felt a sort of kinship and comfort, a feeling they could connect and understand one another more deeply because of their shared race. Ahmad said his peer group was all African American, both male and female. Vaughn described his peer group as "predominantly

African American." Wynton said it was natural to gravitate "to people that look like you."

According to Bryce, all of his friends were "very, very independent Black women."

4.3.2.4   *Connecting outside of school*

The final subtheme to emerge for the second main theme was focused on the ways

participants connected and socialized, outside of school and academics. While participants were

able to push and support one another in their study groups, the true encouragement, support, and

motivation seemed to come from deep bonds that were fostered both in and out of school. In

order to grow these relationships, it was essential for participants to connect with friends in

forums outside of academics. Some participants connected and fostered these friendships at work

or at home, when their friends were their roommates. As Neal shared, "Our freshman dorm

which was all-male, and we were able to forge a bond from that." Perry similarly shared of his

best friend, "I met him freshman, straight first day then a freshman. He was my roommate."

Three of Jalen's closest friends were roommates. Mason also said one of his closest friends had

been his roommate, whose family "kind of took me in. Made me feel comfortable."

Participants described many ways they socialized outside of school, which helped them

build strong, supportive relationships. They described doing almost everything together outside

of class. For example, Ahmad explained,

> We went to all like parties together. We went to campus admits together, we did
>
> everything to-- like dogs after dark like that's like the thing that the school put on, and
>
> had like the theme every Friday… basically, like we just always hung out outside class
>
> always go to the diner hall together.

Jace would meet up with his friends to eat together or watch movies. When asked about the

things he did with his friends, Jalen replied:

Things like going to jump line basketball, when the school would have parties and events,

we would go, yeah. Really sports, walking around campus, chilling in each other's

rooms, and those types of things.

Outside of school, Marshall and his friends would eat and work out together. Exercise, eating,

going to movies together, hanging out in one another's rooms, and talking were common ways

participants socialized with friends. Nasir explained, "I think even though we had fun and were

social and did everything socially together, kind of had all of the life experience together."

Wynton said he and his friends "did basically everything together."

4.3.3   School Environment

The final theme to emerge was not in direct alignment with either of the qualitative

research questions, but it certainly related to the experience of Black men in college, and how

those experiences may influence their academic success. The third theme centered on school

environment. Outside of faculty and peer relationships, the overall environment and culture of

participants' schools seemed to have a profound influence on their attitudes and experiences with

school. The school environment was generally described in two different ways: as either close

and warm, or unfriendly and cold. These two different types of environments are described as

subthemes, as follows.

4.3.3.1   Close and warm school environment

Some participants described their school environment as close and warm—that is,

friendly environments where they felt a strong sense of belonging. These environments were

often described with words like "family" and "familiar." For example, Anderson described his

school as "a small-town feel, family atmosphere." Neal said his school felt "like a home," and

Carter said the environment was "close-knit." Speaking of the welcoming environment at his

school, Anderson explained, "I mean, the whole way that the environment kind of wrapped his arms around you." Carter described the close community feel of his school and said he probably would not have been as successful in a larger school. Nasir also chose a small school because of the closer, warmer environment it offered. Similarly, Derrick chose his school because it was small and intimate:

> When I went up there it was right up my alley. I wanted to go to a smaller institution. So, when I went there-because I felt like you would get more of a close relationship with your advisors and teachers in a smaller setting.

Generally speaking, when participants described their schools as warm, tight-knit, and welcoming, they were also describing HBCUs.

4.3.3.2 Unfriendly and cold school environment

Although most of the participants had strong faculty and peer relationships that seemed to be instrumental in their success, the environments of their schools were not always described as warm. Six participants explained that they felt like outsiders at their schools, and that experience of being an outsider was often linked to race. For example, although the interviews probed the participants about their undergraduate experiences, Hassan shared a point about his struggle to feel included in his graduate program at the same university, as a Black person in a predominantly White space. Hassan explained, "What I was able to distill from that is that being a black person in a graduate program in aerospace engineering is already a rare enough experience that you being in those places, your existence, per se, is resistance." Kareem echoed this sentiment: "When I started off in college, I was a biology major. And of course, in my class, it was predominantly White…really, I was the only African American male in the [majority] of the places." As a homosexual Black man, Darrell also felt like an outsider. Even though he

attended a HBCU, he described the environment as "hyper masculine," which did not align with how he felt about himself. Darrell said,

> I didn't feel like I fit in. It was really difficult for me to, kind of, forge relationships with people because of that. Whether it was my own internal lies, like anxiety about it, or people just not wanting to be around with me. And that's a really relationship-driven school. So, you're supposed to be really proud to go there, and you're supposed to act these specific ways. You're supposed to build all these networks and all that to come out of it. And I didn't have that. And that didn't come just from the student body. That came from faculty. That came from administration, and that came from all of those things. So, it was really, really hard for me to, kind of, find my place.

> Often, the sentiment of feeling like an outsider was expressed when participants were describing attending PWIs. As Wynton explained:

> Me going to PWI and trying to navigate through, and just being around people that I wasn't used to, it was uncomfortable and first and very unsettling. And it was something I had to kind of-- that was an obstacle I kind of had to overcome. A lot of my peers wasn't African American. There wasn't many that looked like me.

Kareem said only "two out of hundreds of professors" at his school were African American. Mason felt stereotyped in his school environment, sharing:

> Most of the kids, they came from well-off White families … So they kind of had Black folks pegged in this hole, where it's you're either a rapper or you come from... it was just trying to- getting past stereotypes and actually seeing me for who I am.

Wynton described his experience of attending a PWI as "silent racism."

4.3.4 Noteworthy Experiences of the Participants who did not Graduate

This study included five Black men who decided to leave the bachelor's degree programs they started without finishing. Each of these five men described having had key supportive relationships with at least one faculty member, and with a small circle of student peers, while enrolled in school for the degree program that they initially attempted. Although four of these five ultimately did not persist to complete their degrees, due to a variety of factors, all indicated that their relationships with supportive faculty members and peers were still important for their well-being and for navigating life more broadly while they were in their initial programs. The reasons they ultimately decided not to continue the programs they started were broad, and included participants' reflections on everything from immaturity to financial obstacles to dealing with significant life events involving immediate family members.

Three of these five participants were in programs at HBCUs; for comparison, there were 7 HBCU enrollees among the 20 study participants who completed their degrees. All five referenced having experienced uncertainty, lack of clarity, and a general lack of guidance around their respective chosen majors at their schools. Three noted negative, or at the very least, detached or inadequate experiences with their respective academic advisors; in one of these cases, this was with at least one faculty-administrator level academic advisor. When probed about whether and how he sought assistance from an academic advisor to discuss his concerns about majoring in business, Jalen recalled his limited interaction with his assigned staff advisor as being less than helpful:

> Yes, I did. But it was only through emails. I maybe seen her two or three times, but it's mostly through email because she's just overwhelmed. It's a lot of people she talked to, so I understand.

Mason tried to change his major to math, which he said he excelled at and was interested in. However, he said that he was actively discouraged from doing so by his White female academic advisor, and by the older White male dean, who he believed was brought into the meeting by the advisor to help discourage him from changing majors.

Vaughn felt strongly that he would have benefited from an intrusive academic advising approach as a student. He felt that intrusive advising would have likely made a difference in terms of his decision to persevere and persist to completing his degree. Instead, his misconceptions about his chosen major, health and physical education, played a significant role in his decision to not finish school. He recalled that conversations with his faculty advisors were very matter of fact and practical, and mainly involved the logistical steps he needed to take to obtain certification for entering into education. He learned to say all the "right" things so that he appeared to be progressing well enough; however, he said that he was never encouraged to assess his options or even what he wanted to do with the degree: "There wasn't really any deep reflection." Vaughn expressed what he wished had happened when his grades began to fall:

> Somebody should have said, "Hey, it doesn't matter that you've pledged [your fraternity]. It doesn't matter that your grades were good enough to do this. You're not a 3.0, definitely not 2.9, 2.8. So even though you're passing and it's decent, we know that you're capable of more than this," and I think that just would have been the extra little – because I'm definitely a creature of habit so knowing that somebody had that expectation for me, I think would have definitely spoke volumes because it's like I found my own loophole, and just too young and immature to realize the only person you're tripping up is yourself, so yeah…

Four of the five men who did not finish the programs they started cited financial strain as a key issue that contributed to them leaving school. Dwight noted that upon going on academic probation, he was unable to raise his GPA to the necessary level within the allotted timeframe required for maintaining financial aid. Darrell explained that after spending four years at his first school, his academic scholarship ended; however, he needed another year in school to finish his degree. His family could not afford to pay out of pocket for him to attend school for another year, and they were also preparing to send his younger brother to college to begin his freshman year.

In addition to the negative experience he had with his academic advisor and dean, Mason shared that he ultimately left school because he was about to become a father at the time. His son was going to be born at the end of his third year. So, he explained that for most of that academic year leading up to the child coming, he stopped going to class, citing that he was more worried about finding work and making money to support the child. He wanted to be a good father, noting that his own father was not around when he was a child. In addition, Mason was one of two, out of the five men who did not finish college, who mentioned experiencing significant family issues, specifically involving their mothers, during school. Mason said his mother became seriously ill and Dwight had his mother to pass away.

Two of the questions and response options presented to all respondents as part of the brief initial survey inquired about their tendencies around help-seeking behavior while in college. Those two questions were as follows:

- What was your attitude towards asking your professors for help when you needed it?
  __ I was very reluctant to approach my teachers/professors for help.
  __ I was somewhat comfortable with asking professors for help.
  __ I never hesitated or had any problem with approaching my teachers/professors for help.

- What was your attitude towards asking your student peers for help when you needed it?
  __ I was very reluctant to approach my peers for help.
  __ I was somewhat comfortable with asking my peers for help.
  __ I never hesitated to ask my peers for help.

Strikingly, none of these five indicated they asked professors or peers for help without hesitation. All five selected the responses that they were only "somewhat comfortable" (3 of the 5 respondents: Jalen, Vaughn, and Dwight), or were "very reluctant" (2 of the 5 respondents: Darrell and Mason) to ask faculty or peers for help when they needed it.

4.4 Summary

The purpose of this phenomenological study was to understand the experiences of high-achieving African American male college students at large, public research universities, including their relationships with and support provided by others. Specifically, I explored the forms of social capital that positively influenced persistence for African American men in college. I gathered data via semistructured interviews with 25 participants. Thematic analysis of interview transcripts revealed three themes and 11 subthemes.

Participants described many ways that informal mentoring relationships with faculty members benefitted them while in school. They described these relationships as caring and supportive, and as bonds that developed organically out of faculty members' genuine desire to help students. Faculty mentoring relationships were characterized as motivational, as participants described ways their mentors inspired, pushed, and held them accountable for their own success. Participants often felt their faculty mentors went the extra mile to help them, extending their assistance beyond their professional requirements. While participants often noted the race of their mentors as White, there was an understandable preference for Black mentors, based on similarities in background experiences. Finally, participants described the ways they took

initiative to develop mentoring relationships, as well as they steps they implemented to get the most out of those relationships.

Participants also described the meaningful ways supportive relationships with their peers helped them during their academic journeys. The most common form of academic support from peers seemed to come from participation in study groups. Participants also described invaluable emotional and social support they received from their peers, and how those bonds created a sense of motivation and accountability. Peer groups were often characterized as small and relatively homogenous, and relationships with peers were formed in a variety of ways. Often, peer relationships were fostered by connecting outside of school settings, through social activities. Many participants noted that they maintained close friendships with their peers from college in the years since being out of school.

This chapter provided a comprehensive explanation of analysis of qualitative data, as well as the results that emerged. The concluding chapter will include a discussion of these findings, their implications, and opportunities for future investigation. In addition, the final discussion will synthesize findings from the qualitative and quantitative analyses to highlight the key points and will close with concluding assessments.

5 QUANTITATIVE RESULTS

Sociological scholars who are principally interested in issues of race, gender, and class tend to focus on college access rather than college retention (Strayhorn 2008a). College access must not be the sole criteria for evaluating educational equality; rather, persistence and retention must be assessed as well (Strayhorn 2016; Donovan 1984). In addition, most college retention studies do not devote attention to low-income minority groups, such as low-income Black men (Strayhorn 2008a). Improving college completion rates for African American males, including those from low-income families, is also a form of social justice (Kahlenberg 2004; Strayhorn 2008a). The current project contributed to the sociology of education literature by investigating major influences on college persistence among Black men at varying income levels. Findings have implications for educators, policymakers, and other stakeholders working towards eliminating inequality in postsecondary education attainment outcomes.

The quantitative portion of this project was guided by the following two questions:

1. *The impact of social capital on persistence for Black men*: To what extent is *social capital* (informal faculty mentoring, and peer network support operationalized as extracurricular activities and participation in study groups) associated with bachelor's degree attainment in a sample of African American male U.S. citizen undergraduates within six years of matriculation, controlling for student pre-entry attribute and other covariates?

2. *The impact of pre-entry social factors on social capital*: To what extent are *social class* (as measured by family income*), educational aspirations*, *institution type* (as measured by PWI or HBCU enrollment), and *parents' educational attainment* associated with *social capital* (informal faculty mentoring, and peer network support operationalized as extracurricular activities, and participation in study groups) in a sample of African American male U.S. citizen undergraduate college graduates, controlling for student pre-entry attribute covariates?

This chapter provides results of the quantitative analysis performed in the current project. Using archival data, analyses were conducted to better understand the interactions between social

class, social capital variables, and bachelor's degree attainment. The chapter begins with a

discussion of the data collection process. Results are presented in alignment with the two

quantitative research questions. Important limitations to the data are addressed. The chapter

closes with a brief summary.

5.1   Data Collection

The BPS:04/09 study focused on students who pursued bachelor's degrees at the same

institution where they started their postsecondary educational career. Complete data were

obtained for two years (2004 and 2006). The filters that I then applied to derive the sample for

my population being examined in this study were as follows: respondents who identified as

Black or African American, identified as male, and identified as U.S. citizens.

5.2   Results

5.2.1   Research Question 1

The first research question examined the relationship between social capital variables

(informal faculty mentoring, and peer network support operationalized as participation in

extracurricular activities and participation in study groups) and bachelor's degree attainment. A

number of pre-entry covariates were controlled, including parents' educational attainment, and

college entrance exam scores. High school GPA was originally of interest as a pre-entry

attribute; however, this variable was unavailable to run due to non-response for this item in the

BPS survey. Two variables were used to examine faculty informal mentoring, including *faculty

informal meetings* and *faculty talk outside of class*. The variables for peer network support

included: extracurricular activities, categorized as *fine arts* activities, *school clubs,* and *school

sports*. The variable for study groups was *participation in study groups.*

5.2.1.1 Faculty Informal Mentoring and Bachelor's Degree Attainment

No statistically significant relationships were identified between faculty informal mentoring and bachelor's degree attainment for research question one. Housing and college entrance exam scores were statistically significant predictors in all the regression models below for research question two. The findings are only interpreted for the current model because the statistical significance and directionality are similar for the subsequent models.

Model 1 – 2004 data. For the 2004 data, housing (On campus; $OR = 4.637, p < .01$) was a statistically significant predictor, indicating that students in on-campus housing had 4.637 times the odds of bachelor's degree attainment in comparison to off-campus students. College entrance exam scores ($OR = 1.003, p < .01$) was a statistically significant predictor, indicating that with every one-unit increase in college entrance exam scores, the odds of bachelor's degree attainment increased by 1.003 times.

Model 2 – 2006 data. For the 2006 data, housing (On campus; $OR = 4.402, p < .01$) was a statistically significant predictor, indicating that students in on-campus housing had 4.402 times the odds of bachelor's degree attainment in comparison to off-campus students. College entrance exam scores ($OR = 1.003, p < .01$) was a statistically significant predictor, indicating that with every one-unit increase in college entrance exam scores, the odds of bachelor's degree attainment increased by 1.003 times. Table 5.1 presents the results of the regression models.

