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Understanding the Antecedents of the "School-to-Jail" Link: The Relationship Between Race and School Discipline

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UNDERSTANDING THE ANTECEDENTS OF THE "SCHOOL-TO-JAIL" LINK: THE RELATIONSHIP BETWEEN RACE AND SCHOOL DISCIPLINE

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One of the strongest findings in the juvenile delinquency literature is the relationship between a lack of school success, school disengagement, and involvement in the criminal justice system. This link has been deemed the "school-to-jail pipeline." To date, research has not clarified the antecedents or origins of this school failure and disengagement, although it is known that it occurs at relatively young ages. This study examines one possible source: racial bias in school discipline experienced during the elementary school years. Using a multi-level analysis, we examine whether African-American elementary school students are more likely to receive disciplinary infractions while controlling for individual-level, classroom-level, and school-level factors. Our findings, robust across several models, show that African-American children receive more disciplinary infractions than children from other racial categories. Classroom factors, school factors, and student behavior are not sufficient to account for this finding. We also find that school-level characteristics (e.g., percentage of black students) are related to overall discipline levels, consistent with a racial threat hypothesis. These findings have important implications for the school-to-jail literature and may point to one explanation for why minority

students fare less well and are more likely to disengage from schools at a younger age than whites.

I. INTRODUCTION

By virtually any measure, African-American youth fare worse in school than whites. For example, black students show less interest and effort in school activities than whites and have lower grades. They are more likely to be held back, more likely to be in lower academic tracks, more likely to be in special education, more likely to drop out before graduating, and less likely to go to college.[1] In addition, compared with whites, blacks have higher rates of crime and incarceration as adolescents and young adults.[2] These are not unrelated facts. For example, Lochner and Moretti concluded that "schooling reduces criminal activity,"[3] and the connection between black academic failure and crime has been the subject of much research and debate.[4]

Research is increasingly beginning to examine the connections between school failure and later contact with the criminal justice system for minorities. Various explanations for this "school-to-jail" (which some have

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[1] *See* JAY R. CAMPBELL ET AL., U.S. DEPT OF EDUC., TRENDS IN ACADEMIC PROGRESS: THREE DECADES OF STUDENT PERFORMANCE (2000), *available at* http://nces.ed.gov/naep/pdf/main1999/2000469.pdf; Adam Gamoran, *American Schooling and Educational Inequality: A Forecast for the 21st Century*, 34 SOC. EDUC. 135 (2001); Larry V. Hedges & Amy Nowell, *Changes in the Black-White Gap in Achievement Test Scores*, 72 SOC. EDUC. 111 (1999); Roslyn Arlin Mickelson, *Subverting* Swann*: First- and Second-Generation Segregation in the Charlotte-Mecklenburg Schools*, 38 AM. EDUC. RES. J. 215 (2001); Roslyn Arlin Mickelson, *When Are Racial Disparities in Education the Result of Racial Discrimination? A Social Science Perspective*, 105 TCHRS. C. REC. 1052 (2003); James M. Patton, *The Disproportionate Representation of African Americans in Special Education: Looking Behind the Curtain for Understanding and Solutions*, 32 J. SPECIAL EDUC. 25 (1998).

[2] Michael J. Leiber, *Disproportionate Minority Confinement (DMC) of Youth: An Analysis of State and Federal Efforts to Address the Issue*, 48 CRIME & DELINQ. 3 (2001).

[3] Lance Lochner & Enrico Moretti, *The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports*, 94 AM. ECON. REV. 155, 183 (2004).

[4] The magnitude of the relationship between education and crime, moreover, may not be trivial. Lochner and Moretti estimated that a one percent increase in the high school completion rate for men would save as much as $1.4 billion annually in reduced costs from crime for society. *Id.* at 183–84. This social saving is above and beyond any private benefit accruing to individuals from greater educational attainment. *See generally* Spencer Holland, *PROJECT 2000: An Educational Mentoring and Academic Support Model for Inner-City African American Boys*, 65 J. NEGRO EDUC. 315 (1996); Lance Lochner, *Education, Work, and Crime: A Human Capital Approach*, 45 INT'L ECON. REV. 811 (2004); Antonio Merlo & Kenneth I. Wolpin, The Transition from School to Jail: Youth Crime and High School Completion Among Black Males (Penn. Inst. Econ. Res., Paper No. 08-033), *available at* http://pier.econ.upenn.edu/.

deemed the "school-to-prison pipeline") trajectory for blacks have been offered.[5]   Among these are accounts noting racial differences in socioeconomic background,[6] the family life of black children, including their lack of cultural capital,[7] and the existence of an oppositional subculture and identity among young blacks, wherein academic success is dismissed and ridiculed as being "too white."[8] Another possibility is that the school itself is partially to blame for the academic problems of black students, because it creates a hostile learning environment, which may be formed very early in children's educational lives—in elementary school. In other words, school disengagement and the academic troubles of young blacks could be due to feelings of racial hostility or disparate treatment by teachers, particularly disciplinary treatment,[9] and it is this racial hostility that in part leads students to disengage from school and ultimately find crime more economically attractive than legitimate labor. These explanations would theoretically link school disengagement and later involvement in the criminal justice system by a common theme of hostility toward white authority, which has its origin in the school and the coercive response of the school in reacting to this conflict with punishment. Ferguson has expressed this possibility perhaps most clearly in her account of life inside one West Coast elementary school:

> What I observed at Rosa Parks during more than three years of fieldwork in the school, heard from the boy himself and his teachers, from his teachers, from his mother, made it clear that just as children were tracked into futures as doctors, scientists, engineers, word processors, and fast-food workers, there were also tracks for some children, predominately African American and male, that led to prison. This book tells the story of the making of these bad boys, not by members of the criminal

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[5] *See* CATHERINE Y. KIM ET AL., THE SCHOOL-TO-PRISON PIPELINE: STRUCTURING LEGAL REFORM (2010); Kelly Welch & Allison Ann Payne, *Racial Threat and Punitive School Discipline*, 57 SOC. PROBS. 25 (2010).

[6] Oscar A. Barbarin et al., *Family Practices and School Performance of African American Children*, *in* AFRICAN AMERICAN FAMILY LIFE: ECOLOGICAL AND CULTURAL DIVERSITY 227, 238 (Vonnie C. McLoyd et al. eds., 2005); Rebecca Donovan, *Path Analysis of a Theoretical Model of Persistence in Higher Education Among Low-Income Black Youth*, 21 RES. HIGHER EDUC. 243 (1984); Timothy Z. Keith & Mark J. Benson, *Effects of Manipulable Influences on High School Grades Across Five Ethnic Groups*, 86 J. EDUC. RES. 85 (1992).

[7] *See generally* PRUDENCE L. CARTER, KEEPIN' IT REAL: SCHOOL SUCCESS BEYOND BLACK AND WHITE (2005); Barbarin, *supra* note 6.

[8] *See* ELIJAH ANDERSON, CODE OF THE STREET: DECENCY, VIOLENCE, AND THE MORAL LIFE OF THE INNER CITY (1999); Signithia Fordham & John U. Ogbu, *Black Students' School Success: Coping with the 'Burden of Acting White,'* 18 URB. REV. 176 (1986).

[9] Brenda L. Townsend, *The Disproportionate Discipline of African American Learners: Reducing School Suspensions and Expulsions*, 66 EXCEPTIONAL CHILD. 381, 382–83 (2000).

justice system on street corners, or in shopping malls, or video arcades, *but in school and by school, through punishment*.[10]

Ferguson's thesis in her qualitative work and the thesis of our own work, presented here quantitatively, is that because of a conflict of racial cultures and the existence of stereotypes, black youth are singled out for punishment in school, independent of their actual behavior. While we do not test the entire sequelae in this Article, we argue that this phenomenon is part of what begins the process of school disengagement for minority youth, which ultimately will land them in jail in disproportionate numbers.

Psychological research has indicated that youths are likely to disengage from school and academic pursuits if they perceive negative information about themselves or their racial group within the school environment. Steele, for example, has argued that when students perceive that racial stereotypes are being employed by teachers, they are more likely to perform poorly, which eventually leads them to detach themselves from the educational process.[11] One particularly virulent outcome of racial stereotyping is racial discrimination.[12] Ogbu has called this the "Pygmalion" problem;[13] white expectations of blacks are internalized, leading to a sort of self-fulfilling prophecy. A stereotype by teachers that black students are academically deficient and hostile to the teachers' goals could easily lead teachers to see black students as "troublemakers" or menaces.[14] With this mindset, teachers may respond more punitively to the conduct of black students than toward identical behavior by white students. An appeal to a modified version of racial threat theory provides one possible reason for this disparate treatment in the school. While racial threat theory has traditionally implied that racial minorities pose a political and economic threat to whites, it is reasonable to also expect that whites will resort to more coercive means when minorities pose a *cultural threat*. Both because minority students are less likely to buy into a predominately white school culture with its emphasis on academic achievement and at least the appearance of docility (due to their own cultural values that

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[10] ANN ARNETT FERGUSON, BAD BOYS: PUBLIC SCHOOLS IN THE MAKING OF BLACK MASCULINITY 2 (2000) (emphasis added).

[11] *See generally* Claude Steele, *A Threat in the Air: How Stereotypes Shape Intellectual Identity and Performance*, 52 AM. PSYCHOL. 613 (1997); Claude Steele & Joshua Aronson, *Stereotype Threat and the Intellectual Test Performance of African Americans*, 69 J. PERSONALITY & SOC. PSYCHOL. 797 (1995).

[12] *See generally* Charles R. Lawrence III, *The Id, the Ego, and Equal Protection: Reckoning with Unconscious Racism*, 19 STAN. L. REV. 317 (1987) (arguing that racially offensive behavior does not have to be overt).

[13] JOHN U. OGBU, BLACK AMERICAN STUDENTS IN AN AFFLUENT SUBURB: A STUDY OF ACADEMIC DISENGAGEMENT 77–84 (2003).

