



The persistent effect of race and the promise of alternatives to suspension in school discipline outcomes



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ABSTRACT

Demographic and student discipline data were used to examine the influence of multi-level risk and protective factors on exclusionary school discipline outcomes. Participants included all youth ($n = 87,997$) in grades K to 12 who were enrolled in Denver Public Schools ($n = 183$) in 2011–2012. The dataset included measures of risk and protective factors for exclusionary school discipline outcomes such as race, family poverty, special education status, emotional disability, participation in gifted and talented programs, homelessness, office referral reasons over the course of one school year, participation in in-school suspension, a behavior contract, or restorative approaches, and school composition. Multilevel logistic regression modeling was used to estimate students' likelihood of receiving one or more office disciplinary referrals, suspensions, expulsions, and/or law enforcement referrals. Findings indicate that student racial background and school racial composition are enduring risks across key decision points of the school discipline process. Conversely, participation in restorative interventions and in-school suspensions protects students from out-of-school suspensions. This study suggests that ongoing attention to issues of racial inequity in school discipline outcomes is warranted, and that restorative practices have potential as an inclusive strategy to improve school discipline outcomes without excluding students from the classroom.

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1. Introduction

The use of exclusionary school discipline practices, such as out-of-school suspension and expulsion, is a growing concern among researchers and youth service providers. Studies indicate that young people who are disciplined in school are at greater risk than other students to experience a host of academic and psychosocial problems across the lifespan (Hemphill et al., 2012; Rausch, Skiba, & Simmons, 2004; Sprague & Hill, 2000). Youth who have been suspended or expelled are more likely than other youth to be held back a grade level, leave school, or become involved in the juvenile justice system

(Fabelo et al., 2011; Rausch et al., 2004; Skiba et al., 2003). This negative trajectory, often referred to as the “school to prison pipeline” has increasingly been the target of youth and community organizing for educational justice (Ford et al., 2013; González, 2011).

Studies of school disciplinary practices also reveal troubling and persistent patterns of disparity. Low-income children, students with disabilities, and youth of color, particularly Black boys in special education, are significantly more likely than students of other backgrounds to be referred to school administrators for discipline problems and to receive out-of-school suspension, expulsion, or a referral to law enforcement as punishment (Hannon, DeFina, & Bruch, 2013; Hemphill, Plenty, Herrenkohl, Toumbourou, & Catalano, 2014; Krezmien, Leone, & Achilles, 2006; Payne & Welch, 2010; Skiba et al., 2011; Theriot, Craun, & Dupper, 2010; Wallace, Goodkind, Wallace, & Bachman, 2008). These students tend to be disciplined more harshly for the same behaviors that are committed by more advantaged students and are less likely to have access to opportunities to develop social and emotional skills valued by schools (Reyes, Elias, Parker, & Rosenblatt, 2013).

A growing number of scholars, school-based mental health professionals, and educators have therefore suggested that the goal of achieving educational equity for vulnerable youth cannot be realized without eliminating disparities in school discipline practices (Beck & Muschkin,

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2012; Eds, 2012; Gregory, Skiba, & Noguera, 2010; Pfleger & Wiley, 2012; Simpson, 2012). Most recently, the federal government identified school discipline policy as a national priority for education and juvenile justice reform, calling on localities to reduce out-of-school suspensions and expulsions, especially among students of color (US Department of Justice and US Department of Education, 2014). In the larger context of inequalities in academic achievement and incarceration, the need to develop effective, non-exclusionary strategies for responding to student misbehavior is clear (Reyes et al., 2013).

1.1. The role of race in school discipline outcomes

Disparities in exclusionary discipline sanctions are the result of complex interactions between risk and protective factors at different points in the school discipline process. These points typically include office referral, suspension, law enforcement referral, and expulsion. Characteristics of students, families, teachers, administrators, classroom environments, school climates, neighborhoods, district policies, and historical context all affect the way in which young people are disciplined (Ferguson, 2001; Morris, 2005; Vavrus & Cole, 2002). However, findings from numerous studies indicate that racial disparities in discipline outcomes persist after accounting for student behavior and confounding variables like poverty, disability, previous academic achievement, school composition, district dynamics, and neighborhood context (Bradshaw, Mitchell, O'Brennan, & Leaf, 2010; Eitle & Eitle, 2004; Fabelo et al., 2011; Skiba, Michael, Nardo, & Peterson, 2002; Skiba et al., 2013; Wallace et al., 2008). To explain this inequality, investigators have identified differential patterns of institutional decision-making at two key points in the discipline process: 1) the *differential selection* of students of color for office disciplinary referrals; and 2) the *differential processing* of racial minority students for discipline resolutions, particularly exclusionary sanctions like out of school suspension, law enforcement referrals, and expulsion (Gregory et al., 2010).