Table 5.1 Faculty Informal Mentoring Predicting Bachelor's Degree Attainment

Variables	Model 1 Bachelor's Degree Attainment (2004)		Model 2 Bachelor's Degree Attainment (2006)	
	B	*Exp (B)*	*B*	*Exp (B)*
Intercept	-.774		-2.450	
Faculty informal meeting (2004) [a]				
Somewhat/a lot of engagement	.031	1.031		
Faculty informal meeting (2006) [a]				
Somewhat/a lot of engagement			.265	1.303
Income (03-04) [b]				
Mid-low	-.350	.705	-.155	.856
Moderate	-.466	.628	-.367	.693
Mid-high	.355	1.427	.477	1.611
High	.701	2.017	.803	2.232
Degree goal first year (03-04) [c]				
Bachelor's degree	.801	2.228	.815	2.258
HBCU (03-04) [d]				
Yes	-.495	.609	-.502	.606
Age first year enrolled	-.251	.778	-.163	.850
Housing (03-04) [e]				
On campus	1.534 **	4.637	1.482 **	4.402
College entrance exam scores (ACT or SAT)	.003 **	1.003	.003 **	1.003
Parent's highest level of education [f]				
Bachelor's degree or higher	.246	1.279	.206	1.228
Pseudo *R2*	.215		.201	
Cox and Snell *R2*	.224		.221	
Log-likelihood	-41410.24		-39312.02	

Note: * $p < .05$, ** $p < .01$. Reference groups: [a] compared to no engagement, [b] compared to the lowest income group ($100 to $25K), [c] compared to no degree first-year goal, [d] compared to not an HBCU student, [e] compared to off-campus students, [f] compared to parents with no college degree.

5.2.1.2 Talking with Faculty Outside of Class and Bachelor's Degree

Attainment

No statistically significant relationships existed between talking with faculty outside of class and bachelor's degree attainment for the 2004 and 2006 data. Table 5.2 presents the results of the regression models.

Table 5.2 Talking with Faculty Outside of Class Predicting Bachelor's Degree Attainment

	Model 1		Model 2	
	Bachelor's Degree Attainment (2004)		Bachelor's Degree Attainment (2006)	
Variables	B	Exp (B)	B	Exp (B)
Intercept	-.734		-1.877	
Talk outside of class (2004) [a]				
Somewhat/a lot of engagement	.754	.814		
Talk outside of class (2006) [a]				
Somewhat/a lot of engagement			.222	.081
Income (03-04) [b]				
Mid-low	-.340	.712	-.157	.855
Moderate	-.468	.626	-.386	.680
Mid-high	.357	1.429	.477	1.611
High	.661	1.937	.739	2.094
Degree goal first year (03-04) [c]				
Bachelor's degree	.824	2.278	.822	2.274

Note: * $p < .05$, ** $p < .01$. Reference groups: [a] compared to no engagement, [b] compared to the lowest income group ($100 to $25K), [c] compared to no degree first-year goal, [d] compared to not an HBCU student, [e] compared to off-campus students, [f] compared to parents with no college degree.

Table 5.2 Talking with Faculty Outside of Class Predicting Bachelor's Degree

Attainment (cont.)

Variables	Model 1 Bachelor's Degree Attainment (2004)		Model 2 Bachelor's Degree Attainment (2006)	
	B	*Exp (B)*	*B*	*Exp (B)*
HBCU (03-04) [d]				
Yes	-.506	.603	-.571	.565
Age first year enrolled	-.244	.783	-.190	.827
Housing (03-04) [e]				
On campus	1.601 **	4.960	1.499 **	4.478
College entrance exam scores (ACT or SAT)	.003 **	1.003	.003 **	1.003
Parent's highest level of education [f]				
Bachelor's degree or higher	.245	1.278	.217	1.242
Pseudo *R2*	.216		.200	
Cox and Snell *R2*	.225		.220	
Log-likelihood	-47375.84		-39373.65	

Note: * p < .05, ** p < .01. Reference groups: [a] compared to no engagement, [b] compared to the lowest income group ($100 to $25K), [c] compared to no degree first-year goal, [d] compared to not an HBCU student, [e] compared to off-campus students, [f] compared to parents with no college degree.

5.2.1.3   *Participation in fine arts activities and bachelor's degree attainment*

No statistically significant relationships existed between participation in fine arts activities and bachelor's degree attainment for the 2004 and 2006 data. Table 5.3presents the results of the regression models.

Table 5.3 Participation in Fine Arts Activities Predicting Bachelor's Degree Attainment

Variables	Model 1 Bachelor's Degree Attainment (2004)		Model 2 Bachelor's Degree Attainment (2006)	
	B	*Exp (B)*	*B*	*Exp (B)*
Intercept	-.884		-2.052	
Fine arts activities (2004) [a]				
Somewhat/a lot of engagement	-.099	.906		
Fine arts activities (2006) [a]				
Somewhat/a lot of engagement			.310	1.363
Income (03-04) [b]				
Mid-low	-.356	.700	-.142	.868
Moderate	-.477	.621	-.440	.644
Mid-high	.364	1.439	.512	1.669
High	.677	1.969	.718	2.050
Degree goal first year (03-04) [c]				
Bachelor's degree	.813	2.254	.769	2.158
HBCU (03-04) [d]				
Yes	-.486	.615	-.563	.569
Age first year enrolled	-.244	.784	-.175	.839
Housing (03-04) [e]				
On campus	1.558 **	4.750	1.491 **	4.443
College entrance exam scores (ACT or SAT)	.003 **	1.003	.003 **	1.003
Parent's highest level of education [f]				
Bachelor's degree or higher	.254	1.289	.223	1.250
Pseudo *R2*	.216		.202	
Cox and Snell *R2*	.224		.222	
Log-likelihood	-49397.10		-39268.20	

Note: * $p < .05$, ** $p < .01$. Reference groups: [a] compared to no engagement, [b] compared to the lowest income group ($100 to $25K), [c] compared to no degree first-year goal, [d] compared to not an HBCU student, [e] compared to off-campus students, [f] compared to parents with no college degree.

5.2.1.4   Participation in school clubs and bachelor's degree attainment

The only social capital variable that was significantly associated with bachelor's degree completion was *participation in school clubs.* Table 5.4 presents the regression model results.

Table 5.4 Participation in School Clubs Predicting Bachelor's Degree Attainment

Variables	Model 1 Bachelor's Degree Attainment (2004)		Model 2 Bachelor's Degree Attainment (2006)	
	B	*Exp (B)*	*B*	*Exp (B)*
Intercept	-.924		-1.153	
School Clubs (2004) [a]				
Somewhat/a lot of engagement	1.003 **	2.726		
School Clubs (2006) [a]				
Somewhat/a lot of engagement			1.104 *	3.016
Income (03-04) [b]				
Mid-low	-.354	.702	-.099	.905
Moderate	-.487	.614	-.398	.671
Mid-high	.466	1.594	.594	1.812
High	.832	2.298	.700	2.015
Degree goal first year (03-04) [c]				
Bachelor's degree	.650	1.916	.891	2.439
HBCU (03-04) [d]				
Yes	-.407	.666	-.349	.706
Age first year enrolled	-.407	.791	-.215	.806
Housing (03-04) [e]				
On campus	1.323 **	3.754	1.213 *	3.365
College entrance exam scores (ACT/SAT)	.003 **	1.003	1.213 *	1.003
Parent's highest level of education [f]				
Bachelor's degree or higher	.223	1.250	.098	1.103
Pseudo *R2*	.243		.233	
Cox and Snell *R2*	.249		.251	
Log-likelihood	-39980.94		-37754.59	

Note: * p < .05, ** p < .01. Reference groups compared to: [a] no engagement, [b] the lowest income group ($100 to $25K), no degree first-year goal, [d] not an HBCU student, [e] off-campus students, [f] parents with no college degree.

Model 1 – 2004 data. For the 2004 data, school clubs (somewhat/a lot of engagement; *OR* = 2.726, *p* < .01) was a statistically significant predictor, indicating that students with somewhat/a lot of engagement in school clubs had 2.726 times the odds of bachelor's degree attainment in comparison to students not engaged in school clubs.

Model 2 – 2006 data. For the 2006 data, school clubs (somewhat/a lot of engagement; *OR* = 3.016, *p* < .05) was a statistically significant predictor, indicating that students with somewhat/a lot of engagement in school clubs had 3.016 times the odds of bachelor's degree attainment in comparison to students not engaged in school clubs.

5.2.1.5 Participation in school sports and bachelor's degree attainment

No statistically significant relationships existed between participation in school sports and bachelor's degree attainment for the 2004 and 2006 data. Table 5.5 presents the results of the regression models.

Table 5.5 Participation in School Sports Predicting Bachelor's Degree Attainment

Variables	Model 1		Model 2	
	Bachelor's Degree Attainment (2004)		Bachelor's Degree Attainment (2006)	
	B	*Exp (B)*	*B*	*Exp (B)*
Intercept	-.848		-1.667	
School Sports (2004) [a]				
Somewhat/a lot of engagement	.359	1.432		
School Sports (2006) [a]				
Somewhat/a lot of engagement			.223	1.250

Note: * p < .05, ** p < .01. Reference groups: [a] compared to no engagement, [b] compared to the lowest income group ($100 to $25K), [c] compared to no degree first-year goal, [d] compared to not an HBCU student, [e] compared to off-campus students, [f] compared to parents with no college degree.

Table 5.5 Participation in School Sports Predicting Bachelor's Degree Attainment (cont.)

Variables	Model 1 Bachelor's Degree Attainment (2004)		Model 2 Bachelor's Degree Attainment (2006)	
	B	*Exp (B)*	*B*	*Exp (B)*
Income (03-04) [b]				
Mid-low	-.377	.686	-.157	.855
Moderate	-.478	.620	-.416	.660
Mid-high	.274	1.315	.413	1.511
High	.698	2.010	.703	2.019
Degree goal first year (03-04) [c]				
Bachelor's degree	.810	2.247	.791	2.206
HBCU (03-04) [d]				
Yes	-.402	.669	-.554	.575
Age first year enrolled	-.251	.778	-.194	.823
Housing (03-04) [e]				
On campus	1.406 **	4.079	1.442 **	4.228
College entrance exam scores (ACT or SAT)	.003 **	1.003	.003 **	1.003
Parent's highest level of education [f]				
Bachelor's degree or higher	.244	1.277	.227	1.254
Pseudo *R2*	.219		.201	
Cox and Snell *R2*	.227		.220	
Log-likelihood	-41234.96		-39343.42	

Note: * $p < .05$, ** $p < .01$. Reference groups: [a] compared to no engagement, [b] compared to the lowest income group ($100 to $25K), [c] compared to no degree first-year goal, [d] compared to not an HBCU student, [e] compared to off-campus students, [f] compared to parents with no college degree.

5.2.1.6 *Participation in study groups and bachelor's degree attainment*

No statistically significant relationships existed between participation in study groups and bachelor's degree attainment for the 2004 and 2006 data. Table 5.6 presents the results of the regression models.

Table 5.6 Participation in Study Groups Predicting Bachelor's Degree Attainment

	Model 1		Model 2	
	Bachelor's Degree Attainment (2004)		Bachelor's Degree Attainment (2006)	
Variables	*B*	*Exp (B)*	*B*	*Exp (B)*
Intercept	-.783		-2.113	
Study Groups (2004) [a]				
Somewhat/a lot of engagement	.553	1.739		
Study Groups (2006) [a]				
Somewhat/a lot of engagement			.460	1.585
Income (03-04) [b]				
Mid-low	-.360	.698	-.194	.824
Moderate	-.401	.670	-.382	.682
Mid-high	.272	1.312	.453	1.573
High	.762	2.144	.767	2.153
Degree goal first year (03-04) [c]				
Bachelor's degree	.755	2.128	.850	2.339
HBCU (03-04) [d]				
Yes	-.500	.606	-.626	.535
Age first year enrolled	-.263	.769	-.178	.837
Housing (03-04) [e]				
On campus	-.263 **	4.003	1.489 **	4.431
College entrance exam scores (ACT or SAT)	.004 **	1.004	.003 **	1.003
Parent's highest level of education [f]				
Bachelor's degree or higher	.196	1.217	.130	1.139
Pseudo *R2*	.223		.205	
Cox and Snell *R2*	.231		.224	
Log-likelihood	-40995.03		-39153.29	

Note: * $p < .05$, ** $p < .01$. Reference groups: [a] compared to no engagement, [b] compared to the lowest income group ($100 to $25K), [c] compared to no degree first-year goal, [d] compared to not an HBCU student, [e] compared to off-campus students, [f] compared to parents with no college degree.

5.2.2   Research Question 2

The second research question allowed for an examination of how pre-entry and social factors (family income, educational aspirations, and institution type) were associated with three different forms of social capital (informal faculty mentoring, participation in extracurricular activities, and participation in study groups). A number of pre-entry covariates were controlled for, including parents' educational attainment, and college entrance exam scores. Two dependent variables were used to examine faculty informal mentoring: *faculty informal meetings* and *faculty talk outside of class*. The dependent variables for extracurricular activities included *fine arts activities* and *school clubs,* and *school sports.* The dependent variable for study groups was *participation in study groups.* The independent variables were social class (measured by family income), educational aspirations, and institution type (measured as PWI or HBCU). The analysis was run using logistic regression.

5.2.2.1   Faculty informal mentoring and social factors

The first variable examined in relation to faculty mentoring was *informal meetings with faculty outside of class*.

Model 1 – 2004 data. For the 2004 data, housing (On campus; $OR = 2.045$, $p < .01$) was a statistically significant predictor, indicating that students in on-campus housing had 2.045 times the odds of having informal meetings with faculty outside of class in comparison to off-campus students.

Model 2 – 2006 data. For the 2006 data, family income (High; $OR = 0.300$, $p < .05$) was a statistically significant predictor, indicating that students from high income family backgrounds had 0.300 times the odds of having informal meetings with faculty outside of class in comparison to students in the lowest income group. HBCU (Yes; $OR = 0.423$, $p < .05$) was

also a statistically significant predictor, indicating that HBCU students had 0.423 times the odds

of having informal meetings with faculty outside of class in comparison to non-HBCU students.

Table 5.7 presents the results of the regression models.

Table 5.7 Regression Models Predicting Informal Meetings with Faculty

	Model 1 Informal Meetings (2004)		Model 2 Informal Meetings (2006)	
Variables	*B*	*Exp (B)*	*B*	*Exp (B)*
Intercept	-2.491		5.685	
Income (03-04) [a]				
Mid-low	-.163	.849	.099	1.104
Moderate	.051	1.052	-.601	.548
Mid-high	-.012	.988	-.638	.528
High	-.465	.628	-1.202 *	.300
Degree goal first year (03-04) [b]				
Bachelor's degree	.800	2.226	-.689	.502
HBCU (03-04) [c]				
Yes	-.041	.960	-.861 *	.423
Age first year enrolled	.043	1.044	-.229	.796
Housing (03-04) [d]				
On campus	.715 **	2.045	.634	1.886
College entrance exam scores (ACT or SAT)	.001	1.001	-.001	.999
Parent's highest level of education [e]				
Bachelor's degree or higher	-.121	.886	.306	1.358
Pseudo *R2*	.054		.070	
Cox and Snell *R2*	.071		.093	
Log-likelihood	-58305.78		-51134.41	

Note: * p < .05, ** p < .01. Reference groups: [a] compared to the lowest income group ($100 to $25K), [b] compared to degree goal first year being less than a bachelor's, [c] compared to not an HBCU student, [d] compared to off-campus students, [e] compared to parents with no college degree.

5.2.2.2 *Talking with faculty outside of class and social factors*

The second variable examined in relation to faculty mentoring was *faculty talk outside of class.*

Model 1 – 2004 data. For the 2004 data, housing (On campus; *OR* = 8.204, *p* < .01) was a statistically significant predictor, indicating that students in on-campus housing had 8.204 times the odds of talking with faculty outside of class in comparison to off-campus students.

Model 2 – 2006 data. There were no statistically significant predictors identified in the 2006 data. Table 5.8 presents the results of the regression models.

Table 5.8 Regression Models Predicting Faculty Talk Outside of Class

	Model 1		Model 2	
	Talk Outside of Class (2004)		Talk Outside of Class (2006)	
Variables	*B*	*Exp (B)*	*B*	*Exp (B)*
Intercept	-.334		-9.196	
Income (03-04) [a]				
Mid-low	.795	2.214	.169	1.184
Moderate	-.197	.821	-.734	.480
Mid-high	.180	1.197	-.637	.529
High	-.934	.393	-.388	.678
Degree goal first year (03-04) [b]				
Bachelor's degree	.741	2.098	-.524	.592
HBCU (03-04) [c]				
Yes	-.079	.924	.122	1.130

Note: * p < .05, ** p < .01. Reference groups: [a] compared to the lowest income group ($100 to $25K), [b] compared to degree goal first year being less than a bachelor's, [c] compared to not an HBCU student, [d] compared to off-campus students, [e] compared to parents with no college degree.