[14] Ferguson, *supra* note 10, at 20–21.

emphasize detachment and aloofness) and because teachers are likely to believe that minority youth do not buy into white school culture (because of stereotypes), teachers in the school are more likely to resort to formal punishment against minority children than against their white counterparts. This is particularly true when minorities threaten the status of white teachers in the school. In Ferguson's words, "school labeling practices and the exercise of rules operate as part of a hidden curriculum to marginalize and isolate black male youth in disciplinary spaces and brand them as criminally inclined."[15]

This racial stereotyping and subsequent disparate treatment has implications for minority students. There is evidence that racial discrimination directed against black students is related to a host of negative developmental consequences, including diminished academic success and disengagement from school.[16] This educational disengagement in turn would make it difficult for black youth to secure legitimate employment, making a life of crime more attractive or more convenient—what we call the school-to-jail link.[17]

Much of this research on racial discrimination in school is based upon analyses that fail to control for important variables, particularly student behavior, or have failed to simultaneously consider both individual student- and school-level factors, both of which are important in explaining disciplinary practices.[18] Thus, most previous work has been unable to

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[15] *Id.* at 2.

[16] *See generally* Steele, *supra* note 11; Steele & Aronson, *supra* note 11. *See also* MICHELLE FINE, FRAMING DROPOUTS: NOTES ON THE POLITICS OF AN URBAN INNER CITY HIGH SCHOOL (1991); Aryn M. Dotterer, Susan M. McHale & Ann C. Crouter, *Sociocultural Factors and School Engagement Among African American Youth: The Roles of Racial Discrimination, Racial Socialization, and Ethnic Identity*, 13 APPLIED DEVELOPMENTAL SCI. 61 (2009); Chance W. Lewis et al., *African American Male Discipline Patterns and School District Response Resulting Impact on Academic Achievement: Implications for Urban Educators and Policy Makers*, 1 J. AFRICAN AM. MALES EDUC. 10 (2010); Patricia Phelan et. al., *Navigating the Psychosocial Pressures of Adolescence: The Voices and Experiences of High School Youth*, 31 AM. EDUC. RES. J. 415 (1994); Ciara Smalls et al., *Racial Ideological Beliefs and Racial Discrimination Experiences as Predictors of Academic Engagement Among African American Adolescents*, 33 J. BLACK PSYCHOL. 299 (2007); Carol A. Wong et al., *The Influence of Ethnic Discrimination and Ethnic Identification on African American Adolescents' School and Socioemotional Adjustment*, 71 J. PERSONALITY 1197 (2001).

[17] *See* KIM ET AL., *supra* note 5, at 113.

[18] Some of the studies that have failed to simultaneously examine both individual and contextual (school) factors include: Virginia Costenbader & Samia Markson, *School Suspension: A Study with Secondary School Students*, 36 J. SCH. PSYCHOL. 59 (1998); Jeremy J. Lietz & Mary K. Gregory, *Pupil Race and Sex Determinants of Office and Exceptional Educational Referrals*, 3 EDUC. RES. Q. 61 (1978); Russell J. Skiba et al., *Office Referrals and Suspension: Disciplinary Intervention in Middle Schools*, 20 EDUC. & TREATMENT CHILD. 295 (1997); Russell J. Skiba et al., *The Color of Discipline: Sources of*

clarify why racial disparity exists with respect to school discipline, regardless of the measures used, perhaps jumping to discrimination-oriented conclusions. In this Article, we hope to contribute to this literature by examining the perhaps more inferentially difficult question as to whether or not teachers actually do discriminate against black students in the imposition of school discipline, and whether any disparate treatment is manifested at a more aggregate level and at a relatively young age (elementary school). We are thus able to address only the first part or one of the antecedents of the school-to-jail link. However, we argue that this is likely to be the most important component of the process—to the extent that the school-to-jail link can be addressed early on, the chances for dissolving the link might increase.

With data from a large number of elementary students who attended different schools within a large school district, we try to determine whether teachers are more likely to discipline black students after taking into account other possible contributory factors, including their conduct, their performance in school, and their attitudes or demeanor. By focusing on the treatment of elementary school students, we push back the window to the early years of school experience. This is a period of developmental importance, with implications for the entire life course. School scholars have long noted that racial differences in school performance, even such later-appearing events as dropping out of school, appear very early in the educational lives of students, as early as the first grade.[19] Discriminatory treatment by teachers in the early elementary school years, as students are getting introduced to the school context, may have particularly important developmental consequences later in life.[20]

In addition to analyzing the relationship between race and school discipline at the individual level, we ask whether the racial composition of the school's student body is related to the use of disciplinary measures by teachers. This is an explicit attempt to model the contextual effect on individual outcomes. We try, therefore, to get some understanding of the school racial climate, or the cultural context within which individual teacher-to-student relationships occur—a cultural climate that is surely

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Racial and Gender Disproportionality in School Discipline, 34 URB. REV. 317 (2002) [hereinafter Skiba et al., *The Color of Discipline*].

[19] *See* Doris R. Entwisle et al., *First Grade and Educational Attainment by Age 22: A New Story*, 110 AM. J. SOC. 1458 (2005) [hereinafter Entwisle et al., *First Grade*]; Doris R. Entwisle et al., *The First-Grade Transition in Life Course Perspective*, *in* HANDBOOK OF THE LIFE COURSE 229 (Jeylan T. Mortimer & Michael J. Shanahan eds., 2003) [hereinafter Entwisle et al., *First-Grade Transition*].

[20] *See generally* Entwisle et al., *First Grade*, *supra* note 19; Entwisle et al., *First-Grade Transition*, *supra* note 19; Robert Haveman et al., *Childhood Events and Circumstances Influencing High School Completion*, 28 DEMOGRAPHY 133 (1991).

racially influenced. Racial threat theory has long argued that when the proportion of the black population increases beyond a particular threshold within a given environment, the white population feels threatened by the black population, especially if the white group views minorities as economic or political threats.[21] Whites who perceive blacks as a threat to their position of dominance are hypothesized by racial threat theory to respond to the perceived menace with the use of punitive legal policies. This argument can easily be extended to the school context to the extent that it is possible for racial minorities to constitute a *cultural* threat to whites, as well as a political and economic threat.[22] For example, school discipline can be understood within the context of racial threat theory because teachers (especially white teachers), with their culture of academic success and need for control over the school environment, may easily perceive black students as a source of trouble or a threat to their ability to control the cultural context of what goes on within the school. With a multi-level analysis, we examine the possibility that the level of school discipline in a school is related to the proportion of black students in the school. If the proportion of black students in a school is correlated with its use of discipline, then we have important contextual information (though clearly not strong confirmation) that helps one to understand the relationship between race and teachers' use of discipline at the individual level. While our data does not allow us to investigate the perceptions of those authorities that use discipline, we can assess whether school composition affects punishment behaviors, independent of other causally important factors. In doing so, we contribute information about some of the processes antecedent to the construction of the school-to-jail pipeline.

II. PRIOR LITERATURE

Prior studies examining the distribution of discipline in schools have consistently found that racial/ethnic minority students are more likely to be disciplined than students from majority groups.[23] One of the earliest studies to examine this question was completed in 1975 by the Children's Defense Fund, which found that African-American students were much more likely

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[21] *See* Welch & Payne, *supra* note 5, at 29–30; *see also* Steward J. D'Alessio et al., *The Effect of Racial Threat on Interracial and Intraracial Crimes*, 31 SOC. SCI. RES. 392 (2002).

[22] *See* FERGUSON, *supra* note 10, at 20–21; Townsend, *supra* note 9, at 383–84.

[23] RUSSELL SKIBA & M. KAREGA RAUSCH, THE RELATIONSHIP BETWEEN ACHIEVEMENT, DISCIPLINE, AND RACE: AN ANALYSIS OF FACTORS PREDICTING ISTEP SCORES 2–3 (2004), *available at* http://www.iub.edu/~safeschl/ChildrenLeftBehind/materials.html; Pamela Fenning & Jennifer Rose, *Overrepresentation of African American Students in Exclusionary Discipline: The Role of School Policy*, 42 URB. EDUC. 536, 536–37 (2007).

than whites to receive school suspensions.[24] This study sparked further, more sociologically-oriented research on the issue of racial disparities in school discipline. The majority of studies in this area have focused on the middle and high school years.[25] The findings from this body of work have nearly universally shown that minority students, especially African Americans, are more likely than whites to be the targets of school punishments such as referral to the office or suspension. Observational and ethnographic studies have confirmed these findings.[26]

While less prevalent, the studies that have examined racial disparity in elementary school punishment have complemented the high school studies.[27] One problem with this early round of research on race and school discipline, however, is that the studies failed to control for important variables to determine whether the observed racial disparities were due to other factors such as the attitudes or actual behaviors of the students. More recent work has made strides in this direction.

Studies have found, for example, that students who are perceived to undervalue education and lack motivation are overrepresented as recipients of school discipline.[28] This may be related to racial disparities in school discipline. However, it is important to assess to what extent, if any, racial differences in behavior, rather than attitudes or perceptions of teachers, cause these disparities in discipline. Certain research has indicated that at least part of the racial disparities in official statistics can be attributed to

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[24] Skiba et al., *The Color of Discipline*, *supra* note 18, at 333.

[25] *See* AARON KUPCHIK, HOMEROOM SECURITY: SCHOOL DISCIPLINE IN AN AGE OF FEAR (2010); MASS. ADVOC. CENTER, THE WAY OUT: STUDENT EXCLUSION PRACTICES IN BOSTON MIDDLE SCHOOLS (1986); Costenbader & Markson, *supra* note 18; Joy Kaufman et al., *Patterns in Office Referral Data by Grade, Race/Ethnicity, and Gender*, 12 J. POSITIVE BEHAV. INTERVENTION 44 (2010); Aaron Kupchik, *Things Are Tough All Over: Race, Ethnicity, Class and School Discipline*, 11 PUNISHMENT & SOC'Y INT'L J. PENOLOGY 291 (2009); Joe D. Nichols et al., *A Darker Shade Of Gray: A Year-End Analysis of Discipline and Suspension Data*, 32 EQUITY & EXCELLENCE IN EDUC. 43 (1999); Skiba et al., *The Color of Discipline*, *supra* note 18.

