

The Role of Implicit Bias in the Overrepresentation of  
African American Males within the Public School System

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THE ROLE OF IMPLICIT BIAS

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**Abstract**

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Disproportionality in the administration of school discipline practices is a national crisis that is receiving more attention from researchers, educators, and policymakers than ever before. Over the past four decades, research has consistently shown that African American students, and African American males in particular, are more likely to receive out-of-school suspensions and expulsions than White students. In addition to disproportionate exposure to punitive discipline, in educational settings across the US, African American male students have been, and continue to be, referred to and educated in special education programs at much higher rates than their representation in the total school population (Kunjufu, 1986 & Piland, 2002). Racial disparities in special education have sparked significant concern by researchers, educators, and policymakers for over four decades (Piland, 2002). Implicit bias - automatic, unconscious stereotyping and judgment - has been posited as a contributing factor for the overrepresentation of African American males in discipline within the public education system. The purpose of the proposed study is to examine empirically the contribution of implicit racial stereotypes to the overrepresentation of African American in school discipline. The first hypothesis is that participants in the African American student group will be more likely to endorse ratings indicating the need to refer the African-American child for special education services than participants rating the Caucasian student. Also, participants in the African American group are expected to provide ratings indicating need for harsher punishment, special education identification, and restrictive setting placement than participants in the Caucasian student group. The hypothesis related to the second research inquiry is that teachers' implicit stereotype scores, as measured by the Implicit Association Test (IAT), will have an interactive effect with vignette group. Specifically, it is anticipated that the effect of implicit stereotypes on the expected referral, placement, and recidivism ratings will be inconsequential for participants exposed to the Caucasian male student vignette; however, there will be a significant difference in these ratings for the group of participants who are exposed to the African American male student vignette. Within the African American vignette group, participants that have higher IAT scores are

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expected to provide harsher expected referral, placement, and recidivism ratings than their counterparts with lower IAT scores. The final hypothesis guiding the current research is that the race of the participants will not moderate the effect of implicit stereotypes on the referral, identification, placement, and punishment ratings. This hypothesis finds much credence in the conflicting results of previous studies (e.g. Tobias et. al, 1982; Tobias et. al, 1983). The participants' race is expected to show a negligible interactive effect, especially when the variance associated with implicit stereotypes is accounted for. As participants of all races are exposed to the same stereotypical images in the media, it is expected that the participants' race will not affect their ratings; however, their level of implicit stereotype association, regardless of their race, is expected to be the most significant factor in this exploration.

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## Chapter I: Introduction

Disproportionality in the administration of school discipline practices is a national crisis that is receiving more attention from researchers, educators, and policymakers than ever before. In January of 2014, the US Department of Justice, Civil Rights Division and the US Department of Education, Office of Civil Rights, issued new guidelines for elementary and secondary schools in meeting the Federal law of administering student discipline without discriminating on the basis of race, color, or national origin. This is due to the fact that over the past four decades, research has consistently shown that African American students, and African American males in particular, are more likely to receive out-of-school suspensions and expulsions than White students. A 2009-2010 survey of 72,000 schools showed that while Black students made up 18 percent of students sampled, they accounted for 35 percent of first-time suspensions, 46 percent of students with multiple suspensions, and 39 percent of expulsions; they were three and half times more likely to be suspended or expelled than their White counterparts (Lewin, 2012). A 2010 study by Horner, Fireman, & Wang found that among students were classified as overtly aggressive, African Americans were more likely to be disciplined than any other group. This is consistent with previous research showing that African American boys are disproportionately punished for the same behaviors as their White peers (Skiba, 2000).

In addition to disproportionate exposure to punitive discipline, in educational settings across the US, African American male students have been, are continue to be, referred to and educated in special education programs at much higher rates than their representation in the total school population (Kunjufu, 1986 & Piland, 2002). Racial disparities in special education have sparked significant concern by researchers, educators, and policymakers for over four decades (Piland, 2002). Overrepresentation of African American males in special education been linked

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to a higher dropout rate, increased chance of incarceration, and limited career preparation and employability (Oswald, Coutinho, Best, & Singh, 1999). Collectively, these outcomes represent the types of alarming, negative long-term effects for African American male students that necessitate additional scientific research that explores why disproportionality exists, so preventative solutions can be implemented in the schools.

Implicit bias - automatic, unconscious stereotyping and judgment - has been posited as a contributing factor for the overrepresentation of African American males in discipline within the public education system. For example, a 2007 meta-analysis of research found significant evidence that teachers hold lower expectations for African American and Latino students compared to European American children (Rosenthal & Jacobson, 1968; Tenenbaum & Ruck, 2007). Lowered expectations can lead to differential treatment for such students, including less praise and harsher disciplinary action (Losen, 2010). Moreover, expectations can impact how teachers interpret African American male student behavior and performance—ultimately viewing them as more problematic and in need of being punitive disciplined or referred for special education.

Implicit biases are the result of stereotypes, which are equally pervasive, culturally shared beliefs that can be positive or negative, about the characteristics and behaviors of particular groups. Graham and Lowery's 2004 study of implicit biases found that when police officers and juvenile probation officers were subliminally exposed to words related to African American culture, they endorsed harsher punishments than did officers who were exposed to culture-neutral words. There are many implications of such findings for the racial disparity within the juvenile justice system. However, such a study has yet to be done to explore the issue of overrepresentation of African American males in discipline within American public schools, and

no direct link has yet been established between implicit biases amongst educators and the harsher punishments African American males receive.

### **Purpose of the Present Study**

Thus, the purpose of the proposed study is to examine empirically the contribution of implicit racial stereotypes to the overrepresentation of African American in school discipline. Participants are randomly assigned into groups based on the race of the child in the vignette about a problem student. One group of participants will read a vignette about a Caucasian male student, while participants in the other group will encounter an African American male student. A questionnaire is then administered that gathers demographic information as well as responses to questions related to referral, identification, placement, and ability to thrive in the general education setting. Finally, participants randomly assigned to vignette about the African American child will then complete an African American-Caucasian version of the Implicit Association Test (IAT).

In light of the research demonstrating the tendency for individuals to view African American males as threatening and hostile (Graham & Lowery, 2004), the first hypothesis is that participants in the African American student group will be more likely to endorse ratings indicating the need to refer the African-American child for special education services than participants rating the Caucasian student. Also, participants in the African American group are expected to provide ratings indicating need for harsher punishment, special education identification, and restrictive setting placement than participants in the Caucasian student group.

The hypothesis related to the second research inquiry is that teachers' implicit stereotype scores, as measured by the Implicit Association Test (IAT), will have an interactive effect with vignette group. Specifically, it is anticipated that the effect of implicit stereotypes on the

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expected referral, placement, and recidivism ratings will be inconsequential for participants exposed to the Caucasian male student vignette; however, there will be a significant difference in these ratings for the group of participants who are exposed to the African American male student vignette. Within the African American vignette group, participants that have higher IAT scores are expected to provide harsher expected referral, placement, and recidivism ratings than their counterparts with lower IAT scores.

The final hypothesis guiding the current research is that the race of the participants will not moderate the effect of implicit stereotypes on the referral, identification, placement, and punishment ratings. This hypothesis finds much credence in the conflicting results of previous studies (e.g. Tobias et. al, 1982; Tobias et. al, 1983). The participants' race is expected to show a negligible interactive effect, especially when the variance associated with implicit stereotypes is accounted for. As participants of all races are exposed to the same stereotypical images in the media, it is expected that the participants' race will not affect their ratings; however, their level of implicit stereotype association, regardless of their race, is expected to be the most significant factor in this exploration.

## **Chapter II: Literature Review**

The purpose of this chapter is to provide coverage of the relevant background literature that builds a case for this dissertation study. Specifically, this chapter will begin with a basic definition of disproportionality and the metrics used to determine whether it is present within a particular system, such as education. Next, the discussion will turn to discussing the data that demonstrates disproportionality in education and the inequities in educational practices and outcomes for African American male students. Following this is a discussion of the theories as to why disproportionality exists. Last, the purpose of this dissertation will be articulated, including the specific research questions that will guide the study and ultimately be addressed.

### **Defining Disproportionality and Metrics to Determine Whether it Exists**

The National Education Association (NEA) defines disproportionality as the over- or underrepresentation of students in a particular population or demographic group in special or gifted education programs, relative to their groups' presence in the overall student population. The presence of disproportionality can be assessed with three main methods of analysis: calculating the risk index (RI), the relative risk ratio (RR), or the composition index (CI). The risk index identifies at what rate, or amount of risk, members of a particular group have of being placed into a particular category, and can be found by dividing the number of members within a population in that category by the total number of that population. The relative risk ratio is calculated by dividing the RI of one population by the RI of all other groups. The composition index can be found by dividing the number of members in a certain population within a category by the total number of members within a category (Chinn & Hughes, 1987).

The overrepresentation of African American males in exclusionary discipline within schools, their underrepresentation in gifted education and academic achievement, and their

overrepresentation within the criminal justice system, is all part of a larger picture of problematic outcomes. This section explains the inequities in the educational system for African American male students by drawing upon both past and current research, drawing parallels to African American male disproportionality in other sectors of society, and thus providing an overall picture of the problem which this study aims to further investigate.

### **Inequities in Educational Practices and Outcomes**

*Academic Achievement.* The Equality of Educational Opportunity Study, also known as the Coleman Report, first documented the racial achievement gap in 1966 and multiple studies since have continued to show a large and persistent gap in achievement test scores between white and black students (Lee 2002; Perie et al. 2005; Fryer and Levitt 2004; Murnane et al. 2006). This racial gap has itself been a major drive for federal education policy, including the No Child Left Behind Act of 2001. Nevertheless, the achievement gap continues to be a problem for educational policymakers, especially because of its role in continue social and economic inequality in the United States (Manning & Kovach, 2003).

In a 2004 summary of National Assessment of Educational Progress data, Phillips and Chin found that as of 2000, there was a .9 standard deviation gap in math and .83 in reading amongst fourth grade black and white students, and a corresponding 1.96 standard deviation gap for math, .85 for reading, amongst 8th grade black and white students. In another pair of studies using the Early Childhood Longitudinal Study (ECLS), Fryer and Levitt (2004, 2005) found a gap of .66 in math and .40 in reading at the beginning of kindergarten. While some studies show the gap to increase over time, and some don't, depending on the region of study (Murnane et al., 2006), the latest studies continue to document the gap in achievement between black and white students (Clotfelter, Ladd, and Vigdor, 2006).

Recent statistics also showed that the average African American student is several grade levels behind his or her white counterpart before entering high school (Robelen, 2002). Haycock (2003) cited statistics from The National Center for Educational Statistics, indicating that gaps begin to emerge as early as fourth grade, where 66% of African American students perform below the NAEP in reading compared to 28% of white students. Manning and Kovach (2003) reviewed the U.S. Department of Education Statistics and indicated “The minority achievement gap is seen as early as kindergarten, persists through secondary levels, and is reflected in differential Scholastic Achievement Test (SAT) scores for black and white youth” (p. 26).

The 2012 results of the National Assessment of Educational Progress assessment, also known as the “Nation’s Report Card,” indicate that the trend continues; in Wisconsin, where the achievement gap is largest among all 50 states, fourth and eighth graders as a whole scored at and above national averages in reading and math, yet black students’ fourth-grade reading scores were actually second-worst in the nation, and both their fourth- and eighth-grade math scores were third-lowest among all 50 states (NCES, 2013). Data from the US Department of Education further reveals that in 2012, 91 percent of Wisconsin’s white students earned a diploma, compared to 64 percent of its black students.

***Placement in the Special and Gifted Education Category.*** The disproportionate representation of culturally and linguistically diverse students in special education programs has been studied extensively, and has been a national concern for over four decades. Since the U.S. Office of Civil Rights first began to sample school districts in 1968, African American students have been overrepresented in special education programs, and in particular, under the categories of mental retardation and emotional disturbance (Artiles, Trent, & Palmer, 2004; Gamm, 2007). Likewise, they have been underrepresented in gifted and/or talented education programs, with an

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identification rate of 3.04 percent, versus 7.47 percent of all White students (NEA, 2007).

Multiple studies show that a child's race and ethnicity are significantly related to the probability that he or she will be inappropriately identified as disabled (National Research Council, 2002; Losen & Orfield, 2002).

Harry and Anderson's (1994) study provided some composition index data on the overrepresentation of African Americans in 1986, 1990, and 1992. While only comprising 16% of the total student population, African Americans accounted for 27% of the severely emotionally disturbed (SED) in 1986, 22% in 1990, and 24% in 1992. More alarming statistics were reported concerning the intellectual disability category, in which African Americans constituted 35% of the population of educable mentally retarded (EMR) students in 1986 and 1990, and 32% in 1992. Harry and Anderson also cite statistics from the National Longitudinal Transition Study of 1987, in which African Americans were shown to comprise 24.9% of emotionally disturbed (ED) students, while only accounting for 14% of the general population. The authors further include data from the U.S. Office of Civil Rights's survey of schools in 1992, in which African American males in particular comprised only 8.23% of the population of students, but accounted for 18.94% SED students, as well as 19.41% of students labeled as EMR.

Unfortunately, recent trends remain comparable to early composition indices. For instance, data from the 25<sup>th</sup> Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act (2005) indicate that the composition of African Americans under the category of ED is 28.20%, while they occupied only 16% of all primary and secondary students during this time. In particular, the U.S. Department of Education (2006) reported that it is Black male students who are twice as likely to be labeled emotionally disturbed as their White peers, twice as likely to be labeled as SED than any other CLD groups, and three times more

likely to receive services for mental retardation than White students. A 2002 study by Fierros and Conroy further found that 55% of white students with disabilities spend 80% of their school day in general education classrooms, compared to only one-third of black students.

The Individuals with Disabilities Education Act (IDEA) 2004 requires states to include how they measure disproportionality in the special education state performance plans they submit to the U.S. Department of Education. Although what is considered a significant rate of disproportionality varies from state to state, and any individual data point may be imprecise, the consistent patterns found over time are informative of an ongoing problem; they show that systematically, African American students are more likely to be identified as emotionally disturbed or intellectually disabled, while they are less likely to be identified as gifted. These trends are especially troubling, given that special education students represent 8.6% of public school students but 32% of youth in juvenile detention nationwide (NAACP Legal Defense and Educational Fund, Inc., 2005).

***Discipline.*** The most common notion of discipline in the context of schools appears to be most associated with the notion of zero tolerance -punishing all misbehavior in order to send a message to potential troublemakers that certain behaviors are not tolerated (Gregory, Skiba, & Noguera, 2010). This definition has lead schools to adopt common practices such as office referral, in- and out-of school suspension as a way of enacting zero tolerance (Brooks, Schiraldi, & Ziedenberg, 2000). Thus, discipline in everyday practices often entails the use of punishment, most often school removal, to enforce student conformance with established standards, as expressed by school discipline codes. Unfortunately, decades of research has shown that punitive disciplinary practices actually promote negative outcomes, including lower academic

achievement, truancy, school vandalism, and academic engagement (Sugai & Horner, 2009; Mayer, 1995; Luiselli, Putnam & Sunderland, 2002; Lewis & Sugar, 1999).

The discipline gap is a common phenomenon observed in many K-12 educational settings (Lewis, Hancock, James & Larke, 2008; Skiba, Peterson & Williams, 1997; Skiba, 2002), with African American males being the most frequent targets of unfair discipline practices (Lewis, et al, 2008; Townsend, 2000). Research over the past 30 years has consistently demonstrated the overrepresentation of African American youth in exclusionary measures of discipline in the American public school system (Gonzalez & Szecsy, 2004). Other over-represented groups in suspensions and expulsions include children from low SES families (Bowditch, 1993) and children who suffer from academic problems and low achievement in school (Balfanz, Spiridakis, Neild, & Legters, 2003). The discipline gap being described here is a reversal of the image presented by the achievement gap for African American and white students, and are often seen as two sides of the same coin; African American students, particularly black males, are overrepresented in expulsion and suspension, while white students are underrepresented (Skiba et al., 2002).

Shaw and Braden also found in their 1990 study that African American males were disciplined for less severe rule violations than were White children, and they were four times more likely to receive corporal punishment than White female students. The discrepancy is further compounded for students with disabilities who were from Black, Hispanic and American Indian backgrounds; they were 67 percent more likely to be removed from school by a hearing officer on the grounds that they were dangerous during the 1999-2000 school year than their White peers (Osher, Woodruff, & Sims, 2002). Black students with learning disabilities in

particular are three times more likely to be suspended than their White counterparts, and four times more likely to end up in correctional facilities (Building Blocks for Youth, 2000).

