MODELING THE EFFECTS OF RACIAL THREAT ON PUNITIVE AND RESTORATIVE SCHOOL DISCIPLINE PRACTICES*

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It is clear that schools are mirroring the criminal justice system by becoming harsher toward student misbehavior despite decreases in delinquency. Moreover, Black students consistently are disciplined more frequently and more severely than others for the same behaviors, much in the same way that Black criminals are subjected to harsher criminal punishments than other offenders. Research has found that the racial composition of schools is partially responsible for harsher school discipline just as the racial composition of areas has been associated with punitive criminal justice measures. Yet, no research has explored comprehensively the dynamics involved in how racial threat and other factors influence discipline policies that ultimately punish Black students disproportionately. In this study (N = 294 public schools), structural equation models assess how school racial composition affects school disciplinary policies in light of other influences on discipline and gauge how other possible predictors of school disciplinary policies relate to racial composition of schools, to various school disciplinary policies, and to one another. Findings indicate that schools responding to student misbehavior with one type of discipline tend to use other

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types of responses as well and that many factors predict the type of
disciplinary response used by schools. However, disadvantaged, urban
schools with a greater Black, poor, and Hispanic student population
are more likely to respond to misbehavior in a punitive manner and
less likely to respond in a restorative manner.

Formal social control in American schools has intensified during the
past 20 years (Beger, 2002; Noguera, 2008; Wallace et al., 2008), which is
shown in the greater use of harsh student discipline and punishment,
despite decreases in rates of student delinquency, student drug use, violent
school victimization, and school-related deaths (Beger, 2002; Brooks,
Schiraldi, and Ziedenberg, 1999; Devoe et al., 2005; Dinkes, Cataldi, and
Lin-Kelly, 2007). Illustrations of this intensification of possible responses
to student misbehavior by teachers and administrators include more
teacher referrals to the principal, more detentions, more in-school and
out-of-school suspensions, and more expulsions (Gottfredson and Gottf-
redson, 2001; Kupchik and Ellis, 2008; Noguera, 2008). Additionally,
research indicates that these harsh disciplinary practices are not applied
equally (Vavrus and Cole, 2002); Black students are more likely to be sub-
jected to stricter controls than their White counterparts, a disparity that
may produce significant negative consequences. This pattern is similar to
what has been happening in the U.S. criminal justice system (Ferguson,
2000), which has seen not only an increase in punitiveness, despite a
decrease in crime rates (Austin and Irwin, 2001; Currie, 1998), but also a
racial disparity in the application of these punishments (Nichols, 2004;
Noguera, 2003a; Wacquant, 2001).

PRISONIZATION OF SCHOOLS AND
CRIMINALIZATION OF STUDENTS

It is clear that the crime-control model is the guiding principle found in
many American social institutions (Simon, 2007), including most modern
urban public schools (Noguera, 2008). One result of this is that schools are
becoming increasingly like prisons (Ferguson, 2000; Fine et al., 2004;
Giroux, 2003; Noguera, 2008; Parenti, 2000; Staples, 2000; Wacquant, 2001;
Watts and Erevelles, 2004).1 School prisonization has involved numerous
restrictions, including the requirement of student identification badges to
facilitate immediate recognition and classification of rule-breakers and to
deter defiance and delinquency (Beger, 2002; Brooks, Schiraldi, and
Ziedenberg, 1999) as well as the implementation of uniforms or dress

1. Please see Wacquant (2001) and Noguera (2008) for detailed descriptions of how
school punishment is comparable in many ways to prison punishment and how
this phenomenon might have developed.
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codes to reduce disobedience (Gottfredson and Gottfredson, 2001; Watts and Erevelles, 2004). Surveillance and security programs are found in at least 55 percent of schools and in nearly all urban schools (Beger, 2002; Devoe et al., 2005). As a consequence, metal detectors often are used to prevent weapons from entering school grounds (Beger, 2002; Brooks, Schiraldi, and Ziedenberg, 1999; Mawson et al., 2002), and most public institutions have locked or monitored doors and gates to prevent unauthorized individuals from gaining access to campus and to preclude students from leaving in defiance of school codes (Devoe et al., 2005; Gottfredson and Gottfredson, 2001).

In addition, hallways often are supervised by school staff and administrators (Devoe et al., 2005), and many schools also hire uniformed security guards or uniformed and armed security resource officers (SROs), who are among the fastest growing segment of law enforcement officers stationed in public schools (Beger, 2002; Giroux, 2003; Kupchik and Ellis, 2008; Watts and Erevelles, 2004). Furthermore, for those times when these adults are not surveilling hallways or classrooms, many educational institutions have installed security cameras (Devoe et al., 2005; Watts and Erevelles, 2004). To reduce contraband such as drugs and weapons, many schools perform regular locker searches, require students to carry clear book bags (Brooks, Schiraldi, and Ziedenberg, 1999; DeVoe et al., 2005; Gottfredson and Gottfredson, 2001), and use drug-sniffing dogs (Giroux, 2003; Gottfredson and Gottfredson, 2001). Despite the greater use of these prison-like practices, parents and school boards have continued to call for stricter measures of control even as students report feeling less safe and describe more violations in schools that implement these “secure” school practices (Brooks, Schiraldi, and Ziedenberg, 1999; Skiba and Peterson, 1999).

The prisonization of educational institutions is not the only recent example of expanding punitiveness in schools; the criminalization of students is another result of the intensification of school discipline. Endeavoring to address school crime and delinquency, schools often control and punish students in a manner that is similar to the treatment of suspected and convicted adult criminals (Fantz, 2008; Giroux, 2003; Kupchik and Monahan, 2006; Mawson et al., 2002; Noguera, 2003b, 2008; Tredway, Brill, and Hernandez, 2007). The actions of rule-breakers and troublemakers are defined frequently with criminal justice language (Tredway, Brill, and Hernandez, 2007). Students, sometimes called “suspects” or “repeat offenders,” are subjected to “investigations,” “interrogations,” and “searches” by dogs or SROs, who sometimes will report “needing backup.” Students may then be involved in “lineups” and school “courts” before being punished with, among other things, in-school suspension, which is analogous to solitary confinement. In fact, a 13-year-old boy from
Georgia hanged himself in December 2008 during an in-school suspension that occurred in what was described as a “seclusion room,” common to public schools in 22 states, which is “something akin to a prison cell—a concrete room latched from the outside, its tiny window obscured by a piece of paper” (Fantz, 2008). Furthermore, out-of-school suspensions are likened to incarceration, expulsions are likened to execution, and zero tolerance policies function as the school equivalent of mandatory-minimum criminal sentencing statutes, with the result that “schools grow more like prisons than institutions of education” (Giroux, 2003: 553).

Research has made it clear that changes in school punitiveness are not in response to changes in student delinquency and misbehavior (Kupchik and Monahan, 2006; Skiba and Peterson, 1999; Wu et al., 1982). Thus, a comprehensive explanation for the intensification of harsh school discipline is needed. This necessity is particularly true because of the serious implications of this increasing punitiveness of school discipline. Students who are perceived as future criminals by their teachers and school administrators tend to receive more punitive sanctions, regardless of the actual infractions committed (Ferguson, 2000; Noguera, 2003b). In addition, violations that occur on school grounds now are referred more often to law enforcement rather than being addressed internally because of legal reforms, such as zero tolerance policies, that mandate this type of intervention (Beger, 2002). Thus, the prisonization of schools and criminalization of students also increases the likelihood of future criminal justice involvement as the educational and criminal justice spheres of influence converge. One of the clearest indications of this overlap is the demographic similarity between the students who experience the most intense forms of school discipline and the individuals who are most likely to become involved in the criminal justice system; members of both groups tend to be poor, male, and part of a racial or ethnic minority (Noguera, 2003b; Singer, 1996).