[26] *See* Edward W. Morris, *"Tuck in That Shirt!" Race, Class, Gender, and Discipline in an Urban School*, 48 SOC. PERSP. 25 (2005); Edward W. Morris, *"Ladies" or "Loudies"? Perceptions and Experiences of Black Girls in Classrooms*, 38 YOUTH & SOC'Y 490 (2007); *see also* Kupchik, *supra* note 25.

[27] *See* Costenbader & Markson, *supra* note 18; Dotterer, McHale & Crouter, *supra* note 16; *see also* Shi-Chang Wu et al., *Student Suspension: A Critical Reappraisal*, 14 URB. REV. 245 (1982); Maurice C. Taylor & Gerald A. Foster, *Bad Boys and School Suspensions: Public Policy Implications for Black Males*, 56 SOC. INQUIRY 498 (1986); Josh Kinsler, Racial Disparities in School Discipline: Racism or Rational Choice? (2006) (unpublished manuscript) (on file with author).

[28] Tamera B. Murdock et al., *Middle-Grade Predictors of Students' Motivation and Behavior in High School*, 15 J. ADOLESCENT RES. 327, 336–42 (2000).

differences in participation in delinquency.[29] Even so, there is evidence that a nontrivial amount of racial disparity in punishment with respect to the criminal justice system is due to discrimination or bias.[30] Given the connection between school discipline and other negative outcomes,[31] fleshing out the causes of racial disparities in discipline should be an increasing research priority.

Despite the importance of the question of whether racial disparities in school discipline are a function of differences in behavior or treatment by teachers, few studies regarding racial disparity in school discipline have attempted to litigate between these competing explanations. Certain work has examined the types of sanctions received by different student racial groups to infer whether there are differences in behavior.[32] Although these studies have not been able to directly examine actual student behavior, they have concluded that blacks are not disproportionately involved in serious infractions. Additionally, some work has argued that minorities are more likely to be given extreme forms of punishment, despite not being involved in more serious acts.[33] In fact, recent research has indicated that racial disparities in punishment are exacerbated at more punitive measures of discipline.[34]

Other studies have examined multiple data sources to answer the crucial question of the cause of racial disparities in discipline.[35] Horner and colleagues found that even among those rated most unruly by their peers, black students were more likely to be disciplined. However, their focus was on peer rejection/acceptance not the causes of racial disparity in punishment. Other studies have used limited data to examine whether race

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[29] *See generally* Michael J. Hindelang et al., *Correlates of Delinquency: The Illusion of Discrepancy Between Self-Report and Official Measures*, 44 AM. SOC. REV. 995 (1979).

[30] Becky Pettit & Bruce Western, *Mass Imprisonment and the Life Course: Race and Class Inequality in U.S. Incarceration*, 69 AM. SOC. REV. 151, 153 (2004).

[31] Christine Bowditch, *Getting Rid of Troublemakers: High School Disciplinary Procedures and the Production of Drop-Outs*, 40 SOC. PROBS. 493 (1993).

[32] *See generally* Skiba et al, *The Color of Discipline*, *supra* note 18. *See also* Anna C. McFadden et al., *A Study of Race and Gender Bias in the Discipline of Handicapped School Children*, 24 URB. REV. 239 (1992); Steven R. Shaw & Jeffrey B. Braden, *Race and Gender Bias in the Administration of Corporal Discipline*, 19 SCH. PSYCHOL. REV. 278 (1990).

[33] Skiba et al, *The Color of Discipline*, *supra* note 18, at 331–32; Welch & Payne, *supra* note 5, at 26–29.

[34] *See* Welch & Payne, *supra* note 5, at 37.

[35] *See generally* Dotterer, McHale & Crouter, *supra* note 16; Costenbader & Markson, *supra* note 18. *See also* Stacy B. Horner et. al, *The Relation of Student Behavior, Peer Status, Race, and Gender to Decisions About School Discipline Using CHAID Decision Trees and Regression Modeling*, 48 J. SCH. PSYCHOL. 135 (2010); John D. McCarthy & Dean R. Hoge, *The Social Construction of School Discipline: Racial Disadvantage Out of Universalistic Process*, 65 SOC. FORCES 1101 (1987).

is associated with punishment independent of behavior.[36]   These studies continue to show that race is significantly associated with being disciplined.

While many more recent studies have found that African-American students are more likely to be disciplined in school even controlling for possible confounding factors, it is not clear what role the school context plays.[37]   The school disciplinary environment is important both directly, because it is a possible source of spuriousness in the relationship between race and school discipline, and indirectly, because it serves as the context for understanding any observed racial disparity. Several studies have noted that official discipline policies and practices are not uniform across schools.[38] The importance of this is that differences in disciplinary policies at the school level may largely drive racial disparities in school discipline observed at the individual level. If minorities are concentrated in schools with harsher disciplinary policies, then unless school context is controlled, minorities will mistakenly appear to be discriminated against at the individual level. Wu and colleagues did incorporate school-level variables in their study, but not in a multi-level contemporaneous fashion.[39] Nonetheless, and important for our purposes, school-level characteristics, such as teacher attitudes, school suspension practices, and school governance, were significantly associated with a student's likelihood of being disciplined. One recent study has examined this issue. Welch and Payne investigated whether school racial context explains use of punishment.[40] They found that in the aggregate, school racial composition was related to use of punitive discipline. However, their measure of student behavior was student-reported delinquency, thus possibly failing to capture legal behavior that is eligible for punishment. In addition, Welch and Payne did not include multi-level (e.g., HLM) models. Thus, while they showed that "racial threat" may be operating on the macro level, they were

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[36] *See generally* Dotterer, McHale & Crouter, *supra* note 16; Costenbader & Markson, *supra* note 18. *See also* Michael Rocque, *Office Discipline and Student Behavior: Does Race Matter?* 116 AM. J. EDUC. 557 (2010).

[37] *See supra* note 27.

[38] *See generally* Fenning & Rose, *supra* note 23; Dotterer, McHale & Crouter, *supra* note 16; Costenbader & Markson, *supra* note 18. *See also* Frank Bickel & Robert Qualls, *The Impact of School Climate on Suspension Rates in the Jefferson County Public Schools*, 12 URB. REV. 79 (1980); Linda Mendez et al., *School Demographic Variables and Out-Of-School Suspension Rates: A Quantitative and Qualitative Analysis of a Large, Ethnically Diverse School District*, 39 PSYCHOL. IN SCHS. 259 (2002).

[39] *See* Wu et al., *supra* note 27.

[40] Welch & Payne, *supra* note 5, at 31–35.

unable to determine if and how macro and micro factors operate conterminously on use of punitive discipline.[41]

Controlling for school context in a study of racial disparity in school discipline is important substantively because this context may provide insight into the meaning of any individual level effect. In understanding why teachers may use race as one basis for meting out punishment in school, one can appeal to the racial threat literature. According to racial threat theory,[42] an increase in the size of a minority group will be viewed as menacing by a majority group because it threatens the majority's position of dominance, be it political, economic, or in the case of the school, cultural. The majority group responds by increasing efforts at social control, particularly through punitive methods, in an attempt to retain control and dominance. Research in criminology has consistently shown that as the percentage of the black population increases in a particular jurisdiction, so do legal efforts to control that population.[43]

We are not, of course, implying that elementary school students pose a political or economic threat to teachers, but they can pose a threat to the *cultural hegemony* of teachers. They can passively resist the cultural doctrine that the teachers are pressing or they can adopt a counter-cultural position of opposition. If white teachers perceive that African-American students have a subculture and adopt identities that are in opposition to official school culture, it is reasonable to think that they would view them as a possible threat to their cultural control.[44] That is, black students may

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[41] A further limitation of this study is that by aggregating the data, the analyses could not isolate disciplinary incidents targeting blacks. That is, their measure of punishment mixed both black and white incidents. Thus, the scenario where increases in the number of black students caused greater punishment for whites could not be ruled out.

[42] *See generally* HUBERT M. BLALOCK, JR., TOWARD A THEORY OF MINORITY-GROUP RELATIONS (1967); Herbert Blumer, *Race Prejudice as a Sense of Group Position*, 1 PAC. SOC. REV. 3 (1958).

[43] *See generally* David Jacobs & Robert M. O'Brien, *The Determinants of Deadly Force: A Structural Analysis of Police Violence*, 103 AM. J. OF SOC. 837 (1998); David Jacobs & Jason T. Carmichael, *The Political Sociology of the Death Penalty: A Pooled Time-Series Analysis*, 67 AM. SOC. REV. 109 (2002); David Jacobs & Jason T. Carmichael, *The Politics of Punishment Across Time and Space: A Pooled Time-Series Analysis of Imprisonment Rates*, 80 SOC. FORCES 61 (2001); David Jacobs et al., *Who Survives on Death Row? An Individual and Contextual Analysis*, 72 AM. SOC. REV. 610 (2007); Bradley Keen & David Jacobs, *Racial Threat, Partisan Politics, and Racial Disparities in Prison Admissions: A Panel Analysis*, 47 CRIMINOLOGY 209 (2009); Stephanie L. Kent & David Jacobs, *Minority Threat and Police Strength From 1980 to 2000: A Fixed-Effects Analysis of Linear and Interactive Effects in Large U.S. Cities*, 43 CRIMINOLOGY 731 (2003).

[44] *See generally* ANDERSON *supra* note 8; FERGUSON *supra* note 10; KUPCHIK, *supra* note 25; Kupchik, *supra* note 25; Morris, *"Tuck in that Shirt!"*, *supra* note 26. *See also* John U. Ogbu, *Frameworks—Variability in Minority School Performance: A Problem in Search of an Explanation*, *in* MINORITY EDUCATION: ANTHROPOLOGICAL PERSPECTIVES 83 (Evelyn

be singled out as "troublemakers" not necessarily because of what they do but because of what they think and what they represent.[45]

The racial threat literature in criminology and sociology has suggested that the functional form of the relationship between percentage of African Americans and official sanctions may be either linear or quadratic.[46] The possibility of a quadratic effect exists because scholars have argued that while a larger percentage of blacks may constitute a threat for whites, this threat exists only up to some point, at which it then reverses. The quadratic possibility reflects the fact that as the black population increases the risk that blacks victimize other blacks, rather than whites, increases. In a spirit of "benign neglect,"[47] this behavior is much less threatening to whites and less likely to result in punitive actions by whites.