More recent research reveal similar discrepancies; the 2010 study by Lewis, Butler, Bonner, & Joubert covered all documented behavior occurrences among African American male cohorts in comparison to other ethnic group peers during the 2005-6 school year in a Midwestern school district. Results from that study found African American males had a relative risk ratio of 2.03 compared to their Anglo male counterparts, and as a whole, receive harsher punishments than their White peers for similar acts of disobedience. Similarly, Wallace et al (2008) found that African American males were 3.3 times more likely than their White male peers to be suspended or expelled. This is in spite of the fact that there is no conclusive evidence that African American males display higher levels of disruptive behavior (Skiba et al, 2013; Skiba, Michael, Nardo & Peterson, 2000; Townsend, 2000; Wu, Pink, Crain & Moles, 1982). 2009-2010 statistics from the US Department of Education indicate that while black students make up 18% of the student population, they make up 35% of students who are suspended once and 39% of those expelled, 42% of those referred to law enforcement, and 35% of students with school-related arrests.

While variances in these numbers exist across districts and even states, the overall picture of discrepancy remains the same. Losen and Gillespie's (2011) report on disciplinary exclusion from 7,000 school districts across the U.S. during the 2009-2010 school year concluded that 1 out of every 6 Black school-children were suspended at least once, in comparison to 1 in 20 for Whites. Corroborating earlier statistics and even more disturbingly, this study also found that 1 in 4 Black children with disabilities were suspended at least once during the school year, and were also more likely to be suspended repeatedly in a given year.

Research has demonstrated that it is a myth that African American students tend to have more behavioral problems. Instead the evidence indicates that African American students engage in similar behavioral problems as other students, but they are significantly more likely to receive more harsh punishment for the same offenses as other students (Skiba et al, 2013; Skiba, Michael, Nardo & Peterson, 2000; Townsend, 2000; Wu, Pink, Crain & Moles, 1982).

### **Disproportionality in Other Sectors in Society**

The overrepresentation of African American males in punitive discipline and special education referral and the longstanding opportunity and achievement gap are prime examples of the disturbing trends in the educational sector that place African American male students at greater risk during and beyond the school years. Other areas in society outside of education show similar disparities that are concerning, including criminal justice system, health care system, and employment and economic opportunities.

*Criminal Justice.* Noguera's (2003) review of literature on discipline in schools also found that the demographics of the population being punished in schools matched that of the prison system; as African Americans and Latinos are most likely to be suspended, expelled, and corporally punished, they are also 'sorted' by the school, and are thus stuck in a cycle that eventually leads to prison. The School to Prison Pipeline proposes that the disproportionality of exclusionary discipline that African American males in particular experience in schools directly contributes to their overrepresentation in the criminal justice system, in that they are alienated from the learning process and steered away from the classroom and academic achievement (Lerner & Galambos, 1998; Skiba, Michael, Nardo, & Petterson, 2002; Walden & Losen, 2003; Zeiderberg & Schiraldi, 2002).

Although there is a lack of empirical evidence for a linear relationship between discipline practices that exclude African American males from school and entrance into the criminal justice system, a recent 2009 study found that issuing exclusionary discipline practices to African American males in 53 counties in the US Midwest was linked to a relative increase in juvenile court referrals for these students. A series of studies conducted by the University of Washington between 1992 and 2000 also revealed that racial and ethnic disparities existed at varying degrees of all stages of the juvenile justice process for 5 counties in Washington State (Washington State, 2002). The first study in the series showed that at the point of detention, minorities were more likely to be detained than Whites; and minorities with records were more likely than Whites with similar offenses to be adjudicated. Further, White youth and those who had not been detained prior to adjudication were more likely to have their charges dismissed. The study concluded that disparities in sentencing correlated racial differences in detention prior to adjudication (Devine, Coolbaugh & Jenkins, 1998).

The outcomes of such practices are clear; the United States Department of Justice's Bureau of Justice Statistics (2007) reported that in 2006, 35% of the state and federal male prisoners were African American even though they constituted only 12.4% of the US population. These numbers indicated that African American males were three times more likely to be incarcerated than non-African American males. More recently, their report in 2009 indicated that Black non-Hispanic males, with an incarceration rate of 4,749 inmates per 100,000 U.S. residents, were incarcerated at a rate more than 6 times higher than white non-Hispanic males (708 inmates per 100,000 U.S. residents) and 2.6 times higher than Hispanic males (1,822 inmates per 100,000 U.S. residents).

Unfortunately, myths regarding African Americans and crime persist to this day. For example, while it is commonly believed drug users are more likely to be black, in 2007 the Human Rights Watch reported that Black drug users were arrested on drug charges 2.8 to 5.5 times higher than White drug users every year from 1980 through 2007. They found that while African Americans composed 13% of the drug using population in 2006, they composed 35% of the drug arrests made that year. The reality is not that drug users are more likely to be black, but that crime prevention and enforcement policies are more likely to target them.

Thirty years of research has consistently demonstrated that an inequity exists between the number of white and African American males punished through exclusionary discipline practices. As of 2000, for example, African American youth 10-17 comprise about 15% of the population within their age group, yet represent 25% of all juvenile arrests, 30% of referrals to juvenile court, 40% of all incarcerated juveniles, and close to 60% of waivers to adult criminal court (Jones & Poe-Yamagata, 2000; McCord, Widom, & Crowell, 2001). And much like within schools, there is also evidence that African American offenders often receive harsher sentences than do their white counterparts, even when severity of crime and prior offense history have been taken into consideration (Leonard, Pope, & Feyerherm, 1995). That the American prison population reflects the same inequities seen within the American education system suggests that the problem is not rooted within just one particular system but is entrenched in all aspects of our society.

### ***Employment and Economic Opportunities.***

Disproportionality abounds in the workplace as well. According to a 1995 study commissioned by the Federal Glass Ceiling Commission, African American men and women comprise less than 2.5 percent of total employment in the top jobs in the private sector, and

African American men with professional degrees earn only 79 percent of the amount of their white male counterparts. A May, 2013 Black Employment and Unemployment data brief from the UC Berkeley Labor Center reported unemployment rates for Blacks to be at 13.3%, compared to 6.7% among whites. Even with this brief sampling of statistics, it is no surprise then that Census Bureau's March 2011 Current Population Survey found 35% of African Americans to be living in poverty, as opposed to 13% of whites in the United States.

Empirical data suggest that more schooling is associated with higher earnings; thus, high school graduates on average tend to earn more than high school dropouts, and college graduates more than high school graduates (Margo, 1990). It is little wonder then, that African American males who were systematically excluded from the educational system are at greater risk for unemployment, lower earning potential, and living below the poverty line. Altonji and Doraszelski (2005) believe, however, that wealth is also measured in more than just earnings. They make the compelling argument that while earning ratios show how people are doing at particular points in time, they do not show the cumulative effect of such income disparities over time. The effects of such a gap in wealth include implications for the social position of African Americans, their social and political power, their access to capital for entrepreneurial ventures, and their insurance against fluctuations in the labor market income. These implications, in turn, affect the quality of housing, neighborhoods, access to educational resources, as well as the ability to finance higher education. The disparity in wealth, then, is not only a symptom of the academic achievement gap and but becomes a precursor, or risk factor, as well.

***Health Care System.*** Likewise, health care is another area in society in which disparities are for African Americans are present. The CDC states that people who live and work in low socioeconomic circumstances are at increased risk for mortality, morbidity, unhealthy behaviors,

reduced access to health care, and inadequate quality of care. In 2011, they found that non-Hispanic blacks had the highest percentage of householders living in inadequate and unhealthy housing, that they had the highest infant mortality rate (2.4 times that of non-Hispanic whites), and higher rates of preventable hospitalizations than their white counterparts. Studies also show that African Americans are as equally at risk as their white counterparts, but receive substantially less treatment; in an analysis of the 2005 US Census Bureau data, African Americans were found to be 7.3 times as likely to live in high poverty neighborhoods with limited to no access to mental health services (Ronzio, 2006).

The African American population in the US also has higher rates of death from heart disease, cancer, homicide, diabetes and conditions from infancy. Ultimately, the starkest contrast that can be given in regards to the discrepancy in quality of life and overall outcome is demonstrated by the consistent gap between the life expectancy for White males and black males, with the average Black males' life expectancy being 5 years less than that of Whites (CDC, 2010).

### **Specific Explanations for Why Disproportionality Exists**

A myriad of factors can be considered when looking for causes in the overrepresentation of African American male students in exclusionary discipline, in special education, and the achievement gap. They can range from differences in school leadership, differences in school policy, lack of effective support and training for teachers, and racial bias (Losen & Gillispie, 2011). Bronfenbrenner (1979) suggested that the development of the child needs to be viewed as influenced by all of these factors, which not only contribute to the problem of overrepresentation, but also often play a perpetuating, transactional role with one another. This section discusses prior research and current theories that may help explain why these troubling trends exist for

African American male students and inform how the problem may be addressed in this current study.

***Socioeconomic Status.*** A common argument for the overrepresentation of African American males in discipline is that they are more likely to come from impoverished homes (US Census Bureau, 2007), and thus are more likely to be non-compliant and misbehave. (Hadley, 1993; Hughes & Kwok, 2007). A report titled, “Minority Students in Special and Gifted Education,” from the National Research Council (2002) suggests that African American children who grow up in poverty are less prepared to meet the behavioral expectations and demands of school. Furthermore, students from low-income homes report receiving more severe consequences than those who came from high-income families for discipline infractions (Skiba et al, 1997, Skiba et al, 2000). SES might be a risk factor explaining the inequity in discipline, but Wu (1982) indicates that African American males continue to be disproportionately represented in exclusionary discipline practices even when SES is controlled.

According to the 2009 data from the Census Bureau, 15.5 million children younger than 18 live in poverty, including 4 million, or one in three, black children. The US Department of Education’s 2011 Condition of Education report showed that 68 percent of 12th-graders in high poverty schools graduated with a diploma in 2008, compared with 91 percent in low-poverty schools. A recent study also found that children who live in poverty and read below grade level by third grade are three times less likely to graduate from high school than students who have never been poor (Hernandez, 2011). Researchers have argued that this achievement gap is the result of environmental factors and “opportunity gaps” in the resources available to poor versus wealthy children. Being raised in a low-income household might mean having fewer educational resources at home, or poorer health care and nutrition. At the same time, research also shows

that children in poverty whose parents provide engaging learning environments do not suffer the same academic readiness gaps generally seen among poor children (US Department of Education, 2000; Viadero, 2000; Sparks, 2011). Nevertheless, these findings do not explain why the achievement and discipline gaps exist even after SES is controlled for. While some health risk factors occur more frequently in black populations, there is no conclusive evidence to support the belief that these factors alone are the cause for disproportionality of African American males in education. It is therefore reasonable to continue this discussion by investigating other possible factors that are contributing to this problem.

***A Historical Context for Disproportionality.*** Historically and even into the present day, the major reasons given for the higher achievements of whites, whether cultural, intellectual, artistic or academic, have been overtly and covertly racist. In the 1930's, the eugenics movement was considered a respectable academic discipline and gained much popularity in North American universities, before being discredited following the advents of World War II (Berlak, 2001). Years later, a 1969 article by Arthur Jensen was published in the Harvard Educational review claiming that his statistical analysis of IQ test scores showed that African Americans were genetically inferior to whites in general intelligence. These claims were once again made through standardized test data by Murray and Hernstein in 1994, who further argued that the inferiority of African Americans in the social, political and economic order was rooted in biology (Berlak, 2001).

Scholars have also offered an alternate, albeit equally, racist theory; that the existence of the achievement gap can be explained by cultural deficits wherein children of color are victims of lifestyles that pathologically prevent them from benefitting from school. Even as the 1966 Coleman Report argued for racially integrated classrooms, scholars managed to interpret that

report to further endorse their cultural deficit theory. Of all the factors the Coleman Report argued to be heavily correlated to academic achievement, such as composition of school, the students' sense of control of the environments and their futures, the teachers' verbal skills, and the students' family background, only family background became the primary focus for most school and social policies (Ladson-Billings, 2006). Thus, this chapter seeks to further explain the overrepresentation of African American males in discipline and the achievement gap within a historical, economical, political, and social context.

*Systemic Factors in Disproportionality.* A 1970 national survey of special education directors conducted by Goldstein indicated that 56% considered mislabeling students as handicapped to be “the major controversy of special education today.” These concerns continue to exist; in an analysis of district-level data looking for special education placement patterns, black students were found to identified as LD or ED more often in high-poverty districts, whereas black students in low-poverty districts are more often identified as MR (Oswald et al, 2000). Since gender and ethnicity contributed to the likelihood of placement in special education when several sociodemographic variables were controlled, Oswald et al. interpreted these district-level findings as indirect support to the “systematic bias hypothesis.”

What does systematic bias look like? It is usually a variety of policies, procedures, and practices existing at the national, state, district, school, or classroom levels that can lead to overrepresentation of African American males in special education programs and underrepresentation in gifted and talented programs. Systemic factors require consideration not only due to overrepresentation and disproportionality, but because of the possible negative outcomes of mislabeling: once students have qualified for and are receiving special education services they tend to remain in special education classes, where they are likely to encounter a

limited, less rigorous curriculum (Harry & Klingner, 2006). Further, the lower expectations of these settings, including the lowered expectations from educators of the capabilities of these students, can lead to diminished academic and post-secondary opportunities (National Research Council, 2002; Harry & Klingner, 2006). A natural outcome of the special education setting is that the students in special education have less access to academically able peers (Donovan & Cross, 2002). All of these factors have implications on the academic outcome of the student.

***IDEA 2004.*** In alignment with the No Child Left Behind Act, the reauthorized 2004 Individuals with Disabilities Act (IDEA) specifies that policies and procedures designed to prevent over-identification and disproportionate representation by race and ethnicity must be in place. This includes the collection and examination of data regarding disproportionality, and the establishment of requirements for reviewing and revising policies, practices and procedures. Many safeguards are mandated by federal law in the evaluation and identification process. In the identification of specific learning disabilities, for example, IDEA 2004 requires that the decision must be made without requiring a severe discrepancy between intellectual ability and achievement, that the process is based on the child's response to evidence-based intervention, with the participation of a multidisciplinary team, that the issue must not be due to cultural, environmental, or economic disadvantage, and or the result of inappropriate or unqualified instruction (US Department of Education, 2007). But despite all this attention towards prevention of over-identification, the problem of overrepresentation continues to be challenge.

One possible explanation for these outcomes is the fact that IDEA 2004 does not require states to label children in order to serve them, and thus some states do not use disability categories at all. For example, in 1998 there were 33 times more children eligible under the Emotionally Disturbed category in Minnesota as in Mississippi (US Department of Education,

1998). There were also nine times as many children reported under the category of Mental Retardation in Alabama as in New Jersey. The different and inconsistent use of categories by states occurs due to idiosyncrasies in state funding mechanisms or variations in state classification criteria for various disabilities. Some use a discrepancy criteria as low as 12 points, or as high as 22 points, in the determination of a learning disorder, while the maximum IQ score for determining an intellectual disability ranged from 69 to 80 points. These differences mean that a student can be classified as eligible for special education in one state but not in another (Denning et al, 2000).

***Referral for Special Education.*** Another source of systemic bias needing review is the referral process. There are two ways in which children can enter the special education services system; some are identified early on due to severe or biologically involved disability, while others are referred by someone, such as a teacher, parent, or doctor. Thus, in the latter scenario, the child must be deemed as unable to fill the role of the 'normal' student, and has been judged by the person making the referral to be violating the normal range of expected student behavior. A 1973 study by Mercer on the identification of the mild intellectual disability category found no disproportion in the referral of black students, but an overrepresentation of black student placement in that category. However, when her data was reanalyzed by Gordon (1980), it was found that Mercer had failed to distinguish different types of referrals, lumping together referrals for problems and ones for giftedness all into one category. Once accounting for these differences, Gordon's reanalysis found that there in fact was an overrepresentation of black students in the referral process, prior to psych educational assessment.