Table 5.8 Regression Models Predicting Faculty Talk Outside of Class (cont.)

Variables	Model 1 Talk Outside of Class (2004)		Model 2 Talk Outside of Class (2006)	
	B	Exp (B)	B	Exp (B)
Age first year enrolled	.111	1.117	.507	1.660
Housing (03-04) [d]				
On campus	2.105 **	8.204	.653	1.921
College entrance exam scores (ACT or SAT)	-.002	.998	.002	1.002
Parent's highest level of education [e]				
Bachelor's degree or higher	-.211	.810	.180	1.198
Pseudo R2	.170		.072	
Cox and Snell R2	.164		.066	
Log-likelihood	-39235.06		-34889.72	

Note: * p < .05, ** p < .01. Reference groups: [a] compared to the lowest income group ($100 to $25K), [b] compared to degree goal first year being less than a bachelor's, [c] compared to not an HBCU student, [d] compared to off-campus students, [e] compared to parents with no college degree.

5.2.2.3 *Participation in fine arts activities and social factors*

Next, social capital variables were examined in relation to the social factors. The first social capital variable was participation in fine arts activities.

Model 1 – 2004 data. For the 2004 data, housing (On campus; *OR* = 2.435, *p* < .05) was a statistically significant predictor, indicating that students in on-campus housing had 2.435 times the odds of participating in fine arts activities in comparison to off-campus students.

Model 2 – 2006 data. There were no statistically significant predictors identified in the 2006 data. Table 5.9 presents the results of the regression models.

Table 5.9 Regression Models Predicting Fine Arts Activities

Variables	Model 1 Fine Arts Activities (2004)		Model 2 Fine Arts Activities (2006)	
	B	*Exp (B)*	*B*	*Exp (B)*
Intercept	-6.306		-1.697	
Income (03-04) [a]				
Mid-low	.127	1.135	.053	1.055
Moderate	.127	.627	.706	2.026
Mid-high	.127	1.315	-.857	.424
High	.127	.486	.558	1.747
Degree goal first year (03-04) [b]				
Bachelor's degree	.009	1.009	.651	1.917
HBCU (03-04) [c]				
Yes	.516	1.676	.277	1.319
Age first year enrolled	.248	1.281	-.015	.985
Housing (03-04) [d]				
On campus	.890 *	2.435	.447	1.563
College entrance exam scores (ACT or SAT)	.001	1.001	.001	1.001
Parent's highest level of education [e]				
Bachelor's degree or higher	.429	1.536	-.129	1.001
Pseudo *R2*	.071		.065	
Cox and Snell *R2*	.092		.090	
Log-likelihood	-56244.67		-51392.21	

Note: * p < .05, ** p < .01. Reference groups: [a] compared to the lowest income group ($100 to $25K), [b] compared to degree goal first year being less than a bachelor's, [c] compared to not an HBCU student, [d] compared to off-campus students, [e] compared to parents with no college degree.

5.2.2.4 *Participation in school clubs and social factors*

The second social capital variable examined was participation in school clubs.

Model 1 – 2004 data. For the 2004 data, housing (On campus; $OR = 3.430, p < .01$) was a statistically significant predictor, indicating that students in on-campus housing had 3.430 times the odds of participating in school clubs in comparison to off-campus students.

Model 2 – 2006 data. For the 2006 data, housing (On campus; $OR = 4.024, p < .01$) was a statistically significant predictor, indicating that students in on-campus housing had 4.024 times the odds of participating in school clubs in comparison to off-campus students. College entrance exam scores ($OR = 1.003, p < .01$) was a statistically significant predictor, indicating that with every one-unit increase in college entrance exam scores, the odds of participating in school clubs increased by 1.003 times. Table 5.10 presents the results of the regression models.

Table 5.10 Regression Models Predicting School Clubs

Variables	Model 1		Model 2	
	School Clubs (2004)		School Clubs (2006)	
	B	*Exp (B)*	*B*	*Exp (B)*
Intercept	-.813		-8.009	
Income (03-04) [a]				
Mid-low	-.289	.749	-.352	.703
Moderate	-.521	.594	-.472	.624
Mid-high	-.580	.560	-.695	.499
High	-.627	.534	.076	1.079
Degree goal first year (03-04) [b]				
Bachelor's degree	.991	2.693	-.292	.747

Note: * $p < .05$, ** $p < .01$. Reference groups: [a] compared to the lowest income group ($100 to $25K), [b] compared to degree goal first year being less than a bachelor's, [c] compared to not an HBCU student, [d] compared to off-campus students, [e] compared to parents with no college degree.

Table 5.10 Regression Models Predicting School Clubs (cont.)

	Model 1		Model 2	
	School Clubs (2004)		School Clubs (2006)	
Variables	*B*	*Exp (B)*	*B*	*Exp (B)*
HBCU (03-04) [c]				
Yes	-.474	.623	-.446	.640
Age first year enrolled	-.149	.862	.267	1.306
Housing (03-04) [d]				
On campus	1.233 **	3.430	1.392 **	4.024
College entrance exam scores (ACT or SAT)	.002	1.002	.003 **	1.003
Parent's highest level of education [e]				
Bachelor's degree or higher	.149	1.161	.548	1.729
Pseudo *R2*	.127		.146	
Cox and Snell *R2*	.143		.180	
Log-likelihood	-47351.08		-45961.39	

Note: * p < .05, ** p < .01. Reference groups: [a] compared to the lowest income group ($100 to $25K), [b] compared to degree goal first year being less than a bachelor's, [c] compared to not an HBCU student, [d] compared to off-campus students, [e] compared to parents with no college degree.

5.2.2.5 *Participation in school sports and social factors*

The last dependent variable examined for extracurricular activities was *participation in school sports.*

Model 1 – 2004 data. For the 2004 data, housing (On campus; *OR* = 5.729, *p* < .01) was a statistically significant predictor, indicating that students in on-campus housing had 5.729 times the odds of participating in school sports in comparison to off-campus students.

Model 2 – 2006 data. For the 2006 data, housing (On campus; *OR* = 4.633, *p* < .01) was a statistically significant predictor, indicating that students in on-campus housing had 4.633

times the odds of participating in school sports in comparison to off-campus students. Table 5.11

presents the results of the regression models.

Table 5.11 Regression Models Predicting School Sports

	Model 1		Model 2	
	School Sports (2004)		School Sports (2006)	
Variables	*B*	*Exp (B)*	*B*	*Exp (B)*
Intercept	-2.815		-8.091	
Income (03-04) [a]				
Mid-low	.034	1.034	.043	1.044
Moderate	-.185	.831	.056	1.058
Mid-high	.749	2.116	.473	1.606
High	-.146	.864	.439	1.550
Degree goal first year (03-04) [b]				
Bachelor's degree	.072	1.074	.274	1.316
HBCU (03-04) [c]				
Yes	-.983	.374	.067	1.069
Age first year enrolled	.073	1.076	.341	1.406
Housing (03-04) [d]				
On campus	1.745 **	5.729	1.533 **	4.633
College entrance exam scores (ACT or SAT)	.000	1.000	.000	1.000
Parent's highest level of education [e]				
Bachelor's degree or higher	.140	1.150	.114	1.121
Pseudo *R2*	.132		.111	
Cox and Snell *R2*	.157		.137	
Log-likelihood	-50096.89		-46594.85	

Note: * p < .05, ** p < .01. Reference groups: [a] compared to the lowest income group ($100 to $25K), [b] compared to degree goal first year being less than a bachelor's, [c] compared to not an HBCU student, [d] compared to off-campus students, [e] compared to parents with no college degree.

5.2.2.6 *Participation in study groups and social factors*

The final social capital variable examined was *participation in study groups.*

Model 1 – 2004 data. For the 2004 data, housing (On campus; *OR* = 3.599, *p* < .01) was a statistically significant predictor, indicating that students in on-campus housing had 3.599 times the odds of participating in study groups in comparison to off-campus students.

Model 2 – 2006 data. For the 2006 data, parent's highest level of education (Bachelor's degree or higher; *OR* = 3.088, *p* < .01) was a statistically significant predictor, indicating that students with a parent who had a bachelor's degree or higher had 3.088 times the odds of participating in study groups in comparison to students with parents with no college degree. Table 5.12 presents the results of the regression models.

Table 5.12 Regression Models Predicting Study Groups

	Model 1		Model 2	
	Study Groups (2004)		Study Groups (2006)	
Variables	*B*	*Exp (B)*	*B*	*Exp (B)*
Intercept	-1.747		-2.242	
Income (03-04) [a]				
Mid-low	.084	1.088	.474	1.606
Moderate	-.406	.666	-.522	.593
Mid-high	.797	2.219	.193	1.213
High	-.485	.616	-.329	.720
Degree goal first year (03-04) [b]				
Bachelor's degree	.273	1.314	-.273	.761
HBCU (03-04) [c]				
Yes	.302	1.352	.800	2.226

Note: * p < .05, ** p < .01. Reference groups: [a] compared to the lowest income group ($100 to $25K), [b] compared to degree goal first year being less than a bachelor's, [c] compared to not an HBCU student, [d] compared to off-campus students, [e] compared to parents with no college degree.

Table 5.12 Regression Models Predicting Study Groups (cont.)

Variables	Model 1 Study Groups (2004)		Model 2 Study Groups (2006)	
	B	*Exp (B)*	*B*	*Exp (B)*
Age first year enrolled	.043	1.044	.352	1.089
Housing (03-04) [d]				
On campus	1.281 **	3.599	.352	1.421
College entrance exam scores (ACT or SAT)	.000	1.000	.001	1.001
Parent's highest level of education [e]				
Bachelor's degree or higher	.461	1.586	1.128 **	3.088
Pseudo *R2*	.099		.084	
Cox and Snell *R2*	.127		.100	
Log-likelihood	-55482.34		-45892.25	

Note: * p < .05, ** p < .01. Reference groups: [a] compared to the lowest income group ($100 to $25K), [b] compared to degree goal first year being less than a bachelor's, [c] compared to not an HBCU student, [d] compared to off-campus students, [e] compared to parents with no college degree.

5.3 Summary

Analysis revealed several statistically significant findings, which were mostly concentrated in the 2006 dataset (model 2). Analysis of model 2 indicated students from high-income families were 0.300 times less likely to engage in informal faculty meetings outside of class than were students in the lowest income group. In addition, students who attended an HBCU were 0.423 less likely to engage in informal faculty meetings outside of class. Also in the second model, the college entrance exam scores variable (*OR* = 1.003, *p* < .01) was a significant predictor of participation in school clubs. Students with a parent who had a bachelor's degree or higher were 3.088 times more likely to participate in study groups. For both models, college entrance exam scores and participation in school clubs significantly predicted bachelor's degree attainment.

6 CONCLUSION

Improving college completion rates for African American males, including those from low-income families, is also a form of social justice (Kahlenberg 2004; Strayhorn 2008a). The purpose of this study was to understand the experiences of high-achieving African American male college students at large, public research universities, including their relationships and types of support provided by others. Specifically, this research explored the forms of social capital that positively influenced persistence for African American men in college.

The qualitative portion of this investigation was guided by the essential question:

Qualitative Research Question: What are the predominant contexts of informal faculty mentoring relationships and peer network supportive relationships for African American male undergraduates?

The following sub-questions were used to organize the results:

Sub-question 1: What are the predominant contexts of informal faculty mentoring relationships for African American male undergraduates?

Sub-question 2: What are the predominant contexts of peer network supportive relationships for African American male undergraduates?

The quantitative portion of this project was guided by the following two questions:

Quantitative Research Question 1: To what extent are social class (as measured by family income), educational aspirations, institution type (as measured by PWI or HBCU enrollment), and parents' educational attainment associated with social capital (informal faculty mentoring, extracurricular activities, and participation in study groups) in a sample of African American male U.S. citizen undergraduate college graduates, controlling for student pre-entry attribute covariates?

Quantitative Research Question 2: To what extent is social capital (informal faculty mentoring, and peer network support as operationalized by extracurricular activities and participation in study groups) associated with bachelor's degree attainment in a sample of African American male undergraduates within six years of matriculation, controlling for student pre-entry attribute and other covariates?

This final chapter provides a discussion of the findings discussed in the previous two chapters. First a summary of the qualitative and quantitative findings is presented. Next, a discussion and interpretation of the results is provided. Study implications and limitations are addressed, followed by recommendations for future research. The chapter closes with concluding assessments.

6.1   Summary of Findings

6.1.1   Qualitative Data

The qualitative portion of the study used individual, semistructured interviews to understand the predominant contexts of informal faculty mentoring relationships and peer network supportive relationships among African American male undergraduates. A total of three themes and 11 subthemes emerged from the qualitative data. The main themes included *Informal faculty mentoring relationships, Peer network supportive relationships,* and *School environment.* Subthemes included *Relationships developed from care and support; Mentor pushed, motivated, and held me accountable; Mentor went above and beyond to help me; Mentor's race; I took initiative; Participation in study groups; Supportive and motivating peer groups; Characteristics of peer groups; Connecting outside of school; Close and warm school environment;* and *Unfriendly and cold school environment.*

Participants described the various ways informal mentoring relationships with faculty members helped them excel in school. Relationships were described as caring and supportive. Participants also felt relationships with faculty members were motivational, as they described ways their mentors inspired, pushed, and held them accountable for their own success. Participants often felt their faculty mentors went out of their way to help students. While participants sometimes noted the race of their mentors as White, there was an understandable preference for Black mentors, based on similarities in background experiences. Many participants described the ways they took the initiative to develop mentoring relationships, and how they maximized the utility of those relationships.

Participants also discussed meaningful and supportive relationships with their peers. Common forms of peer support were indicated from participation in study groups. Participants also described emotional and social support, as well as motivation and accountability they received from their peers. Peer groups were often characterized as small and relatively homogenous, and relationships were commonly fostered by connecting outside of school settings, through social activities. Many participants noted that they maintained close friendships with their peers from college in the years since being out of school.

6.1.2   Quantitative Data

Quantitative data for this study were obtained from the 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09). The BPS is a nationally representative study conducted for the National Center for Education Statistics (NCES), which is an entity of the U.S. Department of Education's Institute for Education Sciences. The first quantitative research question allowed for an examination of how social factors (family income, educational aspirations, and institution type) were associated with three different forms of social capital

(informal faculty mentoring, participation in extracurricular activities, and participation in study groups). The second quantitative research question examined the relationship between social capital variables (informal faculty mentoring, participation in extracurricular activities, and participation in study groups) and bachelor's degree attainment. Analysis revealed several statistically significant findings, which were mostly concentrated in the 2006 dataset (model 2).

Analysis of model 2 indicated students from high-income families were 0.300 times less likely to engage in informal faculty meetings outside of class than were students in the lowest income group. In addition, students who attended an HBCU were 0.423 less likely to engage in informal faculty meetings outside of class. Also in the second model, college entrance exam scores ($OR = 1.003$, $p < .01$) was a significant predictor of participation in school clubs. Students with a parent who had a bachelor's degree or higher were 3.088 times more likely to participate in study groups. For both models, college entrance exam scores and participation in school clubs significantly predicted bachelor's degree attainment.

6.2 Discussion of Findings

Several key findings are worthy of discussion. First, quantitative analysis revealed high-income students were less likely to engage in informal faculty mentoring relationships. In the first chapter, I noted the assertion that social capital in the form of informal faculty mentoring can have a compensatory effect on racially and culturally diverse and marginalized students. With that in mind, my expectation was that informal faculty mentoring provides a key form of social capital that this research would show to be impactful for African American men who successfully attained bachelor's degrees. I expressed interest in exploring whether students from different family income levels might be differently inclined towards, and/or benefit differently from, this type of social capital. I expected that students who were more economically

disadvantaged would be more likely to seek or receive informal faculty mentoring, and that this

social capital would therefore be a more important factor in their persistence behavior and

ultimately their successful degree attainment. Therefore, this finding from the quantitative

analysis that high-income students were less likely to engage in informal faculty mentoring

relationships, appears to align with my expectations in that informal faculty mentoring is more

important to the success of Black male students from lower-income family backgrounds than it is

for Black male students from more affluent family backgrounds.