In this Article, we add to the existing literature on racial disparities in school punishment by looking at the relationship between individual student race and discipline imposed by teachers after controlling for differences in the perceived conduct of the student, grades, school-related attitudes, and other factors. In addition, we examine relationships between teacher and school characteristics and disciplinary practices by estimating a multi-level model that controls for the absence of independence of observations in clustered data (e.g., when students are nested within teachers within schools). We also use the school-level data to examine if the racial composition of the school is related to the risk of being disciplined. In addition, our respondents are elementary school students. We view this to be particularly well-suited to our purposes, since a disengagement from school, including bad grades, poor attendance, and dropping out are not events but a process which begins in the early years of school.[48] Given the direct and substantively nontrivial relationship that has been found with

Jacob & Cathie Jordan eds., 1993); John U. Ogbu, *Cultural Problems in Minority Education: Their Interpretations and Consequences—Part One: Theoretical Background*, 27 URB. REV. 189 (1995); John U. Ogbu, *Cultural Problems in Minority Education: Their Interpretations and Consequences—Part Two: Case Studies*, 27 URB. REV. 271 (1995).

[45] *See generally* Carla R. Monroe, *Why Are "Bad Boys" Always Black? Causes of Disproportionality in School Discipline and Recommendations for Change*, 79 CLEARING HOUSE 45 (2005); Townsend, *supra* note 9.

[46] David Jacobs & Daniel Tope, *The Politics of Resentment in the Post-Civil Rights Era: Minority Threat, Homicide, and Ideological Voting in Congress*, 112 AM. J. SOC. 1458, 1464 (2007).

[47] *See generally* Jacobs et al., *supra* note 43; Allen E. Liska & Mitchell B. Chamlin, *Social Structure and Crime Control Among Macro Social Units*, 90 AM. J. SOC. 383 (2005).

[48] *See generally supra* notes 19 and 20. *See also* Karl L. Alexander et al., *The Dropout Process in Life Course Perspective: Early Risk Factors at Home and School*, 103 TEACHERS C. REC. 760 (2001); Karl L. Alexander et al., *First Grade Behavior: Its Short and Long-Term Consequences for School Performance*, 64 CHILD DEV. 801 (1993).

increasing frequency between educational attainment and crime,[49] a more nuanced understanding of the early factors that contribute to the disengagement from school is imperative and timely.

III. METHODS

A. SAMPLE

The respondents for this research included more than 22,000 students from forty-five elementary schools in a large suburban/urban/rural consolidated school district in a mid-Atlantic state. The data, collected as part of a larger study, span the 2005–2006 school year. Teacher and official reports were gathered in winter and spring 2006. Students were in grades K–5, and they ranged in age from five years to eleven years old with roughly equal proportions of students at each grade level.[50] Fifty-two percent of the students were male, and the distribution by race/ethnicity was as follows: Caucasian (42.9%), African American (20.3%), Hispanic (25.6%), Asian (7.0%), and other (4.2%).[51] In addition to information from students, data were collected from approximately 1,100 teachers. Teachers' demographic information was collected, including their educational background and teaching experience, in addition to attitudinal measures that pertained to their students. Finally, we created aggregate data on the forty-five schools from information taken from students and teachers. Because of the way the data were collected, we were not able to match all the students with their teachers, nor were we able to match all teachers with their students.[52] In addition, approximately 2% of the students were lost with listwise deletion of missing data.[53] We retained 19,645 students (approximately 89% of the total number of students), 990 teachers (approximately 90% of the total number of teachers), and all 45 of the schools. Together, these data are hierarchical with three levels: students nested within classrooms and classrooms nested within schools. The

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[49] *See* Lochner & Moretti, *supra* note 3; Pettit & Western, *supra* note 30; Welch & Payne, *supra* note 4, at 31–35.

[50] Students over the age of eleven were dropped from the analyses.

[51] A very small majority of "others" were of "unspecified" race/ethnicity. This "other" racial group was dropped from the analyses.

[52] At times, the original research team collected data from students in a class but not their teacher and from teachers who did not have classrooms in the student data collection.

[53] In a listwise deletion of missing cases, a case is dropped if it has missing data on any relevant variable. For example, if seven variables are used in a given analysis and a case is missing information on any one of the seven variables, it is dropped from the analysis. This form of missing data deletion is also referred to as "complete case analysis."

hierarchical nature of the data will be taken into account in our analytic strategy described below.

B. MEASURES

1. Dependent Variables

The dependent variables in the study were (a) whether a student was referred to the vice-principal's office for misconduct and (b) the number of times that a student was referred at any time during the 2005–2006 school year. Referrals were almost exclusively initiated by teachers for misconduct such as truancy, showing disrespect to a teacher, inattention in class, disrupting a class, and fighting. Because of the relatively low rate of more serious behavior, we collapse all forms of misconduct resulting in discipline into one measure. This information was recorded by the principal's office and is an official, rather than self-reported, measure of school disciplinary action. The number of office disciplinary referrals is a count variable, but unsurprisingly, it is highly skewed with a long right tail. Out of the nearly 22,000 students, 93% of them did not receive a single office referral during the year, 4% received only one referral, and six students received more than twenty. We created a truncated count variable of the number of office referrals by collapsing six or more office referrals into six referrals. This count variable ranges from zero to six or more referrals.

2. Independent Variables

a. Student Measures

Respondent's *race* was measured with a series of dummy variables. Based upon the student's self-reported designation, each youth was assigned to one of four possible racial/ethnic groups: white, Hispanic, Asian, or African-American. In all analyses the respondent's race was treated as a separate dummy variable with white as the reference category. There were no direct measures of the social class (for example, parental education, occupation, or income) of the youth available in the dataset. As a proxy for social class, therefore, we used official information on whether the youth was eligible for a government funded *free lunch program*. Our measure of social class, then, was a binary variable coded as "1" if the youth received a free school lunch.[54] We also included measures of the

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[54] *See* Skiba et al., *The Color of Discipline*, *supra* note 18; *see also* M. KAREGA RAUSCH & RUSSELL SKIBA, DISPROPORTIONALITY IN SCHOOL DISCIPLINE AMONG MINORITY STUDENTS

respondent's *age* (number of years old), and *gender* (male). Since both the risk and number of school referrals might be related to the degree to which the youth was academically engaged in school, we calculated a composite measure of the youths' grade point average, ranging from 0–4, that was combined from five different subjects (math, science, social studies, reading, and writing) and based upon five previous school terms (*grades*). We also calculated a dummy variable that measured whether or not the student had ever been kept back a year in school (*retained*). We measured whether or not the child was in a *special education* program or a program for those where *English was a second language*. In both instances, a dummy variable coded as "1" was used for those who were enrolled in each respective program. To measure the amount of "*exposure time*" that each youth was at risk for a disciplinary referral, we used a measure of the number of days during the 2005–2006 school year that the youth attended (*days attended*).

In addition to all the above measures, which were based either on self-reports from students or information obtained from school administrators, our data included measures of each student's behavior or demeanor/attitude in school that were obtained from teachers' reports. With these teacher ratings, we can ultimately assess the effect of race on the probability and number of disciplinary referrals while controlling for student conduct and attitudes. Teachers' reports on each student were gathered by the research team during the school year. These rating assessments were based upon a number of content areas with several items comprising each area. One of these content areas was the *closeness* of the relationship between the student and teacher as measured by the teachers' response to the following eight items: (1) I share a warm and caring relationship with this child; (2) This child and I always seem to be struggling with each other; (3) If upset this child will seek me out for support; (4) This child values his relationship with me; (5) This child's feelings toward me can be unpredictable or change suddenly; (6) This child is sneaky and manipulative with me; (7) Dealing with this child drains my energy; and (8) This child spontaneously shares his experiences and feelings with me. Responses to these teacher rating items ranged from 0 ("never") to 3 ("always"). After reverse coding items (2), (5), (6), and (7), a composite *closeness* scale was created by summing and averaging the responses to the eight items (*Cronbach's alpha* = .84). A scale measuring the introversion/extroversion of each student was assessed by eight items: the student (1) interacts easily with teachers, (2) seems sad, (3) makes friends easily, (4) seems withdrawn and doesn't get involved

IN INDIANA: DESCRIPTION AND ANALYSIS (2004), *available at* http://www.iub.edu/~safeschl/ ChildrenLeftBehind/pdf/2a.pdf.

with other students, (5) seems anxious or worried, (6) is shy or timid around classmates or adults, (7) socializes and interacts with classmates, and (8) is a loner. After reverse coding items (1), (3), and (7), the items were summed and averaged to form a composite scale of *introversion* (*Cronbach's alpha* = .85). We created a measure of each student's bad behavior by summing the teacher's responses to the following eight items: the student (1) is disruptive, (2) breaks rules, (3) defies teachers or other school personnel, (4) argues or quarrels with others, (5) teases or taunts others, (6) takes others' property without permission, (7) is physically aggressive or fights with others, and (8) gossips or spreads rumors (*Cronbach's alpha* = .90). We then summed and averaged the responses to create a measure of *bad behavior*. Finally, we created a measure of the extent to which the teacher thought that the youth was able to focus and concentrate on school work. The teacher rated each student on the extent to which they: (1) were easily distracted, (2) completed their assignments independently, (3) appeared eager to learn, (4) worked hard to overcome obstacles in their school work, (5) easily quit when their school work becomes difficult, (6) able to stay on task, (7) able to pay attention, and (8) learn up to their ability. After reverse coding items (1) and (5), responses were summed and averaged to create a *concentration* scale (*Cronbach's alpha* = .92).

b. Teacher Measures

At level 2, we have information about each of the 990 classrooms and each of the teachers. Since students who are in classrooms where bad behavior is prevalent may be more at risk to receive a disciplinary report, we have a measure of *classroom behavior* by aggregating from the individual-level measure of teacher reports. High scores on this measure reflect classrooms where there is a greater concentration of disciplinable behavior. By similarly aggregating up from the individual level, we created measures of the mean proportion of the class that received a *free school lunch*, and the *mean age* and the *mean grade point average* of the students. From each teacher, we have information about their *education level* (1 = bachelor's degree; 5 = Ph.D. degree), race (*white teacher*), gender (*male teacher*), the number of years of teaching experience (*years experience*), and the number of years in the school (*years at school*) where the research was conducted.

c. School Measures

Aggregating from teacher information, we created school-level data on the *average educational level*, the *number of years of experience* in teaching, and the *average number of years that the teachers have worked* at that particular school. To measure the social class composition of the

school, we used a measure of the percent of the students in the school who participate in a *free lunch program*. To measure the *general behavior* of the school or school climate, we aggregated from the student-level measure of *bad behavior*. We measured the *academic climate* at the school by aggregating from the individual level the students' grade point average. We also created two measures of the racial composition of the school, the percent of the student population that is black (*percent black*), and the percent black student population squared (*percent black squared*). Descriptive information about all variables can be found in Table 1.

