

Measuring the Influence of Juvenile Arrest on the Odds of Four-Year College Enrollment
for Black Males: An NLSY Analysis

Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy
in the Graduate School of The Ohio State University

By

Royel Montel Johnson, Ed.M.

Graduate Program in Educational Studies

The Ohio State University

2015

Dissertation Committee:

Terrell L. Strayhorn, Advisor

Antionette Errante

Tatiana Suspitsyna

Copyrighted by
Royel Montel Johnson
2015

Abstract

Black male youth make up 16% of all public school students in the United States, though they constitute 31% of all juvenile arrests. Very little is known from research about the long-term consequences for such contact on their odds of college enrollment. Thus, the purpose of this study was to test the relationship between Black males' early contact with the criminal justice system through arrest on their probability of enrolling in a four-year college, using a nationally representative sample of approximately 1100 Black males who participated in the National Longitudinal Study of Youth (1997). Survey data were analyzed using descriptive, chi-square, and hierarchical binomial logistic regression techniques. Results expose pervasive limits on Black males' college-going, reveal the statistically significant influence of early arrest on college entry, and have far-reaching implications for research, policy, and outreach.

Keywords: Black males, juvenile arrest, college enrollment, juvenile justice

Dedication

To my family,

who have supported me in all of my educational endeavors;

To my friends,

Dr. Ashley Walls and Kyle Jamison,

who I loss during this process— your memory lives in my heart;

To my mentor, advisor, and friend,

Dr. Terrell Strayhorn,

who provided unwavering support throughout this journey;

And finally, to all Black males,

who have been impacted by the criminal justice system in this country

Acknowledgements

At the end of any *long and tedious journey*, one is keenly aware of those who supplied support and inspiration along the way. Such was the case for this doctoral degree. I would be remiss if I did not, first, take this opportunity to thank GOD—*the author and the finisher of my faith*. Through you, I know that *all things are possible*.

To my parents, Mona Echols and Roy Johnson, your unconditional love and support has *sustained* me throughout this journey. I am eternally grateful for your many sacrifices. And to my other family members who have supported me and offered words of encouragement, especially my sister (Raven), stepfather (Keith), and aunts (Priscilla and Mary), I offer thanks.

I am also appreciative of the great training I received at my prior institutions: Providence St. Mel High School and the University of Illinois at Urbana-Champaign (UIUC). I am indebted to the many faculty and staff members at each school, who invested in my personal, professional, and educational development. I owe tremendous thanks to Professor Christopher Benson who I met as freshman while at UIUC. I would have made so many mistakes throughout this journey had it not been for your mentorship and guidance over the years.

To my AMAZING friends and colleagues, thank you for keeping me grounded, holding me accountable, and encouraging me during my most difficult times. I'm especially grateful for: Mike and T'Chana Harden, Keenan Thompson, Aerian Brown,

Raphael and Whitney Smith, Dorian Blythers, John Nelson, Darrick Hooker, Brittney Cleveland, Milagra Ward, Imani Amos, Ahja Steele, Brandon Common, Karla Zaccor, Nameka Bates, Tam Hoff, Keyonn Pope, Ben Jones, Simone Williams, Nicole Luke, Felecia Commodore, Jerry Whitmore, Aaron Beasley, Brenden Gilbert, Bryan Thomas, Christina Cornelius, Erica Lindsay, Martell Richardson, TJ Townsend, Obie Onyeukwu, Mercedes Allen, Kevin Collins, Danielle Jones, Jessica Robinson, Tone Sullers, Bryana Holocomb, Hameed Bello, Ivory Berry, CC Suarez, Montrisha Williams, Louis Johnson, Marcus Phillips, Lisa Blial, Jonathan Daniels, Tony Laing, Tau Chapter of Alpha Phi Alpha Fraternity Inc., and *many, many others*.

Finally, special thanks to my dissertation committee: Drs. Errante, Suspitsyna, and Strayhorn; your insights greatly enriched this study. I appreciate your time, investment, and *genuine* support of my work. And to my advisor, friend, and mentor, Dr. Strayhorn, thank you for being such an exceptional person. This simply would have been possible without you.

Vita

2006.....	Providence St. Mel High School
2010.....	B.A. Political Science, University of Illinois at Urbana-Champaign
2011.....	Ed.M., Educational Policy, Organization & Leadership, University of Illinois at Urbana-Champaign
2011-2013	Graduate Assistant, Office of Fraternity and Sorority Affairs, University of Illinois at Urbana-Champaign
Summer 2012	Education Pioneers Fellowship, Teach For America
2013-2014	Graduate Research Associate, Center for Inclusion, Diversity & Academic Success, The Ohio State University
2013 to present	Affiliate, Criminal Justice Research Center, The Ohio State University
2014 to present	Policy Analyst, Center for Higher Education Enterprise, The Ohio State University

Publications

Johnson, R. M. (2013). Black and male on campus: An autoethnographic account.

Journal of African American Men in Education, 4(2), 25-45.

Strayhorn, T.L., **Johnson, R.M.**, Barrett, B.A. (2013). Investigating the adjustment and transition experiences of formerly incarcerated African American males at PWIs.

Spectrum: A Journal on Black Men, 2(1), 73-98.

Vasquez Urias, M., **Johnson, R.M.**, & Wood, J. L. (2013). The effect of non-cognitive predictors on academic integration measures: A multinomial analysis of STEM students of color in the community college. In R. T. Palmer & J. L. Wood (Eds.), *Community Colleges and STEM: Examining Underrepresented Racial and Ethnic Minorities*. (pp. 75-90). New York, NY: Routledge.

Strayhorn, T.L., **Johnson, R.M.** (2014). Why Are All the White students sitting together in college? Impact of Brown v. Board of Education on cross-racial interactions among Blacks and Whites. *Journal of Negro Education*, 83(3), 385-399.

Strayhorn, T.L., **Johnson, R.M.** (2014). Toward a model of professional identity: A preliminary study of Black men. *The NASAP Journal*, 15(2), 59-74.

Strayhorn, T.L., **Johnson, R.M.** (2014). Black female community college students' satisfaction: A national regression analysis. *Community College Journal of Research and Practice*, 38(6), 1-17.

Fields of Study

Major Field: Educational Studies

Program: Higher Education & Student Affairs

Table of Contents

ABSTRACT.....	II
DEDICATION.....	III
ACKNOWLEDGEMENTS.....	IV
VITA.....	VI
LIST OF TABLES.....	XI
CHAPTER 1: INTRODUCTION.....	1
Purpose.....	7
Research Questions.....	7
Significance of Study.....	8
Delimitations.....	10
Organization of Study.....	11
Terms.....	11
CHAPTER 2: REVIEW OF LITERATURE.....	13
Black Males’ Pathways to and Through Education.....	13
Family Background Characteristics and Expectations.....	15
Educational Aspirations.....	16
Teacher Expectations.....	20
Overrepresentation in Special Education.....	22
Disciplinary Practices.....	23

Juvenile Justice and Education.....	25
Impact of Early Criminal Justice Contact on High School Degree Completion.....	27
Impact of Early Criminal Justice Contact on College Outcomes.....	30
Theoretical Framework.....	33
CHAPTER 3: METHODOLOGY.....	35
Sample Selection.....	36
Phase 1: Selection of Households for Screening.....	37
Phase 2: Identification of Eligible Respondents.....	37
Wave 1 Survey Sample Description.....	38
Analytic Sample.....	39
Instrumentation.....	40
Screener, Household Roster, and Nonresident Roster Questionnaire.....	42
Youth Questionnaire.....	43
Parent Questionnaire.....	44
School and Transcript Surveys.....	45
Household Income Update.....	46
Measures.....	46
Independent Variable.....	46
Dependent Variable.....	46
Control Variables.....	47

Data Collection Procedures.....	49
Round 1 Procedure.....	49
Rounds 2-15 Procedures.....	50
Validity and Reliability.....	51
Data Analysis.....	52
Conclusion.....	56
CHAPTER 4: RESULTS.....	57
Research Question One: Chi-Square Test.....	57
Research Question Two: Hierarchical Binomial Logistic Regression.....	58
Summary of Results.....	63
CHAPTER 5: DISCUSSION.....	65
Relationship of Findings to Prior Research.....	65
Implications for Future Practice, Research and Policy.....	70
Practice.....	70
Research.....	72
Policy.....	72
Limitations of the Study.....	73
Conclusion.....	74
REFERENCES.....	76

List of Tables

Table 3.1 Description of Samples for Rounds 1 and 7 by Race/Ethnicity and Sex.....	39
Table 3.2 Description of Analytic Sample.....	39
Table 3.3 Description of Youth Questionnaire.....	43
Table 3.4 Description of Parent Questionnaire.....	45
Table 3.5 Description of Variables by Wave/Round.....	48
Table 3.6 Means and Standard Deviations for all Variables.....	54
Table 4.1 Descriptive Statistics for College Enrollment by Arrest Status.....	58
Table 4.2 Logistic Regression Results.....	63

Chapter 1: Introduction

In light of mounting concerns about the United States' diminishing global competitiveness, state and federal policy makers have adopted education reform strategies designed to increase the number of students graduating from our nation's colleges and universities. For instance, in 2009, the National Governors Association (NGA) and Council of Chief State School Offices (CCSSO) announced the Common Core State Standards Initiative (CCSSI), which was designed to provide a set of high-quality, consistent, college- and career-ready standards for kindergarten through 12th grade in mathematics and English language arts/literacy (Common Core State Standards Initiative, 2015). CCSSI was a response to earlier, controversial, state-based reform legislation, No Child Left Behind.

Many of these reform efforts such as CCSSI are based on goals for college degree production—that is, targets for increasing the number of individuals earning degrees. The “national completion agenda” seeks to track college students' educational progress towards degree completion, incentivize increased graduation rates, and improve time-to-degree (Humphreys, 2012). The Department of Education, National Science Foundation (NSF), higher education institutions, and private organizations alike have all invested significant financial resources in support of programs and interventions to help bolster the country's degree completion goals. The University Innovation Alliance (UIA), for example, was announced in 2014—a consortium of 11 large public research universities

committed to making high-quality college degrees accessible to first-generation and low-income students. Collectively, the universities have pledged to test and scale successful programs across their campuses to graduate an additional 68,000 students over the next decade (University Innovation Alliance, 2014). UIA is funded, in part, by several key major organizations such as the Bill and Melinda Gates Foundation and Lumina Foundation, to name a few.

There is other evidence of the country's pursuit of global economic success by way of increasing college degree completion rates. In his very first State of the Union address, President Obama outlined an ambitious goal of once again having the world's largest share of college graduates. He noted,

By 2020, America will once again have the highest proportion of college graduates in the world...and, in a global economy where the most valuable skill you can sell is your knowledge, a good education is no longer just a pathway to opportunity—it is a prerequisite...every American will need to get more than a high school diploma. (Obama, 2009)

Indeed, higher education is the most direct pathway to ensuring economic and social mobility, and increasing the number of Americans with a college degree would increase the country's global standing (Haveman & Smeeding, 2006).

Recent college data reveal alarming trends in light of national degree completion goals. Only 59% of first-time, full-time undergraduates who begin at a four-year institution complete their degree within 6 years. Completion rates are higher for women (66%) than men (56%). And both White (63%) and Hispanic (52%) students complete at higher rates than Blacks (40%) (DOE, 2013b). The pace of progress for higher education

degree completion must improve significantly if we are to reach the national completion goal by 2020, as stated in President Obama’s address. Work is already underway to this end. Thirty-five states have set completion goals as part of Complete College America—an alliance of states, in partnership with its colleges and universities, who are committed to increasing the number of Americans who complete degrees or career certificates, especially for traditionally underrepresented populations (Complete College America, 2014).

College completion is however a function of who enroll. Data from the U.S. Department of Education, National Center for Education Statistics (NCES) report gaps in college enrollment rates by race and sex. In 2012, White men accounted for 26% of all students at undergraduate institutions in comparison to their Black male peers who represented just 5.3% (U.S. Department of Education [DOE], 2013a)—nearly the same as it was in 1976 (Harper, 2006; Strayhorn, 2008c). Black male college enrollment rates are troubling, especially since national data indicate that 15% of Black men in the U.S. are college-age (U.S. Census Bureau, 2012).

Not all Black males who enroll in college complete either. Only 35% of first-time, full-time Black male undergraduates who begin at a four-year institution complete their degree within 6 years (DOE, 2013b). In fact, two-thirds of all Black males who enter college leave before degree completion—the lowest completion rate among both sexes and all races (Harper, 2006; Strayhorn, 2008a; Strayhorn, 2010b).

Prior research studies focus on at least three factors that may drive gaps in college student enrollment and completion for Black males, one of which is their pre-college preparation. Black students are more likely to attend under-resourced and low-performing

schools, which place them at an educational disadvantage, compared to their White peers (e.g., Anderson, 1984; Garibaldi, 2007; Irvine, 1990; Kozol, 1997, 2005; Trent et al., 2003). Students attending low-resource, low-performing schools are more likely than their peers to have inexperienced, novice teachers; teachers instructing outside their field or subject; and learn from materials and books that are low-quality, outdated, if not irrelevant (e.g., Anderson, 2006; Kozol, 2000), which impairs their mastery of information often assessed on standardized tests and college entrance exams used in admissions decisions (Noguera & Wing, 2006).

Another factor related to gaps in college enrollment and completion is academic tracking. Tracking refers to a systematic placement of students in classes based in part on teachers' perceptions of their academic ability and performance on standardized tests (Oakes, Gamoran, & Page, 1992). Empirical evidence suggests that Black males are overrepresented in low-ability, remedial, and special education tracks (e.g., Cuyjet, 1997, 2006; Palmer, Davis, & Hilton, 2009; Solorzano & Ornelas, 2004). Students in low-ability tracking are not exposed to rigorous classroom instruction, therefore are not college- and career-ready upon graduation.

Another line of inquiry suggests that teachers' low expectations can hinder the achievement of Black males (Davis, 2003; Ferguson, 2003; Ford, 1998; Irvine, 1990; Kunjufu, 1986, 2005; Polite & Davis, 1999; Strayhorn, 2008d). Teachers tend impose low and negative expectations upon Black males, which impacts their interaction with them, and limits opportunities for learning (e.g., Kunjufu, 1986). Together, these factors reduce the likelihood that Black males will enroll in or complete college.

There are several limits to existing explanations of Black male college enrollment

and completion. Much of what we know about Black males' pathways to and through college is based on perspectives that treat them all the same, despite evidence that they too live much more intersectional lives than traditional scholars have assumed (Harper & Nichols, 2008; Strayhorn, 2013). Data from 2012 related to Black male undergraduates suggest heterogeneity across a number of indicators: 32% were part-time; 47% were in associates programs; 6% were resident aliens; 37% worked more than 40 hours a week; and 66% received a Pell grant (Educational Testing Service, 2014).

There are other signs of Black male heterogeneity. Along their education pathway, many face disproportionate contact with the criminal justice system—an experience that can drastically alter one's odds of completing high school and even enrolling in college. Rovner (2014) noted, Black youth make up 16% of all public school students though they constitute 31% of all juvenile arrests (Rovner, 2014).

Indeed, Black male youth are overrepresented at every level of the criminal justice system—from *routine* stops through incarceration (Alexander, 2012). Examining self-reported arrest histories from a sample of youth who participated in the National Longitudinal Survey of Youth (NLSY:97; $N = 7,335$), Brame and colleagues (2014) found that 30% of Black males were arrested by the age of 18 (compared to Whites at 22%); and by 23, nearly 50% of Black males report being arrested. Early contact with criminal justice system has been long associated with educational disadvantage for youth (Hirschfield, 2009; Kirk & Sampson, 2013), although relatively little is known about its relationship with college enrollment.

The weight of empirical evidence testing the relationship between early criminal justice contact and education outcomes has centered primarily on high school youth,

testing the predictive validity of arrests on high school dropout (e.g., De Li, 1999; Jordan, Lara, & McPartland, 1996; Sweeten, 2006; Tanner, Davies, & O'Grady, 1999). For example, Bernburg and Khron (2003a) examined a sample ($N = 1,000$) of at-risk youth and found that police intervention (i.e., arrest and contact with the police) decreases the odds of high school graduation by over 70%. Likewise, Hjalmarsson (2008) estimated that arrested youth are 11% less likely to graduate high school than those not arrested, using NLSY:97 data ($N = 7417$). Generally, research studies suggest that criminal justice contact reduces ones' odds of completing high school, especially for low-income and urban youth. And although rarely explored, early contact with the criminal justice system might have negative educational outcomes beyond high school graduation (Kirk & Sampson, 2013).

The few studies that have examined early contact with criminal justice system and college-related outcomes are limited. Kirk and Sampson (2013) examined the impact of being arrested as a juvenile on both high school dropout and college enrollment using a multi-wave research design. Results from their study revealed that among Chicago Public School students who were arrested, 26% graduated high school or obtained a GED, of which 16% enrolled in a four-year college. In comparison, 64% of students with no history of arrests graduated high school, of which 35% enrolled in a four-year college. Results from their study were not disaggregated by race and sex subpopulations.