Black men from higher-income family backgrounds likely have better preparation for

college and more available resources while enrolled, relative to those from lower-income family

backgrounds. Students from higher-income households are also likely to have had better

positioning for success in college due to having had parents who could impart knowledge from

their own college experiences. Higher-income students may have broader social capital networks

and more confidence about their abilities. As a result, they may not be as inclined as their lower-

income counterparts to seek out informal mentorship connections with faculty outside of class

time.

Another particularly interesting finding pertained to the association between HBCU

attendance and engagement in informal faculty mentoring relationships. I also noted in the first

chapter that I expected to find that the effect of social capital on persistence and attainment for

Black men in general would be more impactful at PWIs. If more faculty at HBCUs are Black,

then there may be a much greater visibility and availability of racially similar faculty, such that

Black male students generally feel more connected and more comfortable. Black men at HBCUs

are more likely to feel integrated into the fabric of the institution, and less likely to feel

disconnected or isolated. This may mean that at HBCUs, they feel more secure and less inclined

to reach out to faculty for further and more individual connection outside of class time, as opposed to being more likely to experience feelings of insecurity and feeling more inclined towards making those connections at PWIs.

Another key finding was that students with higher college entrance exam scores were more likely to participate in school clubs, and those with at least one parent who earned a bachelor's degree were more likely to participate in study groups. The relationship between higher college entrance exam scores and school club participation may relate to students' academic preparedness. Students who score well on college entrance exams may have already experienced higher levels of academic success in lower levels of education, be less likely to need remedial classes, and be more likely to have obtained scholarships or grants to help pay for college, thereby reducing needs to work and increasing the amount of free time available to engage in school clubs. The relationship between participation in study groups and parents' degree attainment could be related to the emphasis placed on study groups by parents who had successfully completed college. Having guidance from educated parents who understand the rigors of postsecondary education can be valuable for underrepresented student groups, especially when that guidance fosters the development of healthy academic behaviors, such as participation in study groups.

Qualitative findings indicated informal faculty mentoring relationships were valuable in a number of ways. These relationships provided students with support, motivation, and accountability. Students felt their faculty mentors often went above and beyond to help them succeed. While most of the participants had White faculty mentors, they did express a preference for same-race mentors. This may help explain the quantitative result that revealed students who attended HBCUs were more likely to participate in informal faculty mentoring relationships.

Peer network relationships were described as supportive and motivating. Students described their groups as small and close-knit, often characterized by diversity. Often, peer relationships were fostered through activities outside of class, such as going to dinner and attending school events together. Students who attended HBCUs described their school environments as close, warm, and welcoming, while those who attended PWIs sometimes characterized their school culture as unfriendly and cold. It should be acknowledged that it might be difficult to assess whether students may have entered with certain perceptions about the campus environment, which their actual experiences on campus may have seemed to validate for them. The other possibility is that once students got to campus, they experienced things that then led them to perceive and conclude that their school environment was either warm and welcoming, or unfriendly and cold.

6.3   Implications

Several valuable practical implications emerged from the current study. Overall, findings revealed the value of supportive faculty and peer relationships for African American males in college. Qualitative analysis revealed several ways these relationships provided participants with support, guidance, encouragement, and motivation. Relationships with faculty members, specifically, were credited by many participants for helping them finish their degrees. The implications for these findings highlight the importance and value of supportive peer and faculty relationships among African American men attending colleges and universities around the country. Low enrollment and completion rates among this demographic have been attributed to low levels of support, especially emotional and social support. In addition, African American men often lack strong role models and relationships with peers that challenge and motivate them.

For educational leaders and policymakers seeking to improve equity, reduce academic achievement gaps, and eliminate the long-term income disparities faced by African American

men, bachelor's degree attainment is a valuable consideration. However, to ensure more African American men are successful in endeavors to obtain bachelor's degrees, it is vital that they are provided with support throughout their educational journeys. While the importance of financial resources in bachelor's degree attainment among underrepresented minority groups has been described by previous scholars, less emphasis has been placed on social and emotional support from faculty and peers. Leaders of colleges and universities, especially PWIs (which may be less inherently supportive of Black students), should consider ways to provide African American male students with higher levels of peer and faculty support. Leaders could consider developing more formal faculty mentoring programs, or recruit interested faculty members and provide them with professional development and training on how to foster supportive, informal mentoring relationships with students who are African American males. Informal school-based events and gatherings for students and faculty members could be sponsored to help nurture relationships outside of class.

In terms of nurturing supportive peer relationships, school leaders may consider developing more school-based clubs or social events that encourage African American males to network and meet other students outside of class, so they have opportunities to meet new people and develop supportive friendships. It is important that African American male students have opportunities to enjoy life outside of class and find balance that provides them with time to socialize and network with their peers. Especially for African American males attending PWIs, the development of supportive peer relationships can be essential to degree completion. While it is, understandably, the business of colleges and universities to educate students, it is also essential that they help ensure all students, including those from underrepresented groups, have access to essential levels of support and guidance.

6.4 Limitations

It is important to note a few limitations to the analysis of the quantitative data for this study. First, the public-use data for the BPS could only be processed using the PowerStats software from the NCES. During the analysis, a few limitations with this software were noted, including errors related to server communication problems. Software limitations also prevented the analysis of interactions, such as race and gender. Composite variables could not be created, and there was no way to run descriptive analyses in the software. Without a restricted-use data license, it was not possible to export the data and run it in another software suite. Thus, these limitations had to be accepted. It was also not possible to access concrete numbers in the data, only percentages. Frequencies for individual variables were unavailable as well.

Limitations were also present for the qualitative portion of the study. First, data collection via interviews is reliant on open, forthcoming responses from participants. With assurances of confidentiality, it was hoped all participants would feel comfortable providing honest answers, but it was possible that respondents censored their answers to questions in ways that preserved their self-perceptions. There was no way to confirm any of the information provided by participants, which is often an unavoidable limitation of interviews. Finally, a small number of the qualitative participants did not complete their bachelor's degree – there were technically four who never completed bachelor's degrees (neither at the institution where they started, nor at any transfer institution). While they still provided valuable information for the purposes of this research, it must be noted that the entire qualitative sample did not obtain their degrees.

6.5 Recommendations for Future Research

Several opportunities for future research emerged from the current study. These research recommendations would expand the relevant body of research while addressing aforementioned

limitations to this investigation. To overcome the most pressing limitations with the quantitative dataset, future researchers could consider gathering primary quantitative data via a researcher-developed online survey. This would allow for the generation of more focused data directly related to the perceived effects of supportive faculty and peer relationships on the academic success of African American males. In addition, this would help researchers overcome many of the limitations associated with existing quantitative datasets.

Researchers could also examine the specific effects of school club involvement on the academic outcomes of African American males. Findings from the current study indicated participation in school clubs was significantly associated with bachelor's degree attainment among African American males, but more research is needed to understand the mechanisms of this relationship. Investigation should be conducted to understand if involvement in certain types of clubs is associated with increased degree attainment, and how other characteristics of school club involvement (such as group size, meeting frequency, etc.) influence the relationship. Future researchers could also consider examining the mechanism behind the association between degree completion and having a parent who earned at least a bachelor's degree. Research is needed to understand how parent's educational attainment can positively influence the academic outcomes of African American males. For example, scholars could investigate if more educated parents provide more support and have higher expectations that contribute to higher rates of degree completion for their students.

Research is also needed to better understand why family income and HBCU attendance was associated with lower odds of engagement in informal faculty meetings. Informal faculty mentoring may indeed be more important to the persistence decisions and ultimately the success of Black male students from lower-income family backgrounds than it is for Black male students

from more affluent family backgrounds. HBCU attendance may foster higher levels of social support, belonging, and student-faculty relationships for Black male students, thus contributing to higher degree completion. Given the well-established critical mass of Black students and faculty, they may generally feel more secure at HBCUs, and therefore less inclined to reach out to faculty for further and more individual connection outside of class time. This is in contrast to the possibility that, in general, they may be more likely to experience feelings of insecurity at PWIs, and therefore may be more inclined and feel more of a need to engage with faculty outside of class time in an effort to seek more guidance and support from professors or instructors, who are key institutional representatives. However, an understanding of the exact mechanisms of these relationships extended beyond the scope of the current study and create opportunities for future research.

Additional research is also warranted to expand upon findings to emerge from the qualitative analysis performed in the current study. First, researchers could consider replicating this study with a more homogenous sample. Participants in the current study varied greatly, in terms of the time they spent in college, how long ago they attended school, and whether they completed their degrees. These variances likely contributed to significant differences in participants' college experiences. Future researchers may consider limiting the study sample to students who were similar in terms of the types of schools they attended, when they attended, and other demographic characteristics such as age and socioeconomic status. It may also be of benefit to collect data through additional qualitative strategies, such as focus groups and online questionnaires. Having multiple forms of data would allow qualitative researchers to triangulate data to produce more trustworthy results.

6.5.1 Recommended Programming Model

The qualitative data yielded that Black men who persisted to graduation reported these kinds of behaviors having been displayed towards them by faculty as important to their successful college completion: showing a caring and supportive demeanor; being approachable and having an open-door policy; motivating and holding students accountable; and going out of their way to be helpful. A research university in the USG supports the engagement of URM students in their first year through an enrichment program that is coordinated by their central institutional diversity office. The program was created to increase retention and promote the success of URM students. In addition to a faculty mentorship component and a peer social connection component, the program includes academic enrichment and professional development workshops, and other networking opportunities. The institutional diversity office even provides administrative support in an effort to best maximize the best use of time for student and faculty participants, including the following: matching student mentees with renowned, highly accomplished professors who serve as mentors, providing communication templates for faculty to use, and offering scheduling assistance. This program provides the atmosphere and the mechanisms for formalized faculty mentorship arrangements and increased connection with faculty outside of class time. The program encourages and facilitates the aforementioned faculty behaviors that my qualitative interview data shows to be important to Black men having positive experiences and persisting to graduation.

6.5.1.1 Faculty mentoring component

Marshall, one of my interview participants, was automatically placed in this enrichment program as a URM student. Though the program's scope targeted first-year students, Marshall and his faculty mentor developed a great relationship which they maintained throughout

Marshall's time as an undergraduate and in professional school. Marshall successfully graduated from this institution in four years, went on to law school, and is now an attorney at a firm in southeast Georgia. He credits his relationship with this faculty mentor for much of his success.

Given that the quantitative data for the BPS04/09 population revealed that Black men at HBCUs were more likely to engage in informal meetings with faculty outside of class time as compared to Black men at PWIs, it may be especially important for the PWIs to replicate or develop programs that are similar to the one described above that benefited Marshall. The quantitative data also revealed that Black men from higher-income family backgrounds were more likely to engage in informal meetings with faculty outside of class time. So, a program of this nature would also be especially key because it would automatically bring in Black men from all family income levels and backgrounds.

It should be noted that in implementing programs like this one at other colleges and universities, the initiative should be launched, financially supported, and maintained at the central institutional level. Buy-in and funding commitment from executive leadership is important for emphasizing this programming as a priority for the campus community. Institute leadership and/or the central institutional diversity office should promote this programming and recruit faculty to participate. It must be made clear that faculty participation is completely voluntary. With this approach, faculty would volunteer freely and would hopefully not feel pressured to participate; in contrast, if the programming was being launched at the academic unit level, faculty might feel coerced to participate even if they are not so inclined. Regular meetings and professional development should be offered to the faculty mentors, to include emphasis on best practices and ways to display the supportive behaviors outlined above. Regular feedback

and assessment of the program by the faculty and student participants is also necessary, so as to positively enforce the things that work well, and to address things that may not work well.

The central institutional backing would also hopefully alleviate some of the issues faced by faculty members at PWIs who racially identify with URM populations, in that in many cases those faculty members are disproportionately asked to shoulder the mentorship of URM students – either by their institutions or departments, and/or via being approached personally by students. If students are automatically assigned when they first enroll at the institution, those students will already be paired with willing, supportive faculty who are engaged in the program because they want to be. The student mentees will recognize that, and for them it is likely to make the program and the faculty interaction much more meaningful and important.

6.5.1.2   *Peer network support component*

The qualitative data illuminated that close peer circles – on average around five people, and generally less than ten – seemed to organically emerge and many times develop into lifelong friendships. Participants reported that they met their college friends in many ways. There was diversity among the peer groups, including with regard to gender; however, there seemed to be unique bonds within peer groups made up of friends from racially similar backgrounds, given that there was an expressed feeling of connection and comfort. Peers connected and socialized quite a lot outside of school and academics. The quantitative data revealed that the only social capital variable significantly associated with bachelor's degree completion was one of the peer network support variables for engagement in extracurricular activities, specifically *participation in school clubs*. Programming that emphasizes and positions Black men to participate in clubs would be important to help facilitate peer network support. Greater participation in school clubs should facilitate an easier pathway for Black men to make the broad array of peer connections

referenced above, and should bring about an increased likelihood of their persistence to graduation.

The recommended model of the engagement program described above, that contributed to Marshall's success, has a peer social connection component that addresses the facilitation of forming these diverse peer bonds. Also, the *admissions test scores* variable was a significant predictor of participation in school clubs, suggesting that better pre-college academic preparation is related to an increased likelihood of participation in clubs. As this program model would automatically bring in URM from all family income levels and backgrounds, it would be a strong vehicle to connect Black men with participation in clubs, and therefore should increase the likelihood of persistence. Another important element of this model is that it would also automatically include marketing to and recruitment of commuter students in addition to on-campus residents.

The qualitative data also revealed that participation in study groups was the most common form of peer academic support, suggesting that using this kind of more formalized programming to facilitate the formation of, and engagement in, study groups, would be helpful for Black men. The quantitative data showed that Black men with a parent who had attained a bachelor's degree or higher were more than three times more likely to participate in study groups, this programming would be especially key to capturing first-generation students and promoting the importance of study groups to them. The program administrators could pull the enrollment rosters for the incoming students, group students according to major, and offer to arrange study group sessions for them. Staff could make things easier and more appealing for students to convene for study group sessions by reserving designated room spaces on campus. Staff might also arrange for food/snacks and check in regularly with the students to monitor

whether they need supplies or other support. Administrators might hire either graduate students or more senior undergraduate students to provide tutoring and guidance to the study groups. Utilizing undergraduate students would reflect one of the proven high-impact strategies used by another research university in the state that has significantly improved its graduation rates for Black students in part by implementing a near-peer tutoring and mentoring program as part of their university-wide supplemental instruction resources. In addition to offering a faculty and peer mentoring program that targets URM, first-generation, and LGBT+ students, that university also requires all non-honors students to participate in freshman learning communities that group students based on common academic and career pathway interests.

6.5.1.3   School environments

According to the qualitative data, participants largely described the school environments at HBCSs as familial, warm, welcoming, and tight-knit communities. When participants described the school atmospheres at PWIs, several indicated that the environments felt unfriendly and cold. Institutional leaders should administer surveys to URM students to ask what resources and services they would like to see – or see more of – that would help them to feel more included and engaged as part of the campus community. The survey should probe for specific things the students might like to see at the institutional level and in other contexts, such as in their major departments.

The second aforementioned research university also relies on a system created to utilize analytics to track the progress of undergraduate students and generate alerts to notify academic advisors know when certain risk factors have emerged, for example, a decline in grades or attendance. This system is used as part of an intrusive academic advising high-impact strategy that allows the institution to respond promptly and proactively to students who may be at risk of

dropping out. An element that emerged in my qualitative interview with Vaughn, who decided to leave school without finishing, was the lack of more direct, intrusive style advising. He believed his persistence decision might have been different had there been an "intrusive, in-your-face" advisor or mentor to recognize his steep academic decline from the outstanding performance he had achieved when he started school, and to intervene by approaching him more emphatically to get his attention and prompt him to reflect on his academic potential and how he needed to better prioritize.