Since there are no nationally normed scales available for screening students and determining eligibility for special education, children are essentially screened by their teachers

for being at risk. Ysseldyke and Algozzine (1983) assert that referral by a regular classroom teacher is the most important decision in the assignment of children to learning disorder programs. Zigmond (1993) describes the referral as “a signal that the teacher has reached the limits of his or her tolerance of individual differences, is no longer optimistic about his or her capacity to deal effectively with a particular student in the context of the larger group, and no longer perceives that the student is teachable by him- or herself”(262-263). Unfortunately, teacher referral is subjective, and local norms are applied frequently when making judgments about what level of achievement is typical or unacceptable.

***Identification Procedures.*** The assessment of intellectual ability for both special and gifted education placement is rooted in the concept of intelligence as a general factor that underlies all adaptive behavior (Sternberg, 1999; Jensen, 1998). Yet, what was deemed to be characteristic of intellectual and cognitive development by white and European standards were found to be context dependent; people in many cultures did not reach what Piaget called the formal operative stage without having had extensive experience in school (Ashton, 1975; Goodnow, 1962; Super, 1979). Cross-cultural settings for testing also provided researchers a large body of work which challenge the assumption that cognitive tasks or batteries developed in a specific cultural setting were context-free measures of cognitive abilities (Cole et al, 1976; Ceci, 1996; Gardner, 1983; Nunes et al, 1993). And similar research results of these differences are supported at the local level of cross-culturalism, as well; housewives in Berkeley, CA who successfully performed math problems when comparison shopping could not do so when given abstract problems in a classroom setting (Sternberg, 1999), and men who could handicap horse races could not apply their skills to securities in the stock market (Ceci, 1996).

Given the possible differences between the home environment and a mainstream school culture for minority students, then, it is reasonable to conclude that the results of IQ testing for minority children are directly impacted by cultural context (Donovan & Cross, 2001).

Researchers even argue that the disproportionate representation of certain racial, ethnic, and English Language Learner groups in special education as evidence that the content, structure, format, or language of standardized tests tend to be biased in favor of middle or upper-class backgrounds (Bermudez and Rakow, 1990; Hilliard, 1992; Patton, 1992). What, then, are effective, alternative approaches to traditional classification and placement?

***Zero Tolerance Policies.*** The most common interventions for disruptive, problematic behavior within public schools in the US are exclusionary practices, such as suspension and/or expulsion of the student. Such practices are largely due to the widespread adoption of a strict, zero tolerance approach to discipline (Leone, Mayer, Malmgren & Meisel, 200; Skiba & Knesting, 2001), that harshly punishes all forms of misconduct without regard to the severity of the infraction committed. This severe, school-based approach to discipline actually originated from the 1980s federal policies developed to combat the war on drugs, by imposing “immediate, harsh and legally mandated punishments” on drug traffickers or dealers (Wallace, Goodkind, Wallace & Bachman, 2008). This disciplinary approach was further popularized in the wake of school shootings like the one in Columbine High. And while the intent has been to fairly and consistently provide a safe and secure learning environment for students, consequences under a zero tolerance policy are implemented regardless of the type of offense, the extenuating circumstances, or the context surrounding the infraction (Skiba et al, 2006).

Past research has shown the negative implications this policy has had on its most impacted population, African Americans (Lewis et al, 2008), such as their resulting loss of classroom

instruction time, and lower academic performance. Students are essentially unable to take part in the classroom setting for the duration of the punishment, and are not only losing critical classroom instructional time but by default spending more unsupervised time in activities external to the school setting (Office of Special Education Programs, 2001). Other investigations have also found evidence of a strong correlation among negative outcomes such as dropping out, disaffection and alienation, delinquency, retention, academic failure, and even incarceration (Bock, Tapscott & Savner, 1998; Bakken & Kortering, 1999; Brooks, Schiraldi & Ziegenberg, 1999; Skiba, 2002; US Department of Justice, 2003; Brown, 2007). If these findings are accurate, it can be argued that African American students are susceptible to lower classroom performance than their peers because they are more likely to be subject to harsher disciplinary practices that result in less time dedicated towards learning.

Exclusionary discipline practices ranging from suspensions to expulsion, to alternative education programs, have negative effects on all children (Skiba, 2000). African American males in particular, however, are subject to inequitably experiencing exclusionary discipline practices in general, and out of school suspension specifically (Mendez, Knoff & Ferron, 2002). The use of these practices can not only lead to feelings of school disengagement (Brown, 2007), but perceptions of an unsupportive educational system (Sekayi, 2001). It makes sense, then, that the inevitable outcome is an experience of alienation from the educational community, and a loss of interest in learning (Brown, 2007; Wald & Kurlaender, 2003). Research not only suggests that African American males who are frequently subject to exclusionary discipline become academically disengaged and experience resentment toward school personnel, but also associate more often with deviant peer groups that can lead to an increase in criminal activity (Poulin, Dishion, & Burraston, 2001).

Given that these are the well-documented outcomes for zero-tolerance policies, schools are finally beginning to look into other positive behavior support strategies. In a recent New York Times article, “Seeing the Toll, Schools Revise Zero Tolerance,” Alvarez discusses how, under the Obama administration beginning in 2009, both the Department of Justice and the Department of Education have begun encouraging schools to think twice before pushing students out of school. The most recent example of this change can be found in Broward County’s public schools, in Florida, where more students were arrested on school campuses than any other state district in 2011. Since then, the Broward County Schools superintendent has made efforts to change their disciplinary strategies, noting that having hundreds of students arrested each year, with records that will impact their lifelong chances for work, for financial aid, or even joining the military, was no longer acceptable. Alvarez also quotes Skiba regarding zero tolerance policies; “we are not taking these tools out of the toolbox. We are saying these should be tools of last resort.”

Joining other large school districts across the country such as Los Angeles, Baltimore, Chicago, and Denver, the Broward school district began keeping law-breaking students in school and away from the streets, offering them counseling and other methods of behavioral assistance. Their local law enforcement, the juvenile justice department, and civil rights groups like the NAACP, joined them in a wide-ranging agreement to take the focus away from doling out punishment. Under the new agreement this past November, students who commit a first offense of any of the 11 nonviolent misdemeanors are required to attend counseling and provide community service, rather than being suspended or arrested and sent to court. This new shift in the past few weeks has led school-based arrests to drop by 41 percent, and suspensions drop by 66 percent. Alvarez admits that it is too early to predict overall success of these disciplinary

chances at this point. But this new approach ensures that at the very least, more students are staying in school. As Michael Thompson, the director of the Council of State Governments Justice Center, states, “everybody recognizes now that if we want to really find ways to close the achievement gap, we are really going to need to look at the huge number of kids being removed from school campuses who are not receiving any classroom time” (Seeing the Toll, 2013).

### **The Importance of Understanding Explanations for Why Disproportionality Exists**

These alarming statistics suggest that systematically, African American males in particular are at greater risk for negative outcomes throughout life. In *Accounting for the Social and Non-Market Benefits of Education*, by Wolfe and Haveman, the generally neglected intergenerational effects of education are discussed in detail. Some of the nonmarket effects they reported include a positive effect between one’s education and: the schooling received by one’s children, one’s health status as well as that of his family members, the efficacy of their consumer choices, and even their fertility choices. Perhaps, with all the outcomes in which education plays a role, that is why ultimately, “Educators, administrators, school board members, community decision-makers, and NEA’s local association leaders all have a stake in whether children from culturally and linguistically diverse backgrounds are appropriately educated. Culturally and linguistically diverse students make up the largest growing group within our public schools today; looking at the ‘big picture,’ these students are the future of our communities and our democracy” (Truth in Labeling, 2007). It can be argued from a moral and ethical standpoint that all children deserve an appropriate education—one that meets their learning needs and adequately prepares them for a successful future.

### **The Role of Implicit Bias in Disproportionality**

Implicit bias, also known as hidden or unconscious bias, is a concept that can be used to explain why discrimination persists even when people explicitly oppose it. According to the Kirwan Institute for the Study of Race and Ethnicity, implicit associations harbored in the subconscious based on characteristics such as race, ethnicity, age and appearance are developed over the course of a lifetime through exposure to direct and indirect messages. These associations are activated involuntarily, without awareness or intentional control (Greenwald & Krieger, 2006; Nier, 2005; Rudman, 2004), and cannot be accessed through introspection (Kang et al, 2012). These biased associations result in a skewed assessment that can either be favorable or unfavorable (Greenwald & Krieger, 2006). Thus, implicit biases are characterized as being pervasive, distinct mental constructs that do not necessarily align with declared beliefs, that tend to favor one's own 'in-group,' or the group with which one identifies themselves with, and can be gradually unlearned through de-biasing techniques.

Implicit biases are the result of stereotypes, which are equally pervasive, culturally shared beliefs that can be positive or negative, about the characteristics and behaviors of particular groups (Graham and Lowery, 2004). Examples of stereotypes include the culturally endorsed belief that Asians are good students, or that blondes have more fun. While stereotypes are traditionally assumed to be conscious and controlled by the perceiver, increasing evidence shows that stereotypes can be activated and used out of conscious awareness (Greenwald & Banaji, 1995). As a result, they are unintentional, involuntary, and effortless in their process (Bargh, 2007; Ferguson & Bargh, 2004; Fisk & Taylor, 1991). Studies of unconscious racial stereotypes continue to show that people associate Black males with the notion of hostility, aggression, violence and danger (Correll, Park, Judd, & Wittenbrink, 2002; Devine & Elliot, 1995; Krueger, 1996).

Research has also indicated that most Americans, regardless of race, show a pro-White/anti-Black bias (Dovidio et al, 2002; Greenwald et al, 1998; Greenwald, Poehlman, et al, 2009). Given these findings, it is now understood that beyond just their level of experience, there are a multitude of ways in which teachers can affect student learning and performance in school on an individual basis. The next section looks into how stereotype threat, teacher perceptions and expectations, and self-fulfilling prophecies - all factors in bias - can play a critical role in student outcome.

If implicit biases cannot be consciously reported by the perceiver, how are they measured? Simply asking for self-reports of attitudes is a flawed approach, because people are unable to accurately report their unconscious attitudes. As a result, computerized tests that typically gauge the direction and strength of a person's implicit attitudes, through measurement of their reaction times, are used to assess implicit bias (Wittenbrink & Schwartz, 2007).

One category of computerized tests uses sequential priming, for example, where respondents are briefly presented with a African American or Caucasian stimulus immediately before a positive or negative target word, and then asked to identify as quickly as possible whether the target word was "good" or "bad" (Fazio, Sanbonmatsu, Powell, & Kardes, 1986). Another category of computerized testing utilizes response competition procedures, which measures the interference effects of a target that has multiple meanings, known as the Stroop effect (MacLeod, 1991). The Implicit Association Test (IAT) created in 1998 by Greenwald, McGee, and Schwartz, is an example of this type of task, asking respondents to categorize a sequence of Black and White faces and words as either good or bad.

***Stereotype Threat.*** Researchers suggest that as students transition from childhood to adulthood, they become more and more aware of how the community around them and society as

a whole view their racial/ethnic group (Steele, 1997; Cunningham, 1999; Spencer, 1999). Steele, Aronson, and Spencer's research shows that the existence of negative stereotypes can raise inhibiting doubts and high-pressure anxieties that negatively affect one's actual performance, and even passing reminders that someone belongs to a certain group associated with negative stereotypes can have a significant impact. This social-psychological predicament, a phenomenon termed as the 'stereotype threat,' threatens how students evaluate themselves, which then alters academic identity and intellectual performance. Researchers believe that stereotype threat can affect any member of a group about whom negative stereotypes exist.

Thus, Claude Steele (1997) argued that minority students may perform poorly or actively avoid participation in activities in which they might risk confirming the negative stereotype that they are less intellectually capable. His series of experiments demonstrated that black students scored lower on tests when they were told that others routinely scored higher on these tests, and furthermore plead lack of interest to minimize the stigmatization of having performed poorly despite their best effort. But when told that the test did not indicate ability, the performance of Blacks rose to match that of equally skilled White test takers.

Stereotype threat from the greater community can be mitigated by successful teachers, or they can become further reinforced by their own judgments and expectations of their students. Aronson believes that by understanding and attending to these social and psychological processes, schools can work to lessen the power of stereotype threats and thereby boost academic performance.

***Teacher Expectations.*** In three studies conducted in suburban/inner-city schools by Yeager et al, African-American students improved their grades after receiving simple, one-sentence notes from their teachers or an online pep talk (2012). The notes and pep talks were

designed to dispel students' fears that feedback from their teachers were caused by differential treatment rather than their teachers' high standards. In the first study, the experimental group received a note saying, "I'm giving you these comments because I have very high expectations, and I know you can reach them," versus the control group's note, "I'm giving you these comments so that you'll have feedback on your paper." For the African American students who received the treatment, 71 percent revised their essays, compared to 17 percent in the control group. The study also found that among the students who had reported low trust in their teachers, 82 percent revised their essays, compared to none in the control group.

The second study was conducted a year later and further analyzed the grades of revised essays. In the experiment group, 88 percent of African-American students received better grades on their revised essays, compared to 34 percent in the control group. The experiment group also reported higher trust in the teachers more than two months after the exercise, while the difference was insignificant for White students. In the third study, students in the experiment group watched online testimonials from older students, whose advice that academic criticism resulted from teachers' high standards and that their students could reach them. Over the following ten weeks, African-American students in the experiment group averaged a third of a grade point increase on a standard 4.0 grade scale, with higher grades in math, science, English and history, while White students did not show statistically significant improvement.

The authors of the study caution that their strategy for conveying high expectations is not a magic bullet; "everything hinges on good teachers who provide solid feedback for improvement." These three studies do, however, demonstrate the importance of teachers' expectations, and even the perception of teachers' expectations, and their particular impact on academic achievement and outcome on African American students.

A different study, by van den Bergh in 2010, sought to determine whether teacher's expectations for students and the achievement gap were related to the teachers' prejudiced attitudes. Bergh et al found that teachers who hold negative prejudiced attitudes "appeared more predisposed to evaluate their ethnic minority students as being less intelligent and having less promising prospects for their school careers." Tenenbaum and Ruck's 2007 meta-analysis of whether teachers' expectations, referrals, and speech patterns differ towards certain students found significantly lower teacher expectations for African American students compared to European American children.

***Teacher Perceptions.*** Teacher perceptions of certain minority student behaviors can also feed implicit bias. For example, Neal et al (2003) found that students who displayed a Black walk style, characterized by a deliberately swaggered or bent posture, were perceived by teachers as lower in academic achievement, highly aggressive, and more likely to be in need of special education services (Neal, McCray, Webb-Johnson, & Bridgest, 2003). Researchers also found that Whites with relatively high levels of implicit racial bias perceived Blacks to be more threatening than Whites, and that White teachers may incorrectly perceive Black students as angry or aggressive (Hugenberg & Bodenhausen, 2003).

Misperceptions may be further amplified by a cultural mismatch between White teachers and their students of color when they misinterpret student behavior (Ferguson, 2000). For example, Weinstein et al (2004) tells of an incident where a European American teacher misinterpreted a lively debate between African American teenagers, and rather than recognizing the debate as a common practice of verbal sparring, took them to the principal's office to be reprimanded for their aggression. With these cultural mismatch scenarios, and implicit biases

fueled by negative portrayals of Black youth in the media, teachers who are not knowledgeable about these cultural cues may misread their behavior as confrontational or defiant.

***Self-Fulfilling Prophecies.*** Teacher expectations of student achievement are influenced by implicit biases, and the manifestations of these biases can have a lasting impact on students and serve as self-fulfilling prophecies. Holding lower standards for nonwhite students is particularly problematic considering the fact that holding students to higher standards benefits students and actually improves test scores (Betts & Grogger, 2003; Figlio & Lucas, 2004).

In the 1980s, several researchers used hypothetical or simulated situations to elicit judgments and expectations from teachers, in response to photographs or profiles of children of different ethnicities. DeMeis and Turner (1978), Baron et al (1985) found significant evidence of negative judgments based on perceptions of race. Several naturalistic studies have also shown higher rates of teacher attention and praise to white students (Buriel, 1983; Jackson and Cosca, 1974). Irvine found in a 1990 study that teachers quickly formed lasting impressions of students' academic abilities that were often inaccurate, particularly for African American males. A 2007 study by Parks and Kennedy found that among 51 teachers and 21 undergraduate education majors, ratings of a student's perceived academic and social competence were lowest among Black boys who were viewed as physically unattractive. Similarly, a 2011 study by Ritts, Patterson, and Tubbs even found that physically attractive students are judged more favorably by teachers in a number of ways, including their intelligence, academic potential, grades, and various social skills.