**BLACK STUDENTS AND HARSH SCHOOL DISCIPLINE**

When considering the criminal justice approach to school discipline, the considerable overrepresentation of Black students receiving punitive consequences to problem behavior is of particular concern. Research clearly documents that Black students experience more intense punishment in school than White students (Ferguson, 2000; Foney and Cunningham, 2002; Gottfredson and Gottfredson, 2001; Nichols, 2004; Skiba, 2001; Skiba and Peterson, 1997, 1999; Skiba, Peterson, and Williams, 1997; Welsh, 2000) and receive punitive treatment more frequently for less serious offenses (Brown and Beckett, 2006; McCarthy and Hoge, 1987;
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McFadden et al., 1992; Nichols, 2004; Noguera, 2003a; Raffaele Mendez and Knoff, 2003; Shaw and Braden, 1990; Skiba, 2000, 2001; Skiba et al., 2002). Statistics indicate that Black students are more likely to be suspended than White students (Brooks, Schiraldi, and Ziedenberg, 1999; Costenbader and Markson, 1994; Gottfredson and Gottfredson, 2001; Gregory and Weinstein, 2008; Nichols, 2004; Raffaele Mendez, Knoff, and Ferron, 2002; Skiba and Knesting, 2001; Skiba et al., 2002; Taylor and Foster, 1986; Thornton and Trent, 1988). Although Black students make up only approximately 17 percent of those enrolled in American public schools, they account for 40 percent of all rule-breaking incidents and 32 percent of all out-of-school suspensions (Gottfredson, 2001; Vavrus and Cole, 2002). In fact, minority students as a whole are suspended three times more frequently than White students (APA Zero Tolerance Task Force, 2006; Brooks, Schiraldi, and Ziedenberg, 1999). Expulsion, generally the most severe school penalty, is another punishment that is assigned more frequently for violations by Black students (Gottfredson and Gottfredson, 2001; Gregory and Weinstein, 2008; Skiba et al., 2002; Skiba and Peterson, 1999). These students also are exposed more frequently to even harsher disciplinary practices like corporal punishment (Glackman et al., 1978; Gregory, 1995; Shaw and Braden, 1990; Skiba et al., 2002; Skiba and Peterson, 2000) and are less likely to receive mild disciplinary alternatives (McFadden et al., 1992; Skiba et al., 2002; Skiba and Peterson, 2000).

In addition, schools with greater percentages of minority students are more likely to use restrictive prevention tactics. For example, mandatory disciplinary policies, such as zero tolerance, are applied disproportionately in schools with more Black students (Beger, 2002; Claiborne, 1999; Noguera, 2003a; Skiba, 2000; Skiba and Peterson, 1999, 2000; Vavrus and Cole, 2002). It seems that racial disparity in both disciplinary and preventive treatment actually increases as the punitive nature of the tactics increases (Skiba et al., 2002).

Several explanations for the disproportionate punitiveness toward Black students are offered in previous studies. The most obvious explanation for the racially disparate discipline practices of schools is that Black students actually engage in more behaviors that warrant harsh punishment; an overrepresentation in delinquency would justify the overrepresentation in punitive disciplinary practices (Noguera, 2001, 2008; Watts and Erevelles, 2004). Following this connection, Watts and Erevelles (2004: 271) suggested that Black youth may be more violent than others because of certain oppressive conditions that make them feel “vulnerable, angry, and resistant to the normative expectations of prison-like school environments.” Moreover, Duncan (2000) argued that greater involvement of Blacks in school violations could be a by-product of “urban pedagogies,” which convey certain expectations of laziness, delinquency, and violence.
to Black youth through images, symbols, attitudes, and behaviors. However, over time, studies repeatedly show that Black students actually have not misbehaved or participated in delinquency at a higher rate than Whites and that racial disparities in discipline are not attributable to differences in offending (McCarthy and Hoge, 1987; Skiba and Peterson, 1999).

Using similar reasoning, some argue that because zero tolerance policies supposedly remove discretion from school personnel, Black students receive more punitive punishments because they more frequently engage in behaviors that result in mandatory sanctions. However, although Black students are punished more often as a consequence of zero tolerance measures, a considerable amount of individual-level discretion actually is employed in determining which student behaviors are addressed by them (Ferguson, 2000; Vavrus and Cole, 2002). Research suggests that mandatory sanctions, like suspension, usually are preceded by a series of nonviolent events that culminate in a singling out by the teacher for a sole disruptive behavior (Vavrus and Cole, 2002). Thus, the harsher outcomes for Black students are not merely a reflection of more violations punishable by mandated suspensions but also importantly involve the discretion of teachers and administrators in identifying and acknowledging those behaviors.

Another explanation for greater school punitiveness toward Black students is that they are perceived by teachers and school administrators to engage disproportionally in delinquency, despite findings that they do not, and that these perceptions lead to more severe punishment (Morrow and Torres, 1995; Nichols, 2004; Noguera, 2003b). Some research suggests that perceptions of deviance by White teachers result from certain cultural expectations of behavior, such as greater physical contact, boisterousness, and vocal assertiveness of Black students (Nichols, 2004). Cross-cultural misunderstandings of jokes and other behaviors also might make teachers incorrectly believe that Black students are breaking rules (Brown and Beckett, 2006; Nichols, 2004), resulting in those who are perceived as “troublemakers” being “pushed out” (Skiba and Peterson, 1999). Moreover, toughness, a quality often admired by peers, may elicit teacher fear and, therefore, affect student discipline (Noguera, 2003a; Skiba, 2000; Skiba et al., 2002). Teachers accepting stereotypes of Black males as “threatening or dangerous may react more quickly to relatively minor threats to authority, especially if fears are paired with a misunderstanding of cultural norms of social interaction” (Skiba, 2000; 12). Furthermore, Ferguson (2000: 232) observed that “[i]mages of black male criminality and the demonization of black children play a significant role in framing actions and events in the justice system in a way that is similar to how these images are used in school to interpret the behavior of individual
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miscreants” and that “owing to a dominant image of black males as criminals and prisoners, many school authorities view chronically disobedient black boys as ‘bound for jail’ and ‘unsalvageable’” (2000: 92). The common typification of adult criminals as Black (Welch, 2007) increases support for harsh treatment in the criminal justice system (Chiricos, Welch, and Gertz, 2004); therefore, the racial typification of crime also may strengthen adult perceptions of Black youth as delinquent, thus fostering the endorsement of punitive school responses. However, as of yet, no research supports the contention that race-related perceptions about delinquency and crime actually have an impact on school controls.

An additional factor that might increase the perception that Black students are more often delinquent is what Ferguson (2000: 86) called the “adultification” of Black youth. She argued that, unlike White boys, Black boys are not allowed to act out juvenile masculinity by being “naturally naughty.” Instead, schools interpret the expression and display of masculine disobedience of Black students as an indicator of an “inherent vicious, insubordinate nature that, as a threat to order, must be controlled” (2000: 86). Accordingly, school administrators might react to certain misbehaviors of these “adultified” boys with disproportionately punitive sanctions that may seem more appropriate for adult offenders.

Individual examples of racial bias and racism also have been blamed for the racial disproportionality of school discipline (Brown and Beckett, 2006; Ferguson, 2000; Giroux, 2003; Noguera, 2003a; Skiba et al., 2002; Skiba and Peterson, 1999; Watts and Erevelles, 2004; Wu et al., 1982). Racial disparity in itself is not an indicator of discrimination (Skiba et al., 2002), but with delinquency being equal, harsher punishments have been attributed to racial bias. There are certain indicators of racial bias in public schools, with White teachers having more negative attitudes than Black teachers toward Black students (Nichols, 2004). Because much discipline originates in the classroom, such as the generally uneven use of disciplinary referrals by teachers (Noguera, 2003b), teacher racial bias could be responsible for the “systematic and prevalent bias in the practice of school discipline” (Skiba, Michael, and Nardo, 2002: 317). Because prior research shows that Black students are treated more punitively than White students regardless of poverty, misbehavior, attitudes, academic performance, parental attention, or school organization, the studies examining the racial disparity of school controls come to the conclusion that individual-level racial bias must be to blame (Brown and Beckett, 2006; Ferguson, 2000; Giroux, 2003; Noguera, 2003a; Watts and Erevelles, 2004; Wu et al., 1982). However, it is notable that no empirical support exists for this explanation. Given the amount of research highlighting the racial disparity in juvenile discipline, it is remarkable that so few studies explore the causes of this
disproportionality, and that none that have accounted for it with multivariate analyses (Skiba et al., 2002).

Finally, a frequently cited explanation for racial disparity in school discipline is that it actually might be attributable to socioeconomic disparity (Brantlinger, 1991; Nichols, 2004; Skiba et al., 2002; Skiba and Peterson, 1999; Skiba, Peterson, and Williams, 1997; Watts and Erevelles, 2004; Wu et al., 1982). Because Black students disproportionately come from low-income families, some suggest that any relationship between race and punitive discipline is partially, if not completely, spurious. Not surprisingly, statistics indicate that poorer students are, in fact, more likely to be targeted by harsh school practices (Brantlinger, 1991; Singer, 1996; Skiba et al., 2002; Skiba, Peterson, and Williams, 1997), whereas wealthier students more often receive mild or moderate consequences (Skiba et al., 2002). Thus, it has been suggested that the conflation of race with poverty exists because schools with a greater proportion of poor students also tend to have a greater proportion of minority students (Watts and Erevelles, 2004). Although this argument is compelling, various multivariate tests of the relationships among student race, economic status, and school discipline refute the contention that race is inconsequential for disciplinary outcomes. Results show that even while controlling for economic disadvantage, typically assessed by measures of free or reduced-price school lunch, Black students are punished more often and more harshly by schools (Gregory and Weinstein, 2008; McCarthy and Hoge, 1987; Skiba et al., 2002; Skiba and Peterson, 1999; Wu et al., 1982).