Institutions that implement these kinds of assessment and intrusive advising measures may find that they make a difference in helping Black men to feel more included and more integrated into the fabric of the campus community. Intrusive academic advising may help students to feel more "cared about" and "invested in" and may be largely effective to help URM students in particular to stay on track academically. Experiencing high-touch, meaningful connections with institutional representatives, to include faculty, staff, and peers within the structure of the programming recommendations referenced above, would contribute to institutions helping Black men to feel valued, comfortable, and included. The interactions made possible through these programs may directly influence perceptions of a warmer and more welcoming school environment. As a result, Black men would also be able to observe tangible evidence of institutional investment in their success, which the qualitative data has illuminated as a necessary factor in their persistence decisions and successful graduation.

REFERENCES

Adelman, Clifford. 1999. "Answers in the Tool Box. Academic Intensity, Attendance Patterns,

and Bachelor's Degree Attainment." Washington, D.C.: U.S. Department of Education,

Office of Educational Research and Improvement.

Adelman, Clifford. 2002. "The Relationship between Urbanicity and Educational Outcomes."

Pp. 35-63 in *Increasing Access to College: Extending Possibilities for All Students*, edited

by W.G. Tierney and L.S. Hagedorn. Albany, NY: State University of New York Press.

Ainsworth-Darnell, James W., and Douglas B. Downey. 1998. "Assessing the Oppositional

Culture Explanation for Racial/Ethnic Differences in School Performance." *American

Sociological Review* 63(4):536-53.

Arbona, Consuelo, and Diane M. Novy. 1990. "Noncognitive Dimensions as Predictors of

College Success among Black, Mexican-American, and White Students." *Journal of

College Student Development* 31(5):415-22.

Arum, Richard, and Josipa Roksa. 2011. *Academically Adrift: Limited Learning on College

Campuses*. Chicago, IL: University of Chicago Press.

Astin, Alexander W. 1993. *What Matters in College?: Four Critical Years Revisited*. Vol. 1.

San Francisco, CA: Jossey-Bass.

Astin, Alexander W., and Leticia Oseguera. 2004. "The Declining 'Equity' of American Higher

Education." *The Review of Higher Education* 27(3):321-41.

Astin, Alexander W., and Leticia Oseguera. 2005. "Pre-College and Institutional Influences on

Degree Attainment." Pp. 245-276 in *College Student Retention: Formula for Student

Success*, edited by A. Seidman. Westport, CT: American Council on Education and

Praeger.

Baum, Sandy, Jennifer Ma, and Kathleen Payea. 2004. *Education Pays: The Benefits of Higher Education for Individuals and Society*. New York, NY: College Board.

Bean, John P. 1980. "Dropouts and Turnover: The Synthesis and Test of a Causal Model of Student Attrition." *Research in Higher Education* 12(2):155-71.

Becker, Gary S. 1964/1993. *Human Capital*. Chicago, IL: University of Chicago Press.

Bourdieu, Pierre. 1977. "Cultural Reproduction and Social Reproduction." Pp. 487-511 in *Power and Ideology in Education*, edited by J. Karabel and A.H. Halsey. Vol. 19. New York, NY: Oxford University Press.

Bourdieu, Pierre. 1986. "The Forms of Capital." Pp. 241-58 in *Handbook of Theory and Research for the Sociology of Education*, edited by J.G. Richardson. Westport, CT: Greenwood Press.

Bourdieu, Pierre. 1987. "What Makes a Social Class? On the Theoretical and Practical Existence of Groups." *Berkeley Journal of Sociology* 32(1):1-17.

Bourdieu, Pierre, and Jean-Claude Passeron. 1977. *Reproduction in Education, Society, and Culture*. Translated by Richard Nice. London, UK: Sage Publications.

Borgatti, Stephen P., and Brandon Ofem. 2010. "Overview: Social Network Theory and Analysis." Pp. 17-29 in *Social Network Theory and Educational Change*, edited by Alan J. Daly. Cambridge, MA: Harvard Education Press.

Braun, Virginia, and Vaughnia Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3(2):77-101.

Brooms, Derrick R., and Arthur R. Davis. 2017. "Staying Focused on the Goal: Peer Bonding and Faculty Mentors Supporting Black Males' Persistence in College." *Journal of Black Studies* 48(3):305-326.

Brown II, M. Christopher, Guy L. Davis, Shederick A. McClendon. 1999. "Mentoring Graduate

Students of Color: Myths, Models, and Modes." *Peabody Journal of Education*

74(2):105-118.

Buriel, Raymond. 1984. "Integration within Traditional Mexican American Culture and

Sociocultural Adjustment." Pp. 95-130 in *Chicano Psychology*, edited by J.L. Martinez

and R. Mendoza. New York, NY: Academic Press.

Carey, Kevin. 2004. *A Matter of Degrees: Improving Graduation Rates in Four-Year Colleges

and Universities*. Washington, DC: The Education Trust.

Choo, Hae Yeon, and Myra M. Ferree. 2010. "Practicing Intersectionality in Sociological

Research: A Critical Analysis of Inclusions, Interactions, and Institutions in the Study of

Inequalities." *Sociological Theory* 28(2):129-149.

Coleman, James. 1988. "Social Capital in the Creation of Human Capital." *American Journal of

Sociology* 94:S95-S121.

Coleman, James. 1990. *Foundations of Social Theory*. Cambridge, MA: Harvard University

Press.

Collins, Patricia H. 1990. *Black Feminist Thought: Knowledge, Consciousness, and the Politics

of Empowerment*. New York, NY: Routledge.

Collins, Patricia H., and Sirma Bilge. 2016. *Intersectionality*. Malden, MA: Polity Press.

Complete College America. 2014a. "Four Year Myth."

http://completecollege.org/wp-content/uploads/2014/11/4-Year-Myth.pdf

Complete College America. 2014b. "Our Work." http://completecollege.org/about-cca/

Complete College Georgia. 2012. "Georgia Higher Education Plan 2012."

http://www.ose.uga.edu/news/GaHigherEducationCompletionPlan2012.pdf

Cooley, Charles H. 1956. *The Two Major Works of Charles H. Cooley*. Glencoe, IL: The

Free Press.

Cooley, Michele R., Dewey G. Cornell, and Courtland Lee. 1991. "Peer Acceptance and Self-

Concept of Black Students in a Summer Gifted Program." *Journal for Education of the

Gifted* 14(2):166-177.

Corrigan, Melanie E. 2003. "Beyond Access: Persistence Challenges and the Diversity of Low-

Income Students." *New Directions for Higher Education* 121:25-34.

Crenshaw, Kimberle. 1991. "Mapping the Margins: Intersectionality, Identity Politics, and

Violence against Women of Color." *Stanford Law Review* 43:1241-1299.

Crisp, Gloria. 2011. "The Role of Mentoring on the Persistence Decisions of Undergraduate

Students Attending a Hispanic-Serving Institution." *Enrollment Management Journal*

5:32-56.

Crisp, Gloria, and Irene Cruz. 2009. "Mentoring College Students: A Critical Review of the

Literature between 1990 and 2007." *Research in Higher Education* 50(6):525-545.

Cuyjet, Michael J. 2006. "Helping African American Men Matriculate: Ideas and Suggestions."

Pp. 237-50 in *African American Men in College*, edited by M.J. Cuyjet and Associates.

San Francisco, CA: Jossey-Bass.

Cuyjet, Michael J., and Associates, eds. 2006. *African American Men in College*. San Francisco,

CA: Jossey-Bass.

Denzin, Norman K., and Yvonna S. Lincoln. 2000. "Introduction: The Discipline and Practice of

Qualitative Research." Pp. 1-28 in *Handbook of Qualitative Research*, edited by C. Ellis,

A.P. Bochner, N.K. Denzin, and Y.S. Lincoln. 2nd. ed. Thousand Oaks, CA: Sage

Publications.

Dika, Sandra L. 2012. "Relations with Faculty as Social Capital for College Students: Evidence

      from Puerto Rico." *Journal of College Student Development* 53(4):596-610.

Dika, Sandra L., and Kusum Singh. 2002. "Applications of Social Capital in Educational

      Literature: A Critical Synthesis." *Review of Educational Research* 72(1):31-60.

Donovan, Rebecca. 1984. "Path Analysis of a Theoretical Model of Persistence in Higher

      Education among Low-Income Black Youth." *Research in Higher Education* 21:243-52.

Dreeben, Robert. 1968. *On What is Learned in School*. Reading, MA: Addison-Wesley

      Publishing.

Duderstadt, James J., and Farris W. Womack. 2003. *The Future of the Public University in

      America: Beyond the Crossroads*. Baltimore, MD: The Johns Hopkins University Press.

Eby, Lillian T., and Tammy D. Allen. 2008. "Moving Toward Interdisciplinary Dialogue in

      Mentoring Scholarship: An Introduction to the Special Issue." *Journal of Vocational

      Behavior* 72(2):159-67.

Eisenstadt, Shmuel N., and Luis Roniger. 1984. *Patrons, Clients and Friends: Interpersonal

      Relations and the Structure of Trust in Society*. Cambridge, UK: Cambridge University

      Press.

Erickson, Lance D., Steve McDonald, and Glen H. Elder, Jr. 2009. "Informal Mentors and

      Education: Complementary or Compensatory Resources?" *Sociology of Education*

      82(4):344-367.

Essed, Philomena. 1991. *Understanding Everyday Racism*. London, UK: Sage Publications.

Felson, Richard B. 1993. "The (Somewhat) Social Self: How Others Affect Self-Appraisals." Pp.

      1-25 in *Psychological Perspectives on the Self: The Self in Social Perspective*, edited by

      Jerry Suls. Hillsdale, NJ: Lawrence Erlbaum Associates.

Fleming, Jacqueline. 1985. *Blacks in College. A Comparative Study of Students' Success in Black and in White Institutions*. San Francisco, CA: Jossey-Bass, Inc., Publishers.

Ford, Donna Y., and John J. Harris. 1995. "Underachievement among Gifted African American Students: Implications for School Counselors." *School Counselor* 42:196–203.

Fordham, Signithia, and Jonathan Ogbu. 1986. "Black Students' School Success: Coping with the 'Burden of 'Acting White'" *Urban Review* 18(3):176-206.

Fries-Britt, Sharon L. 1998. "Moving Beyond Black Achiever Isolation: Experiences of Gifted Black Collegians." *Journal of Higher Education* 69(5):556-576.

Fullilove, Robert E., and Philip U. Treisman. 1990. "Mathematics Achievement among African American Undergraduates at the University of California, Berkeley: An Evaluation of the Mathematics Workshop Program." *The Journal of Negro Education* 59(3):463-478.

Galbraith, Michael W., and Waynne B. James. 2004. Mentoring by the Community College Professor: One Role among Many." *Community College Journal of Research and Practice* 28(8):689-701.

Gandara, Patricia. 2002. "Meeting Common Goals: Linking K-12 and College Interventions." Pp. 81-103 in *Increasing Access to College: Extending Possibilities for All Students*, edited by W.G. Tierney and L.S. Hagedorn. Albany, NY: State University of New York Press.

Gayles, Jonathan. 2005. "Playing the Game and Paying the Price: Academic Resilience among Three High-Achieving African American Males." *Anthropology and Education Quarterly* 36(3):250-64.

Gayles, Jonathan. 2006. "'Carrying It for the Whole Race': Achievement, Race, and Meaning

among Five High Achieving African American Men." *Journal of African American Studies* 10(1):19-32.

Halpern, David. 2005. *Social Capital*. Cambridge, UK: Polity Press.

Hamilton, John P. 2005. "Reasons African American Men Persist to Degree Completion in Institutions." Pp. 177-95 in *Still Not Equal: Expanding Educational Opportunity in Society*, edited by M. Christopher Brown II. New York, NY: Peter Lang Publishing, Inc.

Harper, Shaun R. 2006a. "Enhancing African American Male Student Outcomes through Leadership and Active Involvement." Pp. 68-94 in *African American Men in College*, edited by M.J. Cuyjet and Associates. San Francisco, CA: Jossey-Bass.

Harper, Shaun R. 2006b. "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.

Harper, Shaun R. 2008. "Realizing the Intended Outcomes of *Brown*: High-Achieving African American Male Undergraduates and Social Capital." *American Behavioral Scientist* 51(7):1030-1053.

Harper, Shaun 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.

Harper, Shaun R. 2010. "An Anti-Deficit Achievement Framework for Research on Students of Color in STEM." *New Directions for Institutional Research* 148:63-74.

Harper, Shaun R. 2012. "Black Male Student Success in Higher Education: A Report from the National Black Male College Achievement Study." Retrieved Sept. 26, 2012 (https://works.bepress.com/sharper/43/).

Harper, Shaun R. 2013. "Am I My Brother's Teacher? Black Undergraduates, Racial

Socialization, and Peer Pedagogies in Predominantly White Postsecondary Contexts."

Review of Research in Education 37(1):183-211.

Harper, Shaun R., and Marybeth Gasman. 2008. "Consequences of Conservatism: Black Male

Undergraduates and the Politics of Historically Black Colleges and Universities." *Journal

of Negro Education* 77(4):336-351.

Hearn, James C. 2001. "Access to Postsecondary Education: Financing Equity in an Evolving

Context." Pp. 439-460 in *The Finance of Higher Education: Theory, Research, Policy

and Practice*, edited by M.B. Paulsen and J.C. Smart. New York, NY: Agathon Press.

Henson, James W. 1980. "Institutional Excellence and Student Achievement: A Study of College

Quality and Its Impact on Educational and Career Achievement." PhD dissertation,

School of Education, University of California Los Angeles.

hooks, bell. 1990. "Choosing the Margin as a Spece of Racial Openness." Pp. 145-53 in

Yearnings: Race, Gender, and Cultural Politics, edited by b. hooks. New York, NY:

Agathorn Press.

Howard, Tyrone C. 2008. "Who Really Cares? The Disenfranchisement of African American

in PreK-12 Schools: A Critical Race Theory Perspective." *Teachers College Record*

110(5):954-985.

Hurd, Noelle, and Marc Zimmerman. 2010. "Natural Mentors, Mental Health, and Risk

Behaviors: A Longitudinal Analysis of African American Adolescents Transitioning into

Adulthood." *American Journal of Community Psychology* 46 (1-2):36-48.

Hurtado, Sylvia, and Deborah F. Carter. 1997. "Effects of College Transition and Perceptions of

Campus Racial Climate on Latinx College Students' Sense of Belonging." *Sociology of*

Education 70:324-45.

Irvine, Jacqueline J. 1990. "Black Students and School Failure: Policies, Practices, and

Prescriptions." New York, NY: Greenwood Press.

Jackson, Jerlando F.L., James L. Moore III, and Raul A. Leon. 2010. "Male Underachievement

in Education Across the Globe: A Shift in Paradigm for Gender Disparities Regarding

Academic Achievement." *International Encyclopedia for Education*. 3rd ed. Elsevier

Science: Oxford, UK.

Johnson, Cynthia S. 1989. "Mentoring Programs." Pp. 118-128 in *The Freshman Year*

Experience: Helping Students Survive and Succeed in College, edited by M.L. Upcraft

and J. Gardner. San Francisco, CA: Jossey-Bass.

Johnson, Harry G. 1960. "The Political Economy of Opulence." *Canadian Journal of Economics*

and Political Science 26(4):552-64.

Jones, Camara P. 2000. "Levels of Racism: A Theoretical Framework and a Gardener's Tale."

American Journal of Public Health 90(8):1212-1215.

Jones, Susan R. 2009. "Constructing Identities at the Intersections: An Autoethnographic

Exploration of Multiple Dimensions of Identity." *Journal of College Student*

Development 50(3):287–304.

Kahlenberg, Richard D. 2004. *America's Untapped Resource: Low-Income Students in Higher*

Education. New York, NY: Century Foundation Press.

Kerckhoff, Alan C. 1976. "The Status Attainment Process: Socialization or Allocation?" *Social*

Forces 55:368-81.

Kim, Young K. 2010. "Racially Different Patterns of Student-Faculty Interaction in College: A

Focus on Levels, Effects, and Causal Directions." *Journal of the Professoriate* 3(2):161-189.

Kuh, George D., Megan Palmer, and Kelly Kish. 2003. "The Value of Educationally Purposeful Out-of-Class Experiences." Pp. 19-34 in *Involvement in Campus Activities and Retention of First-Year College Students*, edited by T.L. Skipper and R. Argo. Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.