While there is relatively little information in existing literature about the relationship between early contact with the criminal justice system and Black males' four-year college enrollment, there is theoretical support for hypothesizing a relationship between these experiences. *Life course theory of cumulative disadvantage (LCTCD)*

provides a useful theoretical framework for understanding the educational consequences of being arrested as a youth for Black males (Sampson & Laub, 1997). LCTCD draws on the theoretical assumptions of both social control theory (Hirschi, 1969) and labeling theory (Becker, 1963; Lemert, 1951), providing a “developmental model where delinquent behavior has a systematic and attenuating effect on the social and institutional bonds linking adults to society” (Sampson & Laub, 1997, p. 12). For instance, once an individual is labeled “deviant” or a “criminal” by way of an arrest status, “a variety of detachment processes are set in motion that promote the likelihood of further deviance, including school dropout, and lessen an individual’s likelihood of a successful transition to adulthood” (Kirk & Sampson, 2013, p. 4). Sampson and Laub (1997) argued that an arrest, for example, could serve as a negative *turning point* in one’s life course. Thus, it’s reasonable to believe that Black males’ arrest experiences as a juvenile has negative consequences for their likelihood of enrolling in college, which was the focus of this study.

Purpose of the Study

The purpose of this study was to test the relationship between Black males’ early contact with the criminal justice system through arrest and four-year college enrollment using a nationally representative sample of approximately 1100 Black males who participated in the National Longitudinal Study of Youth (NLSY:97). Specifically, I employed a battery of statistical controls to isolate and test the predictive validity of Black male arrest history on their probability of enrolling in a four-year college in 2003.

Research Questions

Two central research questions guided this study:

1. Are there significant differences between Black males who report being arrested as a youth and those who do not, in terms of four-year college enrollment?
2. Controlling for a battery of background and family factors, does Black male youth arrest status significantly predict enrollment in a four-year college?

Significance of the Study

This study was significant for several reasons. First, though sociological and educational research lends much to our understanding of the consequences of early contact with the criminal justice system through arrest for Black males, we know less about its explanatory power in predicting college enrollment. And studies that do focus on college outcomes, offer limited insight into the condition for Black males, who disproportionally represent the majority of juvenile arrests in this country, as well as the greater proportion of school suspensions and expulsions, yet only 5% of collegians (Irvine, 1990; Noguera, 1997; Palmer, Wood, Dancy II, & Strayhorn, 2014). This study makes an important contribution to existing literature, expanding this line of inquiry by directly testing the relationship of Black males' juvenile arrest on their probability of enrolling in a four-year college. Black males represent a vulnerable subpopulation in American society, whose pathway to higher education is marked with critical challenges—research identifying factors that place them at risk for education failure is necessary for ensuring their success.

Second, in light of the country's completion goals, findings from this study underscore the importance of dismantling state, federal, and even institutional policies

and practices that disproportionately impact minority men of color, increasing their encounters with the criminal justice system. Practices such as Stop -and-Frisk in New York City, which permit police officers to stop and question pedestrians on the basis of *presumed* suspicion, systemically disenfranchise racial and ethnic minorities, namely Black males (Gelman, 2007), increasing their odds of arrest and incarceration (Alexander, 2012). There may be long-term education consequences associated with Stop-and-Frisk for Black males, diminishing their odds of college enrollment. This is particularly important as our ability to meet the nation’s completion goals, depends, at least in part, on our ability to enroll students from all segments of society, including Black males.

This study was also important for several education constituents. Educational interventions designed to curtail cumulative disadvantages of criminal justice contact, preparing Black males for successful entry into and success in college education are necessary. Community organizations, nonprofits, and schools are all encouraged to allocate resources for the development, testing, and scaling of education interventions that hold promise for supporting Black males who have been involved in the juvenile justice system. Education interventions designed for teachers and administrators are also necessary, as they often hold biases, both consciously and unconsciously, towards Black males, mislabeling them as “bad” (Ferguson, 2001), and subjugating them to unfair disciplinary practices that may increase their likelihood of arrest and incarceration. Additional recommendations and implications for policy, practice, and research, underscoring the significance of this study are provided in Chapter five.

Delimitations

As with all research, this study had some initial delimitations. The first related to the topic. While there are other racial/ethnic groups such as Latino males whose rates of contact with the criminal justice system are also disproportionate to their White peers, this study focused on the experiences of Black males only. Certainly, this limited my ability to test for race differences. But it strengthened the conclusions I made about Black males.

Another delimitation related to the dataset used in the study—the NLSY:97—and the design of this investigation (i.e., secondary analysis). The NLSY:97 study did not employ a simple random sampling strategy. Instead, a complex sampling design was used to collect data from a nationally representative sample. This sampling strategy presents researchers with a number of technical and statistical issues (Thomas & Heck, 2001). Appropriate weights were applied to the database to account for the stratified, complex sampling design used and to “weight up” sample estimates to the population parameters.

Third, despite its widespread use in education and social science research, secondary data analysts are limited by the factors that can be defined, operationalized, and measured in their studies (Thomas & Heck, 2001). I was limited to only those factors that could be measured by variables available in the NLSY—it is possible that the survey did not measure all confounding variables mediating the relationship between juvenile arrest and college enrollment. Still, using this database greatly increased my ability to test the relationship between criminal justice contact and four-year college enrollment, controlling for a relevant set of confounding variables.

Lastly, this study examined self-reported arrests of Black male youth who responded to NLSY:97. Self-report data might differ from more objective or standardized reports of arrest histories as individuals may be inclined to underestimate the number of arrests, yet, prior research suggests that self-report data are generally reliable when: (a) the information requested is known by the respondents; (b) when the questions are phrased clearly and unambiguously; and (c) when the respondents think the questions merit a serious and thoughtful response (Pace, 1985); so the present study was based of these assumptions. Despite these delimitations, the study holds promise. It provided an initial examination of the relationship between juvenile arrest and four-year college enrollment for Black males.

Organization of the Study

The present study is organized around five chapters. Chapter one described and introduced the topic of the study, the purpose of the study, the research questions and the significance and delimitations of the study. Chapter two reviews relevant literature to the study. Chapter three describes the methodology that was employed to collect data and the data analysis procedures and techniques used in this study. The fourth chapter describes the findings of the study while the final chapter discusses those findings and their implications for future practice, research and policy.

Terms

Black/African American: The terms “Black” and “African American” are used interchangeably throughout this dissertation, referring to individuals who trace their ancestral origins to groups of the African diaspora, including West Indians, Africans, Caribbeans, and Haitians, to name a few.

Male: Refers to one's sex or biological assignment at birth to avoid conflating issues of sex with gender, gender performance, or sexuality, in keeping with the current literature (Butler, 2004).

Arrest: Refers to the arrest of a suspect by a federal, state, or local law enforcement agency.

Incarceration: Refers to a state of being confined wherein a person is restricted to a particular space with limited movement and freedom, and under the supervision of a federal, state, or local law enforcement agency.

Attainment: Refers to the highest level of education that an individual has completed.

Enrollment: The process of matriculation or gaining admission and enrolling in a degree-granting postsecondary institution after high school graduation.

Completion: Refers to whether or not a student in a designated cohort has received a degree within a certain amount of years (e.g., 2yrs, 4yrs, 6yrs).

Contact: Federal law requires data be collected at multiple points of contact within the juvenile justice system, including arrest, referral to court, diversion, secure detention, petition (i.e., charges filed), delinquent findings (i.e., guilt), probation, confinement in secure correctional facilities, and/or transfer to criminal/adult jurisdiction (Rovner, 2014)

Chapter 2: Review of Literature

Recall the purpose of this study was to test the relationship between Black males' early contact with the criminal justice system through arrest and four-year college enrollment using a nationally representative sample of approximately 1100 Black males who participated in the NLSY:97. Specifically, I employed a battery of statistical controls to isolate and test the predictive validity of Black male arrest history on their probability of enrolling in a four-year college in 2003. Two central research questions guided this study:

1. Are there significant differences between Black males who report being arrested as a youth and those who do not, in terms of four-year college enrollment?
2. Controlling for a battery of background and family factors, does Black male youth arrest status significantly predict enrollment in a four-year college?

Presented in this chapter is a review of relevant literature, organized around two important lines of inquiry: (a) Black males' pathways to and through education; and (b) relationship between juvenile justice contact and education outcomes.

Black Males' Pathways to and Through Education

For decades, words and phrases like at-risk, vulnerable, endangered, and marginal have guided dominant discourse about the plight and condition of Black males in America (Gibbs, 1988; Jackson & Moore III, 2006; Jones, 2007; Kunjufu, 1986; Madhubuti, 1991; Noguera, 1997). These descriptors are, at least in part, a result of social

and economic indicators that suggest failure in critical domains of society. Data suggest that Black males are two times more likely to be unemployed than Whites, Hispanics, and Asians (Bureau of Labor Statistics, 2015), and six times more likely to be incarcerated than White males (Sentencing Project, 2013a). National Urban League President and Chief Executive Officer Marc Morial aptly noted,

...black men continue to lag behind their white counterparts in every major category; a disproportionate number of black men are underperforming in our society in a variety of areas for a variety of reasons. This state of underachievement, with its devastating and far-reaching ramifications, is the most serious economic and civil rights challenge we face today. (Jones, 2007, p. 13)

Another domain where Black males have long struggled to reach parity with their White peers is education. By all accounts, Black males encounter significant challenges along the education pipeline that collectively reduce their odds of success (Cuyjet, 2006; Ferguson, 2003; Ford, 1998; Irvine, 1990; Jenkins, 2006; Lomotely, 1990; Polite & Davis, 1999; Steele, 1997; Strayhorn, 2008b). hooks (2004) argued, “Even before black boys encounter a genocidal street culture, they have been assaulted by the cultural genocide taking place in early childhood educational institutions where they are simply not taught” (p. 39).

Given the purpose of this study, it was necessary to review existing literature in five important areas of inquiry: (a) family background characteristics and expectations; (b) educational aspirations; (c) teacher expectations; (d) overrepresentation in special education; and (e) disciplinary practices. The following sections are organized around these areas.

Family Background Characteristics and Expectations

A fairly large and persuasive body of literature coverage on the importance of one's family background characteristics and expectations on education outcomes (Lareau, 2003; Manski & Wise, 1983; Rouse, 1994; St. John, 1990; St. John & Noell, 1989; Swell, Haller, & Portes, 1969). Parents in particular play an important role in their children's education success, as they are the first unit to develop and nurture their capacity for learning. For example, Lareau (2003) conducted 85 interviews with parents and children across various social classes and race. She found that parents from higher SES backgrounds tended to be more involved in their child's education, while also maintaining higher education expectations for them. Therefore, children from high-SES backgrounds were more likely to attend and complete college.

SES has also been linked to education outcomes by other researchers as well (Cabrera & Lanasa, 2001; Conley, 2001; Hearn, 1992; Perna, 2000; St. John, 2003). Fitzgerald and Delaney (2002) reported that the size of the gap (32%) in college enrollment between low- and high-income families was the same in 1997 as it was in 1970, though college enrollment has drastically increased for families across all income levels. Similarly, using data from National Education Longitudinal Study (NELS), Cabrera and LaNasa (2001) found that when controlling for relevant college-choice variables, there is a 26.4% gap in college application rates between low-SES and high-SES students. Perna (2000) also used NELS data to measure differences in college enrollment decisions based on race/ethnicity. Results from her study suggest that family income is a significant positive predictor of four-year college enrollment within two years

of high school graduation, controlling for direct costs and expected benefits of college, and academic ability.

Research studies also suggest that SES influences parental expectations. For example, low-SES parents are more likely to maintain lower educational aspirations for their children than high-SES parents (e.g., Lareau, 1987). And of those low-SES students who do enroll in college, they are less likely to persist to a bachelor's degree or to have graduate degree aspirations (Walpole, 2003). Conversely, students whose parents maintain high expectations for them are significantly more likely to perform better academically and attain higher levels of education (e.g., Hossler, Braxton, & Coopersmith, 1980; Lareua, 1987; McDonough, 1997). However, controlling for background, ability, and aspirations, St. John and Noel (1989) found college enrollment rates to be comparable for African American, Hispanic, and White high school seniors. In fact, several others have presented similar findings (e.g., Kane & Spizman, 1994, Rouse, 1994). Provided in the next section is a review of what we know from research about the role of educational aspirations on student education outcomes.

Educational Aspirations

Generally, aspirations refer to “a goal that a person would like to achieve”—unlike an expectation, which is “a goal that one intends or expects to achieve” (Berman & Haug, 1975, p. 166). “Educational aspirations are important because people cannot attain what they do not dream (or think possible)” (Carter, 2001, p. 6). For instance, if a student does not desire or hope to earn a juris doctorate, s/he will not be an attorney. Therefore, ones' aspirations for education take on heightened importance in predicting their educational attainment. Many researchers have argued that Black students do not value

education, therefore not aspiring to achieve educationally (e.g., Baca Zinn, 1989; Fordham & Ogbu, 1986; Inniss & Feagin, 1989; McWhorter, 2000; Mincy, Sawhill, & Wolf, 1990). This perspective is often used to explain low educational attainment rates of Black students, especially in comparison to their White peers.

Empirical evidence related to aspirations of Black students report conflicting findings. Some scholars have argued that Black students inflate their educational aspirations, rendering them “unrealistic” (Agnew & Jones, 1988). And as a result, many do not achieve their dreams of pursuing college. St. John (1991) argued, however, that maintaining high aspirations are important for Black students, as it helps mitigate the negative effects of low-SES, helping them achieve their goals.

Students’ SES has been long documented as a predictor of educational aspirations, even after disaggregating for race and gender differences (McDonough, 1997; Smith-Maddox, 2000; Solorzano, 1992). Portes and Wilson (1976) concluded that Black students actually maintain high or higher aspirations than Whites, and that White students’ higher attainment rates are due in part to their advantages in background characteristics. In fact, even when Black students have “the aspirations, the ability, and the qualifications to go to a four-year college, they do not attend the college of their choice to the degree that Whites do” (Labovitz, 1975, p. 248).

Other scholars have also directed attention to the role of social class in mediating students’ aspirations (Morgan, 1998; Portes & Wilson, 1976, Trusty, 2000). Using NELS:88 data, Solórzano (1992) compared the educational and occupational aspirations of Black and White, female and male eighth grade students, controlling for social class. He identified several important findings: (a) regardless of racial group, student

educational aspirations rise as their SES rises; (b) when social class is controlled, Black female and male students had higher aspirations than Whites in every SES quartile but the highest; (c) in all but one SES quartile (high-SES Blacks), both Black and White females had higher aspirations than their male counterparts; and (d) regardless of racial group, there were significant differences between students' educational attainment and aspirations; however this gap was more pronounced for Blacks than it was for Whites (Solorzano, 1992).

Epps and Jackson (1985) studied the educational aspirations and attainment of Black students, drawing on data from two national samples of students: 1980 High School and Beyond (HSB) and 1972 National Longitudinal Study (NLS). The authors argued that SES is just one factor—though an important one—associated with students' aspirations. For Black males in their sample, coursework, high school grades, standardized test scores, and significant others' influence (i.e., peer, family, instructors) were significant predictors of their aspirations; whereas for females, only coursework, significant others' influence, and test scores were directly related to aspirations (Carter, 2001).

There are a number of other factors related to the educational aspirations of Black students including their school experiences, parent involvement, as well as interpersonal and motivational factors. Howard (2003) conducted a qualitative study, interviewing African American high school students about their college aspirations and academic identities. The students in his study spoke at length about their encounters with racism from teachers and college counselors, and its negative impact on their aspirations. This is particularly troubling as research studies suggest that Black students are more likely to

depend on school counselors and teachers for academic guidance and planning than their White peers (Mahoney & Merritt, 1993; Pitre, 2006; Stewart, 2007). Farmer-Hinton and Adams (2006) documented the importance of school counselors and their role in nurturing college aspirations of Black students, despite economic limitations.

It is equally important to acknowledge the role of families on Black students' college aspirations as well. The extent to which parents maintain high expectations for and are involved in their student's education is positively associated with their (students) college aspirations (Howard, 2003). Mahoney and Merritt (1993) found positive correlations between parents' *desires* and their children's educational aspirations for both Black and White students, noting the smallest correlation for Black men.

Very few studies focus specifically on the educational aspirations of Black males (e.g., Toldson, Braithwaite, & Rentie, 2009). Hebert and Beardsley (2002) conducted a 3-year ethnographic case study of a gifted Black male, Jermaine, living in an impoverished rural community. The authors argued that the condition of rural neighborhoods can constrain some Black males' aspirations.