1.1.1. Differential selection

School discipline processes generally begin with an office referral, most often made by a classroom teacher. Referrals tend to be driven by minor infractions and subjective categories of student misconduct, such as defiance and disrespectful behavior, rather than more objective and serious behaviors like bringing a weapon to school (Bradshaw et al., 2010; Skiba et al., 2002, 2011; Vavrus & Cole, 2002). Teachers typically initiate discipline referrals in response to disruptive externalizing behaviors or challenges to their authority (Bradshaw et al., 2010; Nichols, 2004; Skiba et al., 2002). This general pattern may exacerbate the problem of racial disparities in school discipline outcomes given prior findings suggesting that school staff members' perceptions of student behavior problems are often racially biased. Compared to White youth, school staff often perceive Black and Latino youth as aggressive, oppositional and threatening, whereas they expect Asian American youth to be anxious, perfectionistic and timid (Chang & Sue, 2003; Lau et al., 2004; Morris, 2005; Neal, McCray, Webb-Johnson, & Bridgest, 2003; Skiba et al., 2002). Such biases in perceptions of student behavior likely contribute to differential selection for office referrals and racial disproportionalities in the distribution of referral reasons.

1.1.2. Differential processing

Investigators have noted that administrative responses to discipline events are inconsistent and also prone to influence by racial stereotypes (Hannon et al., 2013; Morris, 2005; Shaw & Braden, 1990). Once an office disciplinary referral is made, administrators are largely responsible for decisions about the consequences for the misconduct reported in the referral. Decisions about serious and objective infractions, such as bringing a firearm to school, are often dictated by state, federal or district policy. However, consequences for more common forms of misconduct, such as disruptive behavior and defiance, are generally at the discretion of school district administrators and are rarely applied consistently,

even for the same behavior (Bradshaw et al., 2010; Nichols, 2004; Noguera & Wing, 2006; Skiba et al., 2011, 2002; Vavrus & Cole, 2002). Subjective discipline problems like these, in which students breach implicit norms among school staff, have the greatest potential for bias in processing, as administrators' behavioral expectations – like those of teachers' and students' – are shaped by perception, culture, and context (Monroe, 2006).

1.2. Alternatives to suspension

Evidence suggests that proactive and preventive behavioral interventions reduce discipline incidents and protect students from suspension and expulsion (Gregory, Allen, Mikami, Hafen, & Pianta, 2013; Monroe, 2006; Skiba et al., 2011). Skiba and colleagues found that Black students are less likely to experience an exclusionary discipline sanction in schools where the principal has a prevention orientation to student discipline and implements alternative consequences such as in-school suspension (Skiba et al., 2003). Indeed, a variety of high quality prevention programs that aim to increase students' social and emotional learning skills have demonstrated reductions in student behavior problems and suspension rates (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Walker, Kerns, Lyon, Bruns, & Cosgrove, 2010; Wilson, Gottfredson, & Najaka, 2001). Emerging research suggests that restorative practices may be a particularly effective approach to preventing office discipline referrals and out-of-school suspensions (González, 2012; Morrison & Vaandering, 2012). Restorative approaches that focus on repairing the harm caused by a discipline incident through classroom circles (group dialogues) and conferencing (mediation) with victims and offenders appear to be particularly promising.

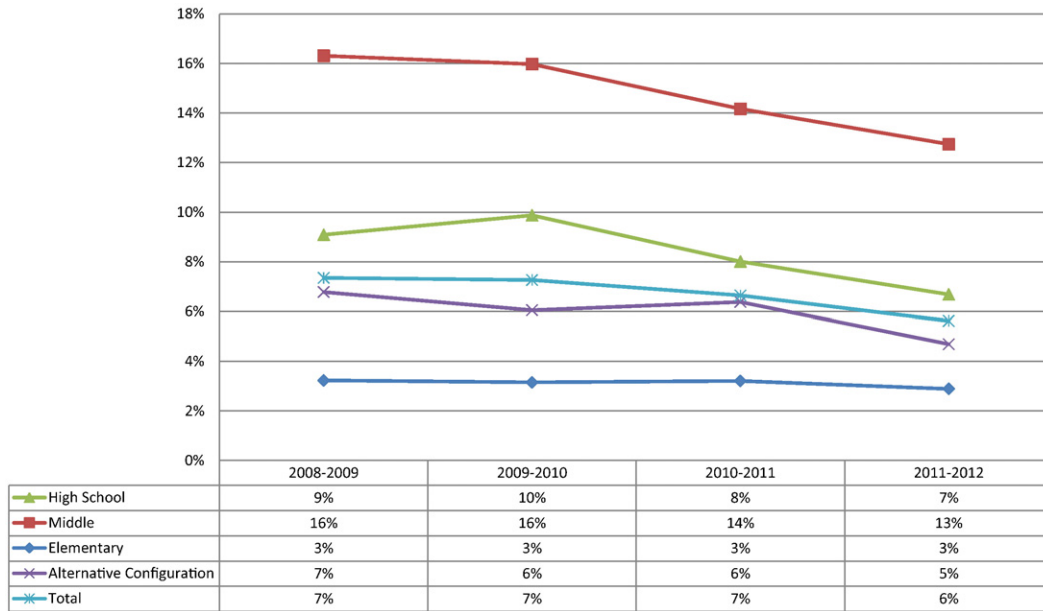
1.3. The policy context in Denver, Colorado

Policies designed to improve discipline practices in Denver, Colorado offer a unique opportunity to examine the influence of alternatives to out-of-school suspension and the effect of race on exclusionary school discipline outcomes. Efforts to reform school discipline practices in Denver have come from several sources. In the past ten years, a community-based organization called *Padres y Jovenes Unidos*, in cooperation with the Advancement Project and the national *Books Not Bars* movement, has led a grassroots effort to end the school-to-jail pipeline in Colorado (González, 2011). In response to concerns voiced through this campaign by community members, parents, and students, Denver Public Schools (DPS) reformed its discipline policy in 2008. The reforms aimed to reduce the use of suspensions, law enforcement referrals, and expulsions in response to student misbehavior and to eliminate racial disparities in discipline practices. Rather than relying on exclusionary sanctions, the 2008 policy requires schools to implement restorative and therapeutic interventions as resolutions to student misconduct and to only refer students to law enforcement when legally mandated to do so. The policy also granted district administrators more influence over expulsion decisions and created a centralized discipline process with increased checks and balances. Since the introduction of these policy changes, the district has lowered suspension and expulsion rates by nearly 40%, with reductions benefitting students of all backgrounds, particularly at the secondary school levels (see Tables 1–2). These trends are impressive because they have taken place during a time when the overall district population has increased by 14%, making DPS the fastest growing urban school district in the nation (Department of Planning and Analysis, 2013).

Despite these successes, recent DPS data reveal that Black, Latino and Native American youth are still more likely than their White or Asian peers to experience an exclusionary discipline sanction. As shown in Table 2, though all racial sub-groups of students have experienced a reduction in suspension rates since the 2008 policy reform, discipline gaps have not decreased substantially over time. Thus, school district

Table 1

Proportion of students suspended by grade level: 2008–2012.



officials and local stakeholders were eager to learn if these patterns can be explained by the higher prevalence of poverty and special education participation among students of color, and whether interventions supported by the new discipline policy, such as restorative approaches, are contributing to district-wide reductions in the use of out-of-school suspensions and expulsions. To meet these needs and inform the knowledge base on school discipline more broadly, a researcher–practitioner partnership between DPS and investigators at the University of Denver (DU) was established in 2012.

1.4. Study aims and contributions

This study examines racial disparities and the protective influence of alternatives to suspension in discipline outcomes at each stage of the school discipline process. Analyses are derived from a rich and unique school district dataset that includes outcomes at four distinct decision-making points in the discipline process: 1) office referral; 2) suspension; 3) law enforcement referral; and 4) expulsion. In addition, the dataset includes student-level covariates that are rarely accounted for in studies of school discipline, though emerging evidence and theory indicate that these factors do influence school discipline outcomes (Fabelo et al., 2011). These covariates include students' designation as seriously emotionally disabled, a native speaker of English, eligible for the gifted and talented program, or homeless. Finally, the current study is one of a small number of investigations that has used school district data to examine a variety of non-exclusionary discipline responses, consider the influence of family poverty at the student-level, and examine the effect of race on students representing all six federally defined racial categories.

1.5. Research questions

The following questions guided the investigation:

1. Does race independently contribute to students' risk of office discipline referral, suspension, law enforcement referral, and/or expulsion?
2. Do alternative approaches to resolving discipline problems, such as behavior contracts, in-school suspension, and restorative approaches protect students from out-of-school suspension and expulsion?

2. Methodology

2.1. Sample and study site

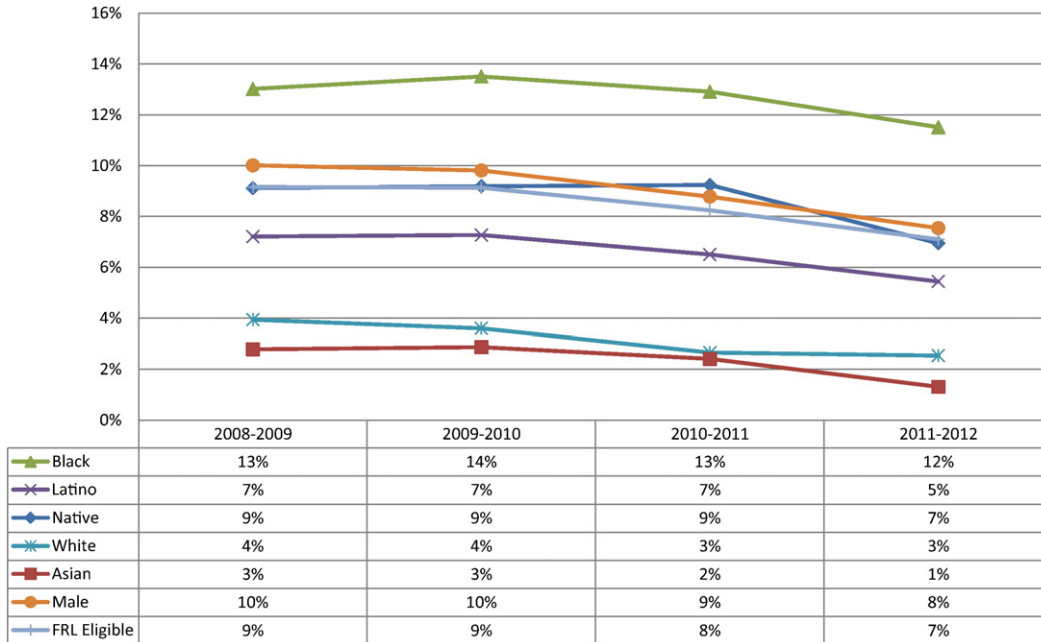
The cross-sectional dataset used in this analysis included all students ($n = 87,997$) in grades K to 12 who were enrolled in DPS schools ($n = 183$) during one academic year (2011–2012). The sample was 58% Latino, 20% White, 15% Black, 3% Asian, 3% Multiracial and less than 1% Pacific Islander. Forty-nine percent of the student population was male and 51% was female. Fifty-eight percent of students were native speakers of English. The district serves predominantly low-income students; 67% of students were eligible for free and reduced lunch and 2% of students were identified as homeless during the school year of interest. Thirteen percent of students participated in the gifted and talented program; 12% participated in special education and 1% had a serious emotional disturbance.

Twelve percent ($n = 10,705$) of all students in the district were referred to the office for discipline problems. A majority of these students (53%) were referred to the office more than once during the school year. The most common reasons for office referrals were detrimental behavior (53%), disobedience or defiance (38%), other violations of the school's code of conduct (25%), bullying (10%), and/or possession or distribution of drugs (7%). Among those students referred to the office, nearly 46% received one or more out of school suspensions (6% of all students in the district), 5% were referred to law enforcement, and 0.7% were expelled. With respect to alternatives to suspension, 37% of students referred to the office received one or more in-school suspensions, whereas 7% received one or more restorative interventions, and 4% were placed on behavior contracts.

2.2. Variables

Demographic and discipline records were downloaded from the district's student information system (*Infinite Campus*), and included variables that reflect state, federal, and local policy mandates for data collection by educational agencies. Student racial categories were: 1) American Indian or Alaska Native; 2) Native Hawaiian or Other Pacific Islander; 3) Asian or Asian American; 4) Black or African American (non-Hispanic); 5) Hispanic or Latino/Latina; 6) White or Caucasian; and 7) Multiracial. Each racial category was recoded into

Table 2
Proportion of students suspended by race, class and gender: 2008–2012.



dummy variables. Additional student-level variables available in the dataset were all dichotomous and included gender (male or not), free and reduced lunch eligibility (eligible or not), special education status (active Individualized Education Program or not), designation as seriously emotionally disabled (disability coded as emotionally disabled or not), identification as homeless (homeless or not), participation in the gifted and talented program (participant or not), and native language (native speaker of English or not).

Other student-level covariates included dichotomous variables that indicated whether or not a student was referred to the office over the course of a school year for each possible referral category, as defined in the district's discipline policy (González, 2011). These categories (in order of overall severity) include destruction of school property, disobedience or defiance, bullying, detrimental behavior, other violations of the school's code of conduct, third degree assault, first degree assault, drug possession or distribution, and possession of a dangerous weapon. Likewise, data assessing students' participation in an alternative intervention to suspension were dichotomous. These variables indicated whether a student had received one or more of the following interventions over the course of a school year: in-school suspension, restorative approaches, or placement on a behavior contract. Student-level dependent variables for each statistical model were dichotomous, indicating the receipt of one or more exclusionary discipline sanctions over the course of a school year: office disciplinary referral, out-of-school suspension, referral to law enforcement, and/or expulsion.

School-level covariates included the proportion of the student body that is Black or Latino and grade configuration (traditional middle school with 6–8th graders, or not). Other investigators have noted that middle schools and highly segregated schools tend to use punitive discipline sanctions more widely, a practice that is associated with racial disparities in suspension and expulsion (Payne & Welch, 2010; Skiba et al., 2013). However, a school's racial composition is not always associated with an increased risk for disparities, as some investigators have found that students are protected from differential selection and processing when they attend highly segregated schools or school districts (Eitle & Eitle, 2004; Payne & Welch, 2010). Finally, several additional school-level covariates were excluded because preliminary analyses revealed they did not independently contribute to students'

odds of exclusionary discipline sanctions. These variables included the proportion of the student body that was eligible for free and reduced lunch, students who were not native English speakers, students with active placements in special education, school size, and school type (traditional, alternative, or charter). These variables have not been consistently related to school discipline outcomes in other studies (Arcia, 2007).

2.3. Data quality

This administrative dataset had very little missing data ($n = 144$) because it only included variables collected through mandatory fields in the districts' student information system. The reliability of data entry and documentation of discipline incidents in this district has not been studied, but other research indicates that student information systems can provide reliable estimates of student problem behavior and discipline outcomes (e.g. Irvin, Tobin, Sprague, Sugai, & Vincent, 2004; Pas, Bradshaw, & Mitchell, 2011). In addition, this district conducted regular data quality checks of student discipline data during the study period. For example, the data quality office generated error alerts when attendance records indicated that a student was suspended or removed from the classroom but there was no corresponding discipline incident or resolution in the student information system. Each school must correct these errors prior to the district submitting reports to the state department of education. The district has also provided professional development for principals and site-based administrators to increase fidelity to district discipline policy and improve the accuracy of data entry into the student information system.

2.4. Analyses

A series of multilevel logistic regression models were employed using STATA 13 software (Rabe-Hesketh & Skrondal, 2008). These models accounted for the nested structure of the dataset (students, level 1, within schools, level 2) and were used to estimate the relationships between risk and protective factors and receipt of an exclusionary discipline sanction (Steenbergen & Jones, 2002).

3. Results

3.1. Office disciplinary referrals

As shown in Table 3 (Model 1), all student-level covariates were significantly associated with students' odds of being referred to the office for discipline problems. Latino (OR 1.40, $p < .001$), Black (OR 2.30, $p < .001$), Native American (OR 1.29, $p < .05$) and Multiracial students (OR 1.50, $p < .001$) had significantly higher odds of office referral compared to White youth. Boys (OR 2.15, $p < .001$), youth eligible for free and reduced lunch (OR 2.37, $p < .001$), homeless students (OR 1.28, $p < .001$), native English speakers (OR 1.72, $p < .001$), youth in special education (OR 1.49, $p < .001$), and students designated as seriously emotionally disabled (OR 4.30, $p < .0001$) all had significantly higher odds of an office disciplinary referral. Students' risk of office referral was also higher at middle schools (OR 3.87, $p < .001$) and those with greater concentrations of Black (OR 6.06, $p < .01$) and Latino (OR 2.84, $p < .01$) students. The only student-level protective effects observed for office disciplinary referrals was being Asian (OR .65, $p < .001$) or participating in the district's gifted and talented program (OR .70, $p < .001$).

3.2. Suspension

Model 2 in Table 3 shows that, after accounting for all the reasons a student was referred to the office over the school year along with the interventions they received, fewer student-level covariates were significantly related to students' odds of receiving an out-of-school suspension than an office discipline referral. In particular, free and reduced lunch eligibility, homelessness, participation in gifted and talented education, and enrollment in a middle school had no significant effect on a students' risk of out-of-school suspension. With respect to race, only Black (OR 1.55, $p < .001$), and Multiracial students (OR 1.41, $p < .05$) had significantly higher odds of suspension compared to White youth. Boys (OR 1.21, $p < .001$), native English speakers (OR 1.13, $p < .05$), youth in special education (OR 1.17, $p < .05$), and students designated as seriously emotionally disabled (OR 2.48, $p < .0001$) also had significantly higher odds of out-of-school suspension.

Students' risk of out-of-school suspension generally increased with the seriousness of the reasons for their office discipline referrals (Table 3, Model 2). For example, students' odds of suspension were lower if they had been referred for destruction of school property (OR 2.78, $p < .001$) than if they were being disciplined for third degree assault (OR 19.82, $p < .001$). Students odds of suspension were also higher if they were placed on a behavior contract (18.10, $p < .001$), were referred to law enforcement (7.81, $p < .001$), or attended schools with higher proportions of Black (OR 17.25, $p < .001$) and Latino (OR 5.32, $p < .001$) students.

Two alternative responses to student misconduct protected youth from being suspended from school one or more times during the school year. Accounting for the seriousness of their offenses (referral reasons) and demographic covariates, students had lower odds of out-of-school suspension if they participated in a restorative approach to resolving their discipline problems (OR .73, $p < .01$) or an in-school suspension (OR .37, $p < .001$).

3.3. Law enforcement referrals

As shown in Model 3 (Table 3), only student-level factors increased youths' odds of being referred to law enforcement. Compared to White students, Latino (OR 1.59, $p < .05$) and Black (OR 1.52, $p < .05$) youth had significantly greater odds of police involvement in their disciplinary incidents, accounting for other demographic variables and the seriousness of their offenses. Native speakers of English were also at greater risk of law enforcement referrals compared to English language learners (OR 1.31, $p < .05$). The only other variables that predicted police involvement in a disciplinary incident were the nature of the office

disciplinary referral reasons. Like suspensions, risk of law enforcement referral increased with the seriousness of offense. None of the variables included in the model protected students from being referred to law enforcement.

3.4. Expulsion

Model 4 (Table 3) findings indicate that the only variables significantly related to students' odds of expulsion were the seriousness of their offenses and their school's grade configuration. Attending a middle school (OR 3.45, $p < .01$) and involvement in more serious infractions such as first degree assault (OR 7.89, $p < .001$) or possession of a dangerous weapon (OR 98.74, $p < .001$) increased students' odds of expulsion. As was the case with law enforcement referrals, no factors in our analysis protected students from expulsion.

4. Discussion

4.1. The persistent effect of race

Study findings revealed that Black, Latino and Multiracial students were often punished more harshly than White students for the same offenses. Students attending schools with higher proportions of Black and Latino students were also at greater risk for school exclusion after accounting for student-level demographics and behaviors. These results mirror patterns observed by other investigators (Arcia, 2007; Hannon et al., 2013; Krezmien et al., 2006; Skiba et al., 2011, 2013). Findings also suggest that higher rates of suspension and law enforcement referrals among Black and Latino students evident in descriptive district data were not solely the result of higher rates of misbehavior, poverty, or special education eligibility among these populations. Results indicate that these patterns also likely reflect differential selection of Black and Latino students for office referrals and differential processing in the application of discipline consequences (Gregory et al., 2010; Hannon et al., 2013). In light of these findings, efforts to reduce the use of exclusionary discipline sanctions in schools should target the attitudes and behaviors of school staff, not only those of students (Hemphill et al., 2014; Theriot et al., 2010).

Race effects weakened as students moved through the discipline process from office referral to expulsion. Office referral reasons were the only significant predictors of expulsion. To assess whether this result was due to the small number of students expelled ($n = 73$), the model was re-run with only key student demographics (race, gender, special education status, and emotional disability) as predictor variables. Only gender (male) increased a student's odds of expulsion (OR 2.14, $p < .01$). Thus, the lower risk of differential processing by race at the expulsion level may be due to the increased administrative checks and balances that must be completed prior to expulsion. Unlike office referrals, suspensions, and law enforcement referrals, expulsion decisions are made by central district administrators and involve formal hearings that are mediated by an independent hearing officer.

4.2. The promise of alternatives to suspension

Most encouraging are findings indicating that two alternative approaches to resolving student misconduct appear to protect students from school exclusion. Results suggest that in-school suspension and restorative approaches are promising strategies to managing student discipline problems and keeping youth in an educational environment. In DPS, students with behavior problems are significantly less likely to experience an out-of-school suspension if they receive these interventions after being referred to the office. This holds true even after accounting for student demographic characteristics and discipline incidents over the course of a school year. This finding builds on theoretical, descriptive, and qualitative evidence of the effectiveness of these alternatives to suspension (González, 2012; Morrison & Vaandering, 2012).

Thus, a critical area for future research is to conduct experimental studies on these interventions to rule out the influence of confounding or unmeasured variables and demonstrate the causal impact of these approaches on discipline outcomes.

4.3. The role of district-level discipline policy

The most influential predictors of exclusionary discipline sanctions in DPS during 2011–2012 were office referral reasons; these indicators reflect and capture school adults' perceptions of student misbehavior (Morrison & Skiba, 2001). Study findings also indicate that students' risk of suspension, law enforcement referral, and expulsion increased as their severity of offending increased. This is an encouraging finding in view of prior research indicating that "zero tolerance" approaches that seek to deter misbehavior through harsh consequences for all types of misconduct are less effective than graduated discipline systems that increase consequences with the seriousness of student offenses (Reynolds et al., 2008). This finding also suggests that school district policy, in this case a matrix of offenses, consequences, and interventions can have a positive influence on discipline practices in schools.

4.4. Additional risk and protective factors for school exclusion

This study identified several risk and protective factors for suspension that may be useful in advancing research on school discipline and informing practice among youth service providers. In addition to a student's racial background, gender, special education status, and designation as seriously emotionally disabled were among the most salient

risk factors for exclusionary discipline practices. These findings are consistent with a number of prior investigations that have reported high rates of suspension and expulsion for boys and students in special education, despite legal protections intended to prevent the exclusion of students with disabilities from school (Hannon et al., 2013; Krezmien et al., 2006; Skiba et al., 2011). Students in traditional middle schools also were at greater risk for office disciplinary referral and expulsion (Skiba et al., 2011). High rates of exclusionary discipline sanctions in middle schools have been attributed to stage-environment misfits between early adolescents' developmental needs, especially autonomy, and the rigid structure of the middle school curriculum (Eccles & Roeser, 2009; Ryan & Patrick, 2001).