IV. ANALYTIC STRATEGY

Depending on the distribution of the dependent variable, we utilized logistic regression (for dichotomous outcomes) and negative binomial regression (for counts). Both the logistic and negative binomial regressions are based on a modeling strategy that takes into account the three-level nested nature of the data (persons within classrooms within schools). As is now well known, a statistical problem of error dependency emerges with such nested data because students within the same classrooms share a common teacher, and students and teachers share a common school environment. Students within a given class are, therefore, more likely to share a common learning and disciplinary environment than students in a different class with a different teacher. Because of this, assumptions concerning independence of observations in standard regression analyses do not hold. Similarly, classrooms in the same school are likely to have a more common social, disciplinary, and cultural context compared to those in different schools. In such a situation, there are likely to be correlated residual errors within classrooms and within schools, and such dependence will lead to downwardly biased standard errors of estimated structural coefficients. Hierarchical linear models have been developed to explicitly take into account the nested nature of data such as these.[55] Hierarchical linear models have the added advantage of allowing estimated coefficients at one level (say, the student level) to vary at the next nested level (teachers). That is, we can estimate at the individual level the effect of being an African-American student on the odds or count of disciplinary referrals, and estimate whether or not that parameter differs for male and female teachers or white and non-white teachers or those with less versus more teaching experience. Our primary interest in this Article is in estimating the effect of a level 1 (student-level) variable (race of the

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[55] STEPHEN W. RAUDENBUSH & ANTHONY S. BRYK, HIERARCHICAL LINEAR MODELS: APPLICATIONS AND DATA ANALYSIS METHODS 38–45 (2d ed. 2002).

Table 1

Descriptive Statistics for Individuals, Teachers, and School

INDIVIDUALS (n = 19,645)	Mean	Std. Dev.	Min.	Max.
Free Lunch Program	.30	.46	0.00	1.00
English as Second Language	.21	.41	0.00	1.00
Special Education	.11	.31	0.00	1.00
Retained	.02	.13	0.00	1.00
Days Attended	167.07	18.66	7.00	178.00
Age	9.57	1.74	6.29	12.77
Grades	3.06	.58	0.11	4.00
Male	.52	.50	0.00	1.00
Asian	.07	.25	0.00	1.00
African-American	.20	.40	0.00	1.00
Hispanic	.25	.43	0.00	1.00
White	.45	.50	0.00	1.00
Concentration	2.06	.73	0.00	3.00
Bad Behavior	.28	.46	0.00	3.00
Introversion	.55	.52	0.00	3.00
Closeness	3.25	.77	0.00	4.00

TEACHERS (n = 990)	Mean	Std. Dev.	Min.	Max.
Proportion Free School Lunch	.33	.26	0.00	1.00
Classroom Behavior	.31	.22	0.00	1.63
Mean Age	9.67	1.65	6.86	12.57
Mean GPA	3.04	.31	1.70	3.88
Teacher's Education Level	2.50	1.01	1.00	4.00
Teacher's Years Experience	3.17	1.30	1.00	5.00
Teacher's Years at School	2.31	1.12	1.00	5.00
White Teacher	.89	.32	0.00	1.00
Male Teacher	.06	.24	0.00	1.00

SCHOOLS (n = 45)	Mean	Std. Dev.	Min.	Max.
Mean Level of Bad Behavior	.30	.26	.18	.52
Proportion Free Lunch	.33	.23	.03	.71
Mean GPA	3.03	.20	2.59	4.29
Teacher's Educational Level	2.72	.19	2.26	3.15
Years Experience	3.26	.38	2.59	4.29
Years at School	2.27	.43	1.00	3.25
Percent Free Lunch	.33	.23	.03	.71
Percent Black	20.94	11.12	.72	51.50
Percent Black Squared	559.40	549.79	.52	2652.40

student) on the outcome variable (disciplinary reports) net of covariates where all estimatedparameters have corrected standard errors. To correct for correlated errors across students and teachers, all models are estimated with HLM3 software.[56]

The data in this study are nested in three levels: the student (level 1), the classroom or teacher (level 2), and the school (level 3). For both logistic and negative binomial regressions, a three-level HLM model was estimated. All dichotomous variables were uncentered for ease of interpretation, and the continuous measures were all grand mean centered. Results for the unit-specific model with robust standard errors are reported. We allow level 2 variables (teacher attributes) to affect the level 1 intercept and the level 1 slope for the regression coefficient of being an African-American student. The latter are essentially interaction terms for the effect of black student x teacher attributes on either the log odds (logistic regression) or count (negative binomial) of a disciplinary referral. We allow level 3 variables (aggregated school attributes) to affect the intercept. All other effects are fixed across level 2 and level 3. The degrees of freedom for level 2 and 3 are not based on the total number of cases but rather the number of units in each level.[57]
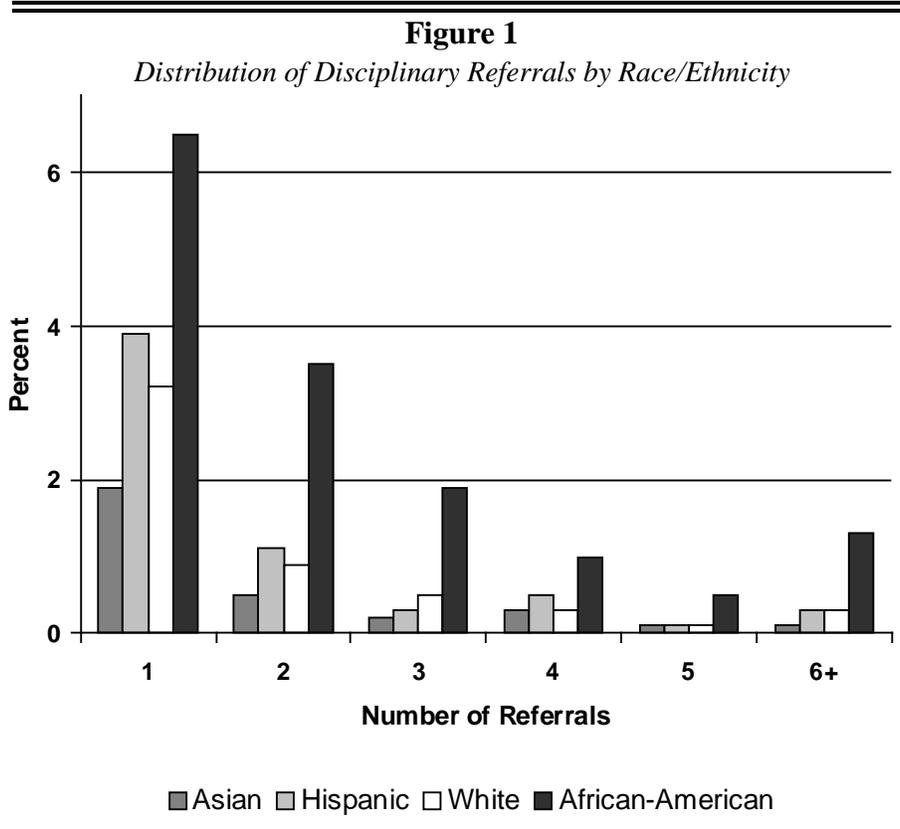
V. RESULTS

In Figure 1, we report the racial distribution of the count of referrals for students who reported at least one disciplinary report in the 2005–2006 school year. Ninety-seven percent of the Asian students, 93.9% of Hispanic students, and 94.8% of the white students received no disciplinary reports, while only 85.3% of the African-American students received no disciplinary reports that year. Put differently, nearly 15% of black students were disciplined compared to 6% of whites. Black students were, therefore, more than two times as likely to receive at least one disciplinary report compared with students of all other races. For those above the zero threshold (Figure 1), black students were more likely to receive a disciplinary report at every value by a ratio of two to one or greater. It would appear that at least at the bivariate level, black students are substantially more likely to receive a school disciplinary report than students of all other races, and receive more disciplinary reports total. Though compelling, these differences cannot tell us why black students are more likely to be disciplined, since the actions of authorities might be due to any number of possible legitimate reasons, most notably the possibly

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[56] *Id.*

[57] *See, e.g.*, Brian D. Johnson, *The Multilevel Context of Criminal Sentencing: Integrating Judge- and County-Level Influences*, 44 CRIMINOLOGY 259 (2006).

unruly behavior of black students in school compared with those of other racial/ethnic backgrounds.   To answer this question, we move to the multivariate logistic and negative binomial regression models with HLM.

Figure 1

Distribution of Disciplinary Referrals by Race/Ethnicity

☐Asian ☐Hispanic ☐White ☐African-American

We first estimate an unconditional model for both the binary school discipline variable and its corresponding truncated count measure. These unconditional models will roughly indicate the proportion of the total variance that lies within students (level 1), across classrooms or teachers (level 2), and across schools (level 3).   In the logit model, the binary measure of disciplinary referrals lacks a meaningful individual-level variance component but can be roughly estimated as $\pi^2/3$, where π is the proportion in the sample with a 1 on the dependent variable, though this depends on underlying assumptions of the model being met.[58] Using this

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[58] *Id.*; Townsend, *supra* note 9; *see also* TOM A.B. SNIJDERS & ROEL J. BOSKER, MULTILEVEL ANALYSIS: AN INTRODUCTION TO BASIC AND ADVANCED MULTILEVEL MODELING (1999) (providing a more detailed justification for this model).

estimate in the unconditional logit model (data not shown), approximately 11% of the variance is at level 2 (teachers/classrooms) and 16% of the variance is at level 3 (schools). For the unconditional negative binomial model, about 14% of the variance is at level 2 and 16% at level 3. For both models, then, there is considerable variation at levels 2 and 3 warranting estimation of the HLM models.