Other researchers have documented the important role that urbanicity has on student educational outcomes. For example, using data from NELS:88/00, Strayhorn (2009) concluded: (a) on average, Black males had relatively low educational aspirations and the majority (53%) attended urban schools; (b) Black males in the sample, from suburban neighborhoods, on average, had higher aspirations; and (c) high-achieving Black males from high-SES suburban backgrounds tended to have the highest educational aspirations. Results from Strayhorn's study indicate a relationship between one's SES background and their educational aspirations. It may be the case that high-SES

students have access to more information about college, and opportunities that engender aspirations. The following section provides a review of what we know about the impact of teacher expectations on Black students generally, and Black males specifically.

Teacher Expectations

Research on teacher expectations has long documented its powerful effect, particularly when communicated, on student achievement (Babad, 1993; Brophy, 1983; Dusek, 1985; Jussim, 1989; Oakes, 1987; Winfield, 1986). Brophy and Good (1974) provided an early model for understanding the process of teacher expectations. The authors argued that teachers form differential expectations for students, which impact their behavior towards them. And teachers' behavior, in turn, set expectations for students about their behavior and academic performance. If consistent over time, teacher expectations can impact student self-concept, motivation to achieve, aspirations, and interactions with the teacher. These effects can complement or reinforce teacher's expectations leading to a self-fulfilling prophecy (Brophy & Good, 1974).

One line of inquiry suggests that teachers, especially White females, maintain low expectations of Black students generally, and Black males specifically (Kunjufu, 1986). Depictions of Black males in popular media and social science as dangerous, lazy, and uneducable (Gibbs, 1988, Majors, 1993) help reinforce negative stereotypes of them (Jackson & Moore, 2008) and collectively shape the perceptions and expectations of teachers, principals, and counselors alike. Even worse, some Black males internalize such beliefs and stereotypes that, in turn, threaten their success (Steele, 1997).

Early research examining teacher expectations note that Black males encounter negative perceptions of their ability and behavior in elementary school (e.g., Kunjufu,

1986; Lewis, 2003). Washington (1982) interviewed 64 first and fourth grade teachers and found that both Black and White teachers viewed Black males in the class less favorably than other groups. Similarly, Ross and Jackson (1991) issued questionnaires to 29 teachers suburban New York teachers (28 female, 1 male) presenting them with 12 hypothetical case histories of Black boys and girls in fourth grade. Teachers were asked to predict each student's performance in the current year, predict his or her performance in the future, and rate their desirability of having the student in their class. Findings from this study suggested that teachers, on average, held lower expectations for the current and future success of Black males, even when the students were equivalent on academic and personal characteristics.

More recent literature related to low or negative teacher expectations converge with earlier research. Wood and colleagues (2007) analyzed a sample of 455 youth drawing on data from the Child and Family Study of the New Hope Project in Milwaukee, Wisconsin, testing the role of gender in educational expectations of urban, low-income African American youth (ages 9-16), their parents, and their teachers. On average, parents and teachers reported lower expectations for them than for girls when controlling for academic achievement. Similar findings have been reported elsewhere.

Strayhorn (2008d) measured the relationship between teacher expectations and academic achievement among urban Black males drawing on data from the NELS:98/00. He found that teachers on average have lower expectations for Black males when compared to their White male and Black female peers. For instance, 16% of Black males reported that their teachers recommended work instead of school. Second, over 20% of Black males reported feeling "put down" in class by their teachers, compared to 4% of

White men and 4.8% of Black women. Low and negative teacher expectations also have significant implications for the placement of Black males in special education. This is the focus of the next section.

Overrepresentation in Special Education

Minority students have long constituted a disproportionate percentage of those represented in special education (Harry & Anderson, 1994; Noguera, 2003). Data suggest that Black males constitute nearly 30% of all students in special education, though they represent only 10% of the total school population in the United States (Artiles, 1998; Hosp & Reschly, 2003). Concerns about this inequity have prompted federal legislation (e.g., Individuals with Disabilities Education Act, IDEA, Public Law No. 94-142, 1975), litigation (e.g., *PASE v. Hannon*, 1980), and a wide spanning line of research (e.g., Dunn, 1968; Dykes, 2008). For instance, the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA) stressed the importance of efforts to “prevent the intensification of problems connected with mislabeling and high dropout rates among minority children with disabilities” (p. 5). As a result, amendments to the Act required state-level reporting and corrective provisions designed to address problems in identification and placement of children in special education, especially Blacks. Some research studies have argued that Black male placement in special education is, in part, a function of their relationship and experiences with teachers.

Black male students are considerably less likely than White students to have positive relationships with their teachers (Decker, Dona, & Christenson, 2007; Monroe, 2005). And those with negative relationships with teachers are more likely to be referred to special education for disciplinary reasons (Decker et al., 2007). In fact, the percentage

of Black males in special education is positively correlated with the percentage of White teachers in a school. Herrera (1998) tested the relationship between the proportion of Black male students placed in special education programs by Black educators in comparison to White educators in ten city school districts. She found a statistically significant relationship between the number of Black students placed in special education and the number of White teachers in the school system. On average, cities with the highest percentage of White teachers had the highest percentage of Black students identified as “special.” Also, every city in the study reported excessive Black male special education placement.

To exacerbate this issue, research on the effectiveness of special education placement is, at best, inconclusive (Artiles & Trent, 1994; Harry & Klinger, 2014), raising many questions about educational policies, placement, and treatment of students in special education (Bondy & Ross, 1998). Krezmien and colleagues (2006) argued that the combined intersection of race and disability place Black students at greater risk for suspension than all other groups with the same disabilities, adversely impacting their educational achievement. The following section provides a review of what we know from research about disciplinary practices for Black males.

Disciplinary Practices

Over the past years, schools have increasingly relied upon suspension and expulsion as primary responses to school disciplinary infractions (Krezmien, Leone, Wilson, 2014). For instance, “zero-tolerance” policies were designed to improve school safety and limit future infractions, though research studies suggest they do more harm than good (e.g., Skiba & Rausch, 2006). Historically, suspension and expulsion were

reserved for the most serious and egregious infractions. Today, strict enforcement of school policies have resulted in significant increases in the national number of suspensions—1.7 million in 1974 to more than 3.3 million (6.8% of all students) in 2006 (Fabello, 2011). Of those suspended, Black males are disproportionately represented.

Disproportionate punishment of Black male students in school is no new phenomenon (Ferguson, 2001; Irvine, 1990; Noguera, 2003). A number of scholars have argued that Black males' overrepresentation in exclusionary discipline (e.g., detention, suspension, expulsion, and school replacements) are, in part, a function of teachers negative perceptions of them (Darensbourg, Perez, & Blake, 2010; Ferguson, 2001; Kunjufu, 1986). Lewis and colleagues (2010) provided insight on exclusionary practices, drawing on data from an urban school district in the Midwest to examine differences in discipline responses to Black and White male students—the authors uncovered several key findings. First, though Black males made up only 11% of the total district population, they constituted nearly 37% of all disciplinary sanctions. A great majority of the behavioral infractions were for disobedience (47%) and defiance (17%); not fight, threats, or thefts (15% combined). Second, of those assigned to behavioral sanctions, 33% were detentions, 38% were in-school suspensions, and 38 were out-of-school suspensions. Results from their study confirm the negative treatment of Black males by teacher and administrators who view them as violent, dangerous, and uneducable (Ferguson, 2001).

Increasingly, more students are also being referred to the police or courts, criminalizing school misbehavior (Krezmien et al., 2006). This has been referred to as the “school-to-prison pipeline” (Children’s Defense Fund, 2012). Krezmien and colleagues

(2010) studied school referrals directly to the courts in five states. They found that schools in each of the states represented a greater proportion of referrals to juvenile courts in 2004 than in 1995. The authors attributed this trend to increased reliance on zero-tolerance policies for school misbehavior, as well as an increase in the use of police officers to manage school misbehaviors. Utilizing correctional services for typical disciplinary problems severely impact Black males, increasing their odds of arrest and incarceration. The following section provides an overview of what we know about the relationship between juvenile justice and education.

Juvenile Justice and Education

In a seminal 1988 report to Congress, *A Delicate Balance*, the Coalition for Juvenile Justice (CJJ) [formerly the National Coalition of State Juvenile Justice Advisory Groups] raised poignant concerns about the overrepresentation of minority youth in the juvenile justice system. They cited: “Questioning the possibility of racism within the juvenile justice system is not a topic of casual inquiry, it is a subject responsible people cannot ignore” (Coalition of Juvenile Justice, 1988, p. 2). Directing attention to trends of differential arrest, prosecution, conviction, and sentencing of minority youth, CJJ called for stricter policies under the Juvenile Justice and Delinquency Prevention Act (JJDPA) of 1974. Therefore, in the 1988 amendments to JJDPA, Congress required States to track confinement differences through the Disproportionate Minority Confinement (DMC) requirement. A later revision of JJDPA in 2002 broadened the DMC initiative from disproportionate minority “confinement” to “contact,” requiring states to track, examine, and address the disproportionate representation of minority youth across multiple points

of contact (e.g., arrest, referral to court, secure detention, etc.) along the juvenile justice system continuum (Coalition of Juvenile Justice, 1988).

Though such policies are in place, disparate trends persist. In 2010, African Americans comprised 17% of all juveniles, but 31% of all arrests (Rovner, 2014). Data also report that Blacks are twice as likely to be arrested as White juveniles (Rovner, 2014). These disparities are more pronounced when disaggregated by both race and sex. In a recent study, Brame and colleagues (2014) found that by age 18, 30% of all Black males were arrested, compared to 20% of White males. The weight of empirical evidence, generally, converges on the negative long-term consequences of contact with criminal justice system as it relates to wages, employment, and family life (e.g., Bushway, 1998; Freeman, 1992; Hagan, 1991; Western, 2006). For example, studying a sample of young males, Bushway (1998) provided evidence that arrest can lead to problems in the labor market above and beyond the impact of one's current or past criminal activity. Theoretical perspectives support this conclusion. Hagan (1991) argued that juveniles that come in contact with the juvenile justice system do not develop the necessary social and human capital necessary to succeed. In contrast, less is known about the educational consequences of criminal justice contact.

Though contact with the juvenile justice system is a long-hypothesized source of educational disadvantage for youth (Kirk & Sampson, 2013), scholarly research is sorely underdeveloped in this area. The preponderance of evidence tests the relationship between various forms of contact (e.g., arrest, incarceration, court involvement) on high school related education outcomes—very few studies consider the implications of criminal justice contact on college outcomes. Offered in the following section is a review

of what we know from research about the relationship between early criminal justice contact and high school related outcomes.

Impact of Early Criminal Justice Contact on High School Degree Completion

Much of what we know about the relationship between early contact with the criminal justice system and education related outcomes focuses on high school. One line of scholarly inquiry has tested the relationship between more serious legal sanctions (e.g., conviction and incarceration) and achievement in high school. For instance, drawing on sample of 411 London working-class boys in 1953, De Li (1999) examined the impact of conviction on delinquency and status achievement. Status achievement was defined as ones' educational and occupational success, specifically, high school achievement, and occupation status and stability. Results from his study suggest that legal sanctions (i.e., conviction) decrease the likelihood of high status achievement by increasing youth's involvement in delinquent behaviors. Youth who were labeled by the juvenile justice system as "deviant" were more likely to participate in antisocial behavior, therefore more likely to underperform in education, and have less job stability and occupational status. Similar findings have been reported elsewhere.

Aizer and Doyle (2013) estimated the causal effects of juvenile incarceration on high school completion and adult recidivism, drawing on a sample of over 35,000 juvenile offenders over a ten-year period from Chicago. Results from their study suggest that juvenile incarceration reduces the probability of high school completion by 13%, while increasing the probability of incarceration later in life by 22%. Incarcerating juveniles has significant long-term consequences in terms of educational attainment and

recidivism. Another line of research has focused on the relationship between arrest and education.

Prior research studies document a negative inverse relationship between juvenile arrest and high school completion (Bernburg & Krohn, 2003b; Hirschfield, 2009; Sweeten, 2006; Tanner et al., 1999). For instance, Sweeten (2006) used data from NLSY:97 to test the effect of first-time arrest and court involvement during high school on educational attainment. He reported, “first-time arrest during high school nearly doubles the odds of high school dropout, while a court appearance nearly quadruples the odds of dropout” (Sweeten, 2006, p. 473). More recent studies have drawn similar conclusions about the negative role early contact with the criminal justice system has on education outcomes.

Bernburg and Krohn (2003b) used a stratified random sample of males (ages 13.5-22) living in New York to test the long-term effect of police interventions (i.e., arrest) during adolescences on educational attainment. And as the authors predicted, early arrest experiences significantly reduced their odds of graduating from high school—in fact, by more than 70%. Similar results have been reported in other studies (e.g., Tanner, et al., 1999). Indeed, Hjalmarsson (2008) found that arrested youth were 11 times less likely to graduate high school than non-arrested individuals. Other studies have taken different methodological approaches in estimating the relationship between criminal justice contact and schooling for youth.

Merlo and Wolpin (2009) analyzed a sample of Black males ages 13 to 22 from NLSY:97, employing vector autoregression (VAR) techniques to estimate and model their schooling, work, and crime decisions, as well as arrest and incarceration outcomes.

Their estimates suggested that early criminal justice contact has long-lasting effects. Specifically, Black males who were arrested at age 14 were about 10% more likely to be arrested at ages 19-22, and 19% less likely to graduate from high school. This was the only study identified that used such relationship for Black males specifically.

Though informative and important scholarly contributions to this line of inquiry, as with all research, there are limits that must be considered. Some of the correlations between arrest, incarceration, and educational outcomes may be explained by alternative (unmeasured) factors. For instance, Bernburg and Krohn (2003b) only controlled for race, poverty, delinquency, and prior math aptitude. Empirical evidence lends support to a robust set of covariates that increase one's odds of high school dropout: disposition toward authority (e.g., Myers, Milne, Baker, & Ginsburg, 1987); peer delinquency (e.g., Battin-Pearson et al., 2000); family (e.g., structure and parental practices) (e.g., Astone & McLanahan, 1991); neighborhood distress (e.g., Crowder & South, 2003) and crime (e.g., Klinger, 1997). Very few studies account for these confounding factors, especially over a life-course or longitudinal design (Kirk & Sampson, 2013).

Some research on this topic is also significantly dated. Recall De Li's (1999) study, which used a sample of male youth during the 1960s and 1970s. Findings from his study may no longer be representative of younger cohorts. Finally, only one reviewed study in this section present findings for Black males specifically. Empirical inattention to the educational consequences of criminal justice contact on Black males is puzzling given their disproportionate representation in the justice system (Alexander, 2012; Kirk & Sampson, 2013). Covered in the following section is a separate line of inquiry,

highlighting what we know about the impact of early criminal justice contact on college outcomes.

Impact of Early Criminal Justice Contact on College Outcomes

Research related to early criminal justice contact and college outcomes is virtually nonexistent. Kirk and Sampson (2013) provided an initial examination this relationship, estimating the direct effect of arrest on later high school dropout and college enrollment for youth. Findings from their study suggest that arrest has “severe consequences for the prospects of [college] educational attainment” (Kirk & Sampson, 2013, p. 47). For instance, youth with arrest records have only a 0.18 probability of enrolling in a four-year college, compared to nonarrestees who have a probability of college enrollment equal to 0.34. The authors conclude, “...arrest in adolescence hinders the transition to adulthood by undermining pathways to educational attainment” (p. 19). Other evidence related to this line of inquiry is, at best, anecdotal.

Several explanations have been offered about the negative educational consequences of early criminal justice contact. First, youth with arrest records who graduate from high school may have their school transcripts marred with poor attendance and grades, a potential consequence of spending time navigating the criminal justice process, or because of disciplinary infractions. Marred transcripts may limit students’ competitiveness in college admission and securing financial aid. Furthermore, gatekeepers like guidance counselors might have little motivation in supporting youth with records (Kirk & Sampson, 2013).

There are also institutional mechanisms that may pose challenge to youth with criminal records. For instance, Lipka (2010) reported that more than 60% of U.S.

colleges consider applicants' criminal records during the admissions decision process. Additionally, in 2006, the Common Application added an admissions question asking applicants if they had ever been convicted of a crime (Jaschik, 2012). Admission officers might use this information as a screening tool to deny admissions for those with records. Some institutions like the University of Illinois ask information about pending charges as well, while others like University of North Carolina-Wilmington asks some students to provide background checks, denying admission to all applicants who fail (Lipka, 2010). Although not all institutions actually use ones' criminal history during admissions decisions, some applicants may assume that they do, and not apply as a result (Kirk & Sampson, 2013).