Some studies of naturalistic settings have actually found these various teacher perceptions and expectations to be quite accurate for both black and white students (Brophy and Good, 1974; Egan and Archer, 1985; Evetson et al, 1972; Willis, 1972). Rosenthal and Jacobson's theory of

self-fulfilling prophecy, however, suggests the possibility that students will behave and perform in a manner consistent with their teachers' expectations. Jussim et al's 1996 study compared teachers' perceptions with self-perceptions, and found a significant impact of teacher perception on students by race/ethnicity, with three times the impact on both test scores and grades for black students than white students. This suggests that black students may be more vulnerable than white students to teachers' perceptions, and is similar to Yeager et al's finding that they are more influenced by teacher expectations.

***Cultural Differences.*** This possibly greater vulnerability of African American male students to teacher judgments and expectations have led researchers to raise concerns regarding the role of culture in student success. By now, it is understood that overrepresentation of African American males is not simply because they tend to display more disruptive behaviors than their peers. While some researchers have argued that this is the case (Hadley, 1993; Hughes & Kwok, 2007) others have failed to find support for this claim (McCarthy & Hoge, 1997; Wu et al, 1982). Rather, researchers have found that African American males tend to receive harsher punishments for less severe offenses than their European American counterparts (McFadden et al, 1992; Shaw & Braden, 1992; Skiba, 2001). McFadden, for example, found that African American males received corporal punishment and other punitive types of discipline for non-violent offenses for "bothering others," or defying school authority. Yet, European Americans were referred more often for these behaviors but received less severe types of punishments (1992).

Cultural differences deserve special consideration given that 68% of the students in the 100 largest school districts of the US are students of color; about 87% of all teachers are White (National Center for Education Statistics, 2001). The overwhelmingly White, middle-class presence among teachers in K-12 institutions across the United States has resulted in

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expectations, rules, and classroom policies that are very much aligned with the norms found in White, middle-class society. When considering the contribution of cultural differences to the discipline gap, it is essential for teachers to distinguish between student behaviors that are a result of cultural differences versus behavior patterns warranting a referral for special education services (Campbell-Whatley & Gardner III, 2002). For example, when some students are frustrated but reluctant to ask for help, they may exhibit fidgety or active behavior. Asking for help might appear obvious to most students but not to some children who have different cultural backgrounds (Valdes, 1996).

Bourdieu (1973) made the argument that all institutions, including schools, have cultures that are by and large taken for granted. Thus, students whose home environment are similar to the culture at school are likely to have an advantage once they enter school, versus those children who have dissimilar home and school cultures. He posits that the advantage would likely be maintained over time, since schools are unlikely to be aware of any need to change the nature of their practices.

Heath's 1982 ethnography provides an example of the subtle cultural differences in the use of language at home versus at school. Teachers in her study believed that the black students were unresponsive in the classroom, despite being engaged and talkative during recess, and wondered if they were suffering from mental defect. Through studying the students, teachers, and interviewing the parents, however, Heath discovered that white parents often asked their children 'inauthentic' questions, which they already knew the answer to, which is a normal course of instruction in American classrooms. However, black children learned language through sitting with their parents and listening to adult interactions, and were invited to join conversations

through authentic questions for which the parent did not have an answer, such as “What did you see?” or “What is your favorite story?”

Heath concludes that black students operate in a home culture where inauthentic questions are relatively rare, and are thus at a disadvantage compared to white students whose home environments use the same types of questions used by teachers during instruction at school. Heath’s work suggests that there may be a multitude of subtle differences at play that put certain racial and ethnic groups at a disadvantage in schools. It can also be argued that the way educators wrongly attribute behaviors they do not understand to mental defects rather than differences in culture is another symptom of implicit bias.

Another example of how cultural communication plays an important role in the discipline gap can be found in Bowers and Flinders’ 1990 study, showing that Whites often interpret culturally based behaviors, such as overlapping speech, as rude and offensive. This is especially troubling, as the teacher’s perceptions of loss of control in the classroom (Vavrus & Cole, 2002), and of disrespectful behavior (Skiba et al., 2000), are leading factors in determining how the behavior is handled or punished. Furthermore, teachers who fail to perceive the relationship between culture and behavior are likely to attribute ‘misbehavior’ to intrinsic, negative qualities among students, or attribute such behavior to poor parenting practices (Monroe, 2005). A 1996 study done by D’Amato found that teachers rated elevated voice levels, self-initiated speech, self-directed movement, displays of emotion, and student-to-student interaction, all as inappropriate behaviors in the classroom. These actions, however, are in fact central to the communicative practices in African American culture (Irvine, 1990).

***Teacher Perceptions of Race.*** A 2004 study by Gregory and Pharmicia on teachers’ explanations for the discipline gap revealed that most teachers had a number of theories,

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including adolescent development, low achievement, and community or culture deficit, as contributing factors. One white male teacher in the study explained that low-achieving students reject and disengage from education in schools, while another white female teacher explained that students start to do silly things in the classroom to hide the fact that they have low skills. The low achievement theory implies an association between achievement patterns and race and culture, but studies have shown that this view disregards the very legitimate concern of black students' feelings that school is an unfair, unjust, and racist place (Giroux, 2001). Still other teachers point to the community and culture deficit as a main cause for the discipline gap – they point to a lack of 'home training,' or the pervasive economic and social problems within the African American community. Only a few teachers explored the possibility of disciplinary policy and school organization as possible explanations for the discipline gap (Gregory & Pharmicia, 2004).

The striking result from this particular area of research reveals that teachers are in fact very much 'colorblind,' such that they could not account for the discipline gap across racial and ethnic groups. Clearly, adolescent development or disciplinary policies by themselves are not sufficient reasons for the discipline gap. And in cases where race is considered, teachers drew from a deficit model and stressed the 'problem' nature of African American students, or families, or communities, without explaining how white students may benefit from the current disciplinary system (Gregory & Pharmicia, 2004). In effect, teachers refusing to see the discipline gap while consciously avoiding consideration of race as a factor in discipline, avoid examining their own beliefs that influence their practice. They ignore the possibility that their individual beliefs about power, control, and what behaviors warrant discipline, are a result of a cultural norm that leads to disproportionate discipline (Gregory & Pharmicia, 2004).

### **Purpose of Study**

Because implicit bias is an unconscious bias, it differs from explicit bias and could not be appropriately measured through self-report. New measures have been developed to do so; the Implicit Association Test (IAT), designed by Greenwald, McGhee, and Schwartz, is a computerized procedure designed to measure social knowledge operating outside conscious awareness or control, through measuring the strength of a person's automatic association between certain concepts. In a 2012 article (Nosek et al) summarizing the results of more than 2.5 million completed IATs and associated self-report measures, it was found that implicit and explicit comparative preferences and stereotypes were widespread across gender, ethnicity, age, and political orientation. Most importantly for this study, it was found that while implicit and explicit attitudes and stereotypes varied substantially across individuals, and were generally positively related, Whites showed stronger social group preferences and stereotypes than did other racial groups and ethnicities, and adults over 60 showed the strongest social preferences and stereotypes both implicitly and explicitly.

This study will use the IAT method to specifically look at the implicit attitudes and stereotypes of educators, and demonstrate the link between biases and disciplinary decisions. It proposes that implicit bias among educators is predicted by age and ethnicity, with White educators showing significantly more of an implicit preference for in-group students than educators belonging to a minority group, and a positive correlation between age and the presence of bias. A secondary goal is to look at the likelihood that naming one specific redeeming quality in the students' behavior may serve as a mediating factor in the disciplinary decisions. Results of this study hope to clarify the efficacy of current policies and procedures and inform future initiatives in the race to close the achievement and discipline gap.

The purpose of the proposed study is to examine empirically the contribution of implicit racial stereotypes to the overrepresentation of African American in school discipline. There are five main research inquiries that will guide this study:

1. To what extent will participants randomly assigned to an African American male student vignette provide higher ratings on items assessing punitive disciplinary practices, referral for special education, and need for placement in a restrictive setting than participants assigned to a Caucasian male student vignette?
2. To what extent will implicit racial stereotypes be significantly correlated with ratings on questionnaire items assessing punitive disciplinary practices and referral for further intervention those who are exposed to the Black male student vignette?
3. To what extent will the race of the participant moderate the magnitude of the effect between implicit racial stereotypes and participant ratings?
4. To what extent will the participants' years of experience moderate the magnitude of the effect between implicit racial stereotypes and participant ratings?
5. To what extent can a redeeming quality in a list of student behaviors serve as a mediating factor in the ratings on the questionnaire items assessing punitive disciplinary practices and referral for further intervention?

In light of the research demonstrating the tendency for individuals to view African American males as threatening and hostile (Graham & Lowery, 2004), the first hypothesis is that participants in the African American student group will be more likely to endorse ratings indicating the need to refer the African-American child for special education services than participants rating the Caucasian student. Also, participants in the African American group are

expected to provide ratings indicating need for harsher punishment, special education identification, and restrictive setting placement than participants in the Caucasian student group.

The hypothesis related to the second research inquiry is that teachers' implicit stereotype scores, as measured by the Implicit Association Test (IAT), will have an interactive effect with vignette group. Specifically, it is anticipated that the effect of implicit stereotypes on the expected disciplinary ratings will be inconsequential for participants exposed to the Caucasian male student vignette; however, there will be a significant difference in these ratings for the group of participants who are exposed to the African American male student vignette. Within the African American vignette group, participants that have higher IAT scores are expected to provide harsher expected referral, placement, and recidivism ratings than their counterparts with lower IAT scores.

The fourth hypothesis guiding the current research is that the race of the participants will not moderate the effect of disciplinary ratings. This hypothesis finds much credence in the conflicting results of previous studies (e.g. Tobias et. al, 1982; Tobias et. al, 1983). The participants' race is expected to show a negligible interactive effect, especially when the variance associated with implicit stereotypes is accounted for. As participants of all races are exposed to the same stereotypical images in the media, it is expected that the participants' race will not affect their ratings; however, their level of implicit stereotype association, regardless of their race, is expected to be the most significant factor in this exploration.

The final hypothesis is that one redeeming behavioral quality of the student described in the vignette will serve to mediate the effect of the disciplinary ratings. This is an important area to explore through this study as a means to better understanding and informing what simple strategies or skills students can employ in school to lessen teacher's use of discipline.

### **Chapter III: Method**

#### **Participants**

The participants for the current study utilized alumni from a university in the Northwest Region of the United States who were part of the elementary teacher education program. Of the 148 study participants, 24 were male, 111 identified as Caucasian, 18 as Asian, 8 as Hispanic, 1 as African American, and 9 as Other. While two of these participants had 40 years of experience in the field, only 7% of respondents had 15 or more years of field experience, and 82% had five or less years of field experience. Respondents included general education teachers, special education teachers, para-educators, and student teachers working in a variety of grade levels and classroom settings.

#### **Procedure**

Prior to conducting the study, approval for the University of Washington's Institutional Review Board was obtained. Using a listserv, respondents were sent an e-mail recruiting their participation in the study. The e-mail contained a link to an online survey system, where they first were asked to provide informed consent in order to participate in the study. Following the consent process, respondents who agreed to participate were randomly assigned to one of two groups: Caucasian priming or African American priming group. Deception was utilized in that respondents were told that they were participating in a study assessing their perceptions about student behavior and nothing with regard to disproportionality or ethnicity was revealed to participants, resulting in them being blind to the condition in which they were assigned. Next, each participant read a vignette about a student exhibiting behavior problems in the classroom (see Appendix A). Another possibility is the assignment to a vignette about a Caucasian or African American male student who is noted to show a positive, redeeming behavior towards the reader.

The vignettes used for both groups were identical in order to control for the untoward influence of nuisance variables. The only differences between the two groups was that individuals in the African American group received information designed to prime implicit theories toward African American, including referencing an African American name of the student, the name school the student attended, while individuals in the Caucasian group received information designed to prime implicit theories about Caucasians. None of the information was presented overtly; instead it was presented to participants in a brief profile of the student's academic performance and current annual disciplinary record, as an attempt to make the student and the vignette feel more real (see Appendix B). This was important considering that participants who think that the research entails examining their attitudes towards race/ethnicity are likely to alter their responses in a more socially desirable manner (Furnham, 1986). A questionnaire was then administered to gather demographic information, as well as responses to questions related to discipline and referral, and ability to thrive in the general education setting (see Appendix C).

After the questionnaire is administered, the participants randomly assigned to vignettes about the African American child completed an African American-Caucasian version of the Implicit Association Test (Greenwald et al, 1998). The IAT was presented after the vignette and questionnaire in order to avoid any expectancy effects that might occur if participants are exposed to the racial pictures on the IAT before responding to the questionnaire. Following the completion of the IAT task, participants were presented with a debriefing screen where they were thanked for their participation.

## **Measures**

**Questionnaire.** Participants answered seven questions pertaining to punitive discipline and referral for special education, as well as the extent to which the student's needs can be effectively changed in the general education setting (see Appendix C). A six-point Likert scale is used so that participants are not able to respond in a neutral manner. The questionnaire then gathered information about age, ethnicity, gender, and year of graduation. Because the question concerning the student's potential behavior change is asked in a positive manner, the responses to this question were reverse scored in order to be comparable to the responses to the other six questions. Results indicated that the punitive discipline and special education referral items possessed adequate internal consistency, with estimates of  $\alpha = .85$  and  $\alpha = .79$ , respectively.

**Implicit Association Test.** The Implicit Association Test is a tool that can be used to measure unconscious stereotypes that participants would probably attempt to hide (Greenwald et al., 1998). During the test, participants were presented with words and pictures that they are asked to classify into 'pleasant' and 'unpleasant' groups. Next, participants were then shown African American and Caucasian faces, which they sorted into groups based on race. In the final stage of the test, the two previous tasks are merged, so that participants must place items and faces into pleasant, unpleasant, African American and Caucasian categories. During the schema consistent trials, participants press the same button on the keyboard to categorize Caucasian and pleasant items, and a different button to categorize African American and unpleasant items. The schema inconsistent trials require participants to use the same key to place items into African American and pleasant groups, while another key was used for unpleasant and Caucasian items. The IAT measures the strength of implicit associations based on the reaction times to the schema consistent and schema inconsistent trials. For example, a person's score on the IAT would suggest a higher degree of implicit stereotypes if they took considerably longer to sort African

American and pleasant stimuli on the same key (schema inconsistent), as opposed to Caucasian and pleasant stimuli (schema consistent). The statistic that the IAT software reports is an effect size in the form of a  $d$  score, which is the difference in reaction times in response to the schema consistent and inconsistent trials divided by the pooled standard deviation of the participants' response latencies (Greenwald et al., 1998). The IAT has been shown to be a valid and reliable measure of implicit stereotypes (Greenwald et al., 2006).

### **Data Analytic Approach**

Descriptive and inferential statistics were calculated. Several different inferential statistical analyses were performed to address the aforementioned research questions. These statistical analyses included tests of mean comparisons and regression analyses.

**Research Question 1.** To answer research question 1 and assess whether there is a significant difference between the responses of participants in the Caucasian group and the African American group, a Multivariate analysis of variance (MANOVA) was performed to assess the multivariate effect across multiple dependent variables. MANOVA is an ANOVA with several dependent variables. Specifically it was used to test for group differences (White vs. Black vignette groups) and the difference in two or more vectors of means. Significant MANOVA were followed up by univariate ANOVAs of the separate DVs (punitive discipline, referral to special education, and placement in restrictive setting).

**Research Questions 2-5.** Research questions 2 through 4 were addressed by conducting multiple regression analyses. Specifically, research question 2 was addressed by performing three separate regression analyses, to examine whether IAT scores significantly predict each of the three dependent variables. Attention was given to the beta coefficient to assess whether IAT scores significantly relate to the DVs. To answer research questions 3 and 4, multiple regression

analyses that include two interaction terms (IATxAge and IATxEthnicity) were performed. A significant interaction effect would demonstrate that the effect of IAT scores depends on the age and/or ethnicity of the educator. Interpretation of the interaction effect was determined by creating graphs depicting mean scores and visually interpreting the data. To analyze the final research question, two between-subjects factorial ANOVAs were performed to examine whether including a redeemable characteristic of the student in the vignette significantly mediated participants' responses between the two groups.