In Table 2, we estimate logistic regression models where the outcome variable is the binary indicator as to whether or not the student received at least one disciplinary report during the 2005–2006 school year. We estimate models sequentially starting with the simplest model that includes only level 1 effects, and then move to models where the intercept is random and slopes are fixed, to a final interaction model where both intercept and the slope for being an African-American student are random.

Model 1 reports the results when we consider only level 1 characteristics. Not surprisingly perhaps, the most important factor predicting the log odds of getting a disciplinary report in school is the student's bad behavior ($b = 1.781$; $p < .001$; odds ratio of 5.936). In large measure, then, disciplinary reports are given to those students who present the most behavioral difficulties for teachers, lending some construct validity to the measure of bad behavior. In addition to those with poor/hostile conduct, however, those who are also more likely to get a disciplinary report in school are males, those in special education, older students, and less affluent students who are in a free lunch program.[59] Those who were less at risk of getting a disciplinary report were those for whom English is their second language, those with better grades, and those whom teachers assessed as being more socially isolated or introverted. The finding that males, those with poor grades, and those whose behavior is more disruptive are more likely to receive a disciplinary report comports with much of the delinquency/problem behavior literature. However, what we see is that even when these factors are taken into account, African-American students are significantly more likely than whites to be given a disciplinary report by teachers ($b = .311$; $p < .001$; odds ratio = 1.36). Hispanic students are not significantly different from whites in the risk that they would be given a disciplinary report. Even after controlling for a host of factors, however, Asian students were less likely than whites to be disciplined ($b = -.246$, $p < .10$). Although only marginally significant and substantively modest, these findings do support the stereotype of Asian Americans as a "model

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[59] Approximately 62% of the Hispanic students, 43% of the African-American students, 24% of the Asian students, and 9% of the white students were enrolled in the free lunch program.

minority"[60] and suggest that there may be two currents of racial stereotyping in American elementary schools, one that privileges Asian-American students and one that disadvantages African-American students. Given the marginal significance, however, this can only be speculation at this point.

A more informative way to look at the effect of a student's race on the risk of a disciplinary report is to estimate the predicted probability of a disciplinary referral. Since the effects of level 1 variables do not change much across different models in Table 2, we will use the parameter estimates in Model 1 to estimate the predicted probability of a disciplinary report for students of different races controlling for all other covariates at the mean.[61] When we do this (data not shown), the predicted probability of a disciplinary report for Asian students is .027, for white and Hispanic students it is .034, and for African-American students it is .046. While the absolute probabilities are low since getting a disciplinary report in school is a rare event, the probability for African-American students is 27% higher than for other students—even after taking into account such things as their grades, attitudes, gender, special education or language program, and *their conduct in school as perceived by teachers*. This finding indicates that black students are more likely to be disciplined in school compared with other racial groups and that this disparity is due neither to differences in their behavior nor their academic performance in school.

In Model 2, we introduce level 2 or teacher characteristics in order to determine whether characteristics of teachers or their classrooms explain the intercept or mean level of school disciplinary reports. Teachers who have on average more disruptive students are more likely to discipline students with an office referral ($b = .446$; $p < .05$), as are those who teach older elementary students rather than younger ($b = .152$; $p < .05$), and those with higher educational levels ($b = .106$; $p < .05$). Male teachers are slightly less likely to resort to referral than female teachers ($b = -.306$; $p < .05$). All of the level 1 findings stay the same in Model 2 as they were in Model 1, notably that African-American students are significantly more likely to be disciplined with an office referral than white students net of a comprehensive cluster of covariates.

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[60] For a discussion of Asian Americans as "model minorities," see Pat K. Chew, *Asian-Americans: The "Reticent Minority" and Their Paradoxes*, 36 WM. & MARY L. REV. 1 (1994); Brian Johnson & Sara Betsinger, *Punishing the "Model Minority": Asian-American Criminal Sentencing Outcomes in Federal District Courts*, 47 CRIMINOLOGY 1045 (2009).

[61] The predicted probability of a binary outcome variable in a logistic regression analysis is defined as:

$$\hat{p} = \frac{e^{\beta_0 + \beta_1 \bar{X}_1 + \beta_2 \bar{X}_2 ... + \beta_k \bar{X}_k}}{1 + e^{\beta_0 + \beta_1 \bar{X}_1 + \beta_2 \bar{X}_2 ... + \beta_k \bar{X}_k}}$$

Model 3 includes random slopes for the relationship between being an African-American student on the chance of receiving a disciplinary report. These random slope coefficients should be understood as interaction terms, and the question being addressed is: "Does the positive relationship between being an African-American student on the risk of a disciplinary report vary by teacher/classroom level factors?" For the most part, the answer to that question is "no." There is a stronger black student effect across classrooms that have more students in a free lunch program ($b = .569$; $p < .05$: all two-tailed tests), where the average grades are higher ($b = .814$; $p < .01$), and when the teacher has more years of teaching experience ($b = .125$; $p < .05$), but these interaction effects are very modest. We tested for other substantively interesting cross-level interaction effects, such as whether or not black students were more disadvantaged in terms of getting disciplinary reports in classrooms that were either mostly white or mostly African-American, but these interactions were all non-significant and substantively not different from zero.

In Model 4, we introduce school-level (level 3) characteristics to explain variation in the intercept or mean level of disciplinary reports across schools. None of the school-level characteristics impact the mean level of school disciplinary reports, except one. Those schools with a higher percentage of African-American students have higher mean levels of office referrals net of both teacher/classroom characteristics and characteristics of the students within the school ($b = .045$; $p < .001$). Our finding that schools with a higher proportion of African-American students are more likely to use office referrals for punishment is consistent with the racial threat hypothesis found in other criminological literature.[62] As the black student population increases, teachers may perceive black student misconduct differently, as perhaps more menacing or more of a threat to their control, and respond to such conduct by African Americans more punitively. Disruptive student behavior may imply to school authorities that the students do not buy into the school game. More importantly, their disruptive conduct may put in jeopardy teachers' ability to educate the remaining students. Because we have controlled for behavior of students in our analysis, the data show that there seems to be something particular about *minority* students' unruly behavior that elicits a response from school officials. That is, unruly minority school students constitute a cultural threat to authorities that is responded to with an official rebuke or sanction

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[62] *See generally* Blalock, *supra* note 42; Jacobs & Carmichael, *supra* note 43. *See also* Kent & Jacobs, *supra* note 43; Karen F. Parker et al., *Racial Threat, Concentrated Disadvantage and Social Control: Considering the Macro-Level Sources of Variation in Arrests*, 43 CRIMINOLOGY 1111 (2005); John Shelton Reed, *Percent Black and Lynching: A Test of Blalock's Theory*, 50 SOC. FORCES 356 (1972).

Table 2

Three Level HLM Logistic Regression Analysis for Whether or Not an Office Referral is Made

	Model 1		Model 2		Model 3		Model 4		Model 5	
Level 1 Effects:	*b*	*t*	*b*	*t*	*b*	*t*	*b*	*t*	*b*	*t*
Free Lunch Program	0.222	3.36[^]	0.238	3.71[^]	0.234	3.71[^]	0.236	3.74[^]	0.237	3.74[^]
English as Second Language	-0.403	-3.71[^]	-0.394	-3.74[^]	-0.390	-3.71[^]	-0.393	-3.81[^]	-0.393	-3.82[^]
In Special Education	0.272	3.90[^]	0.305	4.43[^]	0.308	4.44[^]	0.309	4.43[^]	0.308	4.42[^]
Retained	-0.098	-0.49	-0.095	-0.50	-0.110	-0.56	-0.105	-0.53	-0.106	-0.53
Days Attended	-0.001	-0.32	0.000	-0.40	-0.001	-0.35	-0.001	-0.35	-0.001	-0.35
Age	0.218	6.61[^]	0.087	1.19	0.090	1.23	0.092	1.25	0.092	1.25
Grades	-0.586	-6.05[^]	-0.536	-5.18[^]	-0.541	-5.20[^]	-0.540	-5.18[^]	-0.540	-5.18[^]
Male	1.088	11.96[^]	1.142	12.82[^]	1.102	12.00[^]	1.102	11.98[^]	1.102	11.98[^]
Concentration	-0.038	-0.50	-0.052	-0.67	-0.051	-0.66	-0.050	-0.65	-0.050	-0.64
Bad Behavior	1.781	20.28[^]	1.827	20.00[^]	1.835	20.25[^]	1.839	20.22[^]	1.839	20.23[^]
Introversion	-0.308	-3.59[^]	-0.386	-3.45[^]	-0.290	-3.52[^]	-0.290	-3.52[^]	-0.290	-3.52[^]
Closeness	-0.023	-0.46	-0.016	-0.30	-0.016	-0.31	-0.016	-0.32	-0.016	-0.32
Asian	-0.246	-1.47[*]	-0.252	-1.51[*]	-0.264	-1.60[*]	-0.270	-1.64[*]	-0.270	-1.65[#]
Hispanic	0.022	0.18	0.027	0.21	0.009	0.07	0.006	0.06	0.005	0.04
African-American	0.311	3.61[^]	0.312	3.60[^]	0.489	2.55[&]	0.476	2.49[&]	0.476	2.49[&]
Teacher (Level 2) Effects on African-American Slope:					*Model 3*		*Model 4*		*Model 5*	
% Class Free Lunch					0.569	1.76[#]	0.506	1.08	0.583	1.82[#]
Classroom Behavior					0.317	0.92	0.313	0.92	0.314	0.92
Class Mean Age					-0.001	-0.04	0.000	0.00	0.000	0.00
Class Grades					0.814	2.58[&]	0.819	2.61[&]	0.818	2.61[&]
Educational Level					0.033	0.41	0.038	0.47	0.037	0.47
Years Experience					0.125	1.79[#]	0.124	1.79[#]	0.125	1.80[#]