In response to whether or not ones' criminal background matters in terms of perception, Anderson et al. (2013) studied the perceptions of African American college applicants with criminal records by White peers. Specifically, students evaluated 1 of 24 hypothetical college applicants—manipulated by race, arrest record, and academic qualifications. Results revealed that when evaluated by White students, African American applicants with no criminal record were no more likely to be accepted than Black students with a criminal record. Additionally, White students on average felt more comfortable around the White student with a DUI arrest over the Black applicant with the same arrest. Racial preference for White applicants was consistent across mixed qualifications (e.g., low GPA/high ACT). And while students' peers do not make college admission decisions, findings from this study illustrate how racial bias might manifest itself in the college admission process. It also exposes how implicit bias might impact the

experiences of youth with criminal records upon entry into a higher education institution. There are other institutional barriers too.

Financial aid eligibility presents a major barrier to higher education for some youth with criminal records. Changes to the Higher Education Act (HEA) of 1965, as amended by the Higher Education Act of 1998 suspended higher education funding to persons convicted misdemeanor or felony drug charges. These funds included student loans, Pell grants, Supplemental Educational Opportunity Grants, and Federal Work-Study. Pell grants, specifically, provided a significant number of those with criminal backgrounds access to college education (Tewksbury & Taylor, 1996), given the overrepresentation of low-income people in the criminal justice system (Harlow, 2003; Harrison & Beck, 2006).

Eligibility for financial aid, however, does not impact youth who commit crimes—unless they were charged as an adult. Many youth often lack knowledge about financial aid eligibility for ex-offenders; in fact, many believe that any felony conviction will prevent them from receiving financial aid (Juszewicz, 2009). And while financial aid sanctions are lifted for youth charged as “juveniles,” those who are convicted as adults are disproportionally Black and male (Juszewicz, 2009). In fact, 67% of juvenile defendants in adult court are Black, and 50% of those are male. Overall, Black youth are arrested for drug crimes at a rate 10 times higher than that of Whites (Sentencing Project, 2013b). This poses a major challenge for Black male youth interested in college. Offered in the following section is a review of the theoretical framework used in this study—life course theory of cumulative disadvantage.

Theoretical Framework

Theory has been defined as “a set of interrelated constructs, definitions, and propositions that presents a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting phenomenon” (Kerlinger, 1986, p. 9). In consonance with this definition, it was important to select a theoretical framework that would supply language for hypothesizing the relationship between the primary independent and dependent variables in this study—life course theory of cumulative disadvantage (LCTCD) was selected for these reasons.

Indeed, LCTCD provides a useful theoretical framework for examining the long-term consequences of early contact with juvenile justice system through arrest on four-college enrollment. LCTCD represents an integrated approach to theories of crime and delinquency, recognizing the importance of multiple social, individual, environmental, and economic factors over the life course in explaining eventual behavior of individuals. Sampson and Laub’s (1997) LCTCD is derived from a development approach of labeling theory, integrated with an age-graded theory of social control.

Labeling theory is primarily concerned with the negative consequences of being labeled. And from a developmental perspective, it emphasizes the *process* by which this occurs. For instance, societal reactions to deviance may trigger adjustment issues that lead to further deviance. “Labeling may thus lead to an alteration of one’s identity, exclusion from ‘normal routines’ or ‘conventional opportunities,’ and increased contact with and support from deviant subgroups” (Sampson & Laub, 1997, p. 7). Labels can lead to stigmatization, which may also have negative consequences for ones’ job, self-

esteem, and social networks. Incrementally, labeling effects accumulate overtime, leading to a series of reinforcing conditions. There are structural effects of labeling also.

Traditional social control theory is based on one central tenet that crime and deviance are more likely when an individual's bond to society is weakened or broken—particularly, *pro-social* bonds. However, LCTCD emphasizes the role of age-graded informal social institutions (e.g., family, work, school) across the life span. In other words, relevant institutions of informal social control vary by age. For instance, during adolescence, social bonds with family, peers, and school are important. The relevancy of such institutions may vary however during one's adulthood.

Sampson and Laub (1997) argued that deviance or problem behavior has negative consequences, constraining future opportunities for healthy development, and ultimately contributing to the stability of anti-social behavior over time—this is referred to as cumulative continuity of disadvantage. Said differently, anti-social behavior as a juvenile can lead to severance of pro-social social bonds as an adult—cumulative continuity of disadvantage. This process of cumulative disadvantage is linked to four key institutions of formal of social control: family, school, peers, and state sanctions.

Collectively, core assumptions of LCTCD supplied language for hypothesizing processes that may take place for Black males along their education pathway, as a result of being arrested. Specifically, being labeled “deviant” or “anti-social” as a result of an arrest status *may* have negative long-term consequences for their odds of enrolling in a four-year college, based in part on how pro-social institutions respond to them.

Chapter Three: Methodology

Recall the purpose of this study was to test the relationship between Black males early contact with the criminal justice system through arrest and four-year college enrollment using a nationally representative sample of approximately 1100 Black males who participated in the NLSY:97. Specifically, I employed a battery of statistical controls to isolate and test the predictive validity of Black male arrest history on their probability of enrolling in a four-year college in 2003. Two central research questions guided this study:

1. Are there significant differences between Black males who report being arrested as a youth and those who do not, in terms of four-year college enrollment?
2. Controlling for a battery of background and family factors, does Black male youth arrest status significantly predict enrollment in a four-year college?

The present study represents a secondary data analysis of the National Longitudinal Study of Youth (NLSY:97). Secondary data analysis refers to the “re-analysis of data for the purpose of answering the original research question with better statistical techniques, or answering new questions with old data” (Glass, 1976, p. 3). The present study represents the latter. Secondary analysis of existing data allows researchers access to data from large, national samples—data that would otherwise be difficult for a single researcher to collect (Kiecolt & Nathan, 1985).

This chapter describes the methodology used to answer these research questions. First, a detailed description of sample selection process is provided. Second, information about the NLSY:97 instrument is outlined, including description of relevant questionnaires used in this study. Next, data collection strategies and procedures used for the NLSY:97 database are reviewed. Following, reliability and validity are discussed, concluding with an overview of the data analysis techniques employed.

Sample Selection

The dataset for this study was constructed from the NLSY:97, which was designed to represent the civilian, non-institutional population of the U.S. between the ages of 12 to 16 years, as of December 31, 1996 (Moore, Pedlow, Krishnamurty, Wolter, 2000). Therefore, the sampling universe was restricted to the 50 states comprising the U.S., as well as the District of Columbia. Research analysts from the National Opinion Research Center (NORC) employed standard area probability sampling methods, identifying two independent samples. Area probability sampling refers to a strategy in which geographic areas are sampled with known probability (Hall, 2008). The first was a cross-sectional sample, which refers to “any collection of data from a sample of individuals (or groups) at a particular point in time as a basis for inferring the characteristics of the population from which the sample comes” (Bynner, 2006, p. 53). Second, was a supplemental sample of Black and Hispanic youth so that population generalizations could be made from the data (Thomas & Heck, 2001).

The NLSY:97 cohort was selected via two phases. In the first phase, a list of more than 96,000 housing units for the cross-sectional sample and the supplemental sample were derived from two independently selected, stratified multistage area probability

samples (Moore, et al., 2000). The purpose of this was to ensure an accurate representation of different sections of the population across race, income, region, and other factors (Thomas & Heck, 2001). In phase two, subsamples of eligible persons identified in the first phase were selected for interview (Moore, et al., 2000). The following sections describe each phase in detail.

Phase 1: Selection of Households for Screening

The list of housing units for each sample was selected in a three-stage process. First, 100 primary sampling units (PSUs) for each sample were chosen from the National Opinion Research Center's (NORC) 1990 master probability sample of the United States. Some PSUs were selected in both samples, yielding a total of 147 non-overlapping PSUs included in the NLSY:97. In the cross-sectional sample, each PSU represented either a metropolitan area or one or more non-metropolitan counties within a minimum of 2,000 housing units.

Contrarily, the supplemental sample defined PSUs differently; counties containing large percentages of minorities were merged to create areas containing a minimum of 2,000 housing units. Second, segments containing one or more adjoining blocks-and at least 75 housing units were selected from each PSU. Finally, a subset of housing units within the segment comprised the listing of households eligible for interview (Moore, et al., 2000).

Phase 2: Identification of Eligible Respondents

In the second phase, all NLSY:97-eligible individuals born between 1980 and 1984 (age 12 to 16 as of December 31, 1996) in each household were identified. NORC interviewers visited their households, administering a short interview, which collected the

age or date of birth of every person linked to a particular household—over 150,000 people were surveyed. During the screening process, 9,907 eligible members of the households were identified to participate in NLSY:97; of those, 8,984 were interviewed in round 1 (90.7%) (Moore, et al., 2000). Participation in the study was incentivized through cash gifts. For instance, in round 1, respondents received \$10 for their participation in the *Youth Questionnaire*; likewise, parents received the same for their participation in the *Parent Questionnaire*. The following section provides a description of sample.

Wave 1 Survey Sample Description

Of the nearly 9,000 respondents interviewed in round 1, approximately 6,700 were from the cross-sectional sample and 2,200 from the supplemental sample (which was designed to oversample Hispanic and Black people). In the initial survey, males constituted 51% of the sample, and females 49%. In terms of race/ethnicity, Whites represented the largest group (52%), compared to Blacks (26%), Hispanic/Latinos (21%), and Mixed (0.9%). Table 3.1 provides a description of the samples across rounds 1 and 7 by subsample, race/ethnicity, and sex—the independent and dependent variables were derived from these rounds.

Analytic Sample. The unweighted analytic sample for this study was restricted to respondents who identified as “Black” and “male” within the first wave of the survey ($N = 1169$). Recall that “Black” youth in the NLSY:97 study were oversampled to ensure representativeness. A great majority (i.e., 95%) of the sample reported U.S. citizenship (i.e., born in the U.S.). Ages of the participants varied. For instance, 18% of the sample was 12 years old at the time of the initial survey—20% were 15 years old. Also, a

majority (77%) of participants reported residing in an urban area at the time of the initial survey. For more information about the analytic sample see Table 3.2.

Table 3.1

Description of Samples for Rounds 1 and 7 by Race/Ethnicity and Sex

	White	Black	Hispanic	Mixed Race
<u>Round 1</u>				
Male	2413	1169	977	40
Female	2252	1166	924	43
Total	4665	2335	1901	83
<u>Round 7</u>				
Male	2060	1015	817	36
Female	1916	1046	911	39
Total	3976	2061	1728	75

Table 3.2

Description of Analytic Sample

Characteristic/Variable	%
Age	
13	21%
14	20%

continued

Table 3.2 continued

15	20%
16	20%
College Enrollment Status (2003)	
Not Enrolled	75%
Enrolled at four-year College	25%
Ever Arrested?	
Yes	8%
No	92%
Urbanicity	
Urban	24%
Rural	76%
U.S. Citizenship	
Yes	95%
No	5%
12	19%

Instrumentation

The NLSY, which is sponsored by the U.S. Bureau of Labor Statistics (BLS) of the U.S. Department of Labor, is the youth-focused component of the National Longitudinal Surveys (NLS) program. NLS was initiated in the mid-1960s, and designed to survey four cohorts: older men, mature women, young men, and young women.

Collectively, these surveys elicit information across multiple points in time on the labor market experiences of the aforementioned populations (Hering & McClain, 2003).

NLS was first launched in 1966 and was originally sponsored by the Office of Manpower, Automation, and Training. The initial surveys were designed to understand specific issues related to the U.S. labor market, such as retirement, the return of housewives to the labor force, and the school-to-work transition. The first four cohorts were selected because they faced important labor market decisions that were of special interest to policy makers. Though the initial plan was to interview participants over a 5-year period, however, high retention rates and widespread interest led to the expansion of the surveys. Thus, in 1977 the Department of Labor decided to continue the surveys of the four original cohorts and also begin a new longitudinal study of young men and women. The latter was designed to permit replication of the original Young Men and Young Women cohorts (Hering & McClain, 2003).

In 1978 a national probability sample was drawn of young men and women living in the United States and born between January 1, 1957, and December 31, 1964. Blacks, Hispanics, and economically disadvantaged non-Black/non-Hispanics were oversampled—together these samples comprise the National Longitudinal Survey of Youth 1979 (NLSY:79). Later in 1986, the Children of the NLSY:79 survey was launched, funded in part by the National Institute of Child Health and Human Development (NICHD). The survey was designed to provide detailed information on the development of children born from NLSY:79 women, employing a battery of child cognitive, socio-emotional, and physiological assessments (Hering & McClain, 2003).

With the aging of the NLSY:79 cohort, NLSY:97 was launched, documenting youth's transition from school to work. Specifically, NLSY:97 collects extensive information about youth's labor market behavior, educational experiences, as well as their family and community backgrounds. Participants also participate in the computer adaptive form of the *Armed Services Vocational Aptitude Battery (CAT-ASVAB)*, which measures knowledge and skills in multiple areas including reading and mathematics. NLSY:97 survey was designed to be representative of youth living in the United States in 1997 that were born during the years 1980 through 1984. Thus, all participants were between the ages of 12 and 16 at the time of the first survey. This ongoing cohort has been surveyed 15 times to date and is now interviewed biennially. The most recent administration of the survey was 2011-12 (Hering & McClain, 2003).

Given the wide range of education, background, and employment information collected in the NLSY:97, several instruments are used, including: (a) Screener, Household Roster, and Nonresident Roster Questionnaire; (b) Youth Questionnaire; (c) Parent Questionnaire; (d) Armed Services Vocational Aptitude Battery; (e) School and Transcript Surveys; and (f) Household Income Update. The following sections offer an overview of the types of information collected in each questionnaire, highlighting only those relevant to this study.

Screener, Household Roster, and Nonresident Roster Questionnaire

The *Screener, Household Roster, and Nonresident Roster Questionnaire*, administered in round 1, is a 3-minute screener administered to persons to determine eligibility for the NLSY:97 survey, as well as the *Armed Services Vocational Aptitude Battery (CAT-ASVAB)*. Specifically, it collects demographic information, marital status,

educational attainment, and employment status for all household members. This instrument was also used to identify a household occupant to participate in the Parent Questionnaire (Moore, et al., 2000).

Youth Questionnaire

The *Youth Questionnaire* was administered in each survey round to every respondent. It is organized around 17 major sections, eliciting information about respondents' schooling and employment activities, financial characteristics, family background, social behavior, and health status. For instance, the *Schooling* section collects information about current schooling and school environment; and the *Employment* section collects data about each employer for whom the youth worked since age 14 (Moore, et al., 2000). Table 3.3 describes each major section and provides a brief overview of the kinds of information collected.

Table 3.3

Description of Youth Questionnaire

Section	Description of Data Collected
Information	Verified youth data in the Screener, Household Roster, and Nonresident Roster Questionnaire
Household Information	Confirms and updates information on members of the youth's household
Current Population Survey	Employment status
Schooling	Collects information about current schooling and school environment
Peers/Opportunity	Provided the youth with a list of activities and asked him or her to estimate the percentage of peers who participate in each
Time Use	Asks youth about time spent during the day and week on various activities

Continued

Table 3.3 continued

Expectations	Asked youths to predict characteristics of their lives at certain points in the future.
PIAT Math	Administers the PIAT Math Assessment to eligible respondents.
Employment	Employment history since age 14
Training	Asks about training programs the youth has participated in outside of regular schooling
Health	Asks about general state of youth's health and long-standing problems he or she has
Self-Administered	Sensitive questions related to neighborhood environment, relationship with parents, puberty, dating and sexual activity, pregnancy and abortion, attitudes toward self, substance use, and criminal and delinquent activities
Marriage	Asks questions about any marriages or marriage-like relationships that the youth may have had
Fertility	Gathers information about any biological children of the youth and the parentage of each
Childcare	Collects details about child care arrangements
Program Participation	Gathers data about any assistance programs in which the youth and the youth's spouse/partner may have participated
Income/Assets	Collects data on the income and assets of youth and the youth's spouse/partner

Note. PIAT = Peabody Individual Achievement Test

Parent Questionnaire

The *Parent Questionnaire* collected information about one of the youth's biological parents—for youth without biological parents in the primary household, another adult household member was selected to provide information. This instrument is organized around 11 major sections, collecting data about both the respondent and youth. For instance, information about the family's nationality, religious orientation, and

community environment were collected (Moore, et al., 2000). Table 3.4 provides a brief overview of each major section and a description of the data collected.

Table 3.4

Description of Parent Questionnaire

Section	Description of Data Collected
Information	Verified own and youth's data collected in the <i> Screener, Household Roster, and Nonresident roster Questionnaire</i>
Family Background	Gathered data about parents' family background
Calendars	Collected dates of significant events in parent's life
Child Calendar	Gathered data about health insurance of each eligible youth
Child Health	Collected data about the health insurance of each eligible youth
Family	Collected data about the family situation by asking questions about the youth's social skills, decision-making, positive behavior, and relationships with parents
Expectations	Asked parent to make predictions about each eligible youth's life in the next year and at age 20

School and Transcript Surveys

School and transcript surveys were also administered as part of the NLYS:97 program. School surveys collected information about characteristics of the school, staff, as well as the student body. Other information included the school's general practices, graduation policies, and school-to-work programs. For instance, some items of the survey asked about the average daily rate of attendance, total enrollment, summer school availability, gang activity, as well as alcohol and drug use.