Labaree, David F. 2008. "Public Goods, Private Goods: The American Struggle Over Educational Goals." American Educational Research Journal 34(1):39-81.

LaVant, Bruce D., John L. Anderson, and Joseph W. Tiggs. 1997. "Retaining African American Men through Mentoring Initiatives." Pp. 43-52 in *Helping African American Men Succeed in College*, edited by M.J. Cuyjet. San Francisco, CA: Jossey-Bass.

Lee, Moosung. 2014. "Bringing the Best of Two Worlds Together for Social Capital Research in Education: Social Network Analysis and Symbolic Interactionism." *Educational Researcher* 43(9):454-464.

Lee, Wynetta Y. 1999. "Striving Toward Effective Retention: The Effect of Race on Mentoring African American Students." *Peabody Journal of Education* 74(2):27-43.

Levinson, Daniel J., Charlotte N. Darrow, Edward B. Klein, Maria H. Levinson, and Braxton McKee. 1978. *The Seasons of a Man's Life*. New York, NY: Knopf.

Lincoln, Yvonna S., and Egon G. Guba. 1986. "But is it Rigorous? Trustworthiness and Authenticity in Naturalistic Evaluation." *New Directions for Evaluation* 30:73-84.

Lin, Nan. 2001a. "Social Capital: Social Networks, Civic Engagement or Trust?" *Hong Kong Journal of Sociology* 2:1-38.

Lin, Nan. 2001b. *Social Capital: A Theory of Social Structure*. Cambridge, UK: Cambridge

    University Press.

Lin, Nan. 2008. "A Network Theory of Social Capital." Pp. 50-69 in *The Handbook of Social*

    Capital, edited by D. Castiglione, J.W. van Deth, and G. Wolleb. Oxford,

    NY: Oxford University Press, Inc.

Lincoln, Norman K., and Egon G. Guba. 1986. "But is it Rigorous? Trustworthiness and

    Authenticity in Naturalistic Evaluation." *New Directions for Evaluation* 30:73-84.

Lipsky, Suzanne. 1987. *Internalized Racism*. Seattle, WA: Rational Island Publishers.

Lucas, Samuel R. 2001. "Effectively Maintained Inequality: Education Transitions, Track

    Mobility, and Social Background Effects." *American Journal of Sociology* 106(6):1642-

    1690.

Lundy-Wagner, Valerie C. 2012. "'Class'ifying Ethnicity/Race and Gender: An Intersectional

    Critique of Bachelor's Degree Completion Research." *InterActions: UCLA Journal of*

    Education and Information Studies 8(2):1-21.

Morrow, James. 1999. "Watching Web Speech." *U.S. News & World Report*, February 15, p. 32.

Morrow, Virginia. 1999. "Conceptualising Social Capital in Relation to the Well-Being of

    Children and Young People: A Critical Review." *Sociological Review* 47(4):744-765.

Museus, Samuel D. and Kimberly A. Griffin. 2011. "Mapping the Margins in Higher Education:

    On the Promise of Intersectionality Frameworks in Research and Discourse." *New*

    Directions for Institutional Research 151:5-13.

Museus, Samuel D. and Kathleen M. Neville. 2012. "Delineating the Ways That Key

    Institutional Agents Provide Racial Minority Students With Access to Social Capital in

    College." *Journal of College Student Development* 53(3):436-52.

National Science Board. 2016. *Science and engineering indicators*. Arlington, VA: National

    Science Foundation.

National Science Foundation (NSF). 2000. *Women, Minorities, and Persons with Disabilities in*

    Science and Engineering 2000 (NSF 00-327). Arlington, VA: NSF.

National Student Clearinghouse. 2014. Snapshot Report: Persistence-Retention. Retrieved

    February 28, 2017. http://nscresearchcenter.org/snapshotreport-persistenceretention14/.

Noguera, Pedro. 2003. "The Trouble with Black Boys: The Role and Influence of Environmental

    and Cultural Factors on the Academic Performance of African American Males." *Urban*

    Education 38(4):431-459.

Nora, Amaury, and Gloria Crisp. 2007. "Mentoring Students: Conceptualizing and Validating

    the Multi-Dimensions of a Support System." *Journal of College Student Retention*

    9(3):337-356.

Oakes, Jeannie. 1985. *Keeping Track: How Schools Structure Inequality*. New Haven, CT: Yale

    University Press.

Ogbu, John U. 1991. "Immigrant and Involuntary Minorities in Comparative Perspective."

    Pp. 184-204 in *Minority Status and Schooling: A Comparative Study of Immigrant and*

    Involuntary Minorities, edited by M.A. Gibson and J.U. Ogbu. New York, NY: Garland

    Press.

Organisation for Economic Cooperation and Development (OECD). 2012. "Education at a

    Glance 2012: OECD Indicators". Paris, France: OECD Publishing.

    Retrieved February 20, 2023. http://dx.doi.org/10.1787/eag-2012-en

OECD. 2019. Programme for International Student Assessment (PISA) 2018 Results (Volume I):

    "What Students Know and Can Do." PISA, OECD Publishing: Paris, France.

Retrieved February 20, 2023. https://doi.org/10.1787/5f07c754-en

Orfield, Gary. 1988. "Exclusion of the Majority: Shrinking College Access and Public Policy in Metropolitan Los Angeles." *The Urban Review* 20(3):147-163.

Orfield, Gary, ed. 2004. *Dropouts in America: Confronting the Graduation Rate Crisis*. Cambridge, MA: Harvard Education Press.

Pace, C. Robert. 1984. *Measuring the Quality of College Student Experiences*. Los Angeles, CA: University of California Center for the Study of Evaluation.

Palmer, Robert T., and Marybeth Gasman. 2008. "'It Takes a Village to Raise a Child': The Role of Social Capital in Promoting Academic Success of African American Men at a Black College." *Journal of College Student Development* 49(1):52-70.

Palmer, Robert T., Ryan J. Davis, James L. Moore III, and Adriel A. Hilton. 2010. "A Nation at Risk: Increasing College Participation and Persistence among African American Males to Stimulate U.S. Global Competitiveness." *Journal of African American Males in Education* 1(2):105-124.

Parsons, Talcott. 1959. "The School Class as a Social System: Some of its Functions in American Society." *Harvard Educational Review* 29:297-313.

Pascarella, Ernest T., Christopher T. Pierson, Gregory C. Wolniak, and Patrick T. Terenzini. 2004. "First-Generation College Students: Additional Evidence on College Experiences and Outcomes." *Journal of Higher Education* 75(3):249-284.

Pascarella, Ernest T., and Patrick T. Terenzini. 2005. *How College Affects Students*. Vol. 2, *A Third Decade of Research*. San Francisco, CA: Jossey-Bass.

Perna, Laura W., and Marvin A. Titus. 2005. "The Relationship between Parental Involvement

as Social College Enrollment: An Examination of Racial/Ethnic Group Differences." *The Journal of Higher Education* 76(5):485-518.

Pheterson, Gail. 1990. "Alliances between Women: Overcoming Internalized Oppression and Internalized Domination." Pp. 34-48 in *Bridges of Power: Women's Multicultural Alliances*, edited by L. Albrecht and R. Brewer. Philadelphia, PA: New Society.

Polite, Vernon C., and James E. Davis, eds. 1999. *African American Males in School and Society*. New York, NY: Teachers College Press.

Pope, Myron L. 2002. "Community College Mentoring: Minority Student Perception." *Community College Review* 30(3):31-45.

Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." *Annual Review of Sociology* 24:1-24.

Prillerman, Shelly L., Hector F. Myers, and Brian D. Smedley. 1989. "Stress, Well-Being, and Academic Achievement in College." Pp. 189-215 in *Black Students*, edited by G.L. Berry and J.K. Asaman. Newbury Park, CA: Sage Publications.

Putnam. Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon and Schuster.

Pyke, Karen, and Tran Dang. 2003. "'FOB' and 'Whitewashed': Identity and Internalized Racism among Second Generation Asian Americans." *Qualitative Sociology* 26(2):147-72.

Raftery, Adrian E., and Michael Hout. 1993. "Maximally Maintained Inequality: Expansion, Reform, and Opportunity in Irish Education, 1921-75." *Sociology of Education* 66(1):41-62.

Rendón, Laura. I., Vincent Novack, and David Dowell. 2005. Testing Race-Neutral Admissions

Models: Lessons Learned from California State University–Long Beach. *The Review of Higher Education* 28(2):221–243.

Reynolds, Rena. 2010. "'They Think You're Lazy,' and Other Messages Black Parents Send Their Black Sons: An Exploration of Critical Race Theory in the Examination of Education Outcomes for Black Males." *Journal of African American Males in Education* 1(2):144-163.

Rhodes, Jean E., Lori Ebert, and Karla Fischer. 1992. "Natural Mentors: An Overlooked Resource in the Social Networks of Young, African American Mothers." *American Journal of Community Psychology* 20(4):445-461.

Roach, Ronald. 2001. "Where are the Black Men on Campus?" *Diverse Issues in Higher Education* 18(6):18.

Ross, Teris, Grace Kena, Amy Rathbun, Angelina Kewal Ramani, Jijun Zhang, Paul Kristapovich, and Eileen Manning. 2012. "Higher Education: Gaps in Access and Persistence Study (NCES 2012-046). U.S. Department of Education, National Center for Education Statistics. Washington, DC: Government Printing Office. Retrieved October 27, 2018. https://nces.ed.gov/pubs2012/2012046.pdf

Russell, Melody L. and Mary M. Atwater. 2005. "Traveling the Road to Success: A Discourse on Persistence Throughout the Science Pipeline with African American Students at a Predominantly White Institution." *Journal of Research in Science Teaching* 42(6):691-715.

Sallee, Margaret W., and William G. Tierney. 2007. "The Influence of Peer Groups on Academic Success." *College and University* 82(2):7-14.

Santos, Silvia J., and Elena T. Reigadas. 2004. "Understanding the Student-Faculty Mentoring

Process: Its Effects on At-Risk University Students." *Journal of College Student Retention Research Theory and Practice* 6(3):337-357.

Sax, Linda J. 2008. *Gender Gap in College: Maximizing the Developmental Potential of Women and Men*. San Francisco, CA: Jossey-Bass.

Schultz, Theodore W. 1961. "Investment in Human Capital." *The American Economic Review* LI(1):1-17.

Sedlacek, William E. 2004. *Beyond the Big test: Noncognitive Assessment in Higher Education*. San Francisco, CA: Jossey-Bass.

Sewell, William H., and Robert M. Hauser. 1980. "The Wisconsin Longitudinal Study of Social and Psychological Factors in Aspirations and Achievements." *Research in Sociology of Education and Socialization* 1:59-99.

Shapiro, Doug, Affet Dundar, Faye Huie, Phoebe Wakhungu, Xin Yuan, Angel Nathan, and Youngsik Hwang, Y. 2017. *Completing College: A National View of Student Attainment Rates by Race and Ethnicity – Fall 2010 Cohort* (Signature Report, No. 12b). Herndon, VA: National Student Clearinghouse Research Center.

Simmons, Lamont D. 2013. "Factors of Persistence for African American Men in a Student Support Organization." *The Journal of Negro Education* 82(1):62-74.

Solórzano, Daniel G., and Tara J. Yosso. 2002. "Critical Race Methodology: Counter-Storytelling as an Analytical Framework for Education Research." *Qualitative Inquiry* 8(1):23-44.

Stage, Frances K., and Don Hossler. 2000. "Where is the Student? Linking Student Behaviors, College Choice, and College Persistence." Pp. 170-95 in *Reworking the Student Departure Puzzle*, edited by J.M. Braxton. Nashville, TN: Vanderbilt University Press.

Stanton-Salazar, Ricardo D. 1997. "A Social Capital Framework for Understanding the Socialization of Racial Minority Children and Youths." *Harvard Educational Review* 67(1):1-40.

Stanton-Salazar, Ricardo. 2001. *Manufacturing Hope and Despair: The School and Kin Support Networks of U.S.-Mexican Youth*. New York, NY: Teachers College Press.

Stanton-Salazar, Ricardo D. 2004. "Social Capital among Working-Class Minority Youth." Pp. 18-38 in *School Connections: U.S. Mexican Youth, Peers, and School Achievement*, edited by M. A. Gibson, P. C. Gandara, and J. P. Koyama. New York, NY: Teachers College Press.

Stanton-Salazar, Ricardo D. 2011. "A Social Capital Framework for the Study of Institutional Agents and Their Role in the Empowerment of Low-Status Students and Youth." *Youth and Society* 43(3):1066-09.

Stanton-Salazar, R., and S. Spina. 2003. "Informal Mentors and Role Models in the Lives of Urban Mexican-Origin Adolescents." *Anthropology and Education Quarterly* 34(3):231-54.

Strayhorn, Terrell L. 2008a. "The Invisible Man: Factors Supporting the Retention of Low-Income African American Males." *National Association of Student Affairs Professionals Journal* 11(1):66-87.

Strayhorn, Terrell L. 2008b. "The Role of Supportive Relationships in Facilitating African American Males' Success in College." *National Association of Student Affairs Professionals Journal* 45(1):26-48.

Strayhorn, Terrell L. 2008c. "Fittin' In: Do Diverse Interactions with Peers Affect Sense of

Belonging for Black Men at Predominantly White Institutions?" *NASPA Journal* 45(4):501-27.

Strayhorn, Terrell L. 2010. "When Race and Gender Collide: Social and Cultural Capital's Influence on the Academic Achievement of African American and Latinx Males." *The Review of Higher Education* 33(3):307-32.

Strayhorn, Terrell. 2013. *Theoretical Frameworks in College Student Research*. Lanham, MD: University Press of America.

Strayhorn, Terrell. 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, Terrell L. 2016. "Factors That Influence the Persistence and Success of Black Men in Urban Public Universities." *Urban Education* 1-23. DOI 10.1177/0042085915623347.

Strayhorn, Terrell L., and James M. DeVita. 2010. "African American Males' Student Engagement: A Comparison of Good Practices by Institutional Type." *Journal of African American Studies* 14(1):87-105.

Strayhorn, Terrell L., and Melvin C. Terrell. 2007. "Mentoring and Satisfaction with College for Black Students." *Negro Educational Review* 58(1-2):69-83.

Swail, Watson S., Kenneth E. Redd, and Laura W. Perna. 2003. *ASHE-ERIC Higher Education Report: Retaining Minority Students in Higher Education: A Framework for Success*. Jossey-Bass Higher and Adult Education Series. San Francisco, CA: Jossey-Bass. Retrieved October 15, 2017 http://www.educationalpolicy.org/pdf/Retaining%20Minority%20Students.pdf

Thomas, Scott L. 2000. "Ties That Bind: A Social Network Approach to Understanding Student

Integration and Persistence." *The Journal of Higher Education* 71(5):591-615.

Tinto, Vincent. 1993. *Leaving College: Rethinking the Causes and Cures of Student Attrition*.
2nd ed. Chicago, IL: University of Chicago Press.

Toldson, Ivory A. 2014. "HBCUs are My Brother's Keeper." Washington, DC: White House
Initiative on Historically Black Colleges and Universities. https://sites.ed.gov/whhbcu/

Tracey, Terence J., and William E. Sedlacek. 1987. "Prediction of College Graduation Using
Noncognitive Variables by Race." *Measurement and Evaluation in Counseling and
Development* 19(4):177-184.

Treisman, Philip Uri. 1992. "Studying Students Studying Calculus: A Look at the Lives of
Minority Mathematics Students in College." *College Mathematics Journal* 23(5):362-
372.

Tsui, Lisa. "Effective Strategies to Increase Diversity in STEM Fields: A Review of the
Research Literature." *Journal of Negro Education* 76(4):555-581.

U.S. Department of Education, National Center for Education Statistics. 2013. "The Condition of
Education." Washington, DC: National Center for Education Statistics.

U.S. Department of Education, National Center for Education Statistics. 2014. "National
Assessment of Educational Progress." Washington, DC: National Center for Education
Statistics.

U.S. Department of Education, National Center for Education Statistics. 2015. "Educational
Attainment." Washington, DC: National Center for Education Statistics.

U.S. Department of Education, National Center for Education Statistics. 2016a. "The Condition
of Education." Washington, DC: National Center for Education Statistics.
https://nces.ed.gov/programs/coe/indicator_cha.asp

U.S. Department of Education, National Center for Education Statistics. 2016b. "Status and

   Trends in the Education of Racial and Ethnic Groups 2016: Degrees Awarded."