	Model 2		Model 3		Model 4		Model 5	
Years in School			-0.076	-0.81	-0.082	-0.86	-0.083	-0.88
White Teacher			-0.212	-1.09	-0.214	-1.11	-0.216	-1.12
Male Teacher			0.388	1.13	0.378	1.10	0.376	1.09
Teacher (Level 2) Effects on Intercept:	*Model 2*		*Model 3*		*Model 4*		*Model 5*	
% Class Free Lunch	-0.090	-0.25	-0.294	-0.72	-0.090	-0.25	-0.507	-1.00
Classroom Behavior	0.446	1.75[#]	0.552	2.35[&]	0.446	1.75[#]	0.546	2.31[#]
Class Mean Age	0.152	2.01[#]	0.152	2.09[#]	0.152	2.01[#]	0.152	2.07[#]
Class Grades	-0.255	-1.36	-0.533	-2.60[&]	-0.255	-1.36[*]	-0.526	-2.48[&]
Educational Level	0.106	2.10[#]	0.100	2.12[#]	0.106	2.10[#]	0.098	2.10[#]
Years Experience	-0.037	-0.76	-0.078	-1.47	-0.037	-0.76	-0.076	-1.44[*]
Years in School	-0.011	-0.03	0.017	0.27	-0.011	-0.03	0.034	0.53
White Teacher	-0.123	-0.88	-0.041	-0.26	-0.123	-0.88	-0.014	-0.09
Male Teacher	-0.306	-1.77	-0.461	-2.31	-0.306	-1.77	-0.461	-2.32[#]
School (Level 3) Effects on Intercept:					*Model 4*		*Model 5*	
Teacher's Mean Educational Level					0.592	1.06	0.467	0.77
Years Experience of Teachers					-0.146	-0.19	-0.103	-0.13
Mean Years in School					-1.039	-1.47[*]	-1.073	-1.51[*]
% Student Free Lunch					0.377	0.30	0.235	0.18
Mean Bad Behavior					2.721	0.94	2.607	0.90
Mean Grades					0.353	0.28	0.288	0.18
Percent Black					0.045	3.75[^]	0.071	2.26[#]
Percent Black Squared							-0.001	-0.96
Intercept:	-4.193		-4.071		-4.146		-4.172	-4.170

Note: For a one-tailed test, [*] corresponds to a $t \geq |1.282|$ and a $p \leq 0.10$; [#] corresponds to a $t \geq |1.645|$ and a $p \leq 0.05$; [&] corresponds to a $t \geq |2.326|$ and a $p \leq 0.01$; and [^] corresponds to a $t \geq |3.096|$ and a $p \leq 0.001$.

in the form of a disciplinary report. Moreover, this effect is not due to any social class bias because the proportion of the students that are enrolled in a free lunch program is unrelated to the level of school discipline enforced.

In Model 5, we add the quadratic term for the percent black at the school level. The coefficient for linear percent black on the intercept or the mean level of discipline continues to be positive and statistically significant ($b = .071$; $p < .05$), while that for percent black squared is *negative*, though not significantly different from zero. We should not put too much on the fact that the significance level for percent black declined and the one for percent black squared is non-significant, since there is a very high correlation between these two variables ($r = .95$). The important thing is that the sign of both coefficients confirms the expectation that social control efforts are more punitive when the size of the African-American student population is greater up to a point, but then the relationship begins to reverse at higher levels. These findings are consistent with the racial threat and benign neglect hypotheses. Teachers respond to higher levels of black student population with greater social control, until the point is reached at which black students are more likely to be victimizing other black students or disrupting a predominantly black school environment. At this point, the harshness of the response to student misconduct by the teaching staff declines.

In Table 3, we report the negative binomial regression coefficients when the dependent variable is the count of disciplinary reports received by the student. Generally the story told by the negative binomial regression models is similar to the logistic regression story. Students receive more disciplinary reports when their behavior is disruptive, when they are older, when they have poor grades, when they are male, when they are in a school free lunch program, when English is not their second language, when they are seen by their teachers as less introverted, and when they are enrolled in special education courses. Net of all of these factors, however, we still find that Asian-American students receive less ($b = -.201$; $p < .10$) and African-American students ($b = .228$; $p < .01$) receive significantly more office referrals for misconduct than white students. Hispanic students do not differ from whites in the rate of disciplinary referrals. As with the logistic regression results, since the coefficient estimates do not change that much across models when more parameters are estimated we will use the simple results in Model 1 to calculate the estimated rate for white and African-American students when all dependent variables are at their mean.[63] The

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[63] The formula to calculate these rates is:

$$\hat{\lambda} = \exp(\beta_0 + \beta_1 \bar{X}_1 + \beta_2 \bar{X}_2 + \beta_3 \bar{X}_3 + ... \beta_k \bar{X}_k)$$

estimated annual rate of discipline reports is about twenty percent greater for African-American students (.144) than for white and Hispanic students (.114) (data not shown).

In Model 2 of Table 3, we examine whether any level 2 classroom/teacher characteristics are related to the classroom mean rate of discipline. The results show no significant predictors. In Model 3, we examine whether characteristics of the teacher interact with the effect of being a black student on the rate of being disciplined. There are marginally fewer disciplinary reports in those classrooms where grades are lower and where students are older (with age being a proxy for what grade a student was in). The relatively advantaged position enjoyed by Asian-American students and the relatively disadvantaged position endured by African-American students persists in Model 2. In Model 3, we also examine whether there is an interaction between classroom/teacher characteristics and being an African-American student on the number of discipline referrals. The slope for African-American students is more positive among older than younger students ($b = .152$; $p < .05$), in classrooms where there is a higher overall level of bad conduct ($b = .552$; $p < .01$), and when the teacher has more education ($b = .100$; $p < .05$). The relationship between being an African-American student and discipline referrals is weaker in classrooms where the mean grade point average is higher ($b = -.533$; $p < .01$), and when the teacher is male rather than female ($b = -.461$; $p < .01$). The individual level effect for being an African-American student is still positive and statistically significant in Model 3.

In Model 4, school-level (level 3) characteristics are allowed to influence the intercept reflecting the mean level of disciplinary referrals. There are more disciplinary reports written when the mean educational level of the teachers is higher ($b = .815$; $p < .10$), and slightly fewer when teachers have been in the school for a longer period of time ($b = -.779$; $p < .10$). It is noteworthy that the percent of the student body that is African-American is positively and significantly related to the mean number of disciplinary referrals written by teachers ($b = .037$; $p < .001$). In Model 5, we add the quadratic term for percent black. This effect is negative, consistent with the benign neglect hypothesis, but is not statistically significant and its magnitude is negligible. As with the logistic regression model, we find evidence of a racial threat effect in the school house—disciplinary tactics are both more likely to be used and used more often in schools where black students comprise a larger share of the student body.

Table 3

Three Level HLM Negative Binomial Regression Analysis for Number of Office Referrals

	Model 1		Model 2		Model 3		Model 4		Model 5	
Level 1 Effects	b	t	b	t	b	t	b	t	b	t
Free Lunch Program	0.200	3.47^	0.208	3.60^	0.213	4.89^	0.210	3.68^	0.210	3.68^
English as Second Language	-0.348	-3.89^	-0.341	-3.76^	-0.340	-4.92^	-0.343	-3.77^	-0.343	-3.78^
In Special Education	0.245	3.87^	0.254	4.13^	0.270	5.29^	0.274	4.54^	0.273	4.53^
Retained	-0.117	-0.55	-0.120	-0.57	-0.145	-1.23	-0.139	-0.68	-0.139	-0.68
Days Attended	-0.002	-1.47*	-0.002	-1.52*	-0.002	-2.69&	-0.002	-1.47*	-0.002	-1.47*
Age	0.218	6.61^	0.059	0.96	0.061	1.53*	0.065	1.08	0.092	1.25
Grades	-0.586	-6.05^	-0.336	-3.80^	-0.333	-7.41^	-0.330	-3.55^	-0.540	-5.18^
Male	0.905	8.63^	1.142	12.82^	0.913	20.95^	0.914	8.68^	0.914	8.68^
Concentration	-0.112	-1.50*	-0.117	-1.52*	-0.120	-2.89&	-0.120	-1.51*	-0.120	-1.51*
Bad Behavior	1.335	22.92^	1.342	22.63^	1.349	22.52^	1.350	21.43^	1.350	21.44^
Introversion	-0.144	-2.17#	-0.138	-2.11#	-0.138	-3.22^	-0.138	-2.18#	-0.138	-2.18#
Closeness	-0.026	-0.60	-0.021	-0.48	-0.020	-0.73	-0.019	-0.41	-0.019	-0.41
Asian	-0.201	-1.28	-0.205	-1.30*	-0.202	-1.78#	-0.201	-1.28	-0.202	-1.28
Hispanic	0.000	0.00	0.001	0.02	-0.016	-0.24	-0.016	-0.17	-0.016	-0.17
African-American	0.228	3.03&	0.229	3.04&	0.457	4.15^	0.427	3.05&	0.427	3.05&
Teacher (Level 2) Effects on African-American Slope:					*Model 3*		*Model 4*		*Model 5*	
% Class Free Lunch					-0.294	-0.72	0.235	0.65	0.236	0.66
Classroom Behavior					0.552	2.35&	0.532	2.10#	0.532	2.10#
Class Mean Age					0.152	2.08#	0.016	0.44	0.016	0.44
Class Grades					-0.533	-2.60&	0.406	1.82#	0.406	1.19
Educational Level					0.100	2.12#	0.025	0.44	0.025	0.44
Years Experience					-0.078	-1.47*	0.100	1.88#	0.100	1.88#