High school transcript surveys were also administered for all respondents—those who graduated or who were no longer enrolled in high school but were 18 or older. Based

on this information, survey staff constructed a series of variables describing each respondent's high school experiences (Moore, et al., 2000).

Household Income Update

The *Household Income Update* collects information about the respondent's parent and his/her spouse/partner in the absence of a detailed parent questionnaire. Specifically, information about the parent's total pre-tax income from wages, salaries, commissions, and tips during the past calendar year is collected—the same information is collected for the parent's spouse/partner (Moore, et al., 2000). The following section describes the key measures relevant to this study.

Measures

This study consisted of one main independent variable, one dependent variable, and a battery of control variables related to Black male's background and family factors. The following sections offer an overview of each.

Independent Variable

The primary independent variable for this study measures Black male's arrest status in 1997. Participants were asked, "Have you ever been arrested by the police or taken into custody for an illegal or delinquent offense." Responses were coded dichotomously: 0 (no) to 1 (yes). Coding of this variable is consistent with previous research (Bernburg & Krohn, 2003; Brame et al., 2014; Sweeten, 2006).

Dependent Variable

The dependent variable measures Black male's college enrollment status in September of 2003. This categorical variable was initially on a four-point scale: 1 (not enrolled in college), 2 (enrolled in two-year college), 3 (enrolled in four-year college),

and 4 (enrolled in graduate program). For the purposes of this analysis, I recoded this variable to exclude individual's enrolled two-year college and graduate programs. Thus, responses were coded dichotomously: 0 (no, not enrolled) to 1 (yes, enrolled). Prior studies have treated this variable in similar fashion (Perna, 2000)

Control Variables

NLSY:97 permits the use of a robust set of statistical controls to isolate the net effect of the predictor variable on the dependent variable. Prior research uncovers several factors that may confound the relationship between juvenile arrest and college enrollment based on prior literature: parent's level of education (e.g., Horn & Bobbitt, 2000), parent's income (e.g., McDonough, 1997), parent's expectations (e.g., Lareau, 1987); prior academic achievement (e.g., Davis, 2003); delinquency (e.g., Sampson & Laub, 1997), and urbancity (e.g., Strayhorn, 2009a). Parent's income was measured on a five-point scale ranging from: 1 (1 - \$5,000) and 7 (more than \$250,000). For parent's expectations, I created a composite variable ($\alpha = 0.71$) using three items measuring parent's expectations of their child's educational achievement. The items asked the following questions: "What is the percent chance that [he/she] will have received a high school diploma by the time [he/she] turns 20?" "What is the percent chance that [he/she] will have received a high school diploma by the time [he/she] turns 20?" and "What is the percent chance [he/she] will have a college degree by 30 years old?" Each item were originally on a scale of 0 to 100. The composite variable was created by summing these three items; the range of the composite is from 0 to 300.

Prior academic achievement ($\alpha = 0.64$) was also measured using a composite variable including Black male's eighth grade and high school grades. Both items were

originally scored on a seven-point scale: 1 (Mostly below Ds), 2 (Mostly Ds), 3 (About half Cs and half Ds), 4 (Mostly Cs), 5 (About half Bs and half Cs), 6 (Mostly Bs), and 7 (About half As and Bs). The composite variable was created by summing these two items; the range of composite is from 2 to 14. Delinquency was measured using an existing composite variable, including 10 self-report items, each representing a delinquent act. The Delinquency Index is on a scale from 0 (no delinquent acts) to 10 (many delinquent acts). Finally, urbanicity is coded dichotomously: 0 (rural) to 1 (urban). Table 3.5 presents an overview of each variable and its corresponding survey round.

Table 3.5

Description of Variables by Wave/Round

Variable	Wave/Round of NLSY
College Enrollment	7
Self-Report Arrest	1
Parent's Education	1
Residential Mom's Highest Grade Completed	1
Residential Dad's Highest Grade Completed	1
Delinquency Score Index	1
Prior Achievement	
HS GPA	1

continued

Table 3.5 continued

8 th Grade Grade	1
Parent Expectations	
% Chance in School Next Year	1
% Chance in Jail by 20 years	1
% Chance High School Diploma 20 years	1
% Chance College Degree by 30 years	1

Note. HS = high school

Data Collection Procedures

Data for this study were obtained through multiple measures. For instance, some data collection strategies and procedures employed in round 1 are different from those used in subsequent rounds. Thus, this section is organized around two sections: (a) Round 1 procedure; and (b) Rounds 2-15 procedures.

Round 1 Procedure. Data for round 1 were primarily collected via a CAPI (computer-assisted personal interview) system, administered by an interviewer from NORC, with a laptop computer. The CAPI program guides interviewers, preventing invalid values, and warning interviewers of implausible answers. Additionally, CAPI employs a set of internal checks, which lower the probability of inconsistent data during an interview (Couper & Burt, 1994; Wright, Aquilino, & Supple, 1998). For Spanish-speaking respondents, Spanish versions of all survey instruments were prepared, likewise, NORC employed bilingual interviewers to administer that version of the survey. In some cases, NORC interviewers used a paper screener to collect data during the initial

household screening which collected the same basic information as the CAPI system (Moore, et al., 2000). The following sections describe the stages in which data were collected in round one.

First, data were first collected using the *Screenener, Household Roster, and Nonresident Roster Questionnaire*. Recall that this instrument was administered to a member of each household selected for sampling in the NLSY:97 survey areas to determine eligibility for participation. Indeed, a household resident age 18 or older (also called the “household informant”) was interviewed.

Second, the youth and parent questionnaires were used to interview NLSY:97-eligible youth(s) and one of their parents using the CAPI. Prior to, selected data from the *Screenener, Household Roster, and Nonresident Questionnaire* were automatically transferred into the *Parent Questionnaire* and *Youth Questionnaire* for verification and use during the interviews. Additional information was also collected about participating youth(s) schooling experience. For instance, school principals (or their designee) were surveyed using a self-administered instrument. The first school survey form was mailed in September 1996 (Moore, et al., 2000).

Interviews for round 1 were conducted between January and early October 1997. Concerns about the number of eligible youth participating in the initial field period, however, led NORC researchers to conduct a refielding between March and May 1998—an additional 395 respondents were interviewed. These respondents were administered the same instrument as initially interviewed in 1997 (Moore, et al., 2000).

Rounds 2-15 Procedures. Like the first interview wave, data in rounds 2-15 were primarily collected via face-to-face interviews via a CAPI, administered by a NORC

interviewer with a laptop computer. During sensitive portions of the interview, respondents were asked to answer directly into the laptop. This self-administered portion, called ACASI, included an audio option so that respondents could listen to the questions and answers being read via headphones if they prefer. ACASI was particularly helpful during cases where literacy was in question. In rare cases, respondents were interviewed by phone (Moore, et al., 2000).

In rounds 2-5, the *Household Income Update Questionnaire* was used to elicit income information from one of the respondent's parents. Data were collected using a self-administered paper instrument then entered into a CAPI questionnaire by NORC staff. School surveys were also administered in round 3 to principals (or their designee). The questionnaire was slightly modified since it was last employed in 1996. For instance, some items were changed to allow respondents to insert estimates rather than exact figures. School surveys were mailed February 2000. NORC staff also collected high school transcripts for participating youth—those who either graduated from high school or who were 18 or older and no longer enrolled in high school. Transcripts were first collected in 1999-2000, and the second wave in 2004 (Moore, et al., 2000).

Finally, data were collected from interviewers. For instance, each NLSY:97 questionnaire included an interviewer remarks section, which interviewers completed after interviewing. This section documents information about the interview, like the presence of another person during the survey, where the interview took place, and the language in which the questionnaire was administered. Interviewers are also asked to provide an overall assessment of the interview (Moore, et al., 2000).

Validity and Reliability

Validity and reliability are both addressed in this study. Validity refers to an evaluation of whether or not a particular mode of assessment accurately measures what it intends to measure (Suskie, 1992). Moreover, “validation combine scientific inquiry with rational argument to justify score interpretation and use” (Messick, 1995, p. 742). This study addressed validity in several ways. First, NLSY:97 is a widely used and circulated instrument. Government agencies and academic institutions regularly draw on data and findings from NLSY:97 in their recommendations to—and testimony before—Congress. Second, NLSY was designed and executed by NORC, one of the largest independent social research organizations in the country, established in 1941. NORC is located at the University of Chicago. Third, NLSY is well respected in the academic community. To date, nearly 10,000 journal articles, book chapters, and other studies have been published using information from the NLS. Finally, validity of this study’s variables was assessed using theoretical justification and factor analysis. Validity is important, but it is not sufficient by itself. A second important consideration is instrument reliability.

Reliability is defined as the “consistence with which and instrument measures whatever it measures” (Schmidt, Viswesvaran, & Ones, 2000, p. 905). Said differently, reliability refers to the stability and internal consistency of the measures of interest. The present study addressed reliability in the following ways. First, NLSY is a nationally represented longitudinal study with repeated measures, demonstrating stability and consistency of items over time. In terms of the independent variable of interest, internal consistency reliability is not calculable. Finally, internal consistency was calculated for multi-item scales in this study.

Data Analysis

Several steps were taken to prepare data for final analysis. First, data were retrieved in the aggregate from the NLS website. And given the purpose of this study, data were subsequently restricted to permit analysis of the primary research questions, excluding data beyond the scope of this study. Second, all variables were screened for missing cases. Scholarly research suggests secondary analysis of national databases is often complicated by the amount of missing cases or data (Graham & Hoffer, 2000; Little & Rubin, 1987; Strayhorn, 2009b). Thus, missing data were handled on a case-by-case analysis. For instance, listwise deletion was used for variables with less than 5% of missing data (Cohen & Cohen, 1983)—these variables included arrest status, college enrollment status, and delinquency. One important caveat, missing data constituted nearly 10% of all cases for college enrollment status. Since it was the dependent variable, listwise deletion was deemed appropriate, dropping all missing cases. For the remaining variables, mean substitution was used to replace missing information—this is referred to as the *zero-order correction* procedure (Strayhorn 2009). Table 3.6 provides adjusted means and standard deviations.

Sampling weights were also applied to the data before analysis, given the complex sampling techniques employed in NLSY:97. The NLSY:97 panel weight was appropriate for approximating the population of 1997 youth with arrest records in the longitudinal study. To minimize the influence of large sample sizes ($N=140,145, 249$) on standard errors while also correcting for oversampling of some groups (e.g., Blacks), cases were weighted by the NLSY panel weight divided by the average ($M = 130, 036.55$) weight of the sample (Thomas & Heck, 2001).

Table 3.6

Means and Standard Deviations for all Variables

Variables	Unadjusted		Adjusted	
	M	SD	M	SD
Arrest Status	0.13	0.34	-	-
College Enrollment Status	0.14	0.35	-	-
Delinquency	1.74	2.02	-	-
Parent Expectations	242.01	67.43	251.24	39.31
Parent Income	20692.15	16634.40	20966.23	11955.47
Urbanicity	0.81	0.39	0.81	0.38
Prior Academic Achievement	13.77	3.70	15.73	0.60

This procedure reduced the sample size to 1,078. The following equations were used:

$$\text{Relative Weight} = w_i / \bar{w}$$

Where w_i = original panel weight and $w = \sum w_i / n$.

Once data were prepped, analysis proceeded in three stages. First, descriptive statistics were used to calculate measures of central tendency for all independent, dependent, and control variables in this study. Second, to answer the first research question and test for significant differences between Black males arrest and college enrollment status, a Pearson chi-square test was used. This procedure is used to test for independence when both variables are categorical.

Finally, the second research question was answered using a hierarchical binomial logistic regression given the nature of the dependent variable and the study's goal of controlling for a battery of controls. Hierarchical regression analysis is "a method of regression analysis in which independent variables are entered into the regression equation in a sequence specified by the researcher in advance" (Vogt 1999, p. 129); this approach yields more conservative estimates of statistical relationships, thereby reducing

the chances of making type 1 errors. Also, using logistic regression is deemed the most appropriate method for examining binary outcomes (Aldrich & Nelson, 1984).

Several indices were interpreted to assess the “fit” of the models. First, the classification table was reviewed to determine how many cases were correctly predicted. Generally, the higher the overall percentage of correct predictions the better the model. Second, SPSS reports the $-2 \times \log\text{-likelihood}$ ($-2LL$) statistic—also called scaled deviance—to measure the degree of discrepancy between the observed values and predicted values from the models. The difference in value of the $-2LL$ statistic for each model is called the likelihood ratio (LR) test statistic, and was reported in the “Omnibus Tests of Model Coefficients” table in SPSS. The LR test statistic was used to determine whether the full model, including all variables, was a better predictor of the dependent variable. Next, Cox and Snell’s R^2 and Nagelkerke’s R^2 , also referred to as pseudo R^2 , which measures the overall strength of association between independent and dependent variables (Pampel, 2000). Lastly, the Hosmer-Lemeshow goodness-of-fit test was interpreted, which assess the degree to which the observed frequencies match the expected frequencies using a chi-square goodness-of-fit test. A non-significant test result suggests a well-fitting model.

To evaluate the overall strength of statistical relationship, several other statistics were calculated and interpreted—including predicted probabilities, predicted odds, and adjusted odds ratios (Keith, 2006; Pampel, 2000) where necessary. Probabilities refer to the probability of enrolling in a four-year college, relative to arrest status, controlling for confounding variables. Predicted odds measures the odds of enrolling in a four-year college relative to the influence of an independent variable, controlling for all others. Odds ratios are “a ratio of the odds for each group” (Meyers, Gamst, & Guarino, 2006, p.

230). These statistics were derived using the following formulas:

$$\text{Predicted probabilities: } p' = \frac{1}{1 + e^{-(B_0 + B_1X_1 + \dots + B_iX_i)}}$$

$$\text{Predicted odds} = \text{odds}' = (\text{constant Exp}(\beta))(\text{Exp}(\beta)IV)^{IV \text{ (value)}}$$

$$\text{Odds ratio} = \frac{\text{odds}'_1}{\text{odds}'_2}$$

Conclusion

Given the purpose of this study, secondary analysis of NLSY:97 data was deemed an appropriate strategy. Specifically, several statistical techniques were employed to answer the primary research questions, including: Pearson chi-square, hierarchical binomial logistic regression, and calculation of predicted probabilities, predicted odds, and odds ratio. Recall, the first research question asks about differences in college enrollment for Black male youth based on arrest status. Pearson chi-square was used to answer this question given the nature of the dependent variable (i.e., categorical).

The second research question asked if Black male youth arrest status predicted college enrollment in a four-year college or university. Hierarchical binomial logic regression was used to measure the relationship between the independent (and predictor) and dependent variables. Additionally, several calculations were necessary for interpreting the results of this analysis, including: predicted probabilities, predicted odds, and odds ratio. Collectively, the analytic techniques employed in this study rendered important results that enabled me to answer the primary research questions in this study.

Chapter 4: Results

Recall the purpose of this study was to test the relationship between Black male youth early contact with the criminal justice system through arrest and four-year college enrollment using a nationally representative sample of approximately 1100 Black males who participated in the NLSY:97. Specifically, I employed a battery of statistical controls to isolate and test the predictive validity of Black male arrest history on their probability of enrolling in a four-year college in 2003. Two central research questions guided this study:

1. Are there significant differences between Black males who report being arrested as a youth and those who do not, in terms of four-year college enrollment?
2. Controlling for a battery of background and family factors, does Black male youth arrest status significantly predict enrollment in a four-year college?

Presented in this chapter are the results of the study, organized the primary research questions.

Research Question One: Chi-Square Test

A Pearson chi-square test of independence was performed to examine the relationship between juvenile arrest and four-year college enrollment status for Black males, given the binary nature of each variable. Results suggest statistically significant differences in the expected and observed frequencies of enrollment in four-year college

for Black males in 2003 on the basis of their 1997 arrest status: $\chi^2(1, N = 1079) = 23.52$, $p < 0.01$. In other words, Black males who reported being arrested at some point in their life by 1997 were less likely to be enrolled in a four-year college in 2003 than their same-race male peers who were never arrested. Approximately 2% of Black males who were arrested by 1997 were enrolled in a four-year college in 2003. Table 4.1 presents a summary of these results.

Table 4.1

Descriptive Statistics for College Enrollment by Arrest Status

Arrest Status	College Enrollment	
	No	Yes
No	758 (84%)	172 (98%)
Yes	145 (16%)	4 (2%)

Note. $\chi^2 = 23.52$, $df = 1$, $p < 0.01$. Numbers in parentheses indicate column percentages.