## Chapter IV: Results

### Descriptive Statistics

Table 1 includes the descriptive statistics including the means, standard deviations, and range for the dependent variables for both of the groups. The summary statistics revealed that participants randomly assigned to an African American student vignette (Black condition) had mean discipline and referral ratings that were consistently higher than the mean discipline and referral ratings among participants who were assigned to a Caucasian male student vignette (White condition). In both conditions, office referrals had the highest mean rating among discipline items, while the out-of-school suspension item had the lowest mean rating. Both groups were also more likely to be referred to the student intervention team, over referral for a special education reevaluation. With the exception of referral for special education evaluation, the responses for participants in the Black condition was associated with a larger standard deviation and range of responses, with lower minimum or higher maximum ratings when it came to questionnaire items regarding detention, out-of-school suspension, and total punitive discipline scores.

### Research Question 1

The first research question focused on examining to what extent participants randomly assigned to the Black condition group provided higher ratings on items assessing punitive disciplinary practices, special education referral, and need for placement in a restrictive setting, than participants assigned to the White condition group? A multivariate analysis of variance (MANOVA) was performed in order examine the difference between the vectors of means between the Black and White condition across all the dependent variables assessing punitive discipline and special education referral, respectively. If a significant multivariate effect was

found, follow-up one-way ANOVAS were performed with each of the dependent variables to determine which ones were driving the significant multivariate effect.

Table 2 shows the results from the MANOVA, and results indicated a significant multivariate effect between the two groups on the cluster of punitive discipline items ( $F(4, 143) = 2.64, p < .05$ ). Follow-up one-way ANOVAs revealed significant main effects between the two groups on ratings for the detention item ( $F(4, 146) = .648, p = .01$ ; effect size = .82), office referral item ( $F(1, 143) = 5.70, p < .02$ ; effect size = .39), in-school suspension item ( $F(1, 143) = 4.38, p = .04$ ; effect size = .34), and out-of-school suspension item ( $F(1, 143) = 5.30, p = .02$ ; effect size = .39). Interpretations of these findings in the context of the item means for each of the groups revealed that respondents in the Black condition group endorsed higher degrees of punitive discipline relative to the White condition group, indicating that race/ethnicity may play a role in decisions with regard to punitive discipline. The magnitude of the effect of the Black condition group for these ratings ranged from moderate to large, with effect for detention ratings being the highest. The MANOVA results for the special education referral items indicated that there was not a non-significant multivariate effect. As a result, no follow-up one-way ANOVAs were performed.

#### **Research Question 2-4**

Research Question 2 examines the extent to which implicit racial bias (i.e., IAT scores) was significantly predictive of ratings pertaining to the use of punitive disciplinary practices for only those respondents who were exposed to the Black student vignette. Research Questions 3 and 4 examined the extent to which the race/ethnicity and years of experiences of the respondents moderated the magnitude of the effect between implicit racial stereotypes and their

punitive disciplinary ratings. A combination of bivariate correlations and multiple regression analyses were performed to address these three research questions.

Table 3 shows the results of the bivariate correlations analysis between IAT scores and punitive decision ratings. The effect sizes are reported here in accordance to the guidelines for interpreting magnitudes of effects as outlined in Cohen's 1988 publication on statistical power analysis, with effect size .2 considered as small, .5 as medium, and .8 as large. Among the correlations analyzed, a significant association was found between the respondents' years of experience and their IAT score; as the respondents' reported years of experience increases, so does their IAT score ( $r = 0.27, p = .048$ ). The effect size for years of experience was small to moderate, and was found to account for 7% of the variance in IAT scores. IAT scores were also found to be significantly correlated with detention ( $r = 0.31, p = .02$ ), with a small to moderate effect size, accounting for roughly 9% of its variance. A moderate to large effect size was found for office referrals ( $r = 0.33, p = .01$ ), with the IAT accounting for 11% of its variance. IAT scores also have a moderate to large effect size for in-school suspensions, and accounts for 16% of its variance ( $r = 0.40, p = .002$ ), and a moderate effect size accounting for 11% of the variance in out-of-school suspension ratings ( $r = 0.33, p = .01$ ). As expected, ratings for detention, office referral, in-school and out-of-school suspension items were also significantly correlated with one another.

Table 4 portrays the results of the first multiple regression that was performed to examine whether implicit bias scores were able to significantly predict punitive discipline ratings above and beyond the effects of other individual-level factors of the respondents (ethnicity and years of experience). The total punitive discipline composite was used as the dependent variable. Results from the multiple regression indicated that overall, the first model including only years of

experience and ethnicity only accounted for 3% of the variance in the dependent variable ( $R^2 = .03$ ,  $F(2,53) = .69$ ,  $p = .50$ ). The second model, which included the IAT along with the other variables as predictors, resulted in a significant change in variance accounted for by the predictors ( $R^2 = .22$ ,  $F(3,52) = 4.93$ ,  $p = .004$ ), with an additional 19% of the variance in the outcome variable being accounted for by IAT scores. Interpretation of the individual predictors revealed that IAT scores significantly predicted the total discipline score ( $\beta = .42$ ,  $t = 3.62$ ,  $p = .004$ ) after holding constant the variance in the dependent variable explained by the other individual-level demographic variables. Overall, these results suggest that IAT scores significantly explain respondents' increased likelihood of endorsing punitive disciplinary responses when primed.

Table 5 shows the results of the sequential multiple regressions performed to assess whether the ethnicity and/or years of experience moderated the relationship between implicit bias and the punitive discipline ratings. Results showed that the model including the interaction terms between implicit bias and years of experience and ethnicity was able to significantly account for additional variance in the dependent variable ( $R^2 = .26$ ,  $F(3,52) = 6.02$ ,  $p = .001$ ). Inspection of the individual predictors included in the model indicated that the interaction effect between ethnicity and implicit bias approached significance ( $\beta = .26$ ,  $t = 1.98$ ,  $p = .053$ ) indicating that ethnicity served as a potential moderator. In order to interpret this interaction, a graph depicting the means for the high and low IAT groups and White versus Non-White groups were plotted; see Figure 1 for this illustration. As one can see, the participants with low IAT scores who identified themselves as White had the lower total discipline mean of 9.76. This mean total discipline rating increased by 1.99 points, to 11.75, when White participants had high IAT scores. Participants with low IAT scores who identified themselves as Non-White, on the

other hand, had a low mean total discipline rating of 10.71. This mean increased by 2.42 points, to a mean of 13.13, when Non-white participants also had high IAT scores. The difference between the slopes of the Non-White group versus the White group, with the more dramatic incline in the Non-White group, thus indicated a possible interaction effect between ethnicity and implicit bias on the total discipline ratings.

### **Research Question 5**

To analyze the final research question, two between-subjects factorial ANOVAs were performed to examine whether including a redeemable characteristic of the student in the vignette significantly moderated participants' responses between the two groups. The results of the interaction effect were examined first considering that a significant interaction effect renders the results of the main effects invalid, considering that the effects of one variable depend on the level of another variable. As one can see in Tables 6-7, the results of the factorial ANOVA using punitive discipline as the dependent variable revealed a non-significant interaction effect. Similar non-significant findings were found for the two-way ANOVA for special education referral, as shown in Tables 8-9. These results indicated that the effect of treatment condition did not depend on whether or not the vignette included a redeemable student characteristic.

## **Chapter V: Discussion**

The over-representation of African American males in exclusionary discipline practices and special education is a longstanding inequity issue that is widely recognized among the educational community. Research over the past 40 years has inarguably demonstrated that African American males are the most frequent targets of unfair discipline practices. Furthermore, they are simultaneously underrepresented in gifted education programs, while overrepresented in special education programs, particularly under the categories of mental retardation and emotional disturbance. Researchers have posited that these disturbing trends are directly linked to the implicit biases, or the subconscious and automatic mental attitudes, among educators (Skiba, Michael, Nardo, & Peterson, 2000). However, no research to date has experimentally examined whether implicit biases are associated with educators' discipline and special education referral decisions, and substantiate the need to integrate training into university preparation programs and in-service professional development to mitigate the negative impact of implicit biases on African American male students.

The purpose of this study, therefore, was to examine whether implicit biases influence teachers' disciplinary and referral choices, particularly more negative choices for African American male students. In order to do this, an experiment was conducted in which participants were randomly assigned to either the Black group or the White group, to read a priming vignette, then rate their responses to the student in their vignette. The following discussion seeks to explain the findings of the present study within the context of the relevant literature, and explore the implications for improved educational practices for eliminating the discipline gap. Limitations of the study will also be discussed, along with recommendations for future research.

### **Priming Reveals the Role of Implicit Bias**

The results from this study suggest that implicit biases, or unconscious racial stereotypes, are likely to play a role in the disproportionality of discipline within the American public education system. By using experimental priming within the vignettes to simulate conditions in the classroom, the findings suggest that unconscious stereotypes were activated in participants, which differentially influenced their disciplinary choices but not their responses to the special education referral items. Specifically, participants in the Black condition were significantly more likely to endorse the need for punitive discipline. Moreover, results indicated that participants in the Black condition were provided significantly lower ratings relative to those in the White condition on an item assessing whether they thought the child in the vignette could be successfully educated in the general education environment.

The primary approach in this study was subtle, in that the only perceptible differences between the vignettes about African American versus Caucasian student was the culturally-salient names of the student and the school the student attended. All other aspects, including their behaviors, their academic records, and their backgrounds, were identical – thus, differences in the respondents' discipline ratings were not a result of the type of behaviors described to them, nor any conscious attitudes they held towards African Americans. This priming method also minimized the effects of response bias, in which the participant are influenced to avoid possible prejudice. The experimental priming design of this study thus allowed for the observation of implicit biases' role as a significant contributor to the cycle of behaviors and outcomes that result in the unfair punishment of African American male students.

### **Implicit Bias and Disproportionality**

Survey responses revealed that participants who read the African American student vignette had consistently higher means across all questionnaire item ratings regarding discipline

and special education referrals. In particular, significant differences were found between the two groups' responses when it came to detention, office referrals, in-school suspension, and out-of-school suspension. These findings were consistent with the hypotheses guiding this study and are consistent with the literature from other disciplines examining inequities and disproportionality of African Americans. Although this finding was anticipated and important, the follow-up analysis examining differences in punitive ratings in relation to participants' levels of implicit bias against African American males provided additional supporting evidence

The IAT was used as a measure of the participant's level of unconscious racial prejudice against African American males. By collecting the respondents' demographic data and administering the IAT at the end of the survey, respondents' ages, ethnicities and implicit bias scores were obtained without contamination of their discipline and referral ratings. This experimental design further helped to elicit true responses and thus, demonstrate a significant relationship between an educator's level of implicit bias against African American male students with their likelihood to use detention, office referrals, in-school and out-of-school suspension as methods of discipline. Even more significant, it was found that an educator's level of implicit bias was predictive of their disciplinary choices above and beyond other factors, such as ethnicity or years of experience. This finding is also consistent with the existing literature; research indicates that regardless of race, Americans show a pro-White/anti-Black bias (Jost & Banaji, 1994, Dovidio et al, 2002; Greenwald et al, 1998; Greenwald, Poehlman, et al, 2009).

Further analysis revealed an interaction effect approaching significance between educator ethnicity and their level of implicit bias on their discipline ratings. Evidence suggests that a Non-white educator with high implicit bias is more likely to endorse harsher punishments than a White educator who also has high implicit bias. Due to the low number of Non-white

participants, this area of research needs further examination to better assess whether this phenomenon truly exists, or whether it holds true for all or only certain ethnically diverse groups. Results also did not find any significant effect for bias on special education items, which may be due to the nature of the behaviors described within the vignette. This is also an area needing further research.

### **Implications for Better Educational Practices**

Given the demonstrated role of implicit biases in teacher judgments, expectations, and ultimately, their disciplinary choices, the next section looks into the possible solutions for eliminating the effects of implicit bias on educators' discipline choices. The underlying theory behind these solutions is that unconscious stereotypes can, in fact, be changed; research has documented that changes in a perceiver's goals and intentions, as well as changes in the social environment, can affect the automatic operation of stereotypes (Blair, 2002). The following includes several recommendations for acknowledging that implicit biases cannot be entirely eradicated. Rather, a multi-pronged approach with culturally responsive practices as the centerpiece is likely needed.

**Multicultural Literacy Training.** One of the key approaches to developing culturally responsive practices in educators is through multicultural literacy training. Research shows that culture plays an important role in teacher empathy and understanding, and student performances in the classroom as a result. A 2008 study by Gregory and Weinstein found that predictors for defiant behavior among African American students were their trust in teacher authority, their perception on the level of caring from the teacher, as well as the level of expectation their teacher had of them. The results indicated that defiance referrals are specific to the classroom situation, and that the discipline gap is most likely influenced by teachers' attitude towards, and

understanding of, the students (Gregory & Weinstein, 2008).

Further evidencing the relationship between cultural literacy among teachers and student performance was a 2002 study by McAllister and Irvine, which found that teachers who participated in a multicultural professional development program fostering culturally responsive practice greatly impacted their ability to be empathetic, and thus effective, with culturally diverse students. The majority of the participants, however, were ethnic minorities themselves, and were self-selected to partake in the program; many of them found that their own history with oppression could assist them in understanding their students' experiences, thus serving them more effectively (Gregory & Weinstein, 2002).

**Culturally responsive teaching.** A goal in multicultural literacy training is to help teachers incorporate culturally responsive teaching into their practice. Because culture is central to student learning and learning styles differ across cultures, cultural practices actually shape thinking processes (Hollins, 1996). Educators who are trained in culturally responsive teaching are more successful in spotting the early warning signs of academic distress, in evaluating its cause, and in interpreting student behavior. Ladson-Billings (1994) describes culturally responsive teaching as an approach that includes students' cultural references in all aspects of learning. It encourages teachers to use their students' identities and backgrounds as valuable sources of information for guiding and shaping instruction, and conveys to students that they are respected and genuinely expected to succeed (National Education Association, 2003).

By linking the students' cultural references with classroom instruction, not only are the students empowered intellectually, emotionally, and socially, but their knowledge, skills, and attitudes are maximized. The NEA defines culturally responsive teachers as: unbiased organizers and mediators of social contexts; caring, committed to, and respectful of their students; skilled at

validating, affirming, facilitating, liberating and empowering children; demonstrating a sense of responsibility for their students; believing in their students' abilities and desire to learn; capable at explicitly teaching skills and building meaningful cultural understanding; experts in instruction, who can manage, challenge, and support their students.

**Culturally responsive discipline.** Just as effective, engaging, and culturally responsive teaching eschews a one-size-fits-all approach, so should the interpretation of student behavior, as well as school disciplinary choices, be approached with multi-cultural competence. Given the taken-for-granted nature of cultural norms among teachers, Gregory and Pharmicia (2004) concluded that culturally relevant discipline would be an appropriate way to close the discipline gap; teachers must not only examine the rule that was broken, but what may have caused the student to break it. They must not immediately blame the student or their race, and responses to misbehavior should not be exclusively punitive. Furthermore, cultivating a teacher's sense of cross-cultural competency is an important way of raising their efficacy in addressing student behavior (Cooper, 2002).

McAllister and Irvine's 2002 study on the role of empathy in teaching culturally diverse students provides a prime example of how multicultural training can influence a teacher's approach to discipline. One participant admitted that when an African American student had told her that she would have allowed him to sit wherever he pleased if only he were White, she would have taken action to address his comment had she not been a part of the multicultural program. Instead of letting a statement anger her and put her on the defensive, she was able to understand how the student felt and take a different approach to his statement (McAllister & Irvine, 2002). The multicultural training program used in this study therefore aims to help teachers take on the perspective of their students and reassess seemingly defiant behaviors.

**Cross-cultural competency.** As briefly touched on above, cross-cultural competency represents a critical dimension of multicultural literacy in education. There are many ways to enhance cross-cultural competency. Researchers argue that low-income Black students are most successful in classrooms that employ culturally relevant practices and materials (Hillard, 1995). Parallels between the school and home environments are also important; teachers can be more culturally responsive when they understand their students' cultural background and preexisting knowledge. They are more likely to prevent opportunities for student failure by using a mutually defined set of expectations in the classroom (Irvine, 1990).

Furthermore, schools should foster professional development in their current teachers by offering training programs aimed at increasing cross-cultural competence (Fenning & Rose, 2007). Acknowledgement of racial identity and racism is a crucial step towards promoting equality and fairness within the school setting (Tatum, 2001). Professional development should also include a focus on cultural misunderstandings caused by differing styles of communication – how can a student's comments in the classroom be misinterpreted and escalated into a 'discipline exchange' (Vavrus & Cole, 2002)?