	Model 1	Model 2		Model 3		Model 4		Model 5	
Years in School				0.017	0.27	-0.124	-1.99#	-0.125	-2.00#
White Teacher				-0.041	-0.26	-0.196	-1.11	-0.196	-1.11
Male Teacher				-0.461	-2.31#	0.449	1.67#	0.448	1.67#
Teacher (Level 2) Effects on Intercept:		*Model 2*		*Model 3*		*Model 4*		*Model 5*	
% Class Free Lunch		0.013	0.04	-0.086	-0.27	-0.264	-0.69	-0.264	-0.69
Classroom Behavior		0.141	0.66	0.092	0.45	0.089	0.40	0.089	0.40
Class Mean Age		0.113	1.66#	0.118	2.46&	0.115	1.76#	0.115	1.76#
Class Grades		-0.298	-1.64*	-0.459	-2.53&	-0.451	-2.10#	-0.450	-2.09#
Educational Level		0.043	0.88	0.036	0.78	0.032	0.74	0.032	0.74
Years Experience		-0.023	-0.53	-0.055	-1.16	-0.056	-1.15	-0.056	-1.16
Years in School		-0.001	-0.03	0.036	0.65	0.055	0.93	0.056	0.94
White Teacher		-0.146	-1.07	-0.049	-0.35	-0.024	-0.16	-0.025	-0.16
Male Teacher		-0.106	-0.64	-0.325	-1.80#	-0.326	-1.60*	-0.327	-1.61*
School (Level 3) Effects on Intercept:						*Model 4*		*Model 5*	
Teacher's Mean Educational Level						0.815	1.57*	0.752	1.38*
Years Experience of Teachers						-0.373	-0.61	-0.351	-0.56
Mean Years in School						-0.779	-1.41*	-0.795	-1.43*
% Student Free Lunch						-0.126	-0.11	-0.197	-0.18
Mean Bad Behavior						2.098	0.83	2.039	0.81
Mean Grades						-0.088	-0.85	-0.149	-0.15
Percent Black						0.037	3.48^	0.050	1.71#
Percent Black Squared								0.000	-0.53
Intercept:	-3.727	-3.590		-3.690		-3.715		-3.714	

Note: For a one-tailed test, * corresponds to a $t \geq |1.282|$ and a $p \leq 0.10$; # corresponds to a $t \geq |1.645|$ and a $p \leq 0.05$; & corresponds to a $t \geq |2.326|$ and a $p \leq 0.01$; and ^ corresponds to a $t \geq |3.096|$ and a $p \leq 0.001$.

VI. DISCUSSION & CONCLUSION

Research has long found a connection between schooling and incarceration. Those who perform well academically are, all things being equal, less likely to enter the criminal justice system. This link is especially important with respect to racial disparities in arrest, conviction, and prison rates. There is a substantial body of empirical evidence that demonstrates that African-American students are less academically successful than whites, are less involved in and committed to school, and have lower educational ambitions and attainment. We also know that this disengagement from school comes at a very early age, during the elementary school years, and persists over time with ramifications that are felt in the young adult years in terms of substantially higher school dropout rates and lower rates of college attendance. Poor performance in, and disengagement from, school for African-American students may in turn lead to higher crime and incarceration rates compared with whites.

In this Article, we investigated one possible source of school disengagement for black students as one component of the school-to-jail link—the finding that as early as elementary school, black students feel the sting of discipline at much higher rates than whites. Our results suggested that disproportionality in discipline is not explained by differential behavior and is thus unjustified. We can only speculate about the reasons for disproportionate punishment of African Americans in schools. For example, teachers may hold stereotypes that blacks are not only poor-performing students, but hostile to the teachers' goals of teaching and maintaining order and discipline in the classroom. This may lead them to punish black students at significantly higher rates than they punish white students. Much research has shown that black student behaviors tend to be perceived as more hostile than those of white students,[64] which might have severe consequences. If black students sense that they are being singled out as a group for punishment by teachers, independent of their actual behavior, they may disengage from school. Since our study shows this process of continued discrimination and disengagement may be seen as early as the elementary years and continues over time, black students will do poorly, drop out, fail to secure good jobs, and end up in jail. Thus, our results may fill in a missing link in the school-to-jail literature. This finding, along with historical studies showing a lack of trust of authorities in the community (e.g., police) on the part of blacks, may go a long way toward explaining the school-to-jail pipeline.

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[64] *See generally* FERGUSON, *supra* note 10; Skiba et al., *The Color of Discipline*, *supra* note 18.

We have found that, even when we control for differences in behavior, student demeanor or personality (concentration, extroversion, closeness with teacher), grades, and other factors, African-American students are both more likely to be disciplined and have more disciplinary reports than other students. Admittedly, while the difference between whites and blacks is large (about 30% greater likelihood for African-American students), the absolute magnitudes are modest. However, we would argue that these modest magnitudes are important because we have found evidence for differential racial treatment in the elementary years, and the substantive effects we have observed, though modest in any one year, likely accumulate over time as students establish reputations for being "troublemakers."[65] These findings are important because they illustrate the beginning stages of the school-to-prison link.

Enriching our story of disparate racial treatment at the individual level, we also found evidence for "racial threat" within the school. With our multi-level analysis, we were able to observe that schools that have a higher proportion of African-American students have significantly higher levels of disciplinary referrals against students net of both classroom/teacher and individual student characteristics. This is consistent with the racial threat hypothesis that an increase in the minority population can be perceived as menacing by racial majorities who respond to the perceived menace with more stringent means of social control.[66] Interestingly, the relationship between percent black and school discipline is not clearly linear in either the logistic or negative binomial regression models. We found evidence, supporting the racial threat literature, that as the percent of the black student population increases, the likelihood and number of disciplinary reports increases but only up to some threshold after which it begins to decline. The inverse relationship between percent black squared and disciplining of students is consistent with the "benign neglect" hypothesis found in the racial threat literature.[67] This hypothesis suggests that white authorities disproportionately focus on minorities when the percentage minority in an area increases, but at a certain point, as the minority population reaches a certain threshold, punitive responses decline as minorities begin to victimize each other.

There are two main limitations to this study. One is that the data are cross-sectional, which prohibits parsing out causal and temporal ordering of

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[65] However, this could be evidence for a trend, see Kupchik *supra* note 25, that exclusionary discipline practices traditionally used for minorities may be becoming more prevalent among whites. That is, punitiveness on the part of school officials may be becoming "color blind" as security concerns increase.

[66] Welch & Payne, *supra* note 5, at 42.

[67] Liska & Chamlin, *supra* note 47, at 385.

our variables. Research in school discipline has found that past behavior is a strong predictor of future discipline referrals. It is possible that our finding of racial disparity in punishment is linked to past behavior, not cultural stereotypes. Future research should examine this question more closely. Second, the ratings of student behavior were not made simultaneously with office referral incidents. Put slightly differently, student behavior was rated by teachers separately from the events leading to office referrals. It could be, therefore, that black students are rated as better behaved than they actually are. This explanation, however, strains credulity given past research.[68] We acknowledge that the ideal data for this type of study would be independent observation of student behavior made at the same time as disciplinary incidents.[69] Short of this, our behavioral and disciplinary data provide, we feel, one of the strictest empirical tests to date bearing on the issue of racial disparity in school discipline.

While this research has focused on whether or not African-American students in elementary school receive disparate disciplinary treatment at the hands of teachers, the implications extend beyond elementary school. Research has long shown that black students become disengaged from school at early ages and that this disengagement has important developmental consequences, including a greater propensity for committing crimes as adolescents and young adults. To date, research has been unclear as to why this disengagement occurs, with the most well developed theories positing a cultural phenomenon that, in effect, removes the blame from those in positions of power.[70] These theories recently have been challenged with regard to the school setting.[71] Our findings should be replicated in order to determine their ultimate value. If they stand, however, they would suggest that at least some part of the school failure of African-American students, and some responsibility for the school-to-jail connection, is not due to social class effects nor to the existence of some oppositional subculture whose values denigrate the value of a good education. Our findings suggest that the actions of school officials themselves may be at least partially responsible for the academic failure all too often experienced by black students.

Future research should seek to determine how well our findings hold up with other covariates or measures. In addition, it may be important to understand to what extent past misbehavior or punishment is predictive of

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[68] *See generally* FERGUSON, *supra* note 10; Morris, *supra* note 26, at 317.

[69] Skiba et al., *The Color of Discipline*, *supra* note 18.

[70] Anderson, *supra* note 8, at 97.

[71] *See* Angela L. Harris, *I (Don't) Hate School: Revisiting Oppositional Culture Theory of Blacks' Resistance to Schooling*, 85 SOC. FORCES 797, 802–24 (2006).

current or future punishment. That is, one of the reasons that black students are more likely to be referred to the office might be in part because those students had higher rates of previous school discipline incidents. This would perhaps link racial disparities in punishment to the "state dependence" explanation that has been advanced in the criminological literature.[72]

There is ample evidence that the experience of racial discrimination by adult blacks has consequences for their self esteem and longer-term psychological health.[73] There is little reason to believe that it would have any less of an effect on young black students, male or female. Therefore, examining and ultimately reducing unwarranted racial disparities at early ages should continue to be a research and policy priority.

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[72] *See generally* Daniel S. Nagin & Raymond Paternoster, *On the Relationship of Past to Future Participation in Delinquency*, 29 CRIMINOLOGY 163 (2001); Daniel Nagin & Raymond Paternoster, *Population Heterogeneity and State Dependence: State of the Evidence and Directions for Future Research*, 16 J. QUANTITATIVE CRIMINOLOGY 117 (2000).

[73] *See generally* Kamaldeep Bhui et al., *Racial/Ethnic Discrimination and Common Mental Disorders Among Workers: Findings From the EMPIRIC Study of Ethnic Minority Groups in the United Kingdom*, 95 AM. J. PUB. HEALTH 496 (2005); Gene H. Brody et al., *Perceived Discrimination and the Adjustment of African-American Youths: A Five-Year Longitudinal Analysis with Contextual Moderation Effects*, 77 CHILD DEV. 1170 (2006); Robert M. Sellers et al., *Racial Identity, Racial Discrimination, Perceived Stress, and Psychological Distress Among African-American Young Adults*, 44 J. HEALTH & SOC. BEHAV. 302 (2003).