Research Question Two: Hierarchical Binomial Logistic Regression

Hierarchical binomial logistic regression techniques were used to examine the relationship between 1997 arrest status and probability of four-year college enrollment in 2003 for Black males in the NLSY:97 national sample. Approximately 84% of all cases could be correctly classified using the baseline model (Block 0), which included only the dependent variable (i.e., four-year college enrollment), and no control and independent variables. In other words, if one randomly guessed that the probability of Black males in the sample being enrolled in a four-year college in 2003 was zero, they would be correct

about 84% of the time.

In the first model (Block 1), only control variables were included: delinquency, prior academic achievement, parents' expectations, parents' education, urbanicity, and parents' income. Interpretation of the Omnibus Tests of Model Coefficients statistic suggests that Block 1 was an improvement over the baseline model ($X^2 [6] = 84.16, p < 0.01$). This test was used to determine whether or not there were statistical differences between the log-likelihoods of the baseline model and Block 1 (Sweet & Grace-Martin, 1999). Significant results indicated that Block 1, including only control variables, also could be used to predict the probability of Black male four-year college enrollment in 2003 better than the baseline model.

Several other values were also interpreted. The reported -2 log-likelihood (-2LL) was 873.25. Log-likelihoods cannot be interpreted alone as an index of fit; however, the smaller the statistic the better the model (Sweet & Grace-Martin, 1999). So while results suggest that the Block 1 model is significant for predicting the probability of Black males enrollment in a four-year college, these results suggest generally poor fit between the model and data. Changes in -2LL will be compared in the successive model to determine whether or not it was a better fit to the NLSY:97 data.

Hosmer-Lemeshow test was conducted. Results were statistically non-significant ($X^2 [8] = 10.05, p > 0.05$). Using a Pearson chi-square, Hosmer-Lemeshow tests compare the predicted and observed frequencies—low chi-square values and non-significance indicate goodness of fit (Hosmer-Lemeshow, 2000). Thus, results presented here indicate good fit.

Several other indicators were used to evaluate the ability of the first model to

predict four-year college enrollment for Black males in the NLSY:97 sample, as suggested by others (Cabrera, 1994; Peng, So, Stage, & St. John, 2002). Though not completely comparable to the R -squared statistic used in ordinary least squares regression, two pseudo- R^2 values may be computed for logistic regression: Cox and Snell (1989) R -squared and Nagelkerke (1991) R -squared. The R -squared value used in ordinary least squares regression refers to the proportion of variance in the dependent variable explained by the independent variables included in the model. However, this is problematic when the dependent variable is binary, like in this study. In this case, variance is at a maximum for a 50-50 split on the dependent variable (Cabrera, 1994).

Confusing logistic R -squared values with R -squared values in ordinary least squares regression leads to incorrect conclusions. Reported values for Cox and Snell pseudo- R^2 (0.08) and Nagelkerke pseudo- R^2 (0.13) were therefore interpreted with caution in the first model—between 8% and 13% of the variance or change in the probability of four-year college enrollment for Black males in the NLSY:97 sample is accounted for by factors in Block 1. Also, approximately 84% of all cases could be correctly classified using the first model—the same percentage that could be correctly classified in block 0, where only the constant was included. The baseline model, with no predictors, could be used to correctly classify just as many cases as the first.

Several independent variables were significant predictors of Black males' four-year college enrollment (in 2003) in the first model. Black males who reported higher levels of delinquency ($b = -0.21$) had a lower probability of enrolling in a four-year college in 2003 than less delinquent same-race male youth. However, parents' education ($b = 0.04$), parent's expectations ($b = 0.02$), and parents' income ($b = 0.00$) were all

significant positive predictors of four-year college enrollment. Indeed, Black males whose parents reported higher levels of education, higher educational expectations for their students, and higher income had a higher probability of enrolling in a four-year college in 2003 than those who did not.

In the second and final model (Block 2), approximately 84% of cases could be correctly classified—the same percentage as Block 0 and 1. Again, if one guessed that no Black males in the sample enrolled in a four-year college in 2003, I would be correct about 84% of the time. Interpretation of results from the Omnibus Tests of Model Coefficients in the final model ($X^2 [7] = 96.47, p < 0.01$) suggest that it was a significant improvement over Block 1—there were statistical differences between the log-likelihoods of the first and final model. The final model, including all independent and control variables can be used to predict Black male four-year college enrollment in 2003 better than the first model.

Other indicators were also used to evaluate the ability of the final model to predict four-year college enrollment, including Cox & Snell and Nagelkerke pseudo- R^2 squared. Cox & Snell pseudo- R^2 was 0.09, and Nagelkerke pseudo- R^2 was 0.14 in the final model—very small increases from the first model. Inclusion of the primary independent variable (i.e., arrest status) in the final model only slightly helped explain differences in the probability of enrolling in a four-year college for Black males in 2003.

Though the final model was an improvement over Block 1, it was not considered well fitting. Several model-fitting indices support this conclusion. Results from the Hosmer-Lemeshow (2000) test ($X^2 [8] = 16.37, p < 0.05$) suggest statistically significant differences between the predicted and observed frequencies, rendering the model a bad

fit. A small observed change in scaled deviance ($\Delta -2 \log \text{likelihood} = 23.66$) also suggest that the model was not a good fit. Generally, the smaller the statistic the better the model (Sweet & Grace-Martin, 1999).

In the final model, several independent variables were significant predictors of Black males' four-year college enrollment: delinquency, parents' expectations, parents' education, parents' income, and arrest status in 1997. Black males who reported higher levels of delinquency ($b = -0.13$) had a lower probability of enrolling in a four-year college in 2003 than less delinquent same race male peers. Parents' education ($b = 0.08$), parent's expectations ($b = 0.02$), and parents' income ($b = 0.00$) were all statistically significant positive predictors of four-year college enrollment. In other words, Black males whose parents reported higher levels of education, higher educational expectations for their students, and higher income had a higher probability of enrolling in a four-year college in 2003 than those who did not.

Reported arrest status ($b = -1.58$) in 1997 was also a significant negative predictor of four-year college enrollment for Black males in 2003. Black males who reported ever being arrested by 1997 were significantly less likely to enroll in a four-year college in 2003 than their same-race male peers who reported never being arrested.

To evaluate the overall strength of statistical relationships, predicted probabilities, predicted odds, and adjusted odds ratio were also computed. Consistent with the literature, Black males in the NLSY:97 sample were unlikely to enroll in college by 2003. Those who were arrested by 1997 were even less likely, and had a predicted probability of 0.

Table 4.2

Logistic Regression Results

Factor	Model 1 (β)	Model 2 (β)
Arrest Status	--	-1.58*
Delinquency	-0.21**	-0.13*
Parents' Education	0.09**	0.08*
Parent's Expectations	0.02**	0.02**
Parent's Income	0.00*	0.00*
Prior Academic Achievement	0.16	0.16
Urbanicity	-0.05	-0.01
Constant	-12.31	-11.69

Note. * $p < 0.05$, ** $p < 0.01$.

Summary of Results

This study examined the relationship between early criminal justice contact through arrest and four-year college enrollment for Black males. Results from the analysis employed in this study and were presented in this chapter:

- Juvenile arrest in by 1997 was a significant predictor of four-year college enrollment in 2003 for Black male.
- Parents' education, income, and expectations were all statistically significant predictors of four-year college enrollment in 2003 for Black males.

- Statistically significant differences were observed in the predicted and observed frequencies; thus, the final model was not considered well fitting.

Chapter 5: Discussion

Recall the purpose of this study was to test the relationship between Black males early contact with the criminal justice system through arrest and four-year college enrollment. Specifically, I employed a battery of statistical controls to isolate and test the predictive validity of Black male arrest history on their probability of ever enrolling in a four-year college. Two central research questions guided this study:

1. Are there significant differences between Black males who report being arrested as a youth and those who do not, in terms of four-year college enrollment?;
2. Controlling for a battery of background and family factors, does Black male youth arrest status significantly predict enrollment in a four-year college or university?

Presented in this chapter is a discussion of results from this study. First, findings are discussed in relation to prior research; that is, points of intersection and divergence. Next, implications for policy, practice, and research are described in detail, followed by an overview of this study's limitations. Finally, this chapter closes with a recap of the study and a summary of major findings.

Relationship of the Findings to Prior Research

Results from this study suggest a negative relationship between early criminal justice contact through arrest and four-year college enrollment for Black male youth. Statistical differences were observed in Black males' four-year college enrollment by arrest status. Specifically, Black males who reported being arrested as a juvenile were

less likely than same race male peers who were never arrested to enroll in a four-year college by 2003. Likewise, juvenile arrest was a significant predictor of the probability of four-year college enrollment by 2003 for Black males in the sample.

Although scholarly literature on the nexus between juvenile arrest and college enrollment is sorely underdeveloped, results from the present study generally affirm conclusions drawn in previous research. Sampson and Kirk (2013) analyzed data from 9,000 Chicago residents and found that juvenile arrest is related to odds of college enrollment. In their study, only 16% of individuals with juvenile arrest records enrolled in a four-year college. Similarly, results from the current study suggest clear differences in college enrollment based on Black males' juvenile arrest status—those with juvenile arrest records were significantly less likely to enroll in a four-year college by 2003.

Additionally, data from this dissertation study demonstrates that Sampson and Kirk's findings, which were based on a diverse sample of Chicago residents, hold for Black males in the NLSY sample: juvenile arrest significantly predicts the probability of enrolling in a four-year college, controlling for more traditional academic and background predictors. Even though two Black males may have similar personal and academic records, the one with a juvenile arrest record is significantly less likely than the one without a juvenile arrest to enroll in college, all other things being equal.

Results from the present study also relate to prior research on Black males' experiences with the criminal justice system. Data has shown that among Black men ages 18 and older, the national incarceration rate is 1 in 15 (Pew Charitable Trusts, 2008). Results from this study not only affirm the fact that some Black males report early contact with the correctional system through juvenile arrest but extends what is known by

demonstrating that juvenile arrest can have a deleterious impact on one's educational opportunities. Black men in the study's analytic sample were significantly less likely to enroll in college if they were arrested as a juvenile—recall that only 2% of Black men in the sample who were arrested as juveniles went on to enroll in a four-year college. This adds important information to the growing literature on the Black male crisis in higher education (Cuyjet, 1997, 2006), mass incarceration (Alexander, 2011; Bruce, 2006) and juvenile offenders (Kirk & Sampson, 2013; Rovner, 2014).

Recall, results from this study suggest that Black males were unlikely to enroll in college by 2003; and those who were arrested by 1997 were even less likely, with a predicted probability of zero. Decades of research on the “Black male crisis” in higher education (Cuyjet, 1997, 2006) converge with these results. Black males' low college enrollment rates have been attributed to many factors such as pre-college preparation (e.g., Strayhorn, 2011), overrepresentation in remedial and special education (e.g., Noguera, 20003), and disproportionate punishment in school (Ferguson, 2001). However, findings from this dissertation study contribute to this line of inquiry, identifying juvenile arrest as yet another factor, diminishing Black males' odds of college enrollment.

The theoretical framework used in this study, LCTCD, also supplied language for hypothesizing processes that may take place, which decrease Black males' probability of enrolling in a four-year college. LCTCD is derived from a developmental approach of labeling theory, integrated with an age-graded theory of social control (Sampson & Laub, 1997). The former suggests that there are negative consequences of being labeled as “criminal” or “deviant” as a result of being arrested, which may have both stigmatizing and segregating effects for individuals. Specifically, “a variety of detachment processes

are set in motion that promote the likelihood of further deviance, including school dropout, and lessen an individual's likelihood of a successful transition to adulthood” (Kirk & Sampson, 2013, p. 4).

Individuals negatively labeled, for example, may experience exclusion from “normal routines” in school (e.g., suspension, expulsion) in the name of institutional accountability and school safety (Sampson & Kirk, 2013). For Black males, negative labeling effects may accumulate faster, as decades of research suggest that they represent a vulnerable population who are at risk of experiencing negative low and negative stereotypes and expectations (i.e., labels) in school (Ford, 1998; Kunjufu, 1986; Irvine, 1990; Lewis, 2003; Polite & Davis, 1999; Strayhorn, 2008d; Washington, 1982). An arrest status may therefore reaffirm existing beliefs and expectations of Black males.

Social control theory suggests that an arrest may also lead to a severance of positive social bonds from important social institutions like family, school and peers (Sampson & Laub, 1997). For instance, an arrest status may foster alienation and exclusion (e.g., suspension, restrictions from social events), weakening Black males’ attachment to school. And prior research on Black males in schools directs attention to their waning relationships with key education stakeholders (e.g., teachers, counselors) as a result of low and negative expectations, disproportionate disciplinary practices (Ferguson, 2001), and excessive referral to special education (Ferguson, 2001; Noguera, 2003; Irvine, 1990). Therefore, an arrest status may exacerbate already weakening bonds with school, increasing Black males’ probability of delinquent behavior and eventually school dropout.

There were also other significant predictors of four-year college enrollment for

Black males like delinquency. This relationship seems rather intuitive as delinquency often leads to criminal justice contact through an arrest (Sampson & Laub, 1997). Said differently, individuals who engage in delinquent activities are more likely to be arrested, though I recognize that certain groups like Black males experience criminal justice contact at disproportionate rates *regardless* of delinquency (Alexander, 2012).

Results from this dissertation study relate to other research conclusions as well. For example, dozens of studies have shown that juvenile delinquency is associated with lower level of educational attainment for all students (e.g., de Li 1999; Lochner, 2004; Tanner et al., 1999). Yet, the weight of empirical evidence to date focuses exclusively on secondary education outcomes such as high school dropout. In one such study, Ward and Williams (2014) found that delinquency by the age of 16 reduces males' probability of graduating from high school and four-year college. Results from the present study go a step further and show that juvenile arrest distinguishes Black men who enroll in college from their same-race male peers who do not; the study also provides evidence that juvenile arrest reduces the probability that Black males will enroll in a four-year college, taking Ward and Williams' conclusions to the postsecondary level and focusing specifically on Black males' chances of enrolling in college; no doubt strategies are needed to prevent juvenile delinquency/arrest as well as ways to overcome the long-term impacts of juvenile arrest.

Conceivably, a Black male who was arrested at the age of 12, should be given the opportunity, upon release, to successfully reintegrate into society as a law-abiding citizen without reproach. In fact, the juvenile justice system was designed, at least in part, with that goal in mind (McCord, 2001). Findings from this dissertation suggest that early

criminal justice contact through arrest for Black males may have negative and stigmatizing long-term effects, significantly reducing their odds of four-year college enrollment—the most direct pathway to ensuring economic and social mobility. Said differently, a juvenile arrest may operate as a new *Scarlet Letter*, so to speak, denying Black men from critical educational opportunities important for their success and livelihood. This quite frankly is unacceptable. In her seminal book *mass incarceration*, Alexander (2011) argued that “[Black males] are part of a growing undercaste, permanently locked up and locked out of mainstream society” (p. 8). Findings from study converge with Alexander’s assertion.

Finally, results from this study underscore the significant role of family background characteristics and expectations on students’ education outcomes. Specifically, parents’ income, level of education, and expectations were all statistically significant predictors of Black male four-year college enrollment by 2003 in this sample. Results converge with conclusions presented in prior research (Maski & Wise, 1983; Rouse, 1994; St. John, 1990 & Nowell, 1989; Perna, 2000; Swell, Haller, & Portes, 1969), while adding new insights to scholarly literature about the role of family in predicting college enrollment for Black students generally (Howard, 2003) and Black males specifically.

Implications for Future Practice, Research and Policy

Practice

Results suggest a number of important conclusions that have implications for future practice, research, and policy. In terms of practice, college outreach and academic support programs (COASPs) that specifically target individuals who have been involved

in the juvenile justice system may be an appropriate strategy for bolstering college access. Indeed, COASPs have become increasingly popular vehicles for broadening participation, enhancing academic skills, and promoting engagement among students (Strayhorn, Kitchen, Johnson, & Tillman-Kelly, 2014). Such programs, designed with juvenile offenders in mind, might help mitigate labeling affects and the attenuating pro-social bonds with school that many Black males face as a result of an arrest status. COASP directors might target juveniles with criminal records to reconnect them with pro-social peers and groups, and dispel myths about who “qualifies” for college.

Perhaps most importantly, COASPs might serve as the mechanism through which accurate and clear information is shared with students and their families about their legal rights in terms of disclosure of their criminal records in their college application. Many youth do not pursue four-year college education because of anxiety about disclosing their juvenile records in the college application. However, few know that there are laws and policies in place that are designed to protect them from discrimination on the basis of a juvenile record. For instance, a Black male youth under the age of 18 who has been arrested, or even adjudicated under the court of law (even if found guilty) may select “no” on a college or job application when asked if they have ever been convicted of a crime. Such information is *critical* in expanding access to four-year colleges for all juvenile offenders generally, and Black males specifically.