   Washington, DC: National Center for Education Statistics.

   https://nces.ed.gov/fastfacts/display.asp?id=72

U.S. Department of Education, National Center for Education Statistics. 2018. "The Condition of

   Education 2017 (NCES 2017-144), Undergraduate Retention and Graduation Rates."

   Washington, DC: National Center for Education Statistics.

   https://nces.ed.gov/programs/digest/d16/tables/dt16_326.10.asp

University System of Georgia. 2018. "African-American Male Initiative: An Initiative of the

   University System of Georgia." Retrieved February 26, 2018

   https://www.usg.edu/aami/

Walpole, MaryBeth. 2003. "Socioeconomic Status and College: How SES Affects College

   Experiences and Outcomes." *Review of Higher Education* 27(1):45-73.

Warde, Bryan. 2008. "Staying the Course: Narratives of African American Males Who Have

   Completed a Baccalaureate Degree." *Journal of African American Studies* 12(1):59-72.

Wehlage, Gary G. *Reducing the Risk: Schools as Communities of Support*. Philadelphia, PA:

   Falmer Press.

Wellman, Barry. 1983. "Network Analysis: Some Basic Principles." Pp. 155-200 in *Sociological

   Theory*, edited by R. Collins. San Francisco, CA: Jossey-Bass.

Wells, Ryan. 2008. "Social and Cultural Capital, Race and Ethnicity, and College Student

   Retention." *Journal of College Student Retention* 10(2):103-28.

Williams, Terry, and William Kornblum. 1985. *Growing Up Poor*. Lexington, MA: Lexington

   Books.

Wine, Jennifer, Natasha Janson, and Sara Wheeless. 2011. 2004/09 Beginning Postsecondary

Students Longitudinal Study (BPS:04/09) Full-Scale Methodology Report (NCES 2012-

246). Washington, DC: National Center for Education Statistics, U.S. Department of

Education. Retrieved April 3, 2014 (http://nces.ed.gov/pubsearch)

Zimmerman, Marc A., Jeffrey Bingenheimer, and Paul C. Notaro. 2002. "Natural Mentors and

Adolescent Resiliency: A Study with Urban Youth." *American Journal of Community

Psychology* 30(2):221-243.

APPENDCES

Appendix A

Georgia State University
Informed Consent

Title: The Influence of Social Capital on College Persistence and Completion for African American Males

Principal Investigator: Dr. Tomeka Davis
Student Principal Investigator: Jacquelyn Strickland

Researcher's Statement
I am asking you to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and how you would be involved. This page will provide you information about the study so that you can make a well-informed decision about whether or not you wish to participate. Please read the following information carefully. Please contact the researchers listed below if you find anything to be unclear, or if you need more information. When all of your questions have been answered, you can decide if you would like to be in the study or not. This process is called *informed consent*.

Introduction and Key Information
You are invited to participate in a research study. It is up to you to decide if you would like to take part in the study. The purpose of the study is to investigate the influence of supportive relationship ties on college persistence and completion for African American men. Your role in the study will likely be completed within a week or less. You will be asked to complete a brief survey, which will take 10 minutes or less. You will also be asked to engage in a virtual interview using Zoom, a web-based video conferencing tool. The interview can last anywhere from about 20 minutes to an hour, depending on the depth of your responses to the interview questions. There is a possibility that participation in this study may cause you emotional discomfort if your responses lead you to recall unpleasant experiences. If you feel discomfort at any time, we will stop the interview and you can choose to take a break or end the interview immediately. Overall, I hope to gain information about whether and how social capital – in the form of mentoring relationships with faculty and supportive relationships with peers – impacts the likelihood of college completion for Black male undergraduate students. Exploring these relationships will help inform efforts to understand and ensure more equitable graduation rates for all racial and gender groups. If you do not wish to take part in this study, you may elect at any time not to participate.

Purpose
The purpose of this research is to study the influence of supportive relationship ties on college persistence and completion for African American men. You are invited to participate in this research study because you identify as a Black male who attempted a bachelor's degree program at a college or university in the state of Georgia. A total of up to 27 participants will be recruited for this study – 20 Black men who completed bachelor's degrees, and 5-7 who began bachelor's degree programs but did not complete them.

Procedures

If you decide to participate, there will be two study-related activities. Study participation will likely span a week or less. You will complete a brief online survey, which will take 10 minutes or less. After I have assessed your survey responses, then you will engage in a virtual interview call using the Zoom web-based video conferencing tool. If you do not already have it, you will be asked to download the free basic Zoom app version to your smartphone or tablet, or to your computer via Windows or Mac application. You do not need to have or create a Zoom account to engage in the interview call. If you will be using a computer, you will not be required to have a webcam to participate; however, I would not be able to receive your video transmission. We would still be able to engage with audio only. The interview can last anywhere from about 20 minutes to an hour, depending on the depth of your responses to the interview questions. Your responses will be recorded using Zoom for the purposes of data collection. Your survey responses and interview recordings will be kept completely confidential and will be deleted at the conclusion of the study.

- You complete a brief online survey (10 minutes or less).
- After I have assessed your survey responses, I contact you to arrange a date and time to interview.
- We meet virtually for the interview on Zoom.
- We complete the recorded interview (20 minutes to one hour, depending on the depth of your responses).
- I provide you with a transcript of your interview and ask that you check it for accuracy and to validate my interpretation of your responses (an hour or less).
- Your time commitment might span a total of a few days, but is not estimated to take more than a week total.

Future Research
I will not use nor distribute your data for future research studies even with your identifiers being removed.

Risks
There is a possibility that participation in this study may cause you emotional discomfort if you recall experiences that were unpleasant or painful for you. I will try to prevent your discomfort by being observant and offering you the chance to take a break, and/or moving on to a different, lighter question. No injury is expected from this study, but if you believe you have been harmed, contact me or the Principal Investigator as soon as possible. Georgia State University and the research team have not set aside funds to compensate for any injury.

Benefits
Participation in this study may not benefit you personally. You may benefit personally if you did not complete your bachelor's program but wish to do so, and you need and elect to accept my help to re-enroll in school. Overall, we hope to gain information about the factors that contribute to African American men's successful college completion, specifically supportive relationship ties with faculty mentors and supportive peers, and to help close the achievement gap with respect to Black men and college degree attainment.

Compensation
You will receive a $25 gift card for participating in this study.

Voluntary Participation and Withdrawal
Participation in research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or stop

participating at any time. Whatever you decide, you will still be compensated and will not lose any benefits to which you are otherwise entitled.

Confidentiality
We will keep your records private to the extent allowed by law. The following people and entities will have access to the information you provide:

- Dr. Tomeka Davis, Principal Investigator
- Myself, Jacquelyn Strickland, Student Principal Investigator
- GSU Institutional Review Board
- Office for Human Research Protection (OHRP)

We will use your initials rather than your name on study records. The information you provide will be stored on a firewall-protected computer. Your name and other facts that might point to you will not appear when we present this study or publish its results. When we present or publish the results of this study, we will not use your name or other information that may identify you.

Contact Information
Contact Dr. Tomeka Davis at (404) 413-6524; tmdavis@gsu.edu; or Jacquelyn Strickland at (678) 509-5543; jstrickland20@student.gsu.edu:
- If you have questions about the study or your part in it.
- If you have questions, concerns, or complaints about the study.
- If you think you have been harmed by the study.

The IRB at Georgia State University reviews all research that involves human participants. You can contact the IRB if you would like to speak to someone who is not involved directly with the study. You can contact the IRB for questions, concerns, problems, information, input, or questions about your rights as a research participant. Contact the IRB at 404-413-3500 or irb@gsu.edu.

Consent
Researcher Obtaining Consent: Jacquelyn Strickland

_____ _____
Signature   Date
(Researcher's physical signature and date will be added.)

I will give you a copy of this consent form to keep. You may opt to receive an electronic copy and/or a hard copy by mail.

Please indicate the option for consent below.
__ You consent, you would like to participate; you would like for me to contact you.
__ You do not consent, you do not wish to participate; you do not wish for me to contact you.

Do you identify as a U.S.-born, African American/Black male?
__ Yes
__ No

Did you attempt a traditional - not online - bachelor's degree program at a college or university within the

state of Georgia (regardless of whether you completed the degree)?
__ Yes
__ No

First and Last Name:

_____

If you are willing to volunteer for this research, please sign within the box below. (On a computer: click, hold, and sign with mouse or touch pad. On a device, sign with finger.) I will not use nor distribute your data for future research studies even with your identifiers being removed.

Date (MM/DD/YYYY):

_____

Cell phone number (will remain confidential and will be used for study purposes only):

_____

Email address (will remain confidential and will be used for study purposes only):

_____

Mailing address where you would like to receive the $25 gift card for your participation (alternately, please indicate here if you would prefer to arrange for me to leave it for you at a secure location):

_____

Appendix B

Qualitative Interview Questions

Participation Criteria: Each respondent must identify as an African American or Black male adult born in the U.S. who attempted a traditional bachelor's degree program at a college or university in the state of Georgia. Respondents must be able to speak about their experiences as well as their relationships with faculty members, mentors, and student peers on campus during their undergraduate enrollment.

<u>Questions for Men who Completed College</u>

INITIAL BRIEF QUALTRICS SURVEY
(Survey link: https://gsu.qualtrics.com/jfe/form/SV_eEi5TdlNZKHDHjn)

Demographic Information
- Name _____
- What is your age? __
- Please indicate the city and state are you originally from, or where you primarily attended school from Pre-K/K-12: _____
- What was your age when you began your undergraduate enrollment? __
- Did you complete a bachelor's degree? __ Yes __ No

Postsecondary Education Information
o What bachelor's degree program did you complete? _____
o At what college or university did you complete your bachelor's degree? _____
  o What year did you graduate? ____
  o How many years did it take for you to complete the degree?
    __ 4 years or less
    __ 5 years
    __ 6 years
    __ More than 6 years
  o Did you take more than a summer off between graduating from high school and initially enrolling in college? __ Yes __ No
    ▪ If so, how much time did you take before you enrolled in your bachelor's degree program?
      __ 1 year or less
      __ More than 1 year
o Did you attend another institution (such as a community college) before enrolling at the institution where you pursued your bachelor's degree? __ Yes __ No
o Please select the response that best represents the extent to which you were enrolled as a full-time student while you were an undergraduate student.
      __ I was enrolled full-time every semester/term.
      __ I was enrolled full-time for most of my semesters/terms.
      __ I was enrolled full-time for half or fewer than half of my semesters/terms.

- Are you currently, or have you ever in the past, enrolled in graduate school? __ Yes __ No

- o What is the first graduate degree program in which you enrolled, and at what institution? _____
- o What is your completion status for the first graduate degree program in which you enrolled?
  __ Enrolled now and making progress toward completion
  __ Plan to re-enroll to complete the program in the future
  __ Do not plan to complete the program
  __ Completed the program/Degree awarded
- o Have you completed more than one graduate degree? __ Yes __ No
  - If so, please give the name of the subsequent degree program(s) and the respective institution(s) where you attained the degree(s). _____

Background – Family upbringing, socioeconomic status, and Pre-K/K-12 education
- o Were you primarily raised in a single-parent household, or a two-parent household?
  __ Single-parent household __ Two-parent household
     If you were primarily raised in a single-parent household, were you raised by your mother or a female guardian, or by your father or a male guardian?
     __ Mother or female guardian __ Father or male guardian
- o How would you describe your parent's/parents' financial standing during the majority of your youth through your high school completion, on a scale of 1 to 5? (1 = Low-Income/impoverished household; 5 = Financially well-off/wealthy)
  1 = Low-income household, poverty/significant financial strain
  2 = Lower middle-class household, some financial strain
  3 = Middle-class household, little-to-no financial strain
  4 = Upper middle-class household, no financial strain
  5 = Financially well-off/wealthy
- o What is the highest level of education that your mother (or female guardian) completed?
  - o __ Not known/Unsure, or I was not raised by my mother nor by a female guardian
  - o __ Less than high school diploma or equivalent
  - o __ High school diploma or equivalent
  - o __ Vocational or technical certificate
  - o __ Some college but no degree
  - o __ Associate's degree
  - o __ Bachelor's degree
  - o __ Some graduate school but no graduate degree
  - o __ Master's degree
  - o __ Doctorate or professional degree
- o What is the highest level of education that your father (or male guardian) completed?
  - o __ Not known/Unsure, or I was not raised by my father or by a male guardian
  - o __ Less than high school diploma or equivalent
  - o __ High school diploma or equivalent
  - o __ Vocational or technical certificate
  - o __ Some college but no degree
  - o __ Associate's degree
  - o __ Bachelor's degree
  - o __ Some graduate school but no graduate degree

- o __ Master's degree
- o __ Doctorate or professional degree

- o To what extent did your parent(s)/guardian(s) communicate an expectation for you to attain a college degree?
  1 = Did not discuss, did not encourage me to go to college
  2 = Discussed/encouraged college very little
  3 = Discussed/encouraged college moderately
  4 = Discussed/encouraged college fairly often, and expressed some expectation for me to go to college
  5 = Extensively discussed and/or emphatically expressed expectation for me to go to college; expectation for me to go to college was always made clear
- o To what extent was/were your parent(s)/guardian(s) involved in assisting you with the process of transitioning to college, including help with gathering/organizing information about colleges, assisting with the application process, etc.?
  1 = Was/Were not involved, did not guide/assist me
  2 = Was/Were involved minimally, guided/assisted me very little
  3 = Was/Were involved moderately, guided/assisted me sometimes
  4 = Was/Were involved pretty actively, guided/assisted me fairly often
  5 = Was/Were very actively involved, guided/assisted me significantly and frequently
- o What was your level of awareness of negative societal stereotypes about African American males, including about Black males' academic achievement?
  1 = I wasn't cognizant of it/Did not think about it at all
  2 = I was somewhat cognizant of it/Thought about it sometimes
  3 = I was very cognizant of it/Thought about it a lot
- o When you first started your undergraduate education, did you aspire to pursue graduate school?
  __ Yes __ No
- Regarding your academic preparation for college: What was your high school cumulative GPA upon graduation? (Please provide your estimated high school GPA to the best of your ability if you do not recall the exact GPA.) ____
- Did you take the SAT or ACT for your college entrance exam requirement? __ I took the SAT. __ I took the ACT.
  - o What was your overall SAT score on the exam for which you submitted scores to your bachelor's degree granting institution? (Please provide estimated score to the best of your ability if you do not recall the exact score; think of your highest score if you took the exam more than once and had multiple exam scores submitted.) _____
  - o What was your overall ACT score on the exam for which you submitted scores to your bachelor's degree granting institution? (Please provide estimated score to the best of your ability if you do not recall the exact score; think of your highest score if you took the exam more than once and had multiple exam scores submitted.) ___
- How was your undergraduate education financed?
  __ My parent(s)/family paid for my education.
  __ I had grants (e.g., Pell Grant or other grant funding).
  __ I was awarded a scholarship(s).
  __ I paid via my employment (either on or off campus). Please describe the type(s) of employment.
  __ I took out student loans.

__ My education was financed by other means. (Please describe.) _____

- Please describe any employment that you held while you were an undergraduate student. (Please indicate "N/A" for "Not applicable" if you did not hold any employment during your time as an undergraduate student.)
- Were you responsible for financially supporting any dependents while in college (e.g., spouse/partner and/or children)?
    - o   If yes, please provide the dependent relationship(s): _____
- Where did you live for most of the time that you were enrolled as an undergraduate student?
    - o   __ On-campus housing   __ Off campus
- What was your attitude towards asking your professors for help when you needed it?
  __ I was very reluctant to approach my teachers/professors for help.
  __ I was somewhat comfortable with asking professors for help.
  __ I never hesitated or had any problem with approaching my teachers/professors for help.
- What was your attitude towards asking your student peers for help when you needed it?
  __ I was very reluctant to approach my peers for help.
  __ I was somewhat comfortable with asking my peers for help.
  __ I never hesitated to ask my peers for help.

SEMI-STRUCTURED VIRTUAL INTERVIEW GUIDE

Informal Faculty Mentoring Relationship(s) in College: (In your responses, please do not use names or any identifying information about anyone else.)