Culturally competent and highly effective teachers have been found to provide culturally relevant teaching in the classroom, and were connected with their students by fostering a comfortable and structured, rather than competitive, learning environment (Ladson-Billings, 1994). Cultural-competency workshops should help teachers clearly define classroom and school-wide expectations for behavior, as well as discussing the underlying causes for teachers' fear of loss of control in the classroom (Fenning & Rose, 1997). Ultimately, teachers who are culturally informed will be better equipped to effectively manage the classroom and approach discipline from a proactive, rather than reactive, framework.

**Self-efficacy beliefs and classroom management.** Because teachers' sense of efficacy, or their judgment of their own capabilities, has been linked to their special education referral decisions (Podell & Soodak, 1993), classroom behavior management is another area of training that may positively impact student outcomes. Teachers' efficacy beliefs not only affect the effort they invest in teaching and the goals they set, but relates to greater levels of persistence and resilience in the face of setbacks, which in turn enables them to be less critical of students when they make errors (Ashton & Webb, 1986) and to work longer with a student who is struggling (Gibson & Dembo, 1984). In fact, lower efficacy in teachers is related to more punishment (Tschannen-Moran et al., 1998; Woolfolk Hoy & Hoy, 1990).

The use of classroom behavior management strategies significantly influence students' rates of on-task behavior as well as the teacher-student relationship (Behnke, 2007), and can serve to increase a teacher's sense of efficacy in managing student behaviors. Furthermore, Safran and Safran's 1985 study found that teachers rated a student's behavior as less manageable and more severe when they were operating within a disruptive classroom setting, rather than in a nondisruptive setting. In a 1993 study Merrett and Wheldall, three quarters of the teachers interviewed reported that they were dissatisfied with their initial training in this area.

Unfortunately this lack of training continues today; a 2014 review conducted by the National Council on Teacher Quality found that in most of the 122 teacher preparation programs they studied, classroom management strategies were scattered throughout the curriculum and rarely received the connected and intensive focus, nor actual opportunities for practice, needed. Perhaps even more discouragingly, it was also discovered that most of those teacher preparation programs do not draw from research when choosing which classroom management strategies to teach. It is therefore no wonder that classroom management was considered "the top problem,"

by teachers in a 2013 survey (Greenberg, Putman, & Walsh, 2014). Clearly, this is an area of training deserving more attention when considering ways to increase teacher efficacy, which in turn affects student-teacher relationships, and ultimately, student outcomes.

**Teacher-student interactions and relationships.** Ultimately, the goal in multi-culturally competent teaching practices is to build teacher efficacy and enhance teacher-student interactions and relationships. The relationship to the teacher is one predictor of student well-being (Van Petegem et al. 2007), and the quality of teacher-student relationships is directly related to the quality of student learning (Cornelius-White, 2007). Furthermore, a teacher's strategies for creating positive, safe, caring and inclusive cultures help promote pro-social values (McGrath and Noble, 2010), which in turn promotes a healthier social environment among peers within the classroom and school; research has repeatedly shown that the student-teacher relationship plays a significant role in both academic success and social/emotional development (Ray et al, 2008).

Also well documented is a cultural gap between students and teachers; according to the Center for American Progress in 2011, 40 percent of school-age students in the U.S. were students of color, while teachers of color only consisted 17 percent of the teaching force. These numbers are particularly troubling when it has been found that a racial match between students and teachers leads to measurable achievement gains, particularly for African American students (Dee, 2004). Although such academic gains may be due to better student-teacher relationships that resulted from the racial match, drawing upon minority teachers could not be the only solution. Ultimately, it is the training that teachers receive that will effectively determines the quality of the student-teacher relationship. Considering that predictors for defiant behavior among African American students are their trust in teacher authority, their perception on the level of caring from the teacher, as well as the level of expectation their teacher had of them

(Gregory & Weinstein, 2008), student-teacher relationships are especially important as a protective factor in disproportionate disciplinary practices.

### **Implications for Future Research**

Results of this study indicate that implicit bias was predictive of disciplinary choices regardless of whether educators identified themselves as White or Non-White, further analysis also suggested the possibility that educator ethnicity may be a potential moderator in the effect of implicit bias on discipline choices. In fact, higher levels of implicit bias among Non-White participants resulted in higher discipline ratings than it did for White participants who had comparable levels of implicit bias. However, participants were grouped into either White or Non-White groups due to the limited number of respondents within each of the ethnic minority categories. Further study is recommended to include larger sample sizes of each category so that differences between these groups can be better examined, with a look into how implicit biases compare to self-reported, explicitly-held beliefs.

Contrary to our hypothesis, results of this study did not find any significant effect for bias on decisions for special education referral items, and this may be due to the nature of the behaviors described; no specific scenario involving special education consideration was included within the vignette. Further considerations are needed in this area of research, to determine which mediating factors may be putting students at greater risk for over-identification for special education.

Further research is also recommended in the area of debiasing techniques as an effective intervention strategy for disproportionality in discipline. A 2012 study by Devine et. al., for example, found that a multifaceted intervention aimed at decreasing bias through increasing awareness of bias, increasing concern about discrimination, and teaching strategies to reduce

bias, effectively lowered levels of bias as measured by the IAT both 4 and 8 weeks after the intervention. Elements of the intervention, including the providing a menu of debiasing techniques, with periodic check-ins regarding the participant's use of those strategies, can easily be translated into training provided within the context of a teacher education program or workshop.

IAT scores serve as one measure of intervention effectiveness, but other measures of actual discriminatory outcomes are equally, if not more, important; a controlled study examining how in particular such an intervention actually affects the disciplinary choices among teachers would greatly inform future steps for standardizing educator training to combat disproportionality. Effective interventions rarely take one workshop or training session; whether such an intervention approach is successful in reducing race-based discrimination in real situations outside of the laboratory remains to be seen.

The study also aimed to discover whether a redeemable student characteristic significantly affected educators' disciplinary choices. Although no significant effects were found, further research is recommended to identify possible student behaviors that serve as protective factors against educator practices leading to the discipline gap. This area of research is especially important in informing possible low-cost but effective interventions for students and educators to close the discipline gap.

### **Limitations**

As with all studies, this study possesses specific limitations that are important to discuss and be aware of when interpreting the findings. First, the majority of participants of this study were recruited as graduates from the same university in the Northwest Region of the United States; further study is recommended to confirm these findings across a more varied pool of

subjects. A second limitation is the use of vignettes over the use of actual student data.

However, this slight drawback is not prohibitive; the vignette approach has been shown to be valid and effective in eliciting actual responses comparable to responses to a real-life situation (Evans et al., 2015; Gould, 1996).

Finally, although this study provides important findings indicating that implicit biases may play a role in disproportionality, the findings also suggest the presence of other factor(s) that account for educators' punitive discipline responses. As mentioned previously in the discussion, this may include insufficient training in classroom management strategies, personal beliefs or prior experiences supportive of punitive discipline, or sense of efficacy in handling behaviors in the classroom. Further study is needed to identify these factors, so that appropriate interventions may be developed.

### **Conclusion**

The purpose of this study was to examine the role of implicit biases on educators' disciplinary and referral decisions. There is an ethical and moral imperative that all students, regardless of their cultural or ethnic background, should have equal access to an appropriate education—one that meets their learning needs and adequately prepares them for a successful future. Thus, by shedding light on the impact of implicit bias on the discipline gap, this study hopes to serve as an instigator for further research into effective interventions that will not only eliminate the discipline gap, but also help to institute practices that will eradicate the education debt and school-to-prison pipeline, and ultimately, establish justice and equity in education.

### References

- Altonji, J.G., & Doraszelski, U. (2005). The role of permanent income and demographics in black/white differences in wealth. *Journal of Human Resources* University of Wisconsin Press, 40(1).
- Alvarez, L. (2013, December 3). Seeing the toll, schools revise zero tolerance. *The New York Times*, pp. A1.
- Artiles, A. J., Trent, S C., & Kuan, L. A. (1997). Learning disabilities research on ethnic minority students: An analysis of 22 years of studies published in selected refereed journals. *Learning Disabilities Research & Practice*, 12, 82–91.
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York: Longman.
- Bakken, T., & Kortering, L. (November 01, 1999). The Constitutional and Statutory Obligations of Schools To Prevent Students with Disabilities from Dropping Out. *Remedial and Special Education*, 20, 6, 360-66.
- Balfanz, R., Spiridakis, K., Neild, R. C., & Legters, N. (December 07, 2003). High-poverty secondary schools and the juvenile justice system: How neither helps the other and how that could change. *New Directions for Youth Development*, 2003, 99, 71-89.
- Ballenger, C. (1999). *Teaching other people's children: Literacy and learning in a bilingual classroom*. New York: Teachers College Press.
- Bargh, J. A. (2007). *Social psychology and the unconscious: The automaticity of higher mental processes*. New York: Psychology Press.
- Baron, J. (1985). *Rationality and intelligence*. Cambridge [Cambridgeshire: Cambridge University Press.

- Barter, C. & Renold, E. (1999). The use of vignettes in qualitative research. *Social Research Update*, 25, <http://www.soc.surrey.ac.uk/sru/SRU25.html>
- Berlak, A., & Moyenda, S. (2001). *Taking it personally: Racism in the classroom from kindergarten to college*. Philadelphia: Temple University Press.
- Bermudez, A.B. & Rakow, S.J. (1990). Analyzing teachers' perceptions of identification procedures for gifted and talented Hispanic limited English proficient (LEP) students at-risk. *The Journal of Educational Issues of Language Minority Students*. 7. 21-33.
- Betts, J. R., & Grogger, J. (August 01, 2003). The impact of grading standards on student achievement, educational attainment, and entry-level earnings. *Economics of Education Review*, 22, 4.)
- Bock, S. J., Savner, J. L., & Tapscott, K. E. (September 01, 1998). Suspension and Expulsion: Effective Management for Students?. *Intervention in School and Clinic*, 34, 1, 50-52.
- Bourdieu, P. (1973). *Cultural Reproduction and Social Reproduction*. Knowledge, Education and Cultural Change, edited by R.K. Brown. London: Tavistock.
- Bowditch, C. (November 01, 1993). Getting Rid of Troublemakers: High School Disciplinary Procedures and the Production of Dropouts. *Social Problems*, 40, 4, 493-509.
- Bowers, C.A., & Flinders, D.J. (1990). *Responsive teaching: An ecological approach to classroom patterns of language, culture, and thought*. Teachers College Press (New York).
- Breaden, M.C., (2008). "Teacher-Quality Gap Examined Worldwide," *Education Week*. Retrieved from: <http://www.edweek.org/ew/articles/2008/02/06/22report-1.h27.html>

- Brigham, J. C. (September 01, 1971). Racial Stereotypes, Attitudes, and Evaluations of and Behavioral Intentions Toward Negroes and Whites. *Sociometry*, 34, 3, 360-380.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, Mass: Harvard University Press.
- Brooks, K., Schiraldi, V., & Ziedenberg, J. (August 01, 2001). SCHOOL HOUSE HYPE: TWO YEARS LATER, Washington, DC, Justice Policy Institute and Covington, KY, Children's Law Center, Inc., 2000, 34 pp. Sage Race Relations Abstracts, 26, 3.)
- Brophy, J. E., & Good, T. L. (1974). *Teacher-student relationships: causes and consequences*. New York: Holt, Rinehart and Winston.
- Brown, M. C., & Bartee, R. S. D. (2007). *Still not equal: Expanding educational opportunity in society*. New York: Peter Lang.
- Campbell-Whatley, G.D., & Gardner III, R. (2002). *Strategies and procedures for designing proactive intervention with culturally diverse populations of students with emotional or behavioral disorders and their families/caregivers*. Arlington, VA: Council for Children with Behavioral Disorders.
- Ceci, S. J. (1996). *On Intelligence: A bio-ecological treatise on intellectual development* 2nd ed. Cambridge, MA: Harvard University Press.
- Chinn, P. C., & Hughes, S. (1987). *Representation of minority students in special education classes*. *Remedial and Special Education*, 8, 41-46.
- Clotfelter, C.T., H.F. Ladd, and J.L. Vigdor, 2002 "Who Teaches Whom? Race and the Distribution of Novice Teachers." *Economics of Education Review*, 24 (2005), pp. 377-392.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale: L. Erlbaum Associates.
- Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A metaanalysis. *Review of Educational Research, 77*, 113–143.
- Cornell, D., & Mayer, M. (2010). Why do school order and safety matter? *Educational Researcher, 39*(1), 7–15.
- Correll, J., Park, B., Judd, C.M., & Wittenbrink, B. (2002). The police officer's dilemma: Using race to disambiguate potentially threatening individuals. *Journal of Personality and Social Psychology, 83*, 1314–1329.
- Cunningham, M. (1999). African American adolescent males' perceptions of their community resources and constraints: A longitudinal analysis. *Journal of Community Psychology, 5*, 569 - 588.
- D'Amato, J. (1993). *Resistance and compliance in minority classrooms*. In E. Jacob and C. Jordan (Eds.), *Minority education: Anthropological perspectives* (pp. 181-207). Norwood, NJ: Ablex Publishing Co.
- Darley, J.M., Gross, P.H. (1983). A hypothesis-confirming bias in labeling effects. *Journal of Personality and Social Psychology, 44*, 20-33.
- Dee, T.S. (2004) The race connection: Are teachers more effective with students who share their ethnicity? *Education Next, 4*(2).
- DeMeis, D., & Turner, R. (1978). Effects of students' race, physical attractiveness, and dialect on teacher evaluations. *Contemporary Educational Psychology, 3*, 77–86.

- Denning, C. B., Chamberlain, J. A., & Polloway, E. A. (2000). An evaluation of state guidelines for mental retardation: Focus on definition and classification practices. *Education and Training in Mental Retardation and Developmental Disabilities, 35*, 226–232.
- Devine, P. Coolbaugh K., and Jenkins, S. 1998. *Disproportionate minority confinement: lessons learned from the five states*. Washington, D.C: U.S. Department of Justice, Office of Justice Programs, Office of Justice and Delinquency Prevention.
- Devine, P. G., & Elliot, A. J. (1995). Are racial stereotypes really fading? The Princeton trilogy revisited. *Personality and Social Psychology Bulletin, 11*, 1139-1150.
- Devine, P. G., Forscher, P. S., Austin, A. J., & Cox, W. T. L. (2012). Long-term reduction in implicit race bias: A prejudice habit-breaking intervention. *Journal of Experimental Social Psychology, 48*(6), 1267–1278. doi:10.1016/j.jesp.2012.06.003
- Donovan, M. and Cross, C. (eds.), *Minority Students in Special and Gifted Education*. Committee on Minority Representation in Special Education, Washington D.C.: National Academy Press, 2002.
- Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology, 82*, 62–68.
- Drakeford, W. (2004). *Racial disproportionality in school disciplinary practices*. Denver: National Center for Culturally Responsive Educational Systems.
- Duncan, G., Brooks-Gunn, J. & Klebanov, P. (1994). Economic deprivation and early childhood development. *Child Development, 65*(2), 296-318.
- Egan, O. & Archer, P. (1985). The accuracy of teachers' ratings of ability: A regression model. *American Educational Research Journal, 22*, 25-34.