Professional development and training is also necessary for educators who teach, advise, and work with students in schools, to enhance their capacity in helping and supporting Black male youth with juvenile records. To do so, educators must acknowledge, challenge, and ultimately suspend biases and stereotypes that may get in the way of meaningfully supporting Black males, especially those with juvenile records. At Harvard

University there is an organization called Project Implicit, which provides training on implicit bias, diversity and inclusion, and biases in decision-making. School leaders should consider organizations like Project Implicit when making plans for professional development training.

Research

This study represents a significant contribution to scholarly literature. A careful review of existing research returned very few studies examining the relationship between juvenile arrest and four-year college enrollment, and none on Black males specifically. This is surprising, as we have known from research that Black males are disproportionately overrepresented in the criminal justice system (Alexander, 2011) and underrepresented in college (Cuyjet, 1997, 2006).

More research on the negative and unintended outcomes associated with early criminal justice contact is necessary. Researchers might examine specific types of arrest and their impact on college enrollment such as violent crimes and robbery. It could be the case that certain types of arrest have a more significant impact on one's odds of four-year college enrollment.

Future studies might also draw on more advanced statistical techniques like structural equation modeling (SEM) to test LCTCD on a sample Black males with arrest records. SEM refers a number of statistical models used to evaluate the validity of theories with empirical data. Researchers might model changes in Black males' relationships and negative labeling effects over time to see if LCTCD holds for a sample of Black males. One might also consider examining differences across race and sex.

Policy

Results from this dissertation study hold promise for various policymakers as well. Federal policymakers, for example, should call for the reauthorization of the JJDPa. The current JJDPa delineates four “core protections” that states must comply with as a condition for receiving federal juvenile justice funding, one of which requires states to track disproportionate minority contact (DMC) at critical junctures in the juvenile justice system, as well as develop plans to address such disparities.

Findings from this study underscore the seriousness of juvenile arrest for Black males, a subpopulation remarkably impacted by DMC. Federal policymakers should implement more strict requirements for states whose DMC ratios are high, requiring them to develop and implement plans to address disparities using *evidence-based* policies and practices. Policymakers might also establish policies under JJDPa that allocate funds to states and agencies for reducing DMC and juvenile delinquency.

Limitations of the Study

This study, like all others, has limitations. It is important to consider them when interpreting findings. First, some variables in this study were limited by the magnitude of missing data. Variables with the largest share of missing data included: prior academic achievement, parents’ income, and parents’ expectations. In these cases, list-wise deletion would have reduced the analytic sample significantly, possibly resulting in a non-representative sample.

To avoid substantial reduction in sample size, I took several steps to address missing cases. Specifically, mean substitution was used to replace missing information—this is referred to as the *zero-order correction* procedure (Strayhorn, 2009). To the extent that these adjustments alter statistical relationships, parameter estimates may be biased.

Another limitation related to the operationalization of the dependent variable in this study—four-year college enrollment. The survey item asked participants: “What was your college enrollment status during September in 2003?” This does not account for Black males who enrolled in college between the years of 1998-2002. We know from higher education research that Black males’ pathway to and through college is checkered with various transitions such as stop-outs, dropouts, and delayed enrollment (e.g., Cuyjet, 2006; Strayhorn, 2010a). Future studies should account for such nuances, computing a new composite variable to measure and track college enrollment between those years. While useful to discuss, these issues do not limit the importance of this analysis.

Conclusion

The purpose of this study was to test the relationship between Black male youth early contact with the criminal justice system through arrest and four-year college enrollment using a nationally representative sample of approximately 1100 Black males who participated in the NLSY:97. Specifically, I employed a battery of statistical controls to isolate and test the predictive validity of Black male arrest history on their probability of enrolling in a four-year college in 2003. Two central research questions guided this study:

1. Are there significant differences between Black males who report being arrested as a youth and those who do not, in terms of four-year college enrollment?
2. Controlling for a battery of background and family factors, does Black male youth arrest status significantly predict enrollment in a four-year college?

Survey data were analyzed using descriptive, chi-square, and hierarchical binomial logistic regression techniques. Results suggest that there are statistical differences in four-

year college enrollment for Black males in this sample, based on arrest status; also, arrest status in 1997 is a significant predictor of college enrollment in 2003. Results from this study are important practice, research, and policy.

References

- Agnew, R., & Jones, D. H. (1988). Adapting to deprivation: An examination of inflated educational expectations. *The Sociological Quarterly*, 29(2), 315-337.
- Aizer, A., & Doyle Jr, J. J. (2013). Juvenile incarceration, human capital and future crime: Evidence from randomly-assigned judges: National Bureau of Economic Research.
- Aldrich, J. H., & Nelson, F. D. (1984). *Linear probability, logit, and probit models*. Thousand Oaks, CA: Sage.
- Alexander, M. (2012). *The new Jim Crow: Mass incarceration in the age of colorblindness*. New York, NY: The New Press.
- Anderson, J. D. (1984). The schooling and achievement of Black children: Before and after Brown v. Topeka, 1900-1980. In M. L. Maehr & D. Bartz (Eds.), *The effects of school desegregation on motivation and achievement* (pp. 103-121). Greenwich, CT: JAI Press.
- Anderson, J. D. (2006). A tale of two Browns: Constitutional equality and unequal education. *Yearbook of the National Society for the Study of Education*, 105(2), 14-35.
- Anderson, K., Varghese, F. P., Trower, E., Sandlin, L., & Norwood, N. (2013). Perceptions of African American college applicants: The roles of race, criminal history, and qualifications. *Race and Social Problems*, 5(3), 157-172.

- Artiles, A. J. (1998). The dilemma of difference enriching the disproportionality discourse with theory and context. *The Journal of Special Education*, 32(1), 32-36.
- Astone, N. M., & McLanahan, S. S. (1991). Family structure, parental practices and high school completion. *American Sociological Review*, 56(3), 309-320.
- Babad, E. (1993). Teachers' differential behavior. *Educational Psychology Review*, 5(4), 347-376.
- Baca Zinn, M. (1989). Family, race, and poverty in the eighties. *Signs*, 14(4), 856-874.
- Battin-Pearson, S., Newcomb, M. D., Abbott, R. D., Hill, K. G., Catalano, R. F., & Hawkins, J. D. (2000). Predictors of early high school dropout: A test of five theories. *Journal of Educational Psychology*, 92(3), 568-582.
- Becker, H. S. (1963). *Outsiders: Studies in the sociology of deviance*. New York: Free Press.
- Berman, G. S., & Haug, M. R. (1975). Occupational and education goals and expectations: The effects of race and sex. *Social Problems*, 23(2), 166-181.
- Bernburg, J. G., & Krohn, M. D. (2003a). Labeling, life chances, and adult crime: The direct and indirect effects of official intervention in adolescence on crime in early adulthood. *Criminology*, 41(4), 1287-1318.
- Bernburg, J. G., & Krohn, M. D. (2003b). Labeling, life chances, and adult crime: The direct and indirect effects of official intervention in adolescence on crime in early adulthood. *Criminology*, 41(4), 1287-1318.

- Brame, R., Bushway, S. D., Paternoster, R., & Turner, M. G. (2014). Demographic patterns of cumulative arrest prevalence by ages 18 and 23. *Crime & Delinquency*, 60(3), 471-486.
- Brophy, J. E. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology*, 75(5), 631-661.
- Brophy, J. E., & Good, T. L. (1974). *Teacher-student relationships: Causes and consequences*. New York: Holt, Rinehart & Winston.
- Bureau of Labor Statistics. (2015). The employment situation-December 2014. Washington, D.C.: Bureau of Labor Statistics U.S. Department of Labor.
- Bushway, S. D. (1998). The impact of an arrest on the job stability of young White American men. *Journal of research in Crime and Delinquency*, 35(4), 454-479.
- Bynner, J. (2006). The SAGE dictionary of social and cultural research methods. In V. Jupp (Ed.), *The SAGE dictionary of social research methods* (pp. 53-55). London: SAGE.
- Cabrera, A. F. (1994). Logistic regression analysis in higher education: An applied perspective. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 10, pp. 225-256). New York: Agathon Press.
- Cabrera, A. F., & La Nasa, S. M. (2001). On the path to college: Three critical tasks facing America's disadvantaged. *Research in Higher Education*, 42(2), 119-149.
- Carter, D. F. (2001). *A dream deferred?: Examining the degree aspirations of African American and White college students*. New York & London: RoutledgeFalmer.
- Coalition of Juvenile Justice. (1988). A delicate balance. Washington, DC: Coalition for Juvenile Justice.

- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Common Core State Standards Initiative. (2015). Frequently asked questions. Retrieved February 2, 2015, from <http://www.corestandards.org/about-the-standards/frequently-asked-questions/>
- Complete College America. (2014). Our work. Retrieved February 3, 2015, from <http://completecollege.org/about-cca/>
- Conley, D. (2001). Capital for college: Parental assets and postsecondary schooling. *Sociology of Education*, 74, 59-72.
- Couper, M. P., & Burt, G. (1994). Interviewer attitudes toward computer-assisted personal interviewing (CAPI). *Social science computer review*, 12(1), 38-54.
- Crowder, K., & South, S. J. (2003). Neighborhood distress and school dropout: The variable significance of community context. *Social Science Research*, 32(4), 659-698.
- Cuyjet, M. J. (1997). African American men on college campuses: Their needs and their perceptions. *New Directions for Student Services*, 1997(80), 5-16.
- Cuyjet, M. J. (2006). *African American Men in College*.
- Darensbourg, A., Perez, E., & Blake, J. (2010). Overrepresentation of African American males in exclusionary discipline: The role of school-based mental health professionals in dismantling the school to prison pipeline. *Journal of African American Males in Education*, 1(3), 196-211.
- Davis, J. E. (2003). Early schooling and academic achievement of African American males. *Urban Education*, 38(5), 515-537.

- Davis-Kean, P. E., & Schnabel, K. (1999). *The effect of socio-economic characteristics on parenting and child outcomes*. Paper presented at the Society for Research in Child Development, Albuquerque, N.M.
- Decker, D. M., Dona, D. P., & Christenson, S. L. (2007). Behaviorally at-risk African American students: The importance of student–teacher relationships for student outcomes. *Journal of School Psychology, 45*(1), 83-109.
- De Li, S. (1999). Legal sanctions and youths' status achievement: A longitudinal study. *Justice Quarterly, 16*(2), 377-401.
- Dunn, L. M. (1968). Special education for the mildly retarded: Is much of it justifiable? *Exceptional Children, 35*(1), 5-22.
- Dykes, F. (2008). National implications: Overrepresentation of African Americans in special education programs in east Texas elementary schools: A multi-case qualitative study. *National Forum of Special Education Journal, 19*(1), 1-16.
- Dusek, J. B. (1985). *Teacher expectancies*. Hillsdale, NJ: Lawrence Erlbaum.
- Educational Testing Service. (2014). Advancing success for Black men in college: A statistical profile. Washington, D.C.: Educational Testing Service.
- Epps, E. G., & Jackson, K. W. (1985). *Educational and occupational aspirations and early attainment of Black males and females*. Atlanta, Georgia: Southern Education Foundation.
- Farmer-Hinton, R. L., & Adams, T. L. (2006). Social capital and college preparation: Exploring the role of counselors in a college prep school for Black students. *Negro Educational Review, 57*(1/2), 101-116.

- Ferguson, A. A. (2001). *Bad boys: Public schools in the making of Black masculinity*. Ann Arbor, MI: University of Michigan Press.
- Ferguson, R. F. (2003). Teachers' perceptions and expectations and the Black-White test score gap. *Urban Education*, 38(4), 460-507.
- Ford, D. Y. (1998). The underrepresentation of minority students in gifted education problems and promises in recruitment and retention. *The Journal of Special Education*, 32(1), 4-14.
- Fordham, S., & Ogbu, J. U. (1986). Black students' school success: Coping with the "burden of 'acting white'". *The urban review*, 18(3), 176-206.
- Freeman, R. B. (1992). Crime and the employment of disadvantaged youths. In G. Peterson & W. Vroman (Eds.), *Urban labor markets and job opportunity*. Washington, D.C.: Urban Institute Press.
- Garibaldi, A. M. (2007). The educational status of African American males in the 21st century. *The Journal of Negro Education*, 76(3), 324-333.
- Gelman, A., Fagan, J., & Kiss, A. (2007). An analysis of the New York City police department's "stop-and-frisk" policy in the context of claims of racial bias. *Journal of the American Statistical Association*, 102(479), 818-823.
- Gibbs, J. T. (1988). *Young, Black, and male in America: An endangered species*. Dover, MA: Auburn House Publishing Company.
- Glass, G. V. (1976). Primary, secondary, and meta-analysis of research. *Educational Researcher*, 5(10), 3-8.
- Graham, J. W., & Hofer, S. M. (2000). Multiple imputation in multivariate research. In T. D. Little, S. U. Kai, & B. Jorgen (Eds.), *Modeling longitudinal and multilevel data:*

- Practical issues, applied approaches, and specific examples* (Vol. VII, pp. 201-218). Mahway, NJ: Lawrence Erlbaum Associates Publishers.
- Hagan, J. (1991). Destiny and drift: Subcultural preferences, status attainments, and the risks and rewards of youth. *American Sociological Review*, 56(5), 567-582.
- Hall, J. (2008). Area probability sample. In Lavrakas (Ed.), *Encyclopedia of survey research methods*. Thousand Oaks, CA: SAGE Publications.
- Harlow, C. W. (2003). *Education and correctional populations*: U.S. Department of Justice, Office of Justice Programs Washington, DC.
- Harper, S. R. (2006). Black male students at public universities in the U.S.: Status, trends and implications for policy and practice. Washington, D.C.: Joint Center for Political and Economic Studies.
- Harrison, P. M., & Beck, A. J. (2006). Prison and jail inmates at midyear 2005. Bulletin. Washington, D.C.: Bureau of Justice Statistics.
- Harry, B., & Anderson, M. G. (1994). The disproportionate placement of African American males in special education programs: A critique of the process. *Journal of Negro Education*, 63(4), 602-619.
- Hosmer, D. W., & Lemeshow, S. (2000). *Applied logistic regression* (2nd ed.). New York: Wiley.
- Haveman, R. H., & Smeeding, T. M. (2006). The role of higher education in social mobility. *The future of children*, 16(2), 125-150.
- Herbert, T. P., & Beardsley, T. M. (2002). Jermaine: A critical case study of a gifted Black child living in rural poverty. In S. B. Merriam (Ed.), *Qualitative research in*

- practice: Examples for discussion and analysis* (pp. 201-235). San Francisco: Jossey-Bass.
- Hering, J., McClain, A. (2003). *NLSY97 user's guide: A guide to the rounds 1-5 data: National longitudinal survey of youth 1997*. Columbus, OH: Center for Human Resource Research.
- Herrera, J. (1998). *The disproportionate placement of African Americans in special education: An analysis of ten cities*. East Lansing, MI: National Center for Research on Teacher Learning.
- Hirschfield, P. (2009). Another way out: The impact of juvenile arrests on high school dropout. *Sociology of Education*, 82(4), 368-393.
- Hirschi, T. (1969). *Causes of delinquency*. Berkeley: University of California Press.
- Hjalmarsson, R. (2008). Criminal justice involvement and high school completion. *Journal of Urban Economics*, 63(2), 613-630.
- hooks, b. (2004). *We real cool: Black men and masculinity*. New York, NY: Routledge.
- Horn, L., & Bobbitt, L. (2000). Mapping the road to college: First-generation students' math track, planning strategies, and context of support. Washington, D.C.: Government Printing House
- Hossler, D., Braxton, J., & Coopersmith, G. (1989). Understanding student college choice *Higher education: Handbook of theory and research* (Vol. 5, pp. 231-288). New York: Agathon Press.
- Hossler, D., & Maple, S. (1993). Being undecided about postsecondary education. *Review of Higher Education*, 16(3), 285-307.

- Howard, T. C. (2003). A tug of war for our minds: African American high school students' perceptions of their academic identities and college aspirations. *High School Journal*, 87(1), 4-17.
- Humphreys, D. (2012). What's wrong with the completion agenda--and what can we do about it? *Liberal Education*, 98(1), 8-17.
- Inniss, L., & Feagin, J. R. (1989). The Black "underclass" ideology in race relations analysis. *Social Justice*, 4(38), 13-34.
- Irvine, J. J. (1990). *Black students and school failure. Policies, practices, and prescriptions*. Westport, CT: Praeger.
- Jackson, J. F., & Moore, J. L. (2008). Introduction: The African American male crisis in Education: A popular media infatuation or needed public policy response? *American Behavioral Scientist*, 51(7), 847-853.
- Jackson, J. L., & Moore III, J. L. (2006). African American males in education: Endangered or ignored? *The Teachers College Record*, 108(2), 201-205.
- Jaschik, S. (2012). Juvenile records and admissions. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2012/09/20/pennsylvania-court-says-juvenile-authorities-can-report-actions-colleges>
- Jenkins, T. S. (2006). Mr. Nigger: The challenges of educating Black males within American society. *Journal of Black Studies*, 37(1), 127-155.
- Jones, S. (Ed.). (2007). *The state of Black America 2007: Portrait of the Black male*. Silver Spring, MD: Beckham Publications Group.
- Jordan, W. J., Lara, J., & McPartland, J. M. (1996). Exploring the causes of early dropout among race-ethnic and gender groups. *Youth & Society*, 28(1), 62-94.