In contrast, individual student characteristics were only protective at the point of office discipline referral. Being Asian and participating in the district's gifted and talented program reduced students' odds of entering the discipline process. The protective effect of being Asian may be capturing lower rates of externalizing problem behaviors among some Asian ethnic sub-groups (Anyon et al., 2013; Choi, 2008; Grunbaum, Lowry, Kann, & Patement, 2000). Alternatively, it may reflect perceptions by school staff that these youth are less disruptive and aggressive than students of other racial backgrounds (Chang & Sue, 2003; Morris, 2005). Interventions that target adults' preconceived ideas about Black, Latino, Native, and Multiracial youth and strengthen the individual relationships school adults have with these students may inhibit differential selection for office referrals. Similarly, the effect of being in the district's gifted in talented program suggest that the enrichment and individualized teaching approaches used in classrooms for gifted students may prevent discipline challenges. Other studies have

Table 3
Multilevel model predicting odds of discipline resolutions in all Denver Public Schools (2011–2012).

	Office referral (n = 87,997)		Out of school suspension (n = 10,705)		Law enforcement referral (n = 10,705)		Expulsion (n = 10,705)	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Student level demographics								
Race (comparison group = White students)								
Latino	1.40***	(1.29, 1.52)	1.15	(.96, 1.39)	1.59*	(1.20, 2.30)	.97	(.33, 2.86)
Black	2.30***	(2.10, 2.51)	1.55***	(1.27, 1.89)	1.52*	(1.03, 2.23)	1.77	(.61, 5.19)
Native American	1.29*	(1.02, 1.64)	1.18	(.71, 1.99)	1.10	(.41, 2.96)	^a	
Asian	0.65***	(.54, .78)	.89	(.53, 1.48)	.95	(.34, 2.63)	.96	(.09, 10.63)
Multiracial	1.50***	(1.30, 1.74)	1.41*	(1.02, 1.96)	.74	(.34, 1.58)	1.29	(.19, 8.69)
Pacific Islander	1.124	(.67, 1.88)	.56	(.19, 1.69)	2.79	(.29, 26.94)	^a	
Gender (male)	2.15***	(2.06, 2.26)	1.21	(1.08, 1.34)	1.02	(.82, 1.27)	1.65	(.81, 3.36)
Eligible for free or red. Lunch	2.37***	(2.22, 2.52)	1.05	(.90, 1.22)	.88	(.66, 1.17)	.66	(.31, 3.40)
Homeless	1.28***	(1.13, 1.44)	.94	(.74, 1.20)	1.17	(.71, 1.93)	.95	(.26, 3.40)
Native english speaker	1.72***	(1.62, 1.81)	1.13*	(1.00, 1.28)	1.31*	(1.01, 1.70)	1.30	(.58, 2.88)
Gifted and talented	.70***	(.65, .76)	.85	(.71, 1.02)	1.12	(.81, 1.55)	.53	(.17, 1.69)
Special education	1.49***	(1.40, 1.58)	1.17*	(1.02, 1.33)	1.11	(.84, 1.45)	.95	(.44, 2.02)
Emotional disability	4.30***	(3.64, 5.09)	2.48***	(1.85, 3.32)	1.35	(.82, 2.22)	.57	(.12, 2.63)
Office disciplinary referral reasons (comparison group = students referred for all other reasons)								
Destruction of school property			2.78***	(1.94, 4.00)	.82	(.39, 1.75)	.74	(.08, 6.53)
Disobedient/defiant			3.08***	(2.70, 3.50)	1.09	(.87, 1.37)	1.26	(.66, 2.41)
Other code of conduct violation			3.25***	(2.79, 3.77)	2.64***	(2.08, 3.36)	.69	(.32, 1.46)
Bullying			2.55***	(2.11, 3.07)	1.46*	(1.00, 2.14)	1.47	(.51, 4.25)
Detrimental behavior			6.14***	(5.37, 7.02)	2.13***	(1.67, 2.71)	.84	(.44, 1.61)
Third degree assault			19.82***	(13.27, 29.61)	9.66***	(5.75, 16.22)	7.89***	(2.67, 23.89)
First degree assault			3.16	(.64, 15.69)	10.19**	(1.62, 63.87)	365.80***	(37.6, 3554.5)
Drug possession or distribution			27.17***	(20.67, 35.73)	10.65***	(8.17, 13.88)	8.00***	(3.64, 17.57)
Dangerous weapon			11.86***	(7.66, 18.37)	20.16***	(12.33, 32.94)	98.74***	(46.02, 211.9)
Alternatives to suspension (comparison group = students who did not receive the intervention)								
In school suspension			.37***	(.33, .42)	.85	(.66, 1.08)	.79	(.39, 1.60)
Restorative approach			.73**	(.57, .92)	1.08	(.74, 1.58)	1.77	(.51, 6.19)
Behavior contract			18.10***	(12.0, 27.3)	2.30***	(1.61, 3.29)	1.56	(.57, 4.23)
School level controls								
Middle school (vs. all others)	3.87***	(2.34, 6.38)	1.61	(.89, 2.90)	2.30	(.90, 5.90)	3.45**	(1.34, 8.87)
% Black	6.06**	(1.63, 22.49)	17.25***	(3.38, 88.02)	.15	(.01, 3.05)	1.29	(.02, 71.02)
% Latino	2.84**	(1.37, 5.91)	5.31***	(2.06, 13.69)	.29	(.05, 1.63)	.57	(.05, 6.28)

* p < .05 statistical significance.

** p < .01 statistical significance.

*** p < .001 statistical significance.

^a No Native American or Pacific Islander students were expelled during this school year.

demonstrated that an engaging curriculum and strong teacher–student relationships reduce students' risk for office disciplinary referrals and suspensions, especially for students of color (Fredricks, Blumenfeld, & Paris, 2004; Gregory et al., 2013). Alternatively, the protective effect of being in gifted programming may reflect the benefits of higher IQ scores among this population and the tendency for gifted students to come from families with high socioeconomic status (McBee, 2006), two factors that reduce children's risk of developing behavior problems in school (Bradley & Corwyn, 2002; Lösel & Farrington, 2012; Sprague & Hill, 2000).

5. Study limitations

Findings from this study are only generalizable to other school districts that have similar discipline policies, serving a comparable population of students in an urban setting. Further investigation of these patterns using a larger sample of schools and districts would substantially further knowledge development. Strengths of this study include the breadth of measures available in the DPS dataset and the subsequent inclusion of a wide variety of covariates in each of the tested models. On the other hand, the investigation was limited by the fact that our analysis did not include data assessing several key risk and protective factors for exclusionary sanctions that have been used previously in studies of school discipline, such as student age.

Moreover, measures of cultural and developmental mismatches between students, teachers, administrators, and/or the school environment are among the most theorized risk factors for school discipline outcomes (Deschenes, Cuban, & Tyack, 2001; Eccles & Roeser, 2009). Relevant factors include culturally unresponsive instruction, disagreements regarding appropriate behavior and consequences in school, and racial bias or misunderstanding in perceptions of student behavior (Chang & Sue, 2003; Downey & Pribesh, 2004; Lau et al., 2004; Neal et al., 2003). Cultural mismatches between students and school staff can also lead to disengagement that manifests in disruptive or defiant behaviors, creating additional risk for disparities in referrals (Skiba et al., 2002). Administrator characteristics that are associated with racial disproportionalities in suspension and expulsion include a punitive orientation to discipline, believing that discipline problems stem from inadequacies in students' home life, and relying on school security guards or police officers to manage behavior problems (Arcia, 2007; Skiba et al., 2003, 2013). These attitudes and approaches may interact with racial bias and contribute to the trend observed in the literature of harsher consequences for students of color, particularly Black students (Hannon et al., 2013; Payne & Welch, 2010). Unfortunately, these cultural and administrative measures were not available in the DPS dataset. Future research can address these complex issues by collecting data to evaluate teacher and administrator attitudes and classroom practices that may mitigate or exacerbate differential selection and processing.

6. Conclusion

This study suggests that district policy reforms targeting administrative decision-making in the application of disciplinary consequences and interventions can reduce the use of exclusionary sanctions in schools. In particular, our findings provide new evidence in support of district policies that mandate graduated discipline systems and the use of alternatives to suspension. To our knowledge, this study is the first to use multilevel analyses to demonstrate that restorative approaches in response to student misconduct are promising alternatives to out of school suspension. These findings point to the potential of using restorative approaches to reform school discipline policies and practices. Additional tests of the effects of restorative approaches are needed to assess the consistency and strength of this new evidence.

At the same time, the practices mandated by DPS policy do not appear to eliminate racial disparities in school discipline, a persistent

and vexing social problem in the United States. Our findings highlight the need to design, implement, and test preventive interventions in the classroom that can mitigate office disciplinary referrals of Black, Latino, Native, and Multiracial students. In other words, prevention efforts that target differential selection for office disciplinary referrals at the classroom level, not just differential processing for discipline sanctions at the administrative level, will be necessary to eliminate racial disparities. In this regard, evidence from school-based intervention trials may be helpful in developing new classroom strategies for reducing disparities in discipline practices, particularly those that strengthen teachers' relationships with students of color (Fredricks et al., 2004; Gregory et al., 2013; Jenson & Bender, 2014).

Priorities for future research include experimental trials of alternatives to suspension and classroom-based interventions like restorative approaches that appear to reduce students' risk of school exclusion. Additional research is also needed to examine the efficacy of these approaches in reducing racial disparities in school discipline outcomes. Finally, partnerships like the one described in this manuscript offer an effective interdisciplinary approach to identifying the causes of and to testing the effects of existing or new preventive interventions. Such partnerships should be encouraged and implemented widely in the nation's school districts.

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