- Evertson, C.M. & Neal, K.W. (2006). *Looking into learning-centered classrooms: Implications for classroom management*. Washington, DC: National Education Association.
- Fazio, Sanbonmatsu, Powell, & Kardes, 1986
- Fenning, P., & Rose, J. (2007). Overrepresentation of African American students in exclusionary discipline: The role of school policy. *Urban Education, 42* (6), 536-559. doi: 10.1177/0042085907305039
- Ferguson, A.A. (2000). *Bad boys: public schools in the making of black masculinity*. Ann Arbor: University of Michigan Press.
- Ferguson, M. J., & Bargh, J. A. (January 01, 2004). How social perception can automatically influence behavior. *Trends in Cognitive Sciences, 8*, 1, 33-9.
- Figlio, David N., and Maurice E. Lucas. 2004. "What's in a Grade? School Report Cards and the Housing Market." *American Economic Review, 94*(3): 591-604.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.
- Fletcher, J. M., Francis, D. J, Shaywitz, S. E., Lyon, G. R., Foorman, B. R., Stuebing, K. K, & Shaywitz, B. A. (1998). Intelligent testing and the discrepancy model for children with learning disabilities. *Learning Disabilities Research and Practice, 13*, 186-203.
- Forness, S.R., Bennett, L., & Tose, J. (1983). Academic deficits in emotionally disturbed children revisited. *Journal of the American Academy of Child Psychiatry, 22*, 140-4
- Fryer, R. G. & Levitt, S.D. (2004). Understanding the black-white test score gap in the first two years of school. *The Review of Economics and Statistics, MIT Press, 86*(2), pages 447-464, 06.
- Furnham, A (1986). Response bias, social desirability and dissimulation. *Personality and individual differences 7*.385-400

- Gardner, H. (1983). *Frames of mind*. New York: Basic Books Inc.
- Gamm, S. (2007). *Disproportionality in special education: Identifying where and why overidentification of minority students occurs*. Bethesda, MD: LRP Publications.
- Gibson, S., & Dembo, M. (1984). *Teacher efficacy: A construct validation*. *Journal of Educational Psychology*, 76, 569–582.
- Gonzalez, J. M., & Szecsy, E. M. (2004). The condition of minority access and participation in Arizona: 2004. Retrieved January 2014 from <http://www.asu.edu/epsAEPIEPSL->
- Graham, S., & Lowery, B. S. (2004). Priming unconscious racial stereotypes about adolescent offenders. *Law and Human Behavior*, 28(5), 483.
- Greenberg, J., Putman, H., & Walsh, K. (2014). Training our future teachers: classroom management. *National Council on Teacher Quality*.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality & Social Psychology*, 74, 1464–1480.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: the implicit association test. *Journal of personality and social psychology*, 74(6), 1464.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: attitudes, self-esteem, and stereotypes. *Psychological review*, 102(1), 4.
- Greenwald, A. G., & Krieger, L. H. (2006). Implicit bias: Scientific foundations. *California Law Review*, 945-967.

- Gregory, A., & Mosely, P. M. (2004). The discipline gap: Teachers' views on the over-representation of African American students in the discipline system. *Equity & Excellence in Education, 37*(1), 18-30. Chicago
- Gregory, A., Skiba, R. J., & Noguera, P. A. (2010). The achievement gap and the discipline gap two sides of the same coin?. *Educational Researcher, 39*(1), 59-68.
- 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, 602-619*.
- Harry, B., & Klingner, J. (2007). Discarding the deficit model. *Educational Leadership, 64*(5), 16.
- Haycock, K. (2002). Toward a fair distribution of teacher talent. *Educational Leadership, 60*(4), 11-15.
- Heath, S. B. (1982). What no bedtime story means: Narrative skills at home and school. *Language in society, 11*(01), 49-76.
- Hedges, L. V., Laine, R. D., & Greenwald, R. (1994). An exchange: Part I: Does money matter? A meta-analysis of studies of the effects of differential school inputs on student outcomes. *Educational researcher, 23*(3), 5-14.
- Hernandez, D. J. (2011). Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation. *Annie E. Casey Foundation*.
- Hilliard, A. G. (1992). Behavioral style, culture, and teaching and learning. *Journal of Negro Education, 370-377*.
- Hollins, E. R., & Oliver, E. I. (Eds.). (1999). *Pathways to success in school: Culturally responsive teaching*. Routledge.

- Hadley, C. A. (1993). Comparing teacher and peer perceptions of aggression: An ecological approach. *Journal of Educational Psychology, 85* (2), 377-384. doi: 10.1037/0022-0663.85.2.377
- Hughes, J., & Kwok, O. (2007). Influence of student- teacher and parent-teacher relationships on lower achieving readers' engagement and achievement in the primary grades. *Journal of Educational Psychology, 99* (1), 39-51. doi: 10.1037/0022-0663.99.1.39
- Hugenberg, K., Bodenhausen, G. V., & McLain, M. (2006). Framing discrimination: Effects of inclusion versus exclusion mind-sets on stereotypic judgments. *Journal of personality and social psychology, 91*(6), 1020.
- Jackson, G., & Cosca, C. (1974). The inequality of educational opportunity in the Southwest: An observational study of ethnically mixed classrooms. *American Educational Research Journal, 11*(3), 219-229.
- Jensen, A. R. (1969). How much can we boost IQ and scholastic achievement. *Harvard educational review, 39*(1), 1-123.
- Jensen, A. R. (1998). *The g factor: The science of mental ability*. Westport, CT: Praeger.
- Poe-Yamagata, E., & Jones, M. A. (2000). *And justice for some: Differential treatment of minority youth in the justice system*. Washington, DC: Youth Law Center.
- Kang, J., Judge Bennett, M., Carbado, D., Casey, P., Dasgupta, N., Faigman, D., Godsil, R., Greenwald, A.G., Levinson, J. & Mnookin, J. (2012). Implicit Bias in the Courtroom, *UCLA Law Review 59*, 1124-1186.
- King, G., Murray, C.J.L., Salomon, J.A., & Tandon, A. (2004). Enhancing the validity and cross-cultural comparability of survey research. *American Political Science Review, 98*, 191-207.

Kozol, J. (2005). *The shame of the nation: The restoration of apartheid schooling in America*.

Random House LLC.

Krosnick, J. A. (1991). Response strategies for coping with the cognitive demands of attitude measures in surveys. *Applied Cognitive Psychology*, 5, 213-236.

Krueger, A. (1996). *School resources and student outcomes: an overview of the literature and new evidence from North and South Carolina* (No. w5708). National bureau of economic research.

Kunjufu, J. (1986). *Motivating and preparing Black youth to work*. Chicago: African American Images.

Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in US schools. *Educational researcher*, 35(7), 3-12.

La Vonne, I. N., McCray, A. D., Webb-Johnson, G., & Bridgest, S. T. (2003). The effects of African American movement styles on teachers' perceptions and reactions. *The Journal of Special Education*, 37(1), 49-57.

Leonard, K. K. E., Pope, C. E., & Feyerherm, W. H. (1995). *Minorities in juvenile justice*. Sage Publications, Inc.

Lee, V. E., & Burkam, D. T. (2002). *Inequality at the starting gate: Social background differences in achievement as children begin school*. Washington, DC: Economic Policy Institute.

Lerner, R. M., & Galambos, N. L. (1998). Adolescent development: Challenges and opportunities for research, programs, and policies. *Annual Review of Psychology*, 49, 413- 443.

- Leone, P. E., Mayer, M. J., Malmgren, K., & Meisel, S. M. (2000). School violence and disruption: Rhetoric, reality, and reasonable balance. *Focus on Exceptional Children, 33*(1).Chicago
- Lewis, C. W., Butler, B. R., Bonner, I. I., Fred, 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.
- Lewis, C. W., James, M., Hancock, S., & Hill-Jackson, V. (2008). Framing African American Students' Success and Failure in Urban Settings A Typology for Change. *Urban Education, 43*(2), 127-153.
- Losen, D. J., & Gillespie, J. (2012). Opportunities suspended: The disparate impact of disciplinary exclusion from school.
- MacLeod, C. M. (1991). Half a century of research on the Stroop effect: an integrative review. *Psychological bulletin, 109*(2), 163.
- Manning, J. B., & Kovach, J. A. (2003). The continuing challenges of excellence and equity. *Closing the achievement gap: A vision for changing beliefs and practices, 2*, 25-47.
- Margo, R. A. (1990). The incidence and duration of unemployment: Some long-term comparisons. *Economics Letters, 32*(3), 217-220.
- McAllister, G., & Irvine, J. J. (2002). The Role of Empathy in Teaching Culturally Diverse Students A Qualitative Study of Teachers' Beliefs. *Journal of Teacher Education, 53*(5), 433-443.

- McCarthy, J. D., & Hoge, D. R. (1987) The social construct of school punishment: Racial disadvantage out of universalistic process. *Social Forces*, 65, 1101-1120. doi: 10.2307/2579025
- McCord, J., Widom, C. S., & Crowell, N. A. (2001). *Juvenile Crime, Juvenile Justice: Panel on Juvenile Crime: Prevention, Treatment, and Control*. Washington, DC: National Academy Press.
- McFadden, A. C., Marsh, G. E., Price, B. J., & Hwang, Y. (1992). A study of race and gender bias in the study of school children. *Education and Treatment of Children*, 15(2), 140-146.
- McGrath, H., & Noble, T. (2010). *Supporting positive pupil relationships: Research to practice*. *Educational and Child Psychology*, 27, 79–90.
- McGuire, C. (March 01, 1976). Simulation technique in the teaching and testing of problem-solving skills. *Journal of Research in Science Teaching*, 13, 2, 89-100.
- Mendez, L. M. R., Knoff, H. M., & Ferron, J. M. (2002). School demographic variables and out-of-school suspension rates: A quantitative and qualitative analysis of a large, ethnically diverse school district. *Psychology in the Schools*, 39(3), 259-277.
- Mercer, J. R. (1973). *Labeling the mentally retarded: Clinical and social system perspectives on mental retardation*. Berkeley: University of California Press.
- Monroe, C. R. (2005). Why Are "Bad Boys" always Black?: Causes of disproportionality in school discipline and recommendations for change. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 79(1), 45-50.
- Monroe, C.R., & Obidah, J.E. (2004) .The impact of cultural synchronization on a teacher's perceptions of disruption: A case study of an African American middle-school classroom. *Journal of Teacher Education* 55 (3):256–268

- Mpofu, E., & Watkins, D. (1997). Self-concept and social acceptance in multiracial African schools: A test of the insulation, subjective culture, and bicultural competence hypotheses. *Cross-Cultural Research*, 31(4), 331-355.
- Herrnstein, R. J., & Murray, C. (1994). The bell curve: The reshaping of American life by differences in intelligence. *New York: Free.*
- National Center for Culturally Responsive Educational Systems. (Fall 2005). Cultural considerations and challenges in response-to-intervention models. An NCCRESt position statement. Retrieved January 2014 from <http://www.nccrest.org/PDFs/rti.pdf>.
- Nier, J. A. (2005). How dissociated are implicit and explicit racial attitudes? A bogus pipeline approach. *Group Processes & Intergroup Relations*, 8(1), 39-52.
- Nishioka, V. M. (2001). *Personal and ecological characteristics of middle school boys labeled emotionally disturbed, learning disabled, and socially maladjusted: More alike than different.*
- 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. (2008). What discipline is for: Connecting students to the benefits of learning. In M. Pollock (Ed.), *Everyday antiracism: Getting real about race in schools.* (pp. 132–137). New York: The New Press.
- Nosek, B. A., & Banaji, M. R. (2001). The go/no-go association task. *Social cognition*, 19(6), 625-666.
- Nunes, T., Schliemann, A. D., & Carraher, D. W. (1993). *Street mathematics and school mathematics.* Cambridge University Press.

- Osher, D., Woodruff, D., & Sims, A. E. (2002). Schools make a difference: The overrepresentation of African American youth in special education and the juvenile justice system. *Racial inequity in special education*, 93-116. Chicago
- Oswald, D. P., Coutinho, M. J., Best, A. M., & Singh, N. N. (1999). Ethnic representation in special education the influence of school-related economic and demographic variables. *The Journal of Special Education*, 32(4), 194-206.
- Oswald, D. P., Coutinho, M. J., Best, A. M., & Nguyen, N. (2001). Impact of sociodemographic characteristics on the identification rates of minority students as having mental retardation. *Journal Information*, 39(5).
- Parks, F. R., & Kennedy, J. H. (2007). The impact of race, physical attractiveness, and gender on education majors' and teachers' perceptions of student competence. *Journal of Black Studies*, 37(6), 936-943.
- Patton, J. M. (1998). The disproportionate representation of African Americans in special education looking behind the curtain for understanding and solutions. *The Journal of Special Education*, 32(1), 25-31.
- Phillips, M., & Chin, T. (2004). School inequality: What do we know. *Social inequality*, 467-519.
- Podell, D. M., & Soodak, L. C. (1993). Teacher efficacy and bias in special education referrals. *The Journal of educational research*, 86(4), 247-253.
- Poulin, F., Dishion, J. & Burraston, B. (2001). 3-year iatrogenic effects associated with aggregating high-risk adolescents in cognitive-behavioral preventative interventions. *Journal of Applied Developmental Science*, 5(4), 214-224. doi: 10.1207/

- Quattrone, G. A., & Jones, E. E. (1980). The perception of variability within in-groups and out-groups: Implications for the law of small numbers. *Journal of Personality and Social Psychology*, 38(1), 141.
- Rausch, M. K., Skiba, R. J., & Simmons, A. B. (2004). *The academic cost of discipline: The relationship between suspension/ expulsion and school achievement*. Bloomington, IN: Center for Evaluation and Education Policy, Indiana University.
- Ray, D. C., Henson, R. K., Schottelkorb, A. A., Brown, A. G., Muro, J. (2008). Effect of short- and long-term play therapy services on teacher-child relationship stress. *Psychology in Schools*, 45(10), 994-1009.
- Ritts, V., Patterson, ML & Tubbs, ME (1992). Expectations, impressions, and judgments of physically attractive students: A review. *Review of Educational Research*, 62(4), 413-426.
- Rosenthal, R., & Jacobson, L. (1992). *Pygmalion in the classroom*: Expanded edition. New York:Irvington.
- Robelen, E. W. (2002). ESEA to boost federal role in education. *Education Week*, 21(16), 28-31.
- Ronzio, C. R., Guagliardo, M. F., & Persaud, N. (2006). Disparity in location of urban mental service providers. *American journal of orthopsychiatry*, 76(1), 37-43.
- Rudman, L. A. (2004). Sources of implicit attitudes. *Current Directions in Psychological Science*, 13(2), 79-82.
- Safran, S., & Safran, J. (1985). *Classroom context and teaches' perceptions of problem behaviours*. *Journal of Educational Psychology*, 77, 20-28.
- Seguin, C.A. & Ambrosio, A.L. (2002). Multicultural vignettes for teacher preparation. *Multicultural Perspectives*, 4, 10-16.

- Sekayi, D. N. R. (2001). Intellectual indignation: Getting at the roots of student resistance in an alternative high school program. *Education, 122*(2), 414-422.
- Shaw, S. R., & Braden, J. P. (1990). Race and gender bias in the administration of corporal punishment. *School Psychology Review, 19* (3), 378-383.
- Skiba, R. J., & Knesting, K. (2001). Zero tolerance, zero evidence: An analysis of school disciplinary practice. *New directions for mental health services, 2001*(92), 17-43.
- Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. (2000). *The color of discipline: Source of racial and gender disproportionality in school punishment*. Bloomington, IN: Indiana Education Policy Center.
- Skiba, R. J., Simmons, A. B., Ritter, S., Gibb, A. C., Rausch, M. K., Cuadrado, J., & Chung, C. G. (2008). Achieving equity in special education: History, status, and current challenges. *Exceptional Children, 74*(3), 264-288.
- Skiba, R.J., Michael, R.S., Nardo, A.C. & Peterson, R. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *Urban Review, 34*, 317-342.
- Skiba, R. J., & Petterson, R. L. (2000). School discipline at a crossroads: From zero tolerance to early response. *Exceptional Children, 66*, 335-347.
- Skiba, R. J., Petterson, R. L., & Williams, T. (1997). Office referrals and suspension: Disciplinary intervention in middle schools. *Education and Treatment of Children, 20*(3), 295- 316.
- Sleeter, C. E. (2001). Preparing teachers for culturally diverse schools research and the overwhelming presence of whiteness. *Journal of teacher education, 52*(2), 94-106.
- Spencer, M. B. (1999). Social and cultural influences on school adjustment: The application of an identity-focused. *Educational Psychologist, 34*(1), 43-57.

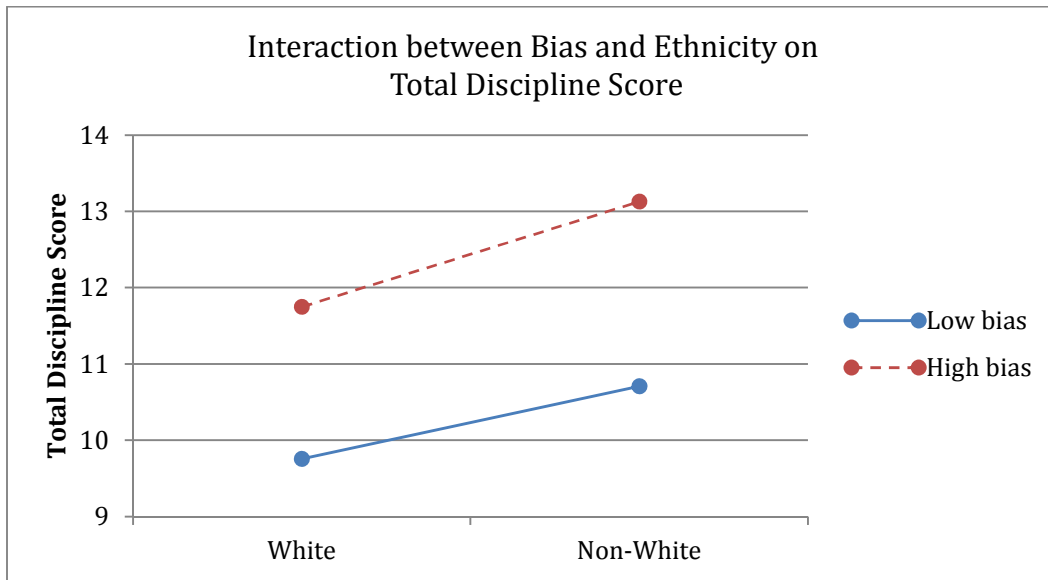
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52, 613–629.
- Sternberg, R. J. (1999). The theory of successful intelligence. *Review of General psychology*, 3(4), 292.
- Stolte, J.F. (1994). The context of satisficing in vignette research. *The Journal of Social Psychology*, 134, 727-733.
- Sugai, G., & Horner, R. H. (1999). Discipline and behavioral support: Preferred processes and practices. *Effective School Practices*, 77(4), 10-22.
- Tenenbaum, H. R., & Ruck, M. D. (2007). Are teachers' expectations different for racial minority than for European American students? A meta-analysis. *Journal of Educational Psychology*, 99(2), 253-273.
- Townsend, B. L. (2000). Disproportionate discipline of African American children and youth: Culturally-responsive strategies for reducing school suspensions and expulsions. *Exceptional Children*, 66, 381-391.
- U.S. Department of Education. (2006). *Twenty-sixth annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: Author.
- U.S. Census Bureau. (2007). *Current Population Reports: Income, Poverty, and Health Insurance Coverage in the United States: 2007* (P60-235). Washington, DC: U.S. Government Printing Office.
- Valdes, G. (1996). *Con Respeto: Bridging the differences between culturally diverse families and schools*. New York: Teachers College Press.
- Van den Bergh, L. (2010). The implicit prejudiced attitudes of teachers: Relations to teacher

- expectations and the ethnic achievement gap. *American Education Research Journal* 47, 2 (497-527).
- Van Petegem, K., Aelterman, A., Rosseel, Y., & Creemers, B. (2007). Student perception as moderator for student wellbeing. *Social Indicators Research*, 83, 447–463.
- Vavrus, F., & Cole, K. (2002). “I didn’t do nothing”: The discursive construction of suspension. *Urban Review*, 34, 87-111.
- Veal, W.R. (2002). Content specific vignettes as tools. *Electronic Journal of Science Education*, 6, 4.
- Viadero, D. (2000a). Lags in minority achievement defy traditional explanations. *Education Week*, 19(28), pp. 1, 18–22.
- Wallace, J. M., Jr., Goodkind, S., Wallace, C. M., & Bachman, J. G. (2008). Racial, ethnic, and gender differences in school discipline among U.S. high school students: 1991–2005. *Negro Educational Review*, 59, 47–62.
- Wald, J. & Kurlaender, M. (2003). Connected in Seattle? An exploratory study of student perceptions of discipline and attachments to teachers. *New Directions for Youth Development: Theory, Practice and Research* 99, 35-54.
- Wald, J., & Losen, D.J. (2003). Defining and redirecting a School to Prison Pipeline. *New Directions for Youth Development*, 99, 9-15. doi: 10.1002/yd.51
- Wason, K.D., Polonsky, M.J., & Hyman, M.R. (2002). Designing vignette studies in marketing. *Australasian Marketing Journal*, 10, 41-58.
- Weinstein, C., Curran, M., & Tomlinson-Clarke, S. (2004) .Toward a Conception of Culturally Responsive Classroom Management. *Journal of Teacher Education*, 55:25-38.

- Wittenbrink, B., & Schwarz, N. (2007). An introduction to the assessment of attitudes with implicit measures. In B. Wittenbrink & N. Schwarz (Eds.), *Implicit measures of attitudes* (pp. 1-13). New York: Guilford Press.
- Wolfe, B. L. & Haveman R. H. (2002). *Accounting for the Social and Non-Market Benefits of Education*
- Wu, S., Pink, W., Crain, R., & Moles, O. (1982). Student suspension: A critical reappraisal. *The Urban Review* 14:245–303.
- Yeager, D. S., Bundick, M. J., & Johnson, B. (2012). The role of future work goal motives in adolescent identity development: A longitudinal mixed-methods investigation. *Contemporary Educational Psychology*, 37, 206–217.
- Yeager, D. S., Purdie-Vaughns, V., Garcia, J., Apfel, N., Brzustoski, P., Master, A., Hessert, W. T., Williams, M. E., & Cohen, G. L. (2013). *Breaking the Cycle of Mistrust: Wise Interventions to Provide Critical Feedback Across the Racial Divide*. *Journal of Experimental Psychology: General*. Advance online publication. doi: 10.1037/a0033906
- Ysseldyke, J., Algozzine, B., & Epps, S. (1983). A logical and empirical analysis of current practice in classifying students as handicapped. *Exceptional Children*, 50, 160-166.
- Zeiderberg, J., & Schiraldi, V. (2002). *Cellblocks or classrooms? The funding of their education and corrections and its impact on African American men*. Washington, DC.
- Zigmond, N. (1993). Learning disabilities from an educational perspective. In G. R. Lyon, D. B. Gray, J. F. Kavanaugh, & N. A. Krasnegor (Eds.). *Better understanding learning disabilities: New views from research and their implications for education and public policies* (pp. 251-272). Baltimore, MD: Paul H. Brookes Publishing Co.

**LIST OF FIGURES**

*Figure 1. The Interaction between Bias and Ethnicity on Total Discipline Score*



**LIST OF TABLES***Table 1. Descriptive Statistics for Black and White Conditions*

<b>Dependent Variables</b>	<b>Mean</b>	<b>SD</b>	<b>Min.</b>	<b>Max.</b>
Detention				
Black condition	3.03	1.35	1	6
White condition	2.65	1.14	1	5
Office discipline referral				
Black condition	3.32	1.18	1	6
White condition	2.88	1.05	1	6
In-school suspension				
Black condition	2.68	1.05	1	5
White condition	2.33	1.00	1	5
Out-of-school suspension				
Black condition	1.88	1.03	1	5
White condition	1.54	.72	1	3
Total punitive discipline				
Black condition	10.90	3.55	4	19
White condition	9.41	2.70	6	17
Referral to student intervention team				
Black condition	5.03	1.05	2	6
White condition	4.93	0.97	3	6
Referral for special education evaluation				
Black condition	3.92	1.06	2	6
White condition	3.62	1.20	2	6
Total special education referral				
Black condition	8.94	1.88	4	12
White condition	8.55	1.78	6	12
Implicit Association Test				
Black condition	.38	.43	-.87	1.02

*Table 2. Results of MANOVA and Effect Size Estimates for Black and White Conditions*

<b>Dependent Variables</b>	<b>F</b>	<b>df</b>	<b>p-value</b>	<b>ES</b>
Multivariate Effect Punitive Discipline	2.64*	4, 143	.04*	–
Detention	6.48**	1, 146	.01*	.82
Office discipline referral	5.70*	1, 146	.02*	.39
In-school suspension	4.38*	1, 146	.04*	.34
Out-of-school suspension	5.30*	1, 146	.02*	.39
Multivariate Effect Special Education Referral	1.29	2, 145	.28	–
Referral to student intervention team	.32	1, 146	.57	.10
Referral for special education evaluation	2.56	1, 146	.11	.26

\**p-value* < .05 \*\**p-value* < .01 \*\*\**p-value* < .001

Table 3. Bivariate Correlations between IAT scores and Punitive Decision Ratings

		IAT	Ethnicity	Years of Experience	Lunch/After school Detention	Office Referral	In-School Suspension	Out-of-School Suspension	Total
IAT	<i>r</i>	-							
	<i>p</i> -value								
Ethnicity	<i>r</i>	.04	-						
	<i>p</i> -value	.76							
Years of Experience	<i>r</i>	.27	.10	-					
	<i>p</i> -value	.05*	.41						
Lunch/After school Detention	<i>r</i>	.31	.07	-.13	-				
	<i>p</i> -value	.02*	.55	.27					
Office Referral	<i>r</i>	.33	.07	-.14	.34	-			
	<i>p</i> -value	.01**	.57	.23	.00**				
In-School Suspension	<i>r</i>	.40	.13	.04	.22	.52	-		
	<i>p</i> -value	.00**	.27	.73	.07	.00***			
Out-of-School Suspension	<i>r</i>	.33	.08	.05	.39	.47	.63	-	
	<i>p</i> -value	.01**	.53	.67	.00**	.00***	.00***		
Total	<i>r</i>	.42	.11	-.08	.65	.78	.76	.80	-
	<i>p</i> -value	.00**	.379	.528	.00***	.00***	.00***	.00***	

\**p*-value < .05 \*\**p*-value < .01 \*\*\**p*-value < .001

*Table 4. Multiple Regression Analysis of the predictive power of Ethnicity, Years of Experience and Bias on Punitive Discipline*

	Model Statistics					Predictor Statistics		
	<b>R</b>	<b>R<sup>2</sup></b>	<b>ΔR<sup>2</sup></b>	<b>F</b>	<b>p</b>	<b>Beta</b>	<b>t</b>	<b>p-value</b>
Model 1	.16	.03	-	.69	.50	-	16.09	.00***
Ethnicity	-	-	-	-	-	.16	1.17	.25
Years of Experience	-	-	-	-	-	-.05	-.33	.75
Model 2	.47	.22	.19	4.93	.00**	-	13.98	.00***
Ethnicity	-	-	-	-	-	.17	1.34	.19
Years of Experience	-	-	-	-	-	-.17	-1.30	.20
IAT	-	-	-	-	-	.46	3.62	.00**

\**p-value* < .05 \*\**p-value* < .01 \*\*\**p-value* < .001

*Table 5. Interaction Effects of Ethnicity and Years of Experience with Bias on Punitive Discipline*

\**p*-value < .05 \*\**p*-value < .01 \*\*\**p*-value < .001

	Model Statistics					Predictor Statistics		
	<b>R</b>	<b>R<sup>2</sup></b>	<b>ΔR<sup>2</sup></b>	<b>F</b>	<b>p</b>	<b>Beta</b>	<b>t</b>	<b>p-value</b>
Model 1	.42	.18	-	11.68	.00**	-	15.81	.00***
IAT	-	-	-	-	-	.42	3.42	.00**
Model 2	.51	.26	.08	6.02	.00**	-	16.33	.00***
IAT	-	-	-	-	-	.42	2.89	.00**
IAT x Ethnicity	-	-	-	-	-	.26	1.98	.05
IAT x Years of Experience	-	-	-	-	-	-.21	-1.51	.14

*Table 6. Descriptive Statistics for Punitive Discipline between Subjects*

Condition	Mean		Standard Deviation	
	Redeemable	Non-Redeemable	Redeemable	Non-Redeemable
Black	11.58	10.36	3.97	3.32
White	9.77	9.08	2.50	2.81

*Table 7. Results of Tests of Between-Subjects Effects for Punitive Discipline*

Source	F	df	p-value
Condition	6.21	1, 104	.01*
Profile	2.31	1, 104	.13
Condition * Profile Interaction	1.18	1, 104	.67

*Table 8. Descriptive Statistics for Special Education Referrals between Subjects*

Condition	Mean		Standard Deviation	
	Redeemable	Non-Redeemable	Redeemable	Non-Redeemable
Black Condition	9.33	9.12	1.58	1.88
White Condition	8.67	8.52	2.01	1.42

*Table 9. Results of Tests of Between-Subjects Effects for Special Education Referrals*

Source	F	df	p-value
Condition	3.37	1, 104	.07
Profile	.27	1, 104	.60
Condition * Profile Interaction	.01	1, 104	.92

### Appendix A: Student Vignette

**Instructions:** You are going to be asked to imagine that you are a 5<sup>th</sup> grade teacher with 30 students in your classroom. Read the following vignette from this perspective about one of the students in your classroom. Immediately after reading it, answer the following questions as honestly as possible.

In your 5<sup>th</sup> grade class, you are experiencing difficulty with a newly transferred student, Tyrell Williams, who came from a neighboring school district at the beginning of the academic year. He is performing below grade level in both reading and math, and rarely raises his hand to volunteer answers, unless directly asked. The biggest challenge you are having with him, however, is not his academics but his behavior. Despite having a few friends, he has trouble making and keeping new ones. In class, he seems to have endless energy and frequently distracts other students when he speaks out of turn, holds side conversations, and he often gets out of his seat without asking. He has also on numerous occasions ignored classroom instructions or raised his voice in protest against doing the assigned task. Outside of the classroom, he is very physical and gets involved in confrontations with peers because of teasing that results with someone getting his or her feelings hurt. Tyrell's behavioral difficulties have been persistent throughout the year, despite moving his seat to the front of the class and giving him verbal warnings. Attempts to reach his parents for a meeting have been unsuccessful thus far.

On this particular day, Tyrell has gotten up multiple times during the 20-minute math lesson to sharpen his pencil, get a drink of water, find a tissue to loudly blow his nose, etc. When asked to work with a peer on an in-class assignment, he ignores you and finds his way to another table and engages in conversation with his friend. After several prompts to get back on task, he turns away and slowly walks back to his seat when you ask him why he isn't working

## THE ROLE OF IMPLICIT BIAS

with his assigned partner.

**APPENDIX B:**

***Rosa Parks Elementary K-8***

*“Education is the key to unlock the golden door of freedom” □ - George Washington Carver*

**Student Progress Report**

**Name:** Williams, Tyrell Lamar **Gender:** Male □ **Date of Birth:** 12/6/04 **Grade:** 5

**School Year:** 2013-14

<b>Subject</b>	<b>Trimester 1</b>	<b>Trimester 2</b>	<b>Trimester 3</b>
Reading	2	2	
Language	2	3	
Math	2	2	
Science	3	3	
<b>Scale Key</b>			
4 = Exceeds expectations			
3 = Meets expectations			
2 = Working towards expectations			
1 = Below Expectations			
<b>Social/Personal Adjustment</b>	<b>Trimester 1</b>	<b>Trimester 2</b>	<b>Trimester 3</b>
Gets along well with others	2	2	
Uses self control	1	1	
Actively listens and participates	2	1	
Completes assignments	2	2	
Organizational skills	3	2	
<b>Attendance</b>	<b>Trimester 1</b>	<b>Trimester 2</b>	<b>Trimester 3</b>

## THE ROLE OF IMPLICIT BIAS

Tardy	15	16	
Absent	11	9	
Days present	49	51	

Conference Requested: By Parent  By Teacher

**APPENDIX C: QUESTIONNAIRE**

1. Would you use detention as a method of correcting the student's behavior?

1	2	3	4	5	6
Definitely Not	No	Probably No	Probably Yes	Yes	Definitely Yes

2. Should the student be referred to the office for his behaviors?

1	2	3	4	5	6
Definitely Not	No	Probably No	Probably Yes	Yes	Definitely Yes

3. Should the student receive in-school suspension if his behaviors continue?

1	2	3	4	5	6
Definitely Not	No	Probably No	Probably Yes	Yes	Definitely Yes

4. Should the student receive out-of-school suspension if his behaviors continue?

1	2	3	4	5	6
Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

5. How likely would you be to refer the student for special education services if the behavior persisted?

1	2	3	4	5	6
Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

6. To what extent would you refer this student to a Student Study Team to be considered for a special education evaluation?

1	2	3	4	5	6
Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

7. Do you think this student will eventually need to be placed in a self-contained classroom so his behaviors do not interfere with and negatively impact other students' ability to learn?

1	2	3	4	5	6
Definitely Not	No	Probably No	Probably Yes	Yes	Definitely Yes

8. How likely do you think it is that the student's problem behaviors can be effectively changed in the general education classroom with basic behavior support strategies?

1	2	3	4	5	6
Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

1. **Age:**

2. **Race/Ethnicity:** Caucasian(non-Hispanic) African American (non-Hispanic)  
Hispanic Asian American Indian/Alaskan Native Other

3. **Sex:** Male Female

4. **Current Position in Education:**

5. **Number of Years as an Educator:**