- Jussim, L. (1989). Teacher expectations: Self-fulfilling prophecies, perceptual biases, and accuracy. *Journal of Personality and Social Psychology*, 57(3), 469-480.
- Juszewicz, J. (2009). Youth crime/adult time: Is justice served? Washington, D.C.: Building Blocks for Youth.
- Keith, T. Z. (2006). *Multiple regression and beyond*. Boston, MA: Pearson.
- Kerlinger, R. (1986). *Foundations of behavioral research*. New York, N.Y.: Holt, Rinehart, & Winston.
- Kiecolt, K. J., & Nathan, L. E. (1985). *Secondary analysis of survey data* (Vol. 53). New York, NY: Sage Publications Inc.
- Kirk, D. S., & Sampson, R. J. (2013). Juvenile arrest and collateral educational damage in the transition to adulthood. *Sociology of Education*, 86(1), 36-62.
- Klinger, D. A. (1997). Negotiating order in patrol work: An ecological theory of police response to deviance. *Criminology*, 35(2), 277-306.
- Kozol, J. (1997). Reflections on Resiliency. *Principal*, 77(2), 5-6.
- Kozol, J. (2000). An Unequal Education. *School Library Journal*, 46(5), 46-49.
- Kozol, J. (2005). *The shame of the nation: The restoration of apartheid schooling in America*. New York, NY: Three Rivers Press.
- Kunjufu, J. (1986). *Countering the conspiracy to destroy Black boys*. Chicago: African American Images.
- Kunjufu, J. (2005). *Keeping black boys out of special education*. Chicago, IL: African American Images.
- Labovitz, E. M. (1975). Race, SES, contexts and fulfillment of college aspirations. *The Sociological Quarterly*, 16(2), 241-249.

- Lareau, A. (1987). Social class differences in family-school relationships: The importance of cultural capital. *Sociology of Education*, 60(2), 73-85.
- Lareau, A. (2003). *Unequal childhoods: Class, race, and family life*. Berkeley, California: University of California Press.
- Lei, P. W., & Wu, Q. (2007). Introduction to structural equation modeling: Issues and practical considerations. *Educational Measurement: Issues and Practice*, 26(3), 33-43.
- Lemert, E. M. (1951). *Social pathology; A systematic approach to the theory of sociopathic behavior*. New York: McGraw-Hill.
- Lewis, A. (2003). *Race in the schoolyard: Negotiating the color line in classrooms and communities*: New Brunswick, N.J.: Rutgers University Press.
- Lewis, C. W., Butler, B. R., Bonner II, Bonner, F. A., & Joubert, M. (2010). African American male discipline patterns and school district responses resulting impact on academic achievement: Implications for urban educators and policy makers. *Journal of African American Males in Education*, 1(1), 7-25.
- Lipka, S. (2010). Experts debate fairness of criminal-backgrounds checks on students. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/Experts-Debate-Fairness-of/66107>
- Little, R. J. A., & Rubin, D. B. (1989). The analysis of social science data with missing values. *Sociological Methods & Research*, 18(2-3), 292-326.
- Lochner, L. (2004). Education, work, and crime: A human capital approach. *International Economic Review*, 45(3), 811-843.
- Lomotey, K. (1990). *Going to school: The African-American experience*. Albany, N.Y.: SUNY Press.

- Madhubuti, H. (1991). *Black men: Obsolete, single, dangerous? The Afrikan American family in transition* (Vol. 4): Chicago: Third World Press.
- Mahoney, J. S., & Merritt, S. R. (1993). Educational hopes of Black and White high school seniors in Virginia. *The Journal of Educational Research*, 87(1), 31-38.
- Manski, C. F., & Wise, D. A. (1983). *College choice in America*. Cambridge, MA: Harvard University Press.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2006). *Applied multivariate research: Design and interpretation*. Thousand Oaks, California: Sage.
- McDonough, P. M. (1997). *Choosing colleges: How social class and schools structure opportunity*. Albany, NY: Suny Press.
- McWhorter, J. H. (2000). *Losing the race: Self-sabotage in Black America*. New York, NY: The Free Press.
- Merlo, A., & Wolpin, K. I. (2009). The transition from school to jail: Youth crime and high school completion among black males. *Penn Institute for Economic Research Working Paper*, 09-002.
- Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist*, 50(9), 741-749.
- Mincy, R. B., Sawhill, I. V., & Wolf, D. A. (1990). The underclass: Definition and measurement. *Science*, 248(4954), 450-453.
- Monroe, C. R. (2005). Understanding the discipline gap through a cultural lens: Implications for the education of African American students. *Intercultural Education*, 16(4), 317-330.

- Moore, W., Pedlow, S., Krishnamurty, P., Wolter, K. (2000). *National longitudinal survey of youth 1997 (NLSY97) technical sampling report*. Chicago, IL: National Opinion Research Center (NORC).
- Morgan, S. L. (1998). Adolescent educational expectations rationalized, fantasized, or both? *Rationality and Society*, 10(2), 131-162.
- Myers, D. E., Milne, A. M., Baker, K., & Ginsburg, A. (1987). Student discipline and high school performance. *Sociology of Education*, 18-33.
- Noguera, P. A. (1997). Reconsidering the “crisis” of the Black male in America. *Social Justice*, 24(2), 147-164.
- Noguera, P. A. (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.
- Noguera, P. A., & Wing, J. Y. (2006). *Unfinished business: Closing the racial achievement gap in our schools*: Jossey-Bass, a Wiley imprint.
- Oakes, J. (1987). Tracking in secondary schools: A contextual perspective. *Educational Psychologist*, 22(2), 129-153.
- Obama, B. H. (2009, February 24). Remarks of President Barack Obama--Address to Joint Session of Congress. Retrieved August 15, 2013, from http://www.whitehouse.gov/the_press_office/remarks-of-president-barack-obama-address-to-joint-session-of-congress/
- Oakes, J., Gamoran, A., & Page, R. N. (1992). Curriculum differentiation: Opportunities, outcomes, and meanings. In P. Jackson (Ed.), *Handbook of Research on Curriculum* (pp. 570-608). New York: Macmillan.

- Pace, C. R. (1985). *The credibility of student self-reports*. Los Angeles, CA: University of California Center for the Study of Evaluation.
- Palmer, R. T., Davis, R. J., & Hilton, A. A. (2009). Exploring challenges that threaten to impede the academic success of academically underprepared Black males at an HBCU. *Journal of College Student Development*, 50(4), 429-445.
- Palmer, R. T., Wood, J.L., Dancy II, T.E., Strayhorn, T.L. (2014). Black male collegians: Increasing access, retention, and persistence in higher education. *ASHE Higher Education Report*, 40(3), 1-147.
- Pampel, F. C. (2000). *Logistic regression: A primer* (Vol. 132). Thousand Oaks, California: Sage.
- Peng, C. J., So, T.S. H., Stage, F. K., & St. John, E. P. (2002). The use and interpretation of logistic regression in higher education journals. *Research in Higher Education*, 43, 259-294.
- Perna, L. W. (2000). Differences in the decision to attend college among African Americans, Hispanics, and Whites. *Journal of Higher Education*, 71(2), 117-141.
- Pew Charitable Trusts. (2008). *One in 100: Behind bars in American 2008*. Washington, DC: Pew Charitable Trusts.
- Pitre, P. E. (2006). College choice: A study of African American and White student aspiration and perceptions related to college attendance. *College Student Journal*, 40(3), 562-574.
- Polite, V. C., & Davis, J. E. (1999). *African American males in school and society: Practices and policies for effective education*. New York: Teachers College Press.

- Portes, A. L., & Wilson, K. L. (1976). Black-White differences in educational attainment. *American Sociological Review*, 41(3), 414-431.
- Ross, S. I., & Jackson, J. M. (1991). Teachers' expectations for Black males' and Black females' academic achievement. *Personality and Social Psychology Bulletin*, 17(1), 78-82.
- Rouse, C. E. (1994). What to do after high school: The two-year versus four-year college enrollment decision. In R. G. Ehrenberg (Ed.), *Choices and consequences: Contemporary policy issues in education* (pp. 59-88). Ithaca, New York: Cornell University Press.
- Rovner, J. (2014). Disproportionate minority contact in the juvenile justice system. Washington, D.C.: Sentencing Project.
- Sampson, R. J., & Laub, J. H. (1997). A life-course theory of cumulative disadvantage and the stability of delinquency. In T. P. Thornberry (Ed.), *Developmental theories of crime and delinquency* (Vol. 7, pp. 133-161). New Brunswick, NJ: Transaction.
- Schmidt, F. L., Viswesvaran, C., & Ones, D. S. (2000). Reliability is not validity and validity is not reliability. *Personnel Psychology*, 53(4), 901-912.
- Sentencing Project. (2013a). Report of the sentencing project to the United Nations human rights committee regarding racial disparities in the United States criminal justice system. Washington, D.C.: Sentencing Project.
- Sentencing Project. (2013b). Report of the sentencing project to the United Nations human rights committee regarding racial disparities in the United States criminal justice systems. Washington, D.C.: Sentencing Project.

- Shapiro, D., Dunder, A., Chen, J., Park, E., Torres, V., & Chiang, Y. (2013). Completing college: A state-level view of student attainment rates. Herndon, VA: National Student Clearinghouse Research Center.
- Smith-Maddox, R. (2000). Educational aspirations of African American eighth graders. *Race, Gender & Class*, 58-80.
- Solorzano, D. G. (1992). An exploratory analysis of the effects of race, class, and gender on student and parent mobility aspirations. *The Journal of Negro Education*, 61(1), 30-44. doi: 10.2307/2295627
- Solorzano, D. G., & Ornelas, A. (2004). A critical race analysis of Latina/o and African American advanced placement enrollment in public high schools. *The High School Journal*, 87(3), 15-26.
- St. John, E. P. (1991). What really influences minority attendance? Sequential analyses of the high school and beyond sophomore cohort. *Research in Higher Education*, 32(2), 141-158.
- St. John, E. P. (2003). *Refinancing the college dream: Access, equal opportunity, and justice for taxpayers*. Baltimore, MD: Johns Hopkins University Press.
- St. John, E. P., & Noell, J. (1989). The effects of student financial aid on access to higher education: An analysis of progress with special consideration of minority enrollment. *Research in Higher Education*, 30(6), 563-581.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52(6), 613-629.
- Stewart, E. B. (2007). Individual and school structural effects on African American high school students' academic achievement. *The High School Journal*, 91(2), 16-34.

- Strayhorn, T. L. (2008a). Fittin' in: Do diverse interactions with peer affect sense of belonging for Black men at predominantly white institutions? *NASPA Journal*, 45(4), 501-527.
- Strayhorn, T. L. (2008b). The invisible man: Factors affecting the retention of low-income African American males. *NASAP Journal*, 11(1), 66-87.
- Strayhorn, T. L. (2008c). The role of supportive relationships in facilitating African American males' success in college. *NASAP Journal*, 45(1), 26-48.
- Strayhorn, T. L. (2008d). Teacher expectations and urban Black males. *Academic Leadership Journal*, 6(2), 29-34.
- Strayhorn, T. L. (2009a). Different folks, different hopes: The educational aspirations of Black males in urban, suburban, and rural high schools. *Urban Education*, 44(6), 710-731.
- Strayhorn, T. L. (2009b). Accessing and analyzing national databases. In T. J. Kowalski & T. J. Lasley II (Eds.), *Handbook of data-based decision making in education* (pp. 105-122). New York: Routledge.
- Strayhorn, T. L. (2010a). Buoyant believers: Resilience, self-efficacy, and academic success of low-income African American collegians. In T. L. Strayhorn & M. C. Terrell (Eds.), *The evolving challenges of Black college students: New insights for policy, practice, & research* (pp. 49-65). Sterling, VA: Stylus.
- Strayhorn, T. L. (2010b). When race and gender collide: Social and cultural capital's influence on the academic achievement of African American and Latino males. *The Review of Higher Education*, 33(3), 307-332.
- Strayhorn, T. L. (2011). Bridging the pipeline: Increasing underrepresented students' preparation for college through a summer bridge program. *American Behavioral Scientist*, 55(2), 142-

Strayhorn, T. L. (2013). *Living at the intersections: Social identities and Black collegians*

Charlotte, NC: Information Age Publishing

Strayhorn, T.L., Kitchen, J.A., Johnson, R.M., & Tillman-Kelly, D.L. (2015) COASP:

College outreach and academic support program study 2014, annual progress

report (CHEE Report Series 2015-001). Columbus, OH: Center for Higher

Education Enterprise, The Ohio State University.

Suskie, L. A. (1992). Questionnaire Survey Research: What Works. Resources for

Institutional Research, Number Six.

Sweet, S. A., & Grace-Martin, K. (1999). *Data analysis with SPSS* (2 ed. Vol. 1). Boston, M.A.:

Allyn & Bacon.

Sweeten, G. (2006). Who will graduate? Disruption of high school education by arrest

and court involvement. *Justice Quarterly*, 23(4), 462-480.

Sewell, W. H., Haller, A. O., & Portes, A. (1969). The educational and early occupational

attainment process. *American Sociological Review*, 34(1), 82-92.

Tanner, J., Davies, S., & O'Grady, B. (1999). Whatever happened to yesterday's rebels?

Longitudinal effects of youth delinquency on education and employment. *Social*

Problems, 46(2), 250-274.

Tewksbury, R., & Taylor, J. M. (1996). The consequences of eliminating Pell grant

eligibility for students in post-secondary correctional education programs.

Federal Probation, 60(3), 60-63.

- Thomas, S. L., & Heck, R. H. (2001). Analysis of large-scale secondary data in higher education research: Potential perils associated with complex sampling designs. *Research in Higher Education*, 42(5), 517-540.
- Toldson, I. A., Braithwaite, R. L., & Rentie, R. J. (2009). *Promoting college aspirations among school-age Black American males* (Vol. 7). Bradford, UK: Emerald Group Publishing Limited.
- Trent, W., Owens-Nicholson, D., Eatman, T. K., Burke, M., Daugherty, J., & Norman, K. (2003). Justice, equality of educational opportunity, and affirmative action in higher education. In M. J. Chang, D. Witt, J. Jones, & K. Hakuta (Eds.), *Compelling interest: Examining the evidence on racial dynamics in colleges and universities*. Stanford, CA: Stanford University Press.
- University Innovation Alliance. (2014). University Innovation Alliance at White House to pledge commitment to graduate 68,000 additional students by 2025 [Press release]. Retrieved from http://www.theuia.org/sites/default/files/UIA_WhiteHouse_press_release.pdf
- U.S. Census Bureau. (2012). Table 1-2: Resident population of the United States, by sex, race or ethnicity, and age: 2012. Retrieved from http://www.nsf.gov/statistics/wmpd/2013/pdf/tab1-2_updated_2014_05.pdf.
- U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. (2013a). Total fall enrollment in degree-granting postsecondary institutions, by level of enrollment, sex, attendance status, and race/ethnicity of student: Selected years, 1976 through 2012. Retrieved from http://nces.ed.gov/programs/digest/d13/tables/dt13_306.10.asp.

- U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. (2013b). Table 326.10: Graduation rates of first-time, full-time bachelor's degree-seeking students at 4-year postsecondary institutions, by race/ethnicity, time to completion, sex, and control of institutions: Selected cohort entry years, 1996 through 2006. Digest of Education Statistics. Retrieved from http://nces.ed.gov/programs/digest/d13/tables/dt13_326.10.asp
- Walpole, M. (2003). Socioeconomic status and college: How SES affects college experiences and outcomes. *The Review of Higher Education*, 27(1), 45-73.
- Washington, V. (1982). Racial differences in teacher perceptions of first and fourth grade pupils on selected characteristics. *Journal of Negro Education*, 60-72.
- Western, B. (2006). *Punishment and inequality in America*. New York City, NY: Russell Sage Foundation.
- Winfield, L. F. (1986). Teacher beliefs toward academically at risk students in inner urban schools. *The Urban Review*, 18(4), 253-268.
- Wood, D., Kaplan, R., & McLoyd, V. C. (2007). Gender differences in the educational expectations of urban, low-income African American youth: The role of parents and the school. *Journal of Youth and Adolescence*, 36(4), 417-427.
- Wright, D. L., Aquilino, W. S., & Supple, A. J. (1998). A comparison of computer-assisted and paper-and-pencil self-administered questionnaires in a survey on smoking, alcohol, and drug use. *Public Opinion Quarterly*, 331-353.