RACIAL THREAT AND SCHOOL PUNITIVENESS

Research has begun to explore the possibility that racial threat is contributing to the intensification of punitive school discipline (Welch and Payne, 2010). The racial threat hypothesis, rooted in conflict theory, suggests that various forms of social control will expand as the proportion of Blacks increases in relation to Whites. The macrosocial minority threat theoretical orientation originated from the work of Blumer (1958) and Blalock (1967), who described “power threat” as related to economic and political competition presented by racial minorities to the White majority. The perceived racial competition for limited financial and political capital (Brown and Warner, 1992; Jackson and Carroll, 1981; Jacobs and Carmichael, 2002; Jacobs and Wood, 1999; Taylor, 1998) is one explanation for increased social control that is implemented to preserve the status quo. Tests for this influence, eventually also termed “social threat” and “racial threat,” ultimately included Black crime as an important additional source of threat (Crawford, Chiricos, and Kleck, 1998; Liska, 1992).
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Of the ways racial threat has been operationalized in previous studies, the racial composition of place is the most frequently used measure. It has been related to crime-associated punitiveness, such as the resources and size of both law enforcement (Chamlin, 1989; Jackson, 1989; Kent and Jacobs, 2004; Liska, Lawrence, and Benson, 1981) and corrections (Jacobs and Helms, 1999), as well as rates of arrests (Harer and Steffensmeier, 1992; Liska and Chamlin, 1984; Liska, Chamlin, and Reed, 1985; Mosher, 2001), incarceration (Jacobs and Carmichael, 2001), executions (Tolnay, Beck, and Massey, 1992), and lynching (Corzine, Creech, and Corzine, 1983; Tolnay and Beck, 1992). Although this perspective originally focused exclusively on the effects of the threat presumably posed by Blacks, more recent studies also have addressed the potential effects of “ethnic threat” or “Hispanic threat” on social-control initiatives (Holmes et al., 2008; Steffensmeier and Demuth, 2000, 2001).

Individual attitudes about race, which presumably mediate the relationship between racial composition and punitive policies, also have increased punitiveness among individuals, such that demographic composition influences not only negative views of Blacks (Fosset and Kiecolt, 1989; Taylor, 1998) and the perception of higher crime in one’s neighborhood (Quillian and Pager, 2001) but also fear of crime by Blacks (Chiricos, Hogan, and Gertz, 1997; Quillian and Pager, 2001), public support for the death penalty (Baumer, Messner, and Rosenfeld, 2003), and punitiveness in general (King and Wheelock, 2007). Studies that have used perceptual measures of threat also have found support for the racial threat explanation for social control. It seems that perceptions about the relative size of Black populations are just as influential as actual values on the perceived risk of crime (Chiricos, McEntire, and Gertz, 2001). Furthermore, in studies of perceived racial threat that are explicitly linked to crime, the proportion of crime that is perceived to be committed by Blacks (Chiricos, Welch, and Gertz, 2004) and the belief by Whites that Blacks pose a threat to public safety (King and Wheelock, 2007) are consequential for the degree to which the public supports punitive crime policies. Moreover, when the public believes that Blacks as a group are more prone to violence, they are more likely to favor various crime-reduction expenditures (Barkan and Cohn, 2005). Additionally, public stereotypes of drug criminals according to race have influenced the manner with which individual sentencing decisions have been made (Steen, Engen, and Gainey, 2005). Overall, the findings of both compositional and attitudinal research suggest strong support for the influence of racial threat in criminal justice contexts.

Yet only one study to date has explored the application of the racial threat perspective in the school setting as an explanation for punitive student discipline. Using a sample of U.S. schools, Welch and Payne (2010) found that schools with more Black students more often implemented
harsh punishment and less often used restorative techniques for student misbehavior while controlling for other important influences. That research also observed that the percentage of Black students had a stronger effect on harsh discipline practices in schools with less student deviance, suggesting that in schools where students engage in less delinquency and drug use, schools are more likely to respond punitively to misbehavior largely based on the racial composition of the student body. Because of the potential negative consequences of harsh school policies and the dramatic racial disparities in school punishments, more exploration of this relationship seems particularly worthwhile.

THE PRESENT STUDY

This study continues to explore the associations between the percentage of Black students in schools and the use of punitive disciplinary responses, such as detentions, suspensions, expulsions, referrals to the police, and zero tolerance practices, as well as restorative disciplinary responses, such as referrals to school counselors, conferences with students and students' parents, restitution, and community service. By applying the racial threat perspective within the context of schools, this study expects to corroborate the findings of previous research that a greater proportion of Black students in certain schools is related to a greater use of harsh school discipline practices and a reduced use of more moderate practices (Welch and Payne, 2010). In addition, it goes beyond the previous findings by illustrating a fuller picture of the punitive and restorative disciplinary responses used in schools.

A broader depiction is possible through structural equation modeling, which allows for the examination of both the measurement of several punitive and restorative disciplinary practices as well as the interrelationships among the various influences on these practices. In this study, the following research questions are examined: 1) How are different school discipline practices related to one another? 2) How are various predictors of school discipline related to one another? 3) How are the various predictors related to punitive school discipline? 4) How are the various predictors related to restorative school discipline? 5) How is the full illustration of all of these relationships depicted? The answers to these questions may offer some explanations for the prevalent use of harsh discipline, particularly that which is applied disproportionately to Black students who are presumed more threatening to the teachers and administrators that might have come to associate Blacks with crime. Obtaining a better understanding of the forces contributing to the current criminal justice response to school deviance and delinquency will provide for the possibility of addressing certain racial injustices associated with it.
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METHODS

DATA

To assess the specific dynamics among racial threat, other potential influences on school policy, and school disciplinary practices, this study uses data from the National Study of Delinquency Prevention in Schools (Gottfredson et al., 2000) for which a probability sample of 1,287 public, private, and Catholic schools—stratified by location and level—was selected. From the sample of 1,287 schools, 7 were closed and 1 was not a school, leaving 1,279 schools in the sample. Of these schools, 848 (66.3 percent) responded to the Phase One Principal Questionnaire given in 1997. Phase Two Principal Questionnaires were administered in 1998; of the 848 schools involved in Phase One, 635 (74.9 percent) responded to the Phase Two Principal Questionnaire. In addition, Student and Teacher Questionnaires were administered in 847 secondary schools in 1998; 310 schools (55.6 percent) participated in the student survey, and 403 schools (72.2 percent) participated in the teacher survey. The relationships between survey participation and various school and community characteristics were examined. Rural schools in small towns were more likely to have participated, whereas schools in communities with more female-headed households with children, greater urban populations, and more households receiving public assistance were less likely to have participated. The degree to which generalizability may be affected by these sample qualities is addressed in the Discussion section.

This study’s analyses are limited to certain types of schools. Only public schools are included in the sample because previous research on discipline and punishment focuses nearly exclusively on public schools; therefore, this study’s sample fits better within established theoretical frameworks (Kupchik and Monahan, 2006). In addition, exploratory analyses indicate that the private and parochial schools in the sample vary widely with regard to disciplinary policies and thus would require separate analyses. Moreover, the alternative schools for disruptive youth include numerous outliers on several of the study’s variables of interest and thus are excluded from analyses. Because student and teacher surveys were administered only in middle and high schools, and many control variables used in this study are taken from these surveys, the sample is limited to secondary schools. Therefore, the final sample for this research includes 294 public, nonalternative secondary schools, which represents the population to which this study’s findings are most applicable.

2. Public charter schools were not surveyed.
### Table 1. Descriptive Statistics for Items in Analyses

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Alpha</th>
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<td>Disciplinary response</td>
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<td></td>
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<tr>
<td>Extreme punitive disciplinary response</td>
<td>1.91</td>
<td>.27</td>
<td>1.00–3.00</td>
<td>.74</td>
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<td>Zero tolerance</td>
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<td>.27</td>
<td>.00–1.00</td>
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<td>283</td>
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<td>Punitive disciplinary response</td>
<td>2.44</td>
<td>.35</td>
<td>1.00–3.00</td>
<td>.61</td>
<td>292</td>
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<td>Mild disciplinary response</td>
<td>2.57</td>
<td>.39</td>
<td>1.00–3.00</td>
<td>.86</td>
<td>291</td>
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<tr>
<td>Restitutive disciplinary response</td>
<td>1.82</td>
<td>.38</td>
<td>1.00–3.00</td>
<td>.57</td>
<td>292</td>
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<td>Racial threat</td>
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<tr>
<td>Percent Black students</td>
<td>13.52</td>
<td>22.45</td>
<td>.00–99.69</td>
<td></td>
<td>294</td>
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<td>Other exogenous variables</td>
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<td></td>
<td></td>
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<td></td>
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<td>Student delinquency</td>
<td>.13</td>
<td>.05</td>
<td>.03–.45</td>
<td>.84</td>
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<td>Student drug use</td>
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<td>.03–.51</td>
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<td>Teacher victimization</td>
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<td>.07</td>
<td>.00–1.00</td>
<td>.61</td>
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<td>Perceived lack of safety</td>
<td>.85</td>
<td>.36</td>
<td>.00–4.00</td>
<td>.94</td>
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<td>Percent students free/reduced lunch</td>
<td>33.26</td>
<td>26.08</td>
<td>.00–100.00</td>
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<td>Percent Hispanic students</td>
<td>10.29</td>
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<td>.00–98.11</td>
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<td>Percent male students</td>
<td>39.11</td>
<td>7.08</td>
<td>25.00–96.80</td>
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<td>Percent minority teachers</td>
<td>12.45</td>
<td>18.96</td>
<td>.00–96.90</td>
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<td>Percent female teachers</td>
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<td>12.45</td>
<td>31.30–92.00</td>
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<td>2.10–4.00</td>
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<td>1.00–2.00</td>
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<tr>
<td>Concentrated disadvantage</td>
<td>-.15</td>
<td>.65</td>
<td>-.120–3.00</td>
<td></td>
<td>281</td>
</tr>
<tr>
<td>Urbanicity</td>
<td>-.20</td>
<td>.95</td>
<td>-.2.32–2.39</td>
<td></td>
<td>281</td>
</tr>
</tbody>
</table>

**ABBREVIATION:** SD = standard deviation.

### MEASURES

Described subsequently are the items and scales comprising the principal, teacher, and student questionnaires. Descriptive statistics are provided in table 1, and the individual items included in each scale can be reviewed in appendix A. Scales other than those used to measure disciplinary responses are taken from the final report of the National Study of Delinquency Prevention in Schools and were developed and copyrighted by Gary Gottfredson (Gottfredson, 1999; Gottfredson and Gottfredson, 1999; Gottfredson et al., 2000).

### DISCIPLINARY RESPONSE

Five scales representing different degrees of disciplinary responses were created using 22 questions from the principal survey that ask about possible administrative responses to student misbehavior. Three of these scales,
MODELING THE EFFECTS OF RACIAL THREAT 1031

Extreme punitive disciplinary response, zero tolerance, and punitive disciplinary response, pertain to harsher, more punitive school responses. Extreme punitive disciplinary response is a 4-item scale that includes court action against the student or parent and calling or notifying the police; possible responses to items are “not used,” “used,” and “used often.” Zero tolerance is a 5-item scale representing whether schools automatically would suspend a student if they brought tobacco, alcohol, other drugs, a knife, or a gun to school; possible responses to items are “yes” and “no.” Punitive disciplinary response is a 5-item scale that includes suspension from school, in-school suspension, and after-school detention; possible responses to items are “not used,” “used,” and “used often.” By contrast, the other two school response scales are more restorative in nature. Mild disciplinary response is a 5-item scale that includes sending students to the school counselor and holding conferences with students’ parents/guardians; possible responses to items are “not used,” “used,” and “used often.” Finally, restitutive disciplinary response is a 3-item scale that includes restitution (requiring a student to repay the school or victim for damages or harm done) and community service; possible responses to items are “not used,” “used,” and “used often.” For each scale, a school’s score is the mean of the proportion of scale items endorsed.

PRIMARY EXOGENOUS VARIABLE: PERCENT BLACK STUDENTS

Racial threat is operationalized in this research by the percent of Black students in each school, as is done in prior research on racial threat in schools (Welch and Payne, 2010). The variable for percent Black students was taken from the Common Core of Data, which is a program of the U.S. Department of Education’s National Center for Education Statistics that collects data on public education (Gottfredson et al., 2000).

OTHER EXOGENOUS VARIABLES

Certain factors that may influence the use of particular discipline policies in schools are suggested by previous research. Therefore, measures of these characteristics are included in this study to control for their potential effects on disciplinary response, to gauge exactly how they influence it, as well as to see how these variables themselves are influenced by the percent of Black students in schools.

One might presume that the actual level of school crime and disorder should be associated with school punitiveness and disciplinary practice (Skiba et al., 2002). In addition, crime salience also has predicted punitive discipline in schools (Hilarski, 2004; Skiba et al., 2002). Therefore, this
study includes measures of these factors to assess the impact of racial composition on punitive discipline. *Student delinquency and drug use* is a latent factor made up of two scales; *student delinquency* is a 13-item self-report scale measuring the number of different crimes committed by the student during the 12 months prior to the survey, whereas *student drug use* is a 15-item self-report scale measuring the variety of different drugs used by the student during the 12 months prior to the survey. Possible responses for both scales are “yes” and “no.” Crime salience is measured by another latent factor, *teacher victimization and perceived lack of safety*, which also is made up of two scales; *teacher victimization* is a 9-item scale assessing the amount of victimization experienced by teachers during the 12 months prior to the survey with possible responses of “yes” and “no,” and *perceived lack of safety* is an 8-item scale that asks respondents how safe teachers feel in various places in the school with possible responses of “very unsafe,” “fairly unsafe,” “average,” “fairly safe,” and “very safe.”

All crime-related indicators were aggregated to the school level.

Research consistently finds that one of the strongest predictors of punitive student discipline is socioeconomic status (Brantlinger, 1991; McCarthy and Hoge, 1987; Skiba et al., 2002; Skiba, Peterson, and Williams, 1997; Thornton and Trent, 1988; Wu et al., 1982). In this study, economic disadvantage is represented as the *percent of students receiving free or reduced price lunch*; on average, the schools in this study offer 33.26 percent of their students this option. In addition, because the relative size of the Hispanic population has affected the severity of criminal justice practices (Holmes, 2000; Holmes et al., 1996; Jacobs and Carmichael, 2002; Steffensmeier and Demuth, 2000), a higher Hispanic composition of student populations may be related to harsher school discipline. Thus, *percent of Hispanic students* is included as a control variable. Hispanic students comprise 10.29 percent of the schools in the sample. Finally, student discipline also is influenced by the *percent male students* in schools (Artiles, 2003; Casella, 2001; Gregory, 1995; Noguera, 1995; Raffaele Mendez and Knoff, 2003; Skiba et al., 2002) and therefore is included in this research, with boys comprising 39.11 percent of the schools’ populations in this study.

It seems that cross-cultural misunderstandings in public school classrooms between a growing number of Black students and a growing number of White teachers might be associated with more punitive student discipline (Brown and Beckett, 2006; Cooper and Jordan, 2003). Furthermore, it seems that the teacher decision to discipline certain actions “disproportionately affects students whose race and gender distance them from their teachers” (Vavrus and Cole, 2002: 109) and that teacher bias is

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3. This scale is coded so that higher values indicate higher levels of perceived lack of safety.
likely to influence disciplinary practices (Skiba, 2001). Therefore, the effects of both percent minority teachers and percent female teachers are controlled in these analyses; both variables are aggregated to the school level from the teacher survey.

School discipline policies also potentially are influenced by the leadership demonstrated by the administration. For example, previous research has shown that principal leadership is important for overall school effectiveness (Gottfredson et al., 2000; Hall, 1987), and that strong principal leadership can result in effective discipline policies (DiLullo, 2004; Lasley and Wayson, 1982), whereas Wu et al. (1982) showed that poor school governance is associated with a greater use of punitive discipline. This study uses two separate measures of principal leadership. Principal leadership is a 19-item scale from the principal survey that measures the principal’s emphasis on supervision and feedback, consideration, presence and visibility, and planning; possible responses were “top,” “high,” “some,” and “little.” A school’s score is the mean of the principal’s responses to each item. Administrative leadership is a 12-item scale from the teacher survey that measures the teachers’ perceptions of principal leadership. Examples of these items include “the administration is supportive of teachers” and “teachers feel free to communicate with the principal”; possible responses were “true” and “false.” A school’s score on this scale is the mean across teachers of the proportion of items endorsed.

In addition, discipline training has been related to the quality of a school’s disciplinary response (Gottfredson et al., 2000; Wu et al., 1982) and therefore is included in this study. Discipline training is an 8-item scale from the principal survey that assesses the quality and quantity of the training received by school personnel in its disciplinary procedures. Items in this scale include questions like “how much initial in-service training in school discipline procedures was completed?” as well as various yes/no statement items such as “participants practiced applying the principles.” A school’s score on this scale is represented by collapsing all nonbinary items and averaging them to form a proportion of items endorsed.

Finally, the characteristics of each school’s surrounding community were measured at the school level using 1990 U.S. Census data for the school’s zip code area, controlling for the possible effect these factors might have on student discipline (Brentlinger, 1991; DeVoe et al., 2005; Gottfredson et al., 2000; Simonson, 1998; Skiba, Peterson, and Williams, 1997; Wu et al., 1982). Concentrated disadvantage is a factor scale including welfare, female-headed households, median income, poverty, divorce rate, and unemployment. Urbanicity is also a factor scale including population size, urban level (according to U.S. Census definitions), and urbanicity (the proportion of people living within an urban area). These two scales were
created using results from varimax factor analyses conducted by Simonsen (1998).

ANALYTICAL STRATEGY

The distributional characteristics of the study measures were examined first. Both concentrated disadvantage and urbanicity were trimmed to address three extreme outliers and resulting skewness. Exploratory factor analyses were conducted for the 22 disciplinary response items to guide decisions about the measurement models; highly related items were treated as multiple indicators of an underlying construct. The EQS Structural Equations Program (version 6.1 for Windows, Multivariate Software, Inc., Encino, CA) then was used to estimate the structural equations models (SEMs) of the direct and indirect effects of percent Black students and other exogenous variables on the five disciplinary response constructs based on the variance–covariance matrix for the transformed and rescaled variables. SEM was chosen as this study’s primary analytical technique because it allows for the simultaneous estimation of measurement and structural models, for covariances illustrating relationships among the exogenous variables, and for the use of multiple dependent variables. A critical value of $p < .05$ was used to determine whether structural paths were significant.

The estimation of these models proceeded in several steps. First, variables were rescaled so that their variances would be approximately equal, and a small amount of missing data was imputed for some control variables for between 1 and 19 schools, depending on the variable. The regression method was used for imputation, using variables from the census that are not included in the model to predict scores for the missing variables. All imputation was accomplished within EQS. Next, to address the first research question, two measurement models were estimated for the disciplinary response latent constructs; one set contained measurement models for the three more punitive outcomes (extreme punitive disciplinary response, zero tolerance, and punitive disciplinary response), and the other set contained measurement models for the two more restorative outcomes (mild disciplinary response and restitutive disciplinary response). For each set of measurement models, the error terms for each latent construct were unconstrained, thus allowing the errors of the disciplinary responses to covary. The factor analysis results were used as a guide, but paths suggested by the Lagrange multiplier test were added to improve the fit of the model to the data. Latent factors were scaled by fixing the variance of each factor at a value of one. In addition, to address the second research question, a measurement model including all independent measures (percent Black students and all other exogenous variables) was estimated to illustrate the empirical relationships that exist among these variables.
MODELING THE EFFECTS OF RACIAL THREAT 1035

Three SEMs then were estimated, allowing all nonrecursive paths from percent Black students and all other exogenous variables to the disciplinary response constructs to be unconstrained. All three models contained each exogenous variable; the first model, which investigated the third research question, estimated paths from these predictors to the three punitive outcomes, whereas the second model, which investigated the fourth research question, estimated paths from these predictors to the two restorative outcomes. The final model, addressing the fifth research question, contained all exogenous variables and all five disciplinary response constructs. In these three models, any covariances found among the exogenous variables in the previously estimated measurement model were unconstrained, as were all covariances among the error terms for the disciplinary outcomes, to account for the relationships found in the earlier models. These models were improved by deleting paths that the Wald test suggested could be eliminated without degrading the fit of the model and by adding a few paths or covariances that the Lagrange multiplier test suggested should be added to improve the fit. Several indices of fit are reported for each of these steps; the ratio of the $\chi^2$/d.f. (best if 3 or less), the nonnormed fit index, and the comparative fit index (both best if greater than .9).

RESULTS

Rotated factor loadings first were obtained from a varimax-rotated factor analysis using the 22 disciplinary response items. A five-factor solution accounted for 56.17 percent of the common variance in the observed measures, as shown in table 2. In this solution, different items loaded highly on different scales, illustrating the five scales described.

To address the first research question, the measurement models for the disciplinary response constructs were estimated. As the standardized solutions show in figures 1 and 2, these models accord with the factor analysis results; all coefficients in the models are statistically different from zero, and the paths from the latent constructs to the observable measures follow the same pattern as the factor loadings shown in table 2. In addition, the covariances among the latent construct error terms show that significant relationships exist among the various discipline outcomes, such that schools using extremely punitive punishments also are more likely to use punitive discipline and zero tolerance practices, whereas schools using milder punishments are more likely to use restitutive practices. Notably, two covariances were found between the extreme punitive disciplinary response latent construct and two individual indicators of punitive disciplinary response; out-of-school suspension and short-term privilege withdrawal are related to extreme punitive disciplinary response and beyond the relationship between that latent construct and punitive disciplinary response.
Table 2. Varimax-Rotated Factor Analysis Results for Disciplinary Response Indicators

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mild Disciplinary Response</th>
<th>Zero Tolerance</th>
<th>Extreme Punitive Disciplinary Response</th>
<th>Restitutive Disciplinary Response</th>
<th>Punitive Disciplinary Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference with student</td>
<td>.882</td>
<td>.056</td>
<td>.073</td>
<td>.033</td>
<td>.108</td>
</tr>
<tr>
<td>Conference with parent</td>
<td>.841</td>
<td>−.011</td>
<td>.066</td>
<td>.042</td>
<td>.095</td>
</tr>
<tr>
<td>Oral reprimand</td>
<td>.737</td>
<td>.071</td>
<td>.060</td>
<td>.115</td>
<td>.110</td>
</tr>
<tr>
<td>Notification of parent</td>
<td>.883</td>
<td>.046</td>
<td>.087</td>
<td>.046</td>
<td>.157</td>
</tr>
<tr>
<td>Visit with counselor</td>
<td>.602</td>
<td>.065</td>
<td>.173</td>
<td>.145</td>
<td>−.051</td>
</tr>
<tr>
<td>Zero tolerance—tobacco</td>
<td>.079</td>
<td>.515</td>
<td>.238</td>
<td>−.281</td>
<td>.098</td>
</tr>
<tr>
<td>Zero tolerance—alcohol</td>
<td>.084</td>
<td>.842</td>
<td>.036</td>
<td>.070</td>
<td>.034</td>
</tr>
<tr>
<td>Zero tolerance—drug</td>
<td>.092</td>
<td>.876</td>
<td>.023</td>
<td>−.048</td>
<td>.017</td>
</tr>
<tr>
<td>Zero tolerance—knife</td>
<td>−.045</td>
<td>.743</td>
<td>.092</td>
<td>−.119</td>
<td>.100</td>
</tr>
<tr>
<td>Zero tolerance—gun</td>
<td>.020</td>
<td>.814</td>
<td>.071</td>
<td>−.080</td>
<td>.035</td>
</tr>
<tr>
<td>Court action</td>
<td>−.056</td>
<td>.057</td>
<td>.743</td>
<td>.057</td>
<td>.070</td>
</tr>
<tr>
<td>Expulsion</td>
<td>−.004</td>
<td>−.096</td>
<td>.684</td>
<td>−.116</td>
<td>−.061</td>
</tr>
<tr>
<td>Notification of police</td>
<td>−.215</td>
<td>.047</td>
<td>.686</td>
<td>−.171</td>
<td>.080</td>
</tr>
<tr>
<td>Charging with crime</td>
<td>−.140</td>
<td>.034</td>
<td>.792</td>
<td>.051</td>
<td>.074</td>
</tr>
<tr>
<td>Restitution</td>
<td>.123</td>
<td>.006</td>
<td>−.002</td>
<td>.572</td>
<td>.449</td>
</tr>
<tr>
<td>Community service</td>
<td>.070</td>
<td>.027</td>
<td>.203</td>
<td>.776</td>
<td>.037</td>
</tr>
<tr>
<td>Work duties or tasks</td>
<td>.051</td>
<td>−.007</td>
<td>−.053</td>
<td>.773</td>
<td>.003</td>
</tr>
<tr>
<td>Suspension</td>
<td>.393</td>
<td>.018</td>
<td>.329</td>
<td>.212</td>
<td>.596</td>
</tr>
<tr>
<td>In-school suspension</td>
<td>.110</td>
<td>.053</td>
<td>−.022</td>
<td>.015</td>
<td>.642</td>
</tr>
<tr>
<td>After-school detention</td>
<td>.134</td>
<td>−.038</td>
<td>−.050</td>
<td>.143</td>
<td>.600</td>
</tr>
<tr>
<td>Short privilege withdrawal</td>
<td>.077</td>
<td>−.023</td>
<td>−.302</td>
<td>.041</td>
<td>.761</td>
</tr>
<tr>
<td>Long privilege withdrawal</td>
<td>.055</td>
<td>−.045</td>
<td>.200</td>
<td>−.045</td>
<td>.788</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>4.62</td>
<td>2.88</td>
<td>1.94</td>
<td>1.52</td>
<td>1.40</td>
</tr>
<tr>
<td>Percent variance explained</td>
<td>20.99%</td>
<td>13.07%</td>
<td>8.82%</td>
<td>6.92%</td>
<td>6.36%</td>
</tr>
</tbody>
</table>

*Factor loadings for items on the scale to which each item belongs are in bold.

response, such that schools using extremely punitive punishments are more likely to suspend students but less likely to withdraw privileges for a short period of time. This finding is logical if one considers that out-of-school suspension is on the harsher end of the punitive punishment continuum, whereas short-term privilege withdrawal is on the milder end. This finding also accords with the relatively strong factor loading that out-of-school suspension displayed with the extreme punitive disciplinary response factor in table 2. Table 3 shows that the fit indices suggest a good fit to the data for these measurement models.

The measurement model for all exogenous variables investigates the second research question by examining the associations among percent Black students and the other predictors of school disciplinary responses (figure 3). As is shown, multiple significant covariances exist between these variables, demonstrating that many relationships are found between school racial composition and structural factors. Percent Black students displays a positive relationship with student delinquency and drug use, teacher victimization and perceived lack of safety, percent students receiving free/
reduced lunch, percent Hispanic students, percent minority teachers, and concentrated disadvantage, illustrating that schools with a greater percentage of Black students are likely to have higher levels of disorder and crime salience, have a greater percentage of poor and Hispanic students and minority teachers, and be located in a more disadvantaged community. Percent Black students also is related to both principal leadership and administrative leadership, such that principals are perceived as less effective in schools with a greater percentage of Black students. Not surprisingly, student delinquency and drug use is related positively to concentrated
disadvantage, whereas teacher victimization and perceived lack of safety is related positively to both percent students receiving free/reduced lunch and concentrated disadvantage, confirming that more disadvantaged schools with a greater percentage of poor students experience more disorder and crime salience. In addition, teacher victimization and perceived lack of safety is related negatively to administrative leadership, suggesting that principals are perceived as less effective in schools that suffer from greater levels of disorder and fear. Percent students receiving free/reduced lunch is related positively to percent Hispanic students, percent minority teachers, discipline training, and concentrated disadvantage, showing that schools with a greater percentage of poor students also have a greater percentage of Hispanic students and minority teachers, engage in more discipline training, and are located in poorer communities. Percent Hispanic students
Figure 3. Exogenous Variables Measurement Model

also is related positively to percent minority teachers, demonstrating that schools with a greater percentage of Hispanic students also have a greater percentage of minority teachers. Additionally, discipline training is related
Figure 4. Punitive Disciplinary Response Structural Model

Chi-square = 602.23
Chi-square/d.f. = 2.01
CFI = .89
NNFI = .85

Percent Black Students

Student Delinquency and Drug Use

Percent Free/Reduced Lunch

Percent Hispanic Students

Percent Male Students

Percent Minority Teachers

Percent Female Teachers

Principal Leadership

Administrative Leadership

Discipline Training

Concentrated Disadvantage

Urbanicity

Chi-square = 602.23
Chi-square/d.f. = 2.01
CFI = .89
NNFI = .85
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to principal leadership and concentrated disadvantage, such that schools that engage in more discipline training are likely to have more effective principals but be located in more disadvantaged communities. Finally, urbanicity is related positively to both percent Hispanic students and concentrated disadvantage, illustrating that urban schools are likely to have a greater percentage of Hispanic students and to be located in more disadvantaged communities. Again, table 3 shows that all fit indices suggest a good fit to the data for this model.

Two structural equation models then were estimated to address the third and fourth research questions (figures 4 and 5). Both models contain percent Black students and all other exogenous variables; figure 4 contains the three punitive disciplinary response constructs, whereas figure 5 contains the two restorative disciplinary response constructs. For simplicity, the covariances allowed among the exogenous variables are not shown, nor are the covariances allowed among the error terms of the dependent variables; the values of these coefficients did not differ significantly in these models from those observed in the measurement model of the exogenous variables (figure 3). All coefficients shown in the structural models are significantly different from zero, and the fit indicators shown in table 3 suggest a good fit to the data.

Figure 4 shows the standardized SEM estimates for the paths leading to extreme punitive disciplinary response, zero tolerance, and punitive disciplinary response. As expected, percent Black students has a significant positive effect on all three punitive constructs, illustrating that schools with a greater percentage of Black students are more likely to use harsh forms of punishment, such as detentions, automatic suspensions, and criminal justice referrals. Notably, student delinquency and drug use is not related to any punitive outcomes, whereas teacher victimization and perceived lack of safety is related positively only to extreme punitive disciplinary response, demonstrating that the level of crime, victimization, and crime salience in a school has little, if anything, to do with the type of discipline used. Other exogenous variables also display positive paths to all three punitive outcomes, including percent students receiving free/reduced lunch, percent Hispanic students, percent minority teachers, principal leadership, and concentrated disadvantage, suggesting that harsher forms of punishment also are found in schools with a greater percentage of poor and Hispanic students and minority teachers, schools located in more disadvantaged communities, and schools in which principals view themselves as effective leaders. Percent female teachers has a positive path to punitive disciplinary response but has a negative path to extreme punitive disciplinary response, demonstrating that schools with a greater percentage of female teachers are more likely to use harsh punishments such as suspension and detention.
Figure 5. Restorative Disciplinary Response Structural Model

Chi-square = 311.32
Chi-square/d.f. = 1.88
CFI = .94
NNFI = .91
but less likely to use extreme punishments such as expulsion and involvement of the criminal justice system. In addition, the path estimate from urbanicity to punitive disciplinary response is positive, as is the path estimate from discipline training to extreme punitive disciplinary response, suggesting that urban schools are more likely to use harsh punishments, as are schools that engage in more discipline training. It is notable that neither percent male students nor administrative leadership are significantly related to any of the disciplinary responses.

Figure 5 shows the standardized SEM results for the outcomes of mild disciplinary response and restitutive disciplinary response. As expected, percent Black students has a significant negative effect on both restorative outcomes, illustrating that schools with relatively more Black students are less likely to use more moderate forms of punishments, such as counselor visits, conferences with students, community service, and restitution. In this model, student delinquency and drug use does display a significant positive path to restitutive disciplinary response, whereas teacher victimization and perceived lack of safety shows a significant positive path to mild disciplinary response, such that schools with greater levels of disorder and crime salience are more likely to use these restorative forms of punishment. Most of the other exogenous variables have effects on both restorative outcomes in the expected directions. Percent students receiving free/reduced lunch, percent Hispanic students, percent minority teachers, concentrated disadvantage, and urbanicity display negative path estimates, such that milder forms of punishment are less likely to be used in more disadvantaged urban schools with a greater percentage of poor and Hispanic students and minority teachers. In contrast, principal leadership, administrative leadership, and discipline training display positive path estimates, suggesting that these responses are more likely to be used in schools with more effective principals and more discipline training. As with the more punitive responses, percent male students is not related to either restorative school response.

A final structural equation model was estimated, containing all exogenous variables and the five disciplinary response latent constructs, to address the fifth research question (figure 6). Again, for clarity, the covariances allowed among the exogenous variables are not shown; the values of these coefficients did not differ significantly in these models from those found in the measurement model shown in figure 3. However, the error terms for the dependent variables are shown because additional covariances were freed. Along with the covariances already described, significant covariances are observed between the two restorative responses and two of the three punitive responses (zero tolerance and punitive disciplinary response), demonstrating that schools that use one type of response to misbehavior are more likely to use many other types as well. Notably,
this finding does not hold true for extreme punitive disciplinary response, as covariances between this type of punishment and the two restorative responses are not significant. Thus, schools that respond to misbehavior in a moderate, more restorative way are not likely to use responses that involve the criminal justice system.
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When the path estimates from the exogenous variables to the five disciplinary response constructs are examined, results are similar to those observed in the previous structural models. Percent Black students displays a positive effect on all three punitive outcomes and a negative effect on both restorative outcomes, illustrating that schools with a greater percentage of Black students are more likely to respond to misbehavior in a harsh manner and are less likely to respond in a mild, more restorative manner. Similarly, most relationships between the other exogenous variables and the five dependent variables match those discussed previously. However, a few of the relationships between the exogenous variables and restorative responses are no longer significant. Neither percent Hispanic students nor administrative leadership display significant paths to mild disciplinary response, whereas student delinquency and drug use no longer displays a significant path to restitutive disciplinary response; these relationships are rendered spurious in the full model. All coefficients shown in the structural models are significantly different from zero, and the fit indicators shown in table 3 suggest a good fit to the data. Thus, the full model shows the continued importance of percent Black students as a predictor in the type of discipline used even while examining the relationships among all predictors, among all possible disciplinary responses, and between the predictors and responses.

Table 3. Summary of Model Fit Indices

<table>
<thead>
<tr>
<th>Model</th>
<th>Chi-Square</th>
<th>d.f.</th>
<th>Chi-Square / d.f.</th>
<th>CFI</th>
<th>NNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punitive disciplinary responses</td>
<td>209.91</td>
<td>69.00</td>
<td>3.04</td>
<td>.84</td>
<td>.78</td>
</tr>
<tr>
<td>measurement model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restorative disciplinary responses</td>
<td>48.69</td>
<td>17.00</td>
<td>2.86</td>
<td>.96</td>
<td>.93</td>
</tr>
<tr>
<td>measurement model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exogenous variables</td>
<td>152.62</td>
<td>60.00</td>
<td>2.55</td>
<td>.92</td>
<td>.88</td>
</tr>
<tr>
<td>measurement model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punitive disciplinary responses</td>
<td>602.23</td>
<td>301.00</td>
<td>2.01</td>
<td>.89</td>
<td>.85</td>
</tr>
<tr>
<td>structural model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restorative disciplinary responses</td>
<td>311.32</td>
<td>166.00</td>
<td>1.88</td>
<td>.94</td>
<td>.91</td>
</tr>
<tr>
<td>structural model</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Full structural model</td>
<td>935.72</td>
<td>526.00</td>
<td>1.78</td>
<td>.88</td>
<td>.85</td>
</tr>
</tbody>
</table>

ABBREVIATIONS: CFI = comparative fit index; NNFI = nonnormed fit index.

DISCUSSION

This study went beyond previous research to examine the relationships among various disciplinary responses themselves, as well as among the racial composition of schools and other influences on these responses, to
illustrate a full model of the effects on school discipline. As the findings of previous research indicate (Welch and Payne, 2010), this research found that a greater proportion of Black students in schools is related to a greater use of harsh school discipline practices and a reduced use of more moderate practices. To learn more about the factors associated with different disciplinary approaches and some injustices associated with them, the following research questions were investigated: 1) How are different school discipline practices related to one another? 2) How are various predictors of school discipline related to one another? 3) How are the various predictors related to punitive school discipline? 4) How are the various predictors related to restorative school discipline? 5) How is the full illustration of all these relationships depicted?

Results from analyses exploring the first research question show that significant positive relationships exist among the various disciplinary responses. This finding indicates that schools responding to student misbehavior with one type of discipline tend to use other types of responses as well, which suggests that when discipline is used by schools, it, in fact, might become harsher just by virtue of the number of disciplinary measures implemented by those schools.

Analyses exploring the second research question also found significant relationships among many exogenous factors. Not surprisingly, schools with a greater percentage of Black students are also more likely to have a greater percentage of poor and Hispanic students, to be located in disadvantaged urban communities, to have less effective principals, and to have higher levels of disorder and crime salience. However, unexpectedly, schools with these characteristics actually are more likely to engage in discipline training. This finding likely reflects the need for schools to respond to actual or perceived student misbehavior or to pressure from outside sources. Exploring these associations among the potential influences on disciplinary responses conveys the broader picture of school management.

Beyond the direct effects observed from certain school factors to school discipline, such as the influence racial composition has on punitive discipline, the illustration of these interrelationships also points to the possibility of indirect effects on school discipline. For example, it is possible that the lack of a direct effect of urbanicity on punitive discipline is actually because urbanicity has an indirect effect on discipline through other factors, such as racial composition or student poverty. These findings related to the interrelationships among the exogenous factors, revealed through the use of SEM, provide a fuller and more specific depiction of the reality of school discipline management.

Many significant relationships also were observed between the exogenous factors and school discipline, as explored pursuant to the remaining three research questions. As expected, the racial composition of schools is
related to the type of discipline used in those schools, such that those with a greater Black population are more likely to respond to misbehavior in a punitive manner and less likely to respond in a restorative manner. However, although the racial composition of students is the strongest predictor of discipline in these models, it is not the only significant influence: Similar associations are observed in disadvantaged urban schools with a greater percentage of poor and Hispanic students. Interestingly, the effectiveness of the principal and the amount and quality of discipline training also are related to all types of discipline, such that schools with more effective principals and trained personnel are more likely to use both types of disciplinary responses. This finding suggests that some schools may be responding to misbehavior with any means available to them, whether it includes charging students with crimes, suspending them, sending them to a counselor, or having them engage in community service. Notably, the level of disorder in schools only is related to the more moderate responses to misbehavior, such that schools with greater levels of disorder and perceived lack of safety are more likely to use these restorative forms of punishment. Thus, the use of harsher forms of punishment is unrelated to a school’s level of crime and delinquency. Such a counterintuitive outcome deserves more examination.

STUDY LIMITATIONS AND FUTURE RESEARCH

This study has certain limitations that should be considered for future research. Because of theoretical, sampling, and data restrictions, this study’s sample is not fully representative of all U.S. schools, thus limiting generalizability. In addition, response rates may be problematic, although some research has shown that studies with a lower rate of participation actually can demonstrate more or equally accurate results than studies with higher response rates (Keeter et al., 2006; Visser et al., 1996). Also, the results of this research may not generalize as well to schools located in urban communities, with more female-headed households with children, and more households that received public assistance because they were less likely to have participated in the study.4

4. It is unlikely that the basic results of the study would change had more of these schools been included. Exploratory analyses of potential biases introduced by the low response rates examined participating schools that were located in similar communities as nonparticipating schools. These schools were more likely to have a greater percentage of Black students and more punitive disciplinary responses than other schools. It therefore seems likely that the inclusion of the nonparticipating schools would have resulted in actually intensifying the relationships reported in this study. Of course, it is possible that the relationships of interest are not linear in the region of the distribution in which nonparticipating schools
Additionally, the cross-sectional nature of the data prevents conclusive knowledge of whether the Black composition of schools is related causally to school disciplinary responses. It is possible that the implementation of discipline preceded one or more of the exogenous variables in this study. Although prior research using time-series data also supports the racial threat perspective in relation to the severity of crime policies (Kent and Jacobs, 2004), to establish temporal ordering truly, future studies of the effects of racial threat on school discipline should consider using longitudinal methods.

A potential shortcoming related to this study’s primary exogenous variable is the use of compositional data to represent racial threat. Although objective racial composition is the most frequently applied measure of threat, it has been argued that perceptual measures are more valid representations of the concept and may have a more direct effect on increased punitive controls (Chiricos, Welch, and Gertz, 2004). Considering the very limited research on the effects of racial threat in schools, it might be beneficial to consider the use of alternative measures of threat in future studies.

Although this study includes those variables found to predict discipline most consistently, it could not control for every possible influence on it. For example, principal gender and principal race, which may have an important influence on discipline practices, were not available in this data. Furthermore, poor academic performance of students has been associated with teachers’ willingness to discipline students harshly (Wu et al., 1982), so including a measure of this variable may have increased the accuracy of findings. It also might be useful to control for more specific details related to the crime and disorder in schools, as discipline likely varies according to levels of violent, property, and drug offenses as well as less serious student mischief. Additionally, other factors not identified in previous research might be related to student discipline, such as school climate and structure. Thus, future research should explore the racial threat hypothesis in schools in greater detail by controlling for a school’s level of different types of disorder and principal characteristics, as well as by examining the possibility that school climate and structure could mediate or moderate the impact of racial composition on discipline.

fall or that some characteristic might alter the relationships established. However, the linear relationship among community characteristics and nonparticipation, racial composition of the student body, and the punitiveness of the disciplinary measures seems to indicate that, if anything, the results presented here provide conservative estimates of the relationships.
CONCLUSION

This study’s confirmation that the effects of racial threat extend beyond criminal justice institutions has significant implications for school discipline. The relative size of schools’ minority populations seems to be at least partially responsible for the intensification of school punishment, thus leading to the increasing prisonization of schools and criminalization of students. This prisonization and criminalization also is seen in the finding that schools responding to misbehavior with one type of discipline also tend to use other types, thus increasing not only the severity of responses but the amount and frequency as well. In addition, this intensification seems to be a result not only of racial composition and other factors, such as student ethnic composition and student socioeconomic status, but also a result of the interrelationships among these influences.

Furthermore, although several sources of influence on discipline were found, the consequences of racial threat in schools clearly have been most significant for the Black students being disproportionately punished by them. These students recognize that they are treated more often like criminals in school (Ferguson, 2000) and that they are targeted for exclusion from the sphere of public education and channeled into the criminal justice system (Fine et al., 2004). Racial disparities in school punishment have fueled student sentiments that the administration of discipline is unfair, which then contribute to more disruptive behavior (Gottfredson, 2001). A self-fulfilling prophecy also may be encouraging Black students—who might perceive they are going to be future criminals and prisoners—to legitimate and reinforce the judgments made about them and punishments imposed on them (Arum and Beattie, 1999). This phenomenon reinforces prevailing perceptions of young Black males as delinquents and criminals and further validates the ensuing racial disparities evident at all levels of criminal justice. In return, perceptions about the racial composition of criminality also seem to influence social policy relative to public schools and teacher education (Duncan, 2000), intensifying student discipline in a seemingly endless cycle.

The findings of this study suggest that not only are the trends in school policies and punishment similar to those sanctioned by the criminal justice system but that some portion of the cause is also similar. These conclusions reveal important flaws in school discipline policies and practices and call for restructuring to rid them of their disparate effects on minority students. In a society deluged with widespread images of young Black males as “superpredators” and Black culture as inherently criminal, Black youth not only encounter a criminal justice system that increasingly pursues and punishes them but also schools that increasingly undermine their chances
for success later in life, thereby increasing the odds that the criminal justice system also eventually will get its chance with them.

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MODELING THE EFFECTS OF RACIAL THREAT 1051


MODELING THE EFFECTS OF RACIAL THREAT 1053


MODELING THE EFFECTS OF RACIAL THREAT 1055


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MODELING THE EFFECTS OF RACIAL THREAT 1057


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MODELING THE EFFECTS OF RACIAL THREAT 1059

Appendix A. Items Included in Survey Scales

Disciplinary responses

Extreme punitive disciplinary response
  Court action against student or parent
  Expulsion from school (exclusion of student from membership
  for periods of time more than 30 days)
  Calling or notifying the police
  Charging student with a crime

Zero tolerance (automatic suspension if . . .)
  Possession of alcohol
  Possession of other drugs (e.g., marijuana, LSD, cocaine, etc.)
  Possession of a knife
  Possession of a gun

Punitive disciplinary response
  Suspension from school (exclusion of student from membership
  for periods of 30 days or less)
  Brief exclusion of student from attendance in regular classes
  (e.g., in-school suspension or cooling-off room)
  After-school detention
  Short-term (5 days or less) withdrawal of a privilege (e.g., riding
  the bus, playground access, participation in athletics, use of the
  library, etc.)
  Long-term (more than 5 days) withdrawal of a privilege (e.g.,
  riding the bus, playground access, participation in athletics, use
  of the library, etc.)

Mild disciplinary response
  Sending student to school counselor
  Conferences with student’s parents/guardians
  Oral reprimand
  Notifying parents about student’s behavior
  Conference with student

Restitutive disciplinary response
  Restitution (requiring a student to repay the school or a victim
  for damages or harm done)
  Community service
  Work duties, chores, or tasks as punishment

Exogenous variables

Student delinquency and drug use
  Student delinquency (in last 12 months, have you . . .)
  Purposefully damaged or destroyed property belonging to a
  school?
Purposely damaged or destroyed property that did not belong to you?
Stolen or tried to steal something worth more than $50?
Carried a hidden weapon other than a pocket knife?
Been involved in gang fights?
Hit or threatened to hit a teacher or other adult at school?
Hit or threatened to hit other students?
Taken a car for a ride (or drive) without the owner’s permission?
Used force or strong-arm methods to get money or things from a person?
Stolen or tried to steal things worth less than $50?
Stolen or tried to steal something at school, such as someone’s coat from a classroom, locker, or cafeteria, or a book from the library?
Broken into or tried to break into a building or car to steal something or just to look around?
Belonged to a gang that has a name and engages in fighting, stealing or selling drugs?
Drug use (other than for medical reasons, in the last 12 months have you. . .)
Sold marijuana or other drugs?
Smoked cigarettes?
Used smokeless tobacco?
Drunk beer, wine, or “hard” liquor?
Gone to school when you were drunk or high on some drugs?
Sniffed glue, paint, or other spray?
Smoked marijuana (weed, grass, pot, hash, or ganja)?
Taken hallucinogens (LSD, mescaline, PCP peyote, or acid)?
Taken sedatives (barbiturates, downers, Quaaludes, or reds)?
Taken amphetamines (uppers, speed, or whites)?
Taken tranquilizers (Valium or Librium)?
Taken heroine (horse or smack)?
Taken cocaine (coke)?
Used crack?
Used other narcotics (codeine, Demerol, or dilaudid)?
Taken steroids?
Teacher victimization (This year in school have any of the following happened to you personally in this school?)
Damage to personal property worth more than $10.00
Theft of personal property worth less than $10.00
Theft of personal property worth more than $10.00
MODELING THE EFFECTS OF RACIAL THREAT 1061

Was physically attacked and had to see a doctor
Was physically attacked but not seriously enough to see a doctor
Received obscene remarks or gestures from a student
Was threatened in remarks by a student
Had a weapon pulled on me
Perceived lack of safety (At your school during school hours, how safe from vandalism, personal attacks, and theft is each of the following places?)
Your classroom while teaching
Empty classrooms
Hallways and stairs
The cafeteria
The restrooms used by the students
Locker room or gym
Parking lot
Elsewhere outside on school grounds
Principal leadership
Tour the school to establish my presence.
Observe teachers’ instruction and classroom management practices.
Formally assess the needs or problems of the school.
Use reason or passion to generate staff commitment to tasks.
Plan staff meetings.
Discuss quality of work performance with staff members.
Evaluate the effectiveness of existing school practices.
Check with teachers before making changes that might affect them.
Assign responsibilities to teachers.
Review teacher performance with individual teachers in a formal evaluation.
Discuss alternative plans for school improvement with staff, district personnel, or community members.
Praise teachers or recognize effective staff performance.
Mention observed strengths and weaknesses in performance to teachers at the time of observation.
Establish policies or standard operation procedures to cover most day-to-day decisions.
Be patient with and helpful to faculty.
Communicate performance expectations.
Review progress on improvement plans with individual staff members.
Set schools improvement goals, taking into account such things as time, resources, obstacles, and cost. Offer support or sympathy when a staff member experiences a difficulty.

Administrative leadership
The school’s administration makes it easy to get supplies, equipment, or arrangements needed for instruction. In your opinion, how well do teachers and administrators get along at your school? Administrators and teachers collaborate toward making the school run effectively. There is little administrator-teacher tension in this school. Our principal is a good representative of our school before the superintendent and the board. The principal is aware of and lets staff members and students know when they have done something particularly well. Teachers or students can arrange to deviate from the prescribed program of the school. Teachers feel free to communicate with the principal. The administration is supportive of teachers. It is hard to change established procedures here. The principal of our school is informal. The principal of our school is open to staff input.

Discipline training
If there was in-service training in discipline, which of the following describe the training?
- The presentation was clear and organized.
- Principles to be followed were presented.
- Principles were illustrated with examples.
- Participants practiced applying the principles.
- Participants received feedback on their performance in applying the principles.
- Participants’ questions and concerns about possible obstacles in applying the principles were addressed.

How much formal follow-up training on school discipline was completed by the average individual who manages discipline?
- None
- One occasion
- Two occasions
- Three or more occasions