- Please talk about a relationship(s) that you had with one or more faculty mentors as an undergraduate student, that you consider to be important to your finishing college.
- How did this person come to be your mentor?
- What, if any, challenges did you encounter a.) trying to initiate a mentoring relationship(s), if in fact you were the initiator? b.) asking that person for time and/or help?
- Please describe your faculty mentor(s).
    - o   Is the mentor male or female?
    - o   What is the race of the mentor?
    - o   For how long was this individual your mentor?
    - o   How frequently did you spend face-to-face time with your mentor (emphasis on time spent outside of class)?
    - o   What types of things did you primarily talk about and do together with your mentor?
    - o   What was the highest level of education attained by your mentor?
    - o   To what extent did your mentor assist you outside of class with academic skills and tasks?
    - o   To what extent did your mentor assist you with nonacademic skills, such as goal-setting, time management, or self-reflection?
    - o   Please describe any opportunities to which your mentor may have exposed you that you otherwise might not have known about or taken advantage of.
    - o   To what extent did your mentor discuss your career aspirations and assist you with career and professional development?
    - o   How did your mentor express his or her personal confidence in your abilities and your success, in terms of your accomplishing goals while in college and after college?

- o To what extent did your mentor express and make clear his or her expectations regarding things they wanted to see you do?
- o How did your mentor connect you with other key people and resources on campus?
- o In what ways did your mentor assist you with problem solving?
- o In what ways did your mentor provide encouragement?
- o In what ways did your mentor redirect your thinking after you experienced failure, or disappointment?
- o Please describe anything your mentor may have shared with you about his or her own personal experiences, such as stories about their time in college or adversity they may have overcome in their own educational experience.
- o Please describe any negative experiences, if you had any, with a faculty member(s) in the context of a mentoring relationship?

Peer Network Supportive Relationship(s) in College:

This section explores participants' relationships with supportive fellow students in their circles who were also pursuing their bachelor's degree at the same institution, with the emphasis on time spent on academic support outside of class.

- Were you involved in one or more student organizations on campus? Please describe any/all organizations in which you participated (e.g., clubs, fraternities, NCAA or intramural athletics, music/theater/arts, cultural organizations, etc.).
- Did you participate in study groups? Please describe the size and nature of the study groups, and your level of participation.
- Did you have significant individual peer supportive relationships that emerged out of your participation in student organizations and/or study groups?
- Did you have a relationship(s) with one or more peers as an undergraduate student, that you consider to be important to your staying in college all the way through to bachelor's degree completion?
- In thinking of your most influential peer supportive relationships, what about them was most important in helping you to be successful and to finish college?
- What, if any, significant challenges did you encounter a.) trying to initiate peer supportive relationships if, in fact, you were the initiator? b.) asking that person for time and/or help?
- Please describe your most influential peer supporter(s). If you feel that you were most influenced by two or more peer network supporters, then please answer and include descriptions for both/all members, or for several members of the group.
  - o Is the peer support person male or female?
  - o What is the race of the peer support person?
  - o How did you come to know this person, and for how long did you know them?
  - o How frequently did you spend face-to-face time with the peer supporter (emphasis on time spent outside of class)? Approximately how much time did you spend with him/her on average?
  - o What types of things did you primarily do and talk about together with your peer support person?
  - o Did your peer support person assist you with academic tasks, nonacademic skills related to just navigating college, or both?
    - o What did he/she teach you or share with you that you feel was most crucial to your success in college (and possibly beyond) and to your finishing college?

- o Please describe any opportunities to which your peer support person may have exposed you that you otherwise might not have known about or taken advantage of.
- o In what ways did your peer support person assist you with problem solving?
- o In what ways did your peer support person provide encouragement?
- o In what ways did your peer support person redirect your thinking after you experienced failure, or disappointment?
- o Please describe anything your peer support person may have shared with you about his or her own personal experiences, such as stories about adversity they may have overcome.

<u>Questions for Men who Did Not Complete College</u>

INITIAL BRIEF QUALTRICS SURVEY
(Survey link: https://gsu.qualtrics.com/jfe/form/SV_eEi5TdlNZKHDHjn)

Demographics:
- Name _____
- What is your age? __

- Please indicate the city and state are you originally from, or where you primarily attended school from Pre-K/K-12: _____

- What was your age when you began your undergraduate enrollment? __

- Did you complete a bachelor's degree? __ Yes __ No

  - o What bachelor's degree program did you enroll in? _____

  - o How long were you enrolled in the program? _

  - o Did you take more than a summer off between graduating from high school and initially enrolling in college? __ Yes __ No

    - ▪ If so, how much time elapsed before you enrolled in your bachelor's degree program? _____

  - o Did you attend another institution (such as a community college) before enrolling at the institution where you pursued your bachelor's degree? __ Yes __ No

  - o While in your bachelor's degree program, were you enrolled as a full-time student: __ Every semester/term __ Most semesters/terms __ Half or fewer than half of my semesters/terms

Background: Your upbringing, socioeconomic status, and educational background through the beginning of your postsecondary education:
- o Were you primarily raised in:
  __ a single-parent household, or __ a two-parent household?
  If you were primarily raised in a single-parent household, were you raised by:
  __ your mother or a female guardian, or __ by your father or a male guardian?
- o How would you describe your family's income level, on a scale of 1 to 5? (1 = Low-income household; 5 = Financially well-off)
- o What is the highest level of education that your mother (or female guardian) completed?

- ○ __ Not known/Unsure, or you were not raised by your mother nor by a female guardian
- ○ __ Less than high school diploma or equivalent
- ○ __ High school diploma or equivalent
- ○ __ Vocational or technical certificate
- ○ __ Some college but no degree
- ○ __ Associate's degree
- ○ __ Bachelor's degree
- ○ __ Some graduate school but no graduate degree
- ○ __ Master's degree
- ○ __ Doctorate or professional degree

○ What is the highest level of education that your father (or male guardian) completed?
- ○ __ Not known/Unsure, or you were not raised by your father or by a male guardian
- ○ __ Less than high school diploma or equivalent
- ○ __ High school diploma or equivalent
- ○ __ Vocational or technical certificate
- ○ __ Some college but no degree
- ○ __ Associate's degree
- ○ __ Bachelor's degree
- ○ __ Some graduate school but no graduate degree
- ○ __ Master's degree
- ○ __ Doctorate or professional degree

○ To what extent did your parent(s)/guardian(s) communicate an expectation for you to attain a college degree?
1 = Did not discuss, did not encourage me to go to college
2 = Discussed/encouraged college very little
3 = Discussed/encouraged college moderately
4 = Discussed/encouraged college fairly often, and expressed some expectation for me to go to college
5 = Extensively discussed and/or emphatically expressed expectation for me to go to college; expectation for me to go to college was always made clear

○ To what extent was/were your parent(s)/guardian(s) involved in assisting you with the process of transitioning to college, including help with gathering/organizing information about colleges, assisting with the application process, etc.?
1 = Was/Were not involved, did not guide/assist me
2 = Was/Were involved minimally, guided/assisted me very little
3 = Was/Were involved moderately, guided/assisted me sometimes
4 = Was/Were involved pretty actively, guided/assisted me fairly often
5 = Was/Were very actively involved, guided/assisted me significantly and frequently

○ What was your level of awareness of negative social stereotypes that exist about African American males, including with regard to Black males and academic achievement?
1 = I wasn't cognizant of it/Did not think about it at all
2 = I was somewhat cognizant of it/Thought about it sometimes
3 = I was very cognizant of it/Thought about it a lot

○ When you started your undergraduate education, did you aspire to pursue graduate school at that point? __ Yes __ No

- Regarding academic preparation: What was your GPA upon high school graduation? (Please provide your estimated high school GPA to the best of your ability if you do not recall the exact GPA.)
- Did you take the SAT or ACT for your college entrance exam requirement? __ SAT __ ACT
    - What was your overall SAT score on the exam for which you submitted scores to your bachelor's degree granting institution? (Please provide estimated score to the best of your ability if you do not recall the exact score; think of your highest score if you took the exam more than once and had multiple exam scores submitted.) ____
    - What was your overall ACT score on the exam for which you submitted scores to your bachelor's degree granting institution? (Please provide estimated score to the best of your ability if you do not recall the exact score; think of your highest score if you took the exam more than once and had multiple exam scores submitted.) __
- How was your undergraduate education financed?
  __ My parent(s)/family paid for my education.
  __ I had grants (e.g., Pell Grant or other grant funding).
  __ I was awarded a scholarship(s).
  __ I paid via my employment (either on or off campus). Please describe the type(s) of employment.
  __ I took out student loans.
  __ My education was financed by other means. (Please describe.) __
  _____
- Please describe any employment that you held while you were an undergraduate student. (Please indicate "N/A" for "Not applicable" if you did not hold any employment during your time as an undergraduate student.)
- Were you responsible for financially supporting any dependents while in college (e.g., spouse/partner and/or children)?
    - If yes, please provide the dependent relationship(s):
      _____
- Where did you live for most of the time that you were enrolled as an undergraduate student?
    - __ On-campus housing __ Off campus
- What was your attitude towards asking your professors for help when you needed it?
  __ I was very reluctant to approach my teachers/professors for help.
  __ I was somewhat comfortable with asking professors for help.
  __ I never hesitated or had any problem with approaching my teachers/professors for help.
- What was your attitude towards asking your student peers for help when you needed it?
  __ I was very reluctant to approach my peers for help.
  __ I was somewhat comfortable with asking my peers for help.
  __ I never hesitated to ask my peers for help.

SEMI-STRUCTURED VIRTUAL INTERVIEW GUIDE

Informal Faculty Mentoring Relationship(s) in College: (In your responses, please do not use names or any identifying information about anyone else.)

- What would you say is the primary reason that you decided to leave college?
- Please talk about a relationship(s) that you had with one or more faculty mentors as an undergraduate student.
- How did this person come to be your mentor?

- What, if any, challenges did you encounter a.) trying to initiate the mentoring relationship(s), if in fact you were the initiator? b.) asking that person for time and/or help?
- Please describe your faculty mentor(s).
  - Is the mentor male or female?
  - What is the race of the mentor?
  - For how long was this individual your mentor?
  - How frequently did you spend face-to-face time with your mentor (emphasis on time spent outside of class)?
  - What types of things did you primarily talk about and do together with your mentor?
  - To what extent did your mentor assist you outside of class with academic skills and proficiencies?
  - To what extent did your mentor assist you with nonacademic skills, such as goal-setting, time management, or self-reflection?
  - Please describe any opportunities to which your mentor may have exposed you that you otherwise might not have known about or taken advantage of.
  - To what extent did your mentor discuss your career aspirations and assist you with career and professional development?
  - How did your mentor express his or her personal confidence in your abilities and your success, in terms of your accomplishing goals while in college and after college?
  - To what extent did your mentor express and make clear his or her expectations regarding things they wanted to see you do?
  - How did your mentor connect you with other key people and resources on campus?
  - In what ways did your mentor assist you with problem solving?
  - In what ways did your mentor provide encouragement?
  - In what ways did your mentor redirect your thinking after you experienced failure, or disappointment?
  - Please describe anything your mentor may have shared with you about his or her own personal experiences, such as stories about their time in college or adversity they may have overcome in their own educational experience.
  - Please describe any negative experiences, if you had any, with a faculty member(s) in the context of a mentoring relationship?

Peer Network Supportive Relationship(s) in College:

This section explores participants' relationships with supportive fellow students in their circles who were also pursuing their bachelor's degree at the same institution, with the emphasis on time spent on academic support outside of class.

- Were you involved in one or more student organizations on campus? Please describe any/all organizations in which you participated (e.g., clubs, fraternities, NCAA or intramural athletics, music/theater/arts, cultural organizations, etc.).
- Did you participate in study groups? Please describe the size and nature of the study groups, and your level of participation.
- Did you have significant individual peer supportive relationships that emerged out of your participation in student organizations and/or study groups?
- Did you have a relationship(s) with one or more peers as an undergraduate student, that you consider to be important to you having stayed in college for the period of time you were there?

- In thinking of your most influential peer supportive relationships, what about them was most important in helping you during the time you were in college?
- What, if any, significant challenges did you encounter a.) trying to initiate peer supportive relationships if, in fact, you were the initiator? b.) asking that person for time and/or help?
- Please describe your most influential peer supporter(s). If you feel that you were most influenced by two or more peer network supporters, then please answer and include descriptions for both/all members, or for several members of the group.
  - Is the peer support person male or female?
  - What is the race of the peer support person?
  - How did you come to know this person, and for how long did you know them?
  - How frequently did you spend face-to-face time with the peer supporter (emphasis on time spent outside of class)? Approximately how much time did you spend with him/her on average?
- What types of things did you primarily do and talk about together with your peer support person?
- Did your peer support person assist you with academic tasks, nonacademic skills related to just navigating college, or both?
- Please describe any opportunities to which your peer support person may have exposed you that you otherwise might not have known about or taken advantage of.
- In what ways did your peer support person assist you with problem solving?
- In what ways did your peer support person provide encouragement?
- In what ways did your peer support person redirect your thinking after you experienced failure, or disappointment?
- Please describe what your peer support person may have shared with you about his or her own personal experiences, such as stories about adversity they may have overcome.

*Offer of assistance statement that I will make at interview conclusion to all participants who did not complete college:
"I encourage you to consider finishing what you started, because you absolutely can go back and complete your bachelor's degree. It doesn't necessarily have to be at the same institution where you started out. If you would like for me to assist you with making the connections with either your previous institution or with another school, then please let me know. I would be happy to help you get started with answering any questions about what you would need to do to go back and finish your degree."

Appendix C

Nora and Crisp (2007:346-348) Survey Items on Student Perceptions of Mentoring

Table 1. Factor Loadings and Cronbach Alpha Coefficients

Questions	Factor loading	Cronbach alpha
Factor 1 (Educational/Career Exploration and Goal Setting)		0.96
Encourages me to use him or her as a sounding board to explain hopes, ideas, feelings	0.746	
Make well-informed choices regarding career goals	0.727	
Share his or her own view and feelings when discussing college-related issues	0.695	
Expresses his or her own personal confidence in my abilities to succeed in pursuit of goals	0.693	
Discusses positive and negative feelings about my ability to succeed	0.680	
Explores the extent I spend time and energy in achieving my educational goals	0.671	
Expresses confidence in my abilities to achieve my educational goals	0.666	
Discusses his or her role so that my expectations are appropriate and realistic	0.665	

Uses his or her own personal experience to explain how college courses can be a valuable learning experience for me	0.642
Asks probing questions so that I can explain my views regarding my academic progress	0.639
Encourages me to review my strategies for managing changes in my life while pursuing my educational goals	0.619
Provides practical suggestions for improving my academic performance	0.590
Shares personal examples of difficulties they have had to overcome	0.575

Table 1. (Cont'd.)

Questions	Factor loading	Cronbach alpha
Requires me to reflect on competencies needed in achieving my future goals	0.569	
Assists me in mapping out realistic strategies to achieve my academic goals	0.557	
Helps me develop better coping strategies when my academic goals are not achieved	0.525	
Questions my assumptions by guiding me through a realistic appraisal of my ideas and beliefs	0.508	
Helps me explore realistic options and provides guidance on academic objectives	0.504	
Emphasizes that one of his or her goals is to assist me in reaching my own decisions about goals	0.628	
Factor 2 (Emotional/Psychological Support System)		0.91
Refers me to other departments for information about my academic plans	0.688	
Encourages me to consider other educational opportunities	0.646	

Guides me in exploring my commitment to academics	0.622
Offers recommendations about my academic needs	0.603
Explains degree and career options	0.592
Follows up on my decisions to develop better study habits	0.591
Encourages me to discuss academic problems	0.588
Discusses the importance of developing a realistic view of learning	0.565
Meetings are arranged to avoid interruptions	0.501

Table 1. (Cont'd.)

Questions	Factor loading	Cronbach alpha
Factor 3 (Academic Subject Knowledge Support Aimed at Advancing Student Knowledge Relevant to Chosen Field)		0.68
Suggests that I meet with a college counselor when I have concerns	0.676	
Encourages me to provide information about academic preparation	0.669	
Factor 4		0.53
Establish regular schedule of meeting times	0.734	
Very supportive when emotionally upset	0.563	