An Examination of Restorative Interventions and Racial Equity in Out-of-School Suspensions

Anne Gregory
Rutgers University

Francis L. Huang
University of Missouri

Yolanda Anyon
University of Denver

Eldridge Greer
Barbara Downing
Denver Public Schools

Abstract. Districts have been engaged in efforts to reduce “differential processing” of discipline-referred students based on their racial backgrounds. They strive for fair assignment of exclusionary consequences across racial groups. The current study examines discipline records for one academic year in an urban school district (N = 9,039 discipline-referred students) to identify the factors associated with equitable assignment of out-of-school suspension (OSS). Multilevel logistic regression found that student participation in restorative interventions substantially reduced the odds that individual students received OSS. However, such participation was only marginally associated with more comparable assignment of OSS to Black students relative to their White peers. Together these findings suggest that alternatives to suspension, such as restorative interventions, may yield benefits for all student groups, but they may result in only marginal narrowing of the disparities in suspension rates between Black and White students. This indicates that greater attention is needed to address the inequitable school contexts in which disparities arise.

Keywords: Hierarchical Linear Modeling, School Discipline, Social Justice, Violence, School and Community, Intervention, Behavior

Entrenched and pervasive racial discipline gaps in public education have come under increasing scrutiny, partially in response to increased national attention highlighting the unfair and punitive treatment of students of color (United States Department of Education, 2014). In particular, the overrepresentation of students of color in suspensions and expulsions has been the focus of much recent scholarship on racial equity in education (Morris & Perry, 2016). Scholars have identified differential processing of consequences as one of the many contributors to racial disparities in school discipline (Gregory, Skiba, & Mediratta, 2017; Gregory, Skiba, & Noguera, 2010). Differential processing refers to racial disparities in educators’ decisions about consequences in response to an individual discipline incident. In general, administrators tend to apply more punitive and exclusionary sanctions to Black and Latino students than their Asian and White peers, even when accounting for a range of confounding variables (e.g., Anyon et al., 2014; Skiba et al., 2014).

Several empirical studies suggest that characteristics at the student level (e.g., number and type of discipline incidents) and school level (e.g., the principal’s discipline philosophy) contribute to the relationships between student race, school racial composition, and exclusionary practices (e.g., Anyon et al., 2014; Skiba et al., 2014). Yet multilevel analyses have

Author note. The authors thank the school staff and students in Denver Public Schools that made this study possible, including technical assistance provided by the Division of Accountability, Research and Evaluation.

Correspondence regarding this article should be addressed to Anne Gregory, School Psychology Department, Rutgers University, 152 Frelinghuysen Road, Piscataway, NJ 08854; e-mail: annegreg@gsapp.rutgers.edu

Copyright 2018 by the National Association of School Psychologists ISSN 0279-6015, eISSN 2372-966x
rarely included alternatives to out-of-school suspension (OSS). Studies are needed to identify the degree to which restorative interventions (RIs)—an increasingly common alternative to suspension—are linked to narrowed racial disparities in OSS. In particular, there has been a groundswell of interest in the potential of RIs to reduce racial disparities in school discipline (e.g., Syracuse City School District, 2015), but empirical research in this area is lacking. The current study addresses these gaps in the literature by examining whether an alternative to exclusionary discipline (e.g., RIs) was associated with reduced differential processing of discipline-referred Black and White students.

Differential Processing

Multiple studies have confirmed that Black, Latino, and Native American students are more likely than White students to be issued an exclusionary sanction by an administrator after a discipline incident, even for similar infractions (Anyon et al., 2014; Skiba et al., 2014). Further, differential processing occurs for both Black males and females (Annamma et al., 2016; Blake et al., 2016) and when Black and White students share similarities on a range of characteristics. Specifically, the likelihood of a Black student receiving OSS is significantly higher than that of a White student when the students are similar in terms of low-income status (Skiba et al., 2014) and academic underperformance (Blake et al., 2016; Fabelo et al., 2011). Further, in a districtwide analysis of discipline records, Anyon et al. (2014) accounted for gender, low-income status, special education eligibility, English language proficiency, frequency of discipline infractions, and the safety-threatening nature of these infractions. They found that Black students with similarities to White students on the aforementioned characteristics had greater odds of receiving an OSS. A statewide study with a focus on race and gender offers additional support for these findings: Blake et al. (2016) showed that Black females had 13% higher odds of discipline in a year than White males, accounting for student grade retention and income status. Further, in a sample drawn from 21 elementary schools, Bradshaw, Mitchell, O’Brennan, and Leaf (2010) showed that after accounting for teacher-reported disruptive behavior, Black students still had a higher chance of receiving one or more office discipline referrals than White students. This means that when comparing teacher reports of disruptive behavior among Black and White students, Black students had a higher likelihood of being asked to leave the classroom for misconduct. Other studies have also accounted for students’ self-reported misbehaviors and aggressive attitudes and have shown that Black students were still much more likely than White students to receive an OSS (Huang, 2018; Huang & Cornell, 2017).

Scholars have postulated that poor relationships between students of color and educators can lead to differential processing (Gregory et al., 2016). In fact, studies have shown that racial discipline gaps are greater in schools where students report less support (Gregory, Cornell, & Fan, 2011) and less connection to school adults (Anyon, Zhang, & Hazel, 2016), relative to schools where students experience greater connection and support. Also noteworthy is that several recent studies have illustrated that Black, Latino, and Native American students are less likely than White students to report feeling really cared about by an adult at school (Anyon et al. 2016; Bottiani, Bradshaw, & Mendelson, 2014; Voight, Hanson, O’Malley, & Adekanyel, 2015). Scholars further argue it is likely that stereotyping of students of color as dangerous or culpable influences educators’ implicit racial biases in the assignment of exclusionary and punitive sanctions (Carter, Skiba, Arredondo, & Pollock, 2015; Morris, 2016). Such claims are supported by a handful of experimental studies that reveal that school staff tend to perceive Black students as more problematic, oppositional, threatening, or deserving of harsher consequences for misbehavior than White and Asian students (Chang & Sue, 2003; Gilliam, Maupin, Reyes, Accavitti, & Chic, 2016; Neal, McCray, Webb-Johnson, & Bridgest, 2003; Okonofua & Eberhardt, 2015).

Restorative Interventions

Restorative approaches to discipline include a variety of practices on the prevention–intervention continuum. Namely, some practices aim to prevent infractions through building community, and other practices intervene after infractions have occurred (e.g., Amstutz & Mullet, 2005; Blood & Thorborne, 2005; Costello, Wachtel, & Wachtel, 2009; McCluskey et al., 2008). The current study examines the restorative practices on the intervention end of the continuum. RIs include circles and conferences during which individuals have the opportunity to express their experiences of harmful acts and to collectively problem-solve for resolution and repair (Drewery, 2013; Zehr, 2002; Zehr & Toews, 2004). Thus, RIs have two core features: (a) those affected by an infraction or crime come together to identify how people were impacted by the incident, and (b) they jointly problem-solve and identify actions that will repair the harm (Coates, Umbreit, & Vos, 2003; Gal & Moyal, 2011; McGarrell & Hipple, 2007).

Typically, restorative conferences and circles for serious incidents follow a formal procedure. People impacted by the incident are invited to voluntarily participate. If they agree, they attend a preconference to get oriented to the process (Costello et al., 2009; McCluskey et al., 2008). In the conference itself, participants sit in a circle facing one another and a facilitator uses a structured set of questions to guide the exchange among all the participants. All of those involved have a chance to reflect on the incident and respond to questions such as, “What happened?”; “Who has been harmed/affected by what you have done?”; “What part are you responsible for?”; and “How will the harm be repaired?” (Costello et al., 2009). The participants jointly develop a plan to repair the harm. For example, disputants may agree to issue a public apology, undertake community service, or repair damaged property. The aim of the plan is to hold disputants accountable for breaching trust with the community but also to find ways to help them reintegrate back into the community (Braithwaite, 1989, 2001; Costello et al., 2009).
Restorative approaches to resolving conflict have historical roots in diverse religions (e.g., Judaism) and cultures (e.g., American Indian, Maori; Drewery, 2013). Despite their long history and more recent popularity among educators and juvenile justice workers, restorative approaches to conflict are understudied. In their aptly titled article “Cart Before the Horse,” Song and Swearer (2016) noted that dissemination of restorative practices across school districts has outpaced research. Authors of another recent review of literature from 1999 to 2014 also concluded that the research evidence on restorative justice in schools is in a “nascent state” (Frönius, Persson, Gucken, Hurley, & Petrosino, 2016, p. 26). They noted that published studies lack internal validity to support claims that restorative justice causes positive changes in schools. As such, forthcoming results from randomized controlled trials are much anticipated. For example, evaluators will soon release results from a 5-year, cluster-randomized controlled trial of whole school restorative practices implemented in 14 rural middle schools. However, 95% of enrolled students in these schools were White, so the generalizability of this study’s findings will be limited (Acosta et al., 2016).

The evidence base for restorative approaches to discipline is mainly comprised of findings based on single group, pre- and postresearch designs—designs that lack internal validity. Nonetheless, corroborating results across numerous single group studies indicate that restorative practices have promise for effecting change. For example, most international studies using single group designs have found reductions in office discipline referrals and OSS rates after whole school restorative practices were introduced, including in New Zealand (Buckley & Maxwell, 2007), Scotland (Kane et al., 2007), and China (Wong & Mok, 2010). Evaluations using single group designs in the United States have also shown declines in exclusionary discipline (e.g., International Institute of Restorative Practices, 2014; Riestenberg, 2013). Moreover, studies using surveys (e.g., Corrigan, 2012) and interviews (Ortega, Lyubansky, Nettes, & Espelage, 2016) have found that students tend to feel they benefit from restorative programming such as circles and conferences; perceived benefits include strengthened social and emotional skills. As a whole, these studies are promising, but caution is warranted in interpreting their findings given that certain student or school characteristics that are unaccounted for may explain these results.

Further research is also sorely needed on the promise of RI as a response to discipline disparities, especially given growing beliefs among policy makers and practitioners about its gap-reducing benefits. For example, as districts adopt restorative programming, they tend to make assumptions that the approach promotes racial equity. For instance, on their website, the Oakland Unified School District (OUSD) states that their restorative justice program “works to lower our rate of suspension and expulsion and to foster positive school climates with the goal of eliminating racially disproportionate discipline practices and the resulting push-out of students into the prison pipeline” (OUSD, n.d. para. 1).

Although many educators believe RIs can reduce racial discipline gaps, there is not a well-specified theory of change by which the key components of the approach (e.g., restorative circles and conferences) disrupt differential processing. Some scholars have speculated that restorative approaches to discipline create opportunities for perspective taking and relationship building, which could help address distrust, cultural misunderstanding, implicit bias, or negative racial beliefs (Davis, Lyubansky, & Schiff, 2015; Morris, 2016). Yet other theoretical models of the relationship between restorative interventions and discipline outcomes do not specify any mechanisms for reducing racial gaps (e.g., Acosta et al., 2016).

Studies examining the promise of RIs and, more broadly, restorative practices for reducing racial disparities are sparse. One report on districtwide discipline patterns in OUSD showed that Black students had the greatest decline in suspension rates, relative to other student groups, after the school year they implemented a range of discipline reforms, including restorative justice programming (Jain, Bassey, Brown, & Kalra, 2014). Another study found promise for discipline equity at the classroom level using a small sample of classrooms in two high schools (Gregory & Clawson, 2016). Specifically, teachers perceived by their students as frequently using restorative practices tended to issue few discipline referrals to Black and Latino students relative to teachers infrequently using restorative practices who had pronounced racial referral gaps. However, they also found after 2 years of restorative practices in the high schools that large racial disparities in referrals persisted at the school level. Given the lack of published research on the gap-reducing promise of RIs, the current study offers much needed, new knowledge about factors associated with reductions in racial disparities in exclusionary school discipline practices. Moreover, given that the bulk of published studies on restorative approaches lacks statistical controls of varying student and school characteristics, the current study’s use of a wide range of covariates to account for possible confounding variables offers a greater level of precision in pinpointing the positive correlates of school and student use of RIs.

**Current Study**

The current study directly builds on a prior study that examined data from the same school district. Thus, details about the prior study’s findings are warranted: Using 2011–2012 discipline records from the Denver Public School (DPS) system, Anyon et al. (2014) examined the characteristics of schools (e.g., percentage Black and grade configuration) and students (e.g., number of referrals, referral reasons, special education status, gender, race/ethnicity, and eligibility for free or reduced-price lunch) associated with OSS. They also accounted for student participation in in-school suspension (ISS) and behavioral contracts. For ISS, students are compelled to stay in a dedicated room for a specified length of time (e.g., a course period, multiple days) as a consequence for a
discipline referral. A behavior contract is designed for school staff members to use in facilitating a functional behavioral assessment that aims to identify the root causes of a student’s discipline incidents and action steps to address them. The document is signed by an administrator, student, student’s parent or guardian, a mental health staff professional, and a teacher.

Anyon et al. (2014) found that, accounting for student and school covariates (including participation in ISS and behavioral contracts), discipline-referred students who received one or more RIs (odds ratio OR = 0.73, p < .01) were less likely to receive an OSS during that same school year than discipline-referred students who did not receive an RI. However, despite accounting for students’ RI and other school and student characteristics, Black students continued to have significantly higher odds of receiving an OSS relative to White students (OR = 1.55, p < .001). The authors also stated that the OSS rates across the district went down for all racial groups, yet disparities remained pronounced (Anyon et al., 2014). The study raises questions about whether alternatives to suspensions such as RIs may have associated benefits for students from all racial groups in general without yielding greater associated benefits for Black students in particular.

The current study examines whether the Anyon et al. (2014) pattern of results were corroborated in a more recent school year in the same district and also directly addressed questions about whether alternatives to suspensions (e.g., RIs) altered the association between student race and receipt of OSS. The current investigation further improves upon the prior Anyon et al. (2014) study by including measures of not only individual participation in RI, but also school-wide RI use (i.e., percentage of RIs conducted relative to the number of discipline referrals). Thus, the current study examines whether the associated benefits of RI are linked to both individual and school-wide use. The positive correlates of RI may differ depending on whether schools frequently or infrequently respond to incidents with restorative practices (Anyon, Gregory, et al., 2016). In fact, lower use of RIs may suggest practical barriers such as lack of training or staffing, poor alignment between a restorative philosophy and the norms or values of school personnel, and/or limited opportunities for practitioners to improve their skills (Anyon, Wiley, et al., 2016).

Using a cross-sectional design and multilevel modeling, we considered the following research question: What factors are associated with equitable assignment of OSS? To do so, we examined the relationships between student racial background, school-level rates of RI use, and student-level participation in RIs, ISS, and behavioral contracts. We hypothesized that the strength of the relationship between students’ race/ethnicity and the odds of receiving an OSS would decrease after including student-level alternatives to suspension and school-level RI variables in the model, while controlling for other student and school characteristics. Evidence in support of our hypotheses would suggest that alternatives to suspension, such as RIs, may hold promise for counteracting differential processing in the assignment of OSS.

**METHOD**

DPS is a large urban school district in Colorado with over 100,000 students in nearly 200 schools. In 2014–2015, students enrolled in DPS were predominantly low-income (70.1%) and children of color (56.2% Latino, 22.2% White, 14.0% Black, 3.4% multiracial, 3.3% Asian, 0.7% Native American, and 0.3% Pacific Islander). Fifty-one percent of the student body was male, and 40.1% were English language learners. Twelve percent of students were eligible for special education services and 0.8% were designated as having a serious emotional disability.

In response to concerns voiced by parents, students, and community members about racial disparities in exclusionary discipline practices and the growing school-to-prison pipeline, the district reformed their discipline policy in 2008 (Advance ment Project [Community Partners], Padres & Jóvenes Unidos, Southwest Youth Collaborative, & the Children and Family Justice Center, 2005). DPS guidelines encouraged school administrators to minimize their use of exclusionary discipline practices, expand implementation of school-wide prevention programs, increase the use of supportive discipline approaches like RIs, and track racial discipline gaps (DPS, 2008). In the policy text, RIs are defined as problem-solving interventions done with the “offender,” such as group conferences and mediation (DPS, 2008, p. 3). The policy indicates that RIs can be implemented as a stand-alone approach, offered to students as an alternative to a punitive sanction, or delivered in conjunction with an exclusionary consequence for almost all types of discipline incidents. For example, students can be assigned an OSS and an RI for the same discipline incident. During the 2014–2015 school year, 14.2% of all 19,250 discipline incidents resulted exclusively in an RI. Twenty-one percent of the 9,039 discipline-referred students received multiple consequences for their discipline incidents, and these could include both exclusionary and alternative practices at the same time.

After the policy was approved, DPS began to support implementation of RIs with voluntary professional development units on the approach. Two types of training have been offered consistently since 2008: a half-day session on preventive restorative approaches like peace circles and affective statements and a 2-day session on the uses of RIs (conferences and mediations) to address discipline incidents. In the 2014–2015 school year (the focus of the current study), 141 staff members (37 teachers, 27 administrators, 70 support service providers, and 7 staff with their role missing on attendance sheets) represented 69 district schools at the trainings. Similar numbers of staff had been trained in prior years, with more than 2,700 district educators participating in the 2-day training since 2008 (Anyon, Gregory, et al., 2016).

Of note, the DPS trainings included a brief review of evidence of racial disproportionalities in suspension and expulsion. However, they have not included discussions about how or why RIs might address institutional racism, minimize implicit bias, or strengthen relationships and cultural responsiveness (DPS, 2012). Some schools elected to also
participate in the district’s trainings on bias and equity, but these have been largely focused on instructional approaches, and participants were not provided with a framework for making connections across these different professional learning opportunities (Anyon, Wiley, et al., 2016).

DPS has also continued its use of ISS, whereby students are assigned to a designated room to sit for an allotted period of time, ranging from a class period to multiple days. District policy outlines ISS as an exclusionary approach that is to be used with students who repeatedly disrupt other students’ abilities to learn. Written policies in the district do not mandate specific programming in ISS, except that students have an opportunity to learn from their mistakes in a supervised environment where they have access to their assignments and course materials. In a recent qualitative study, school-based practitioners in DPS reported that students in ISS tend to work on their homework and/or complete reflection worksheets about the discipline incident that led to their being issued ISS (Anyon, Wiley, et al., 2016).

Since the passage of the new policy, OSS rates have steadily declined from 7.4% to 3.6% of all students in the district, as has the proportion of students entering the discipline system (from 15.4% to 8.9%). At the same time, schools’ use of RIs increased from less than 4% of disciplined students to nearly 26%. However, districtwide suspension rates suggest that racial disparities among disciplined students have persisted in recent years, although racial gaps in suspension rates have narrowed over time (Anyon et al., 2014). In 2015 (the most recent data available), 6% of Black students, 5% of Native American students, 3% of Latino students, 1% of White students, and 1% of Asian students were issued one or more suspensions. In contrast, in 2008, before discipline reform was implemented, the rates were as follows: 14% of Black students, 11% of Native American students, 9% of Latino students, 5% of White students, and 2% of Asian students. This represents a narrowing of the suspension gap between White and Black students from 9% to 5% over 7 years, although Black students remain six times more likely to be suspended than their White peers.

Sample

All disciplined students ($N = 9,039$) in grades K–12 ($N = 193$ schools) from one academic year (2014–2015) comprised the cross-sectional dataset used in this study. This group was 57.7% Latino, 24.9% Black, 11.4% White, 3.6% multiracial, 1.4% Asian, 0.9% Native American, and 0.2% Pacific Islander. Nearly 32% of disciplined students were female, and 68.2% were male. Almost 39% of these students were English language learners, and 87.4% were eligible for free and reduced-price lunch (FRL). Twenty-one percent received special education services, and 3.6% were classified as having a serious emotional disturbance. The majority of the sample was in grades 6–10 (62%). In contrast to the overall student population, disciplined students were more likely to be Black, male, low-income, enrolled in special education services, and designated as having an emotional disability.

Forty percent of students in this sample had multiple discipline incidents or office discipline referrals (ODRs) over the course of the school year. DPS policy categorizes ODR reasons into six levels aligned with the seriousness of the perceived misconduct. The first level comprises minor misconduct, such as excessive tardiness, minor classroom disruption, dress code violations, use of profanity or vulgarity, use of cell phones or other electronic devices, distraction of other students, minor defiance, use of tobacco, gambling, scholastic dishonesty, unauthorized use of school equipment, and minor damage or defacement of school property. These Level 1 behaviors are addressed by educators without writing a formal ODR. Student infractions that are perceived as more serious are designated as Level 2 or higher, recorded as an ODR, and entered into the school discipline records. Sixty-six percent of referred students had at least one Level 2 ODR, which can include severe disrespect or defiance, theft or destruction of school property valued at less than $500, consensual but inappropriate physical contact, trespassing, possession of fireworks, and false activation of a fire alarm. Forty-five percent had one or more Level 3 incidents, which range from possession of drugs or alcohol and being intoxicated on campus to minor fights that result in injuries like cuts and scrapes, sexual harassment, theft from an individual or destruction of school property valued between $500 and $1,000, and bullying. Level 4 ODRs (11.0%) encompass the following behaviors: unlawful sexual contact, arson, hazing, harassment of school staff, serious fights with significant injuries that do not rise to the level of first- or second-degree assault, theft from an individual or destruction of school property valued over $5,000, possession of an explosive, willfully causing damage to the property of a school employee, false allegations of abuse against a school employee, child abuse, indecent exposure, habitual disruption, and witness intimidation. Level 5 incidents include robbery, possession of a dangerous weapon, drug distribution, first- or second-degree assault, and sexual assault (2.7%). The last level (Level 6, 0.1%) only includes use of a firearm, which requires a 5-day suspension, a mandatory expulsion hearing request, and a mandatory referral to law enforcement according to district policy. Among those students with an ODR, 40% received one or more OSSs, 32% received one or more ISSs, 26% received one or more RIs, 5% were placed on behavioral contracts, 5% were referred to law enforcement, and 0.7% were expelled.1

Measures

Demographic and discipline records were downloaded from the district’s student information system (Infinite

---

1Student may receive a mix of sanctions for different incidents over the school year, so percentages will not add up to 100%.
The outcome variable was a dichotomous indicator of a disciplinary infraction. We also included a dichotomous covariate if the student had received one or more ISSs. Twelve students with Level 6 incidents were dropped from the sample because this type of ODR perfectly predicted OSS receipt. We also followed the lead of the prior study’s inclusion of behavioral contracts and ISS as covariates in the analyses. They were all dichotomous and included gender (male or not), FRL eligibility (eligible or not), special education status (eligible for services or not), designation as seriously emotionally disabled (emotionally disabled or not), and language (English language learner or not).

Other student-level covariates included continuous indicators of how many times a student was referred to the school information system, along with the percentage of Black students enrolled at school. These variables were hypothesized to decrease in effect with the inclusion of additional variables. In Model 2, we added student demographic variables (e.g., gender, disability status, socio-economic status) and the frequency and severity of referrals (i.e., the infraction level variables) that are known to correlate with OSS receipt (Anyon et al., 2014). In Model 3, we included school-level demographic variables to investigate the changes in model fit resulting from school-level factors. In the succeeding models, all rate and percentage variables (i.e., percentage eligible for FRL, percentage of Black students enrolled, incident rate, RI rate) were scaled to have a range of 0–100 instead of 0.00–1.00 to allow for an interpretation of a one-point change in the coefficient.

Given the highly skewed distribution of Black students in DPS (out of the 193 schools, 96 schools had Black student enrollment < 10%, and four schools had Black student enrollment at or above 50%), we used piecewise regression to account for the possible non-linear relationship (Center, Skiba, & Casey, 1985) between OSS rates and Black student enrollment. This was further justified by past research showing a nonlinear relationship between the percentage of Black student enrollment and student receipt of OSS (Edwards, 2016). Specifically, in Model 3, we included the continuous percentage of Black students enrolled at school (M = 14.37, SD = 13.66, skewness = 1.11, range = 0–75), a dummy-coded variable indicating whether the school had more than 10% Black students enrolled (1 = yes) or 10% or fewer Black students enrolled (0 = no), and the interaction between the dummy-coded variable and the percentage of Black students enrolled. By specifying the model in such a manner, two separate regression slopes were modeled: one for schools with

Analytic Plan

Cross tabulations showed the likelihood of students receiving ODRs for Levels 2–5 and of students receiving one or more OSSs by student race/ethnicity. We employed a series of multilevel logistic regression models (i.e., random intercept models) using R 3.3 (R Core Team, 2016) and the lme4 package (Bates, Mächler, Bolker, & Walker, 2015). Models accounted for the nested structure of the dataset, in which students were clustered in schools, and predicted the likelihood of a student receiving an OSS (1 = yes, 0 = no). Specifically, multilevel generalized linear models with a logit link function and a binary outcome were estimated. We computed the intraclass correlation coefficient (ICC) for the outcome variable, which represents the amount of variability at the group level in linear regression models. We used the linear threshold method, appropriate for logit models (Merlo et al., 2006), to compute the ICC, where $ICC = V_g/(V_g + (\pi^2/3))$ and $V_g$ represents the variance of the intercept on the logit scale estimated using a null multilevel model (i.e., a model with no predictors). For the current data, the ICC was .38, suggesting the appropriate use of multilevel models to account for the nesting of students within schools.

In Model 1, we included only student race/ethnicity as a predictor. This model offers a baseline for the race/ethnicity variables that are hypothesized to decrease in effect with the inclusion of additional variables. In Model 2, we added student demographic variables (e.g., gender, disability status, socio-economic status) and the frequency and severity of referrals (i.e., the infraction level variables) that are known to correlate with OSS receipt (Anyon et al., 2014). In Model 3, we included school-level demographic variables to investigate the changes in model fit resulting from school-level factors.
low Black student enrollment (i.e., percent Black coefficient) and one for schools with a greater number of Black students enrolled (i.e., interaction term coefficient).

In Model 4, two RI variables were included: one at the student level (i.e., whether the student participated in one or more RIs) and the other at the school level (i.e., the RI rate, which indicated the percentage of discipline incidents in the school that were addressed with an RI). In addition, we included two alternatives to OSS as covariates: ISS and behavioral contracts. By building the models over several stages, the association of the race/ethnicity variables with the outcome variable was investigated in a stepwise fashion controlling for the additional variables included in the model.

Regression results are shown with the commonly used odds ratio (OR) where ORs > 1 indicate a greater likelihood and ORs < 1 indicate a lower likelihood. Given that statistical significance is easier to find with a large sample size (such as in our sample), effect sizes were computed to provide practical significance. Although ORs are already a measure of effect size, we converted the ORs into a more easily understood Cohen’s $d$ (1992) for binary predictors, where 0.20 = small, 0.50 = medium, and 0.80 = large. We followed Chinn’s (2000) guidelines, where $d = \ln(OR)/1.81$.

In order to assess model fit, we used several criteria. First, the overall model pseudo $R^2$s are shown using McFadden’s $R^2$ (also known as the likelihood ratio index and the most commonly used $R^2$ metric for logistic regression models; Veall & Zimmermann, 1996) and Tjur’s $R^2$ (also referred to as the coefficient of discrimination; Tjur, 2009). Although there is no single agreed-upon metric that best describes model $R^2$ in logistic regression models, both McFadden’s and Tjur’s $R^2$s have properties that are appealing to methodologists in that higher numbers represent better predictive accuracy (Allison, 2013; Menard, 2000). Pseudo $R^2$s for logistic regression models are typically lower when compared to traditional $R^2$s for linear regression models and for McFadden’s $R^2$; values between .20 and .40 represent an excellent fit (McFadden, 1977). In addition, the model area under the curve (AUC) is presented and is an indicator of the model’s discriminating capabilities, where values near .50 indicate discrimination capabilities with no better chance than values > .80, which is considered excellent discrimination (Hosmer & Lemeshow, 2004).

**RESULTS**

A descriptive examination of data showed that a greater percentage of discipline-referred Black students than discipline-referred White students received an OSS. Specifically, among students with an office disciplinary referral, 18% more of the referred Black students received at least one OSS (49.4%) compared to the referred White students (31.5%). Put another way, discipline-referred Black students were 1.57 times more likely (i.e., 49.4/31.5) to receive OSS compared to discipline-referred White students (see Table 1). In addition, we examined a descriptive table of the racial composition of the students who received referrals assigned to each level of discipline (i.e., Levels 2–5, with 5 being the most serious; see Table 2). Noteworthy was that a greater percentage of discipline-referred Black students (48.5%) received one or more referrals at Level 3 relative to referred White students (39.4%). Similarly, a greater percentage of discipline-referred Black students (14.8%) received one or more referrals at Level 4 relative to referred White students (9.9%).

We then estimated multilevel generalized linear models with a logit link function and a binary outcome. The ORs of Model 1 (see Table 3) indicate that Black students were more likely than White students $(OR = 1.74, p < .001, d = 0.31)$ to receive an OSS (McFadden’s $R^2 = .15$, Tjur’s $R^2 = .23$). The addition of the student demographic variables and the level

### Table 1. Frequency Counts of Receiving an Out-of-School Suspension by Race/Ethnicity ($N = 9,039$)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Received an OSS</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>White</td>
<td>707</td>
<td>325</td>
</tr>
<tr>
<td>Row %</td>
<td>68.5</td>
<td>31.5</td>
</tr>
<tr>
<td>Black</td>
<td>1,134</td>
<td>1,108</td>
</tr>
<tr>
<td>Row %</td>
<td>50.6</td>
<td>49.4</td>
</tr>
<tr>
<td>Latino</td>
<td>3,195</td>
<td>2,019</td>
</tr>
<tr>
<td>Row %</td>
<td>61.3</td>
<td>38.7</td>
</tr>
<tr>
<td>Other Groups*</td>
<td>351</td>
<td>200</td>
</tr>
<tr>
<td>Row %</td>
<td>63.7</td>
<td>38.3</td>
</tr>
<tr>
<td>Totals</td>
<td>5,387</td>
<td>3,652</td>
</tr>
<tr>
<td>Row %</td>
<td>59.6</td>
<td>40.4</td>
</tr>
</tbody>
</table>

*Other includes Native American, Asian, Pacific Islander, and multiracial.

### Table 2. Percentage of Students With One or More Office Discipline Referrals in Each Infraction Level by Race

<table>
<thead>
<tr>
<th>Infraction Level</th>
<th>Other*</th>
<th>White</th>
<th>Black</th>
<th>Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>67.90%</td>
<td>67.70%</td>
<td>67.60%</td>
<td>64.80%</td>
</tr>
<tr>
<td>Level 3</td>
<td>42.50%</td>
<td>39.40%</td>
<td>48.50%</td>
<td>46.50%</td>
</tr>
<tr>
<td>Level 4</td>
<td>12.50%</td>
<td>9.90%</td>
<td>14.80%</td>
<td>9.50%</td>
</tr>
<tr>
<td>Level 5</td>
<td>2.90%</td>
<td>3.50%</td>
<td>2.20%</td>
<td>2.80%</td>
</tr>
</tbody>
</table>

*Other includes Native American, Asian, Pacific Islander, and multiracial.
Table 3. Multilevel Logistic Regression Models Predicting Receipt of Out-of-School Suspensions (N = 9,039)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR</td>
<td>LL</td>
<td>UL</td>
<td>OR</td>
<td>LL</td>
<td>UL</td>
</tr>
<tr>
<td>Student Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>1.74***</td>
<td>1.44</td>
<td>2.10</td>
<td>1.31*</td>
<td>1.05</td>
<td>1.63</td>
</tr>
<tr>
<td>Latino</td>
<td>1.11</td>
<td>0.93</td>
<td>1.33</td>
<td>1.10</td>
<td>0.89</td>
<td>1.36</td>
</tr>
<tr>
<td>Native American</td>
<td>1.30</td>
<td>0.77</td>
<td>2.19</td>
<td>1.19</td>
<td>0.67</td>
<td>2.13</td>
</tr>
<tr>
<td>Asian</td>
<td>0.63</td>
<td>0.37</td>
<td>1.06</td>
<td>0.78</td>
<td>0.43</td>
<td>1.42</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.62</td>
<td>0.19</td>
<td>2.03</td>
<td>0.41</td>
<td>0.11</td>
<td>1.58</td>
</tr>
<tr>
<td>Multiracial</td>
<td>1.39*</td>
<td>1.04</td>
<td>1.87</td>
<td>1.05</td>
<td>0.75</td>
<td>1.47</td>
</tr>
<tr>
<td>Male</td>
<td>1.16*</td>
<td>1.03</td>
<td>1.31</td>
<td>1.37***</td>
<td>1.14</td>
<td>1.65</td>
</tr>
<tr>
<td>Eligible for FRL</td>
<td></td>
<td></td>
<td></td>
<td>0.81**</td>
<td>0.71</td>
<td>0.93</td>
</tr>
<tr>
<td>English Language Learner</td>
<td>1.09***</td>
<td>1.05</td>
<td>1.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
<td>1.20*</td>
<td>1.03</td>
<td>1.39</td>
</tr>
<tr>
<td>Special Education Status</td>
<td>1.92***</td>
<td>1.36</td>
<td>2.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Disability</td>
<td></td>
<td></td>
<td></td>
<td>1.33***</td>
<td>1.27</td>
<td>1.38</td>
</tr>
<tr>
<td>Level 2</td>
<td></td>
<td></td>
<td></td>
<td>2.88***</td>
<td>2.65</td>
<td>3.13</td>
</tr>
<tr>
<td>Level 3</td>
<td></td>
<td></td>
<td></td>
<td>4.71***</td>
<td>3.91</td>
<td>5.67</td>
</tr>
<tr>
<td>Level 4</td>
<td></td>
<td></td>
<td></td>
<td>11.98***</td>
<td>8.14</td>
<td>17.63</td>
</tr>
<tr>
<td>Level 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McFadden's R²</td>
<td>.15</td>
<td></td>
<td></td>
<td>.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tjur's R²</td>
<td>.23</td>
<td></td>
<td></td>
<td>.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUC</td>
<td>.79</td>
<td></td>
<td></td>
<td>.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 3</td>
<td></td>
<td></td>
<td></td>
<td>Model 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>LL</td>
<td>UL</td>
<td>OR</td>
<td>LL</td>
<td>UL</td>
</tr>
<tr>
<td>Student Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>1.28*</td>
<td>1.03</td>
<td>1.60</td>
<td>1.20</td>
<td>0.95</td>
<td>1.51</td>
</tr>
<tr>
<td>Latino</td>
<td>1.09</td>
<td>0.88</td>
<td>1.36</td>
<td>1.05</td>
<td>0.83</td>
<td>1.31</td>
</tr>
<tr>
<td>Native American</td>
<td>1.19</td>
<td>0.67</td>
<td>2.13</td>
<td>1.06</td>
<td>0.58</td>
<td>1.94</td>
</tr>
<tr>
<td>Asian</td>
<td>0.78</td>
<td>0.43</td>
<td>1.40</td>
<td>0.67</td>
<td>0.36</td>
<td>1.27</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.41</td>
<td>0.11</td>
<td>1.57</td>
<td>0.43</td>
<td>0.11</td>
<td>1.73</td>
</tr>
<tr>
<td>Multiracial</td>
<td>1.03</td>
<td>0.74</td>
<td>1.45</td>
<td>0.93</td>
<td>0.65</td>
<td>1.33</td>
</tr>
<tr>
<td>Male</td>
<td>1.16*</td>
<td>1.02</td>
<td>1.31</td>
<td>1.22**</td>
<td>1.07</td>
<td>1.38</td>
</tr>
<tr>
<td>Eligible for FRL</td>
<td>1.36**</td>
<td>1.13</td>
<td>1.64</td>
<td>1.29*</td>
<td>1.06</td>
<td>1.57</td>
</tr>
<tr>
<td>English Language Learner</td>
<td>0.82**</td>
<td>0.71</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td>1.10***</td>
<td>1.06</td>
<td>1.15</td>
<td>1.13***</td>
<td>1.08</td>
<td>1.18</td>
</tr>
<tr>
<td>Special Education Status</td>
<td>1.20</td>
<td>1.03</td>
<td>1.39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Disability</td>
<td>1.91***</td>
<td>1.36</td>
<td>2.69</td>
<td>1.67**</td>
<td>1.17</td>
<td>2.40</td>
</tr>
<tr>
<td>Level 2</td>
<td>1.34***</td>
<td>1.28</td>
<td>1.39</td>
<td>1.59***</td>
<td>1.52</td>
<td>1.67</td>
</tr>
<tr>
<td>Level 3</td>
<td>2.89***</td>
<td>2.66</td>
<td>3.14</td>
<td>3.92***</td>
<td>3.57</td>
<td>4.30</td>
</tr>
</tbody>
</table>

(Continued)
of seriousness of the infraction in Model 2 resulted in a large improvement in model fit (McFadden’s $R^2 = .30$, Tjur’s $R^2 = .40$). All the added variables in Model 2 were statistically significant (all $p < .05$) indicating the importance of controlling for various student-level predictors such as socioeconomic status, gender, and disability status (see Huang, 2018; Huang & Cornell, 2017). The number and seriousness of the infractions were also large and practically meaningful predictors of receiving an OSS ($OR_s = 1.33–11.98$). The levels of the infractions were progressive in nature and, as expected, the more serious the infraction, the higher the likelihood of receiving an OSS. In addition, although originally Black students had 74% higher odds than White students to receive an OSS (Model 1), the $OR$ for Black students decreased by almost half ($OR = 1.31, p < .05, d = 0.15$) with the inclusion of the Model 2 variables.

In Model 3, we added the school-level predictors, but model fit measures did not improve visibly ($R^2$s and AUC statistics were largely unchanged from the prior model). Moreover, there was no evidence that the percentage of enrolled Black students was related to whether or not a discipline-referred student received OSS. In Model 4 (see Table 3), we added three types of consequences students might have received once issued discipline referrals: RI, ISS, and behavioral contracts. We also added school-level RI rate. Although Model 3 did not show large improvements over Model 2 in terms of model fit, the inclusion of alternatives to OSS slightly increased the model’s predictive accuracy (McFadden’s $R^2 = .37$, Tjur’s $R^2 = .48$, AUC = .90), and overall, the discrimination capability of the model was excellent (Hosmer & Lemeshow, 2004).

The three disciplinary consequences (RI, ISS, and behavioral contracts) were statistically significant (all $p < .001$) and were practically meaningful. If a student received one or more behavioral contracts, the odds of being suspended almost doubled ($OR = 1.96, p < .001, d = 0.40$). Converted to probabilities, in terms of relative risk (i.e., a ratio of probabilities), students who received a behavioral contract were 29% more likely to receive an OSS compared to a referred student who did not receive a behavioral contract. In contrast, the $OR$ for ISS ($OR = 0.15, p < .001$) indicates that the receipt of one or more ISSs was associated with an 85% decrease in the odds of receiving an OSS while controlling for all other variables in the model. Converted to

### Table 3. (Continued)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 3</th>
<th></th>
<th>Model 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR</td>
<td>LL</td>
<td>UL</td>
<td>OR</td>
</tr>
<tr>
<td>Level 4&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.71***</td>
<td>3.91</td>
<td>5.67</td>
<td>5.35***</td>
</tr>
<tr>
<td>Level 5&lt;sup&gt;b&lt;/sup&gt;</td>
<td>11.99***</td>
<td>8.15</td>
<td>17.65</td>
<td>11.95***</td>
</tr>
<tr>
<td>Behavioral Contract&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1.96***</td>
<td>1.42</td>
<td>2.71</td>
<td></td>
</tr>
<tr>
<td>ISS&lt;sup&gt;d&lt;/sup&gt;</td>
<td>0.15***</td>
<td>0.13</td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>RI&lt;sup&gt;e&lt;/sup&gt;</td>
<td>0.31***</td>
<td>0.26</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>School Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td>1.01</td>
<td>0.52</td>
<td>1.94</td>
<td>0.83</td>
</tr>
<tr>
<td>% Eligible for FRL</td>
<td>1.01</td>
<td>1.00</td>
<td>1.02</td>
<td>1.01</td>
</tr>
<tr>
<td>% Black Enrollment</td>
<td>0.98</td>
<td>0.86</td>
<td>1.05</td>
<td>1.00</td>
</tr>
<tr>
<td>Dummy ( &gt; 10% Black)</td>
<td>0.87</td>
<td>0.31</td>
<td>2.43</td>
<td>0.90</td>
</tr>
<tr>
<td>Dummy x % Black</td>
<td>1.05</td>
<td>0.92</td>
<td>1.21</td>
<td>1.03</td>
</tr>
<tr>
<td>School Size</td>
<td>0.92*</td>
<td>0.85</td>
<td>1.00</td>
<td>0.93</td>
</tr>
<tr>
<td>% with Discipline Incident</td>
<td>0.95***</td>
<td>0.93</td>
<td>0.97</td>
<td>0.96***</td>
</tr>
<tr>
<td>RI Rate</td>
<td></td>
<td></td>
<td></td>
<td>0.98***</td>
</tr>
<tr>
<td>McFadden’s R&lt;sup&gt;2&lt;/sup&gt;</td>
<td>.30</td>
<td></td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>Tjur’s R&lt;sup&gt;2&lt;/sup&gt;</td>
<td>.40</td>
<td></td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>AUC</td>
<td>.87</td>
<td></td>
<td>.90</td>
<td></td>
</tr>
</tbody>
</table>

Note. $OR = $ odds ratio; $LL = $ lower limit of the 95% confident interval; $UL = $ upper limit of the 95% confidence interval; FRL = free or reduced lunch; AUC = area under the curve; ISS = in-school suspension; RI = restorative intervention.

<sup>a</sup>White students are the reference group. <sup>b</sup>Represents severity level of infraction. <sup>c</sup>Dummy-coded with students who did not receive a behavior contract as the reference group. <sup>d</sup>Students with no receipt of ISS are the reference group. <sup>e</sup>Students with no receipt of RI are the reference group.

* $p < .05$; ** $p < .01$; *** $p < .001$. 

In Model 4 (see Table 3), we added three types of consequences students might have received once issued discipline referrals: RI, ISS, and behavioral contracts. We also added school-level RI rate. Although Model 3 did not show large improvements over Model 2 in terms of model fit, the inclusion of alternatives to OSS slightly increased the model’s predictive accuracy (McFadden’s $R^2 = .37$, Tjur’s $R^2 = .48$, AUC = .90), and overall, the discrimination capability of the model was excellent (Hosmer & Lemeshow, 2004).

The three disciplinary consequences (RI, ISS, and behavioral contracts) were statistically significant (all $p < .001$) and were practically meaningful. If a student received one or more behavioral contracts, the odds of being suspended almost doubled ($OR = 1.96, p < .001, d = 0.40$). Converted to probabilities, in terms of relative risk (i.e., a ratio of probabilities), students who received a behavioral contract were 29% more likely to receive an OSS compared to a referred student who did not receive a behavioral contract. In contrast, the $OR$ for ISS ($OR = 0.15, p < .001$) indicates that the receipt of one or more ISSs was associated with an 85% decrease in the odds of receiving an OSS while controlling for all other variables in the model. Converted to
probabilities, in terms of relative risk, students who received an ISS were 44% less likely to receive an OSS compared to a referred student who did not receive an ISS. The effect size of ISS can be considered extremely large ($d = 1.05$). The student-level RI variable was also statistically significant ($OR = 0.31, p < .001$) and indicated that the receipt of one or more RIs was associated with a 69% decrease in the odds of receiving an OSS while controlling for all other variables in the model. The effect size was also large and practically meaningful ($d = 0.65$). In terms of relative risk, students who received an RI had a 35% lower chance of receiving a suspension while controlling for all other variables in the model.

With regard to the school-level RI rate, the $OR$ was also statistically significant ($OR = 0.98, p < .001$). In other words, students in schools that responded to a greater percentage of infractions with RIs had a lower likelihood of suspension. Although the $OR$ appears small, the effect of $OR$s is multiplicative in nature and a one $SD$ ($SD = 27.18$) increase in RI rate at the school results in an $OR$ of 0.58 (i.e., $0.98^{27}$), or a decrease in the odds of suspension by a factor of 0.42.

Central to the study’s focus on student race and school discipline, Model 4 shows that the $OR$ for Black students ceases to be statistically significant ($OR = 1.20, 95\% CI [0.95, 1.51], p = .12$). The effect size is small ($d = 0.10$) and based on a relative risk ratio; Black students had an 11% higher likelihood of receiving an OSS compared to White students while controlling for all other variables in the model. This is in contrast to the relative risk ratio that Black students had of 1.57 (or 57% higher likelihood of suspension) compared to White students without considering any covariates. Additional models were tested that included interactions for student race and RI, as well as student race and ISS, to test for the differential association of these alternatives and OSS by race. However, all interaction terms were not statistically significant (all $p > .05$, not shown).

It is also noteworthy that in Model 4, despite accounting for a range of covariates, three student characteristics remained associated with increased odds of receiving OSS: gender, socioeconomic status, and disability type (all $p < .05$). Male students, low-income students (i.e., FRL eligible), and those classified as having an emotional disability were all more likely to receive OSS. This held after accounting for student race, level of disciplinary referrals (i.e., severity), frequency of referrals, and receipt of RI, ISS, or behavioral contracts ($ORs = 1.13–1.67$).

**DISCUSSION**

Using DPS data from 2014–2015, statistical models showed that student participation in RIs substantially reduced the odds that individual students received OSS. However, the benefits of such participation were relatively similar across racial groups and were therefore only marginally associated with more comparable assignment of OSS to Black and White students. This suggests that the alternatives to suspensions, such as RI, may have benefits for all student groups but not substantially greater benefits for referred Black students. The findings are correlational and claims of causation cannot be supported; with that caution in mind, the findings do corroborate the results presented in Anyon et al. (2014) and offer promise that school districts using RI may reduce their use of out-of-school, exclusionary discipline for all students from diverse racial groups. The use of RI, however, may result in only marginal narrowing the disparities between the suspension rates of Black and White students, suggesting the need for prevention-oriented, race-conscious or culturally adapted approaches that address the broader contexts in which disparities arise (e.g., poor relationships between school adults and students of color, racial biases in perceptions of student behavior, differential access to rigorous and engaging instruction).

The study also found that the greatest reduction in referred Black students’ odds of receiving OSS was shown when six student sociodemographic controls (e.g., gender, eligibility for FRL, special education status) and frequency and level of seriousness of discipline incident were entered into the statistical model. In fact, their odds were reduced by close to half. Said differently, referred Black students had a 57% higher probability compared to referred White students of receiving an OSS based on the descriptive controls when no covariates were considered. With the six student sociodemographic controls and the frequency and level of seriousness of discipline incident in the statistical model, Black students had a 14% higher probability compared to White students of receiving an OSS. When we further accounted for participation in alternatives to suspensions (RIs, ISSs, and behavioral contracts), referred Black students only had an 11% higher probability compared to referred White students of receiving an OSS. Moreover, the difference in the likelihood that discipline-referred Black students compared to White students were issued OSS was not statistically significant when controlling for the aforementioned covariates in the statistical model.

At first glance, the findings might offer promise that school districts are successfully reducing differential processing of discipline-referred Black students relative to referred White students. However, before asserting this claim, future studies would need to carefully scrutinize the process by which reasons for discipline referral are assigned varying levels of severity (e.g., fighting versus assault). This is key, given that the current study showed that infraction severity Levels 2–5 were large and practically meaningful predictors of students receiving an OSS and that the likelihood of suspension for Black students changed the most from Model 1 to Model 2. Assignment of severity level may be influenced by adults’ subjective perceptions of student behavior. In the current school year, despite comparable Black and White percentages at Level 2, a greater percentage of Black students received one or more Level 3 and Level 4 referrals. It may be the case that Black students were engaging in more serious, safety-threatening behaviors than White students. However, research from other areas of the country suggests that Black students’ behavior relative to White students’ behavior tends to be judged as...
Alternatives to Suspension

As noted earlier, the findings are suggestive that student participation in alternatives to suspensions (e.g., RIs) may have made a slight contribution to more equitable sanctions of Black and White referred students. Specifically, analyses showed that when student participation in RI, ISS, and behavioral contracts was added to the model, the difference in the likelihood of Black and White students receiving an OSS was no longer statistically significant. Thus, inclusion of the discipline alternatives in the model resulted in the predictor of Black student racial background changing from statistically significant ($p < .05$) in the prior model to nonsignificant ($p > .05$). However, the magnitude of its effect was extremely small (i.e., $d = 0.06$), given the confidence interval was already close to 1.00 in the prior model ($LL = 1.03$ and $UL = 1.60$). Moreover, analyses using interaction terms showed that the association between the alternatives to suspension (ISS and RI) and OSS were similar across racial groups, suggesting there was no detectable protective effect for Black students who generally have a higher risk of receiving OSS relative to other racial groups.

Also mentioned above, the findings showed that student participation in RIs and ISSs was associated with reduced risk of OSS. More specifically, discipline-referred students who received one or more RIs were 35% less likely to receive an OSS, and discipline-referred students who received an ISS were 44% less likely to receive an OSS, relative to discipline-referred students who never received an RI or ISS. This held for students with more frequent referrals, greater severity of reasons for referral (i.e., the level of the referral), as well as for those qualifying for FRL and those designated as having an emotional disability. Put another way, students’ risk of suspension was lower if they participated in RI and/or ISS regardless of their race/ethnicity, FRL status, or disability status. This finding corroborates results from the 2011–2012 school year (Anyon et al., 2014), which increases confidence in the results. The study also corroborates a prior study showing that when referred students attended schools that used RIs with a greater percentage of incidents, they were less likely to receive an OSS (Anyon, Gregory, et al., 2016).

Reducing the likelihood of students receiving OSS is worthy in and of itself, given the deleterious correlates of being sent home as a consequence for discipline incidents. In fact, evidence suggests that suspensions have a generally negative effect on students from diverse racial and ethnic groups (Noltemeyer, Ward, & Mcloughlin, 2015). Multivariate and longitudinal studies demonstrate that OSS is a risk factor for a host of short- and long-term negative consequences, including academic disengagement, weak academic achievement, school dropout, increased involvement in the juvenile justice system, and later arrest (Monahan, VanDerhei, Bechtold, Cauffman, 2014; Mowen & Brent, 2016; Noltemeyer et al., 2015; Skiba, Arredondo, & Williams, 2014).

We can only speculate about why alternatives to suspension may reduce the chance of receiving OSS. One possibility, particularly for ISS, is that one exclusionary practice has simply replaced another. In other words, schools that once used OSS are now using ISS. One critique is that ISS is simply a segregated holding room in which students sit with limited learning opportunities (Gonzalez, 2012) and that it contributes to their negative academic trajectories (Cholewa, Hull, Babcock, & Smith, 2017). Yet increased use of ISS may be integral to many districts’ discipline reform plans to reduce the number of lost instructional days when students are sent home on suspension. In other words, many districts may be diverting students from OSS by assigning them to short-term ISS based on the belief that it is more beneficial to keep the students on school grounds than sending them away from the school building on suspension (Osher, Poirier, Jarjoura, & Brown, 2015). Relative to OSS, ISS may potentially keep students more engaged in academic tasks and reduce students’ unsupervised time at home or in the community. In fact, in a recent meta-analysis, student receipt of ISS was found to be less strongly associated with poor achievement than student receipt of OSS (Noltemeyer et al., 2015). In contrast, forced absence due to OSS is associated with a range of negative outcomes, including arrest (e.g., Monahan et al., 2014; Mowen & Brent, 2016).

Equity-oriented school discipline reform may also include efforts to revamp ISS to include more academic and behavioral supports, thereby reducing reentry into the discipline system for students from disproportionately referred student racial groups. For example, the Cleveland City School District administrators reconceptualized their ISS programs as planning centers and integrated social and emotional learning programming (e.g., social problem-solving techniques) to help students practice alternative ways to solve conflicts (Osher et al., 2015). However, the extent to which ISS in schools across the nation is being substantially reformed to more closely resemble Cleveland’s planning centers is unknown.

Evidence is more promising with RIs, which intentionally engage youth in a conflict resolution process. During RIs, adults and students have the opportunity to explain their experience of a discipline incident and jointly problem-solve to repair damaged relationships. Thus, there is potential for strengthening adult and student social, emotional, and cultural competencies, as well as relationships between those involved in discipline incidents (Ortega et al., 2016). That said, it is
unknown whether these theorized RI processes occurred in this study. Moreover, it is unknown whether RI participation was associated with not just reduced negative outcomes but also increased positive outcomes, such as strengthened academic engagement, sense of community, and sense of safety in the school. Clearly, it is essential to not only reduce OSS receipt but also to increase safe, supportive, racially just, and academically engaged communities.

Limitations

Several study limitations need to be considered to place the findings in perspective. The study is correlational and therefore cannot claim that RIs caused reductions in OSS. Moreover, RI participation requires voluntary consent. Thus, students who were already less prone to being issued OSS may have chosen to participate in RIs, given unmeasured psychological factors (e.g., empathy) relative to their peers who refused to participate (McCold, 2008). Future longitudinal research using propensity score matching might measure and account for such psychological differences between those who do or do not participate in RIs and thus offer more definitive claims about the protective effects of RIs. As mentioned earlier, the study had a limited focus on OSS receipt. It is essential for future studies to examine whether discipline-referred students who participate in alternatives to suspension make gains in domains related to positive youth development. With adequate statistical power, a three-level statistical model composed of ODRs, students, and schools would further explicate students’ patterns of discipline receipt over time. Moreover, the current study was further limited given that it did not use time-ordered data to isolate cases in which RI receipt occurred before OSS receipt. To strengthen theorized directionality of effects, future analyses could select RIs that took place in the beginning of the school year and track students’ discipline referrals and consequences through the rest of the school year.

The current study also did not account for the fidelity of RI implementation. Thus, we do not know the degree to which students and adults experienced procedural fairness, authentic sharing of perspectives, empathic perspective-taking, and adequate resolution or repair through agreed-upon action plans. Moreover, whether these indicators of high quality RI were equally distributed among student groups was also unknown. Punitive tendencies toward Black students or negative racial beliefs might undermine the fidelity of RI implementation (Lustick, 2017a). Future research might examine whether high quality RIs are distributed evenly among Black and White students.

Future Restorative Interventions Research and Practice

The findings suggest that student participation in RIs were related to only marginal narrowing of the suspension gap between Black and White students. This leads to conjecture that equity efforts may make greater inroads if they focus on prevention, rather than intervention (i.e., responses after students have already received a discipline referral). In DPS’s 2014–2015 school year, Black students comprised only 14.0% of enrolled students, but 24.9% of those were issued one or more discipline referrals. In contrast, White students comprised 22.2% of enrolled students, but just 11.4% of those were issued one or more discipline referrals. This substantial overrepresentation of enrolled Black students in the discipline systems suggests the need to prevent Black students from receiving a discipline referral in the first place. To that end, school districts are engaging in equity-oriented preventive efforts including: (a) using social and emotional programming to enhance student and staff interpersonal competency (Gregory & Fergus, 2017), (b) strengthening the motivational and engaging qualities of instruction (Gregory et al., 2016), and (c) increasing cultural relevancy of course work (Dee & Penner, 2016) and cultural responsiveness of staff (Debnam, Bottiani, & Bradshaw, 2017).

In addition, many school districts are also implementing restorative programming with a preventive focus on universally strengthening relationships, building community, and increasing capacity for productive conflict resolution (Hurley, Guckenbig, Persson, Fronius, & Petrosino, 2015). The current study examined only one aspect of restorative programming—the intervention end of the prevention–intervention continuum. RIs themselves may not be enough to disrupt multistaged processes that culminate in Black students being issued OSS. Future research would need to examine whether well-implemented classroom-based and community-building restorative practices can be leveraged to reduce the large number of Black students entering discipline systems in the first place. It might be that restorative efforts to increase Black students’ sense of belonging, fairness, support, and positive interactions with adults and peers before disciplinary interactions occur may ultimately be more effective at reducing the suspension gap between Black and White students.

In DPS, the RI rate across the district only reached close to 26% by 2014–2015. This means that 74% of disciplined students did not receive a formal restorative conference, circle, or mediation. It would be informative to investigate whether increased use of RIs with a majority of disciplined students would have positive ripple effects on the way Black students’ behavior is addressed in school more generally, not just when OSS is being considered as a discipline consequence.

Another future direction for research on restorative approaches to discipline includes examining the effective ways to explicitly focus on racial equity. According to Carter et al. (2015), “… closing racial discipline gaps will almost certainly require interventions and programs that are in some way race-conscious—that is, conscious of overall race dynamics in student-educator relationship and interaction” (p. 7). Davis et al. (2015) further highlighted the need for culturally competent educators with the “consciousness and
communication skills needed to work effectively across cultural, racial, and ethnic boundaries” (p. 13). They also argue that restorative justice training and practices should not be limited to addressing racialized interpersonal harm but should also include efforts to disrupt the structural nature of racial oppression though macro-level systems change. We need further specification about what it means to implement restorative approaches to discipline in a race-conscious manner in day-to-day interactions. Certainly, future research on restorative approaches to discipline needs to identify how adults demonstrate consciousness of racial dynamics, enact cultural competence, and engage in racial justice-oriented efforts to change systems in the school setting (Lustick, 2017b). Only then will researchers be able to evaluate the promise of race-conscious prevention programming (as opposed to race-neutral programming) for disrupting racial inequality.

Summary

The study conducted multilevel logistic regression analyses with student discipline records from a large urban district in the United States. Statistical analyses accounted for known predictors of OSS, including frequency of discipline referrals and seriousness of the perceived misconduct. Two findings corroborated research conducted with district records from prior school years (Anyon et al., 2014; Anyon, Gregory, et al., 2016): (a) discipline-referred students who participated in RIs were less likely to receive OSS than discipline-referred students who did not participate in RIs, and (b) discipline-referred students who were enrolled in schools using RIs in response to a greater percentage of discipline referrals were less likely to receive OSS than referred students in schools with lower RI rates. As a novel contribution, the study showed that alternatives to suspension, including RIs, were marginally associated with racially equitable assignment to OSS after accounting for frequency and seriousness of discipline referrals and student characteristics. In other words, after accounting for numerous covariates, RI participation was associated with only a slight narrowing of the Black/White disparities in suspension rates. The findings, as a whole, have implications that alternatives to suspension such as RIs are likely a useful strategy to reduce OSS rates for students from all racial groups, but they will not likely result in substantially narrowing districtwide OSS gaps between racial groups. To substantially narrow OSS gaps, schools may need to prevent overrepresented groups from entering the discipline system in the first place. Future research needs to investigate whether restorative practices with an explicit focus on racial equity, community building, and social–emotional learning can serve as a preventive civil rights remedy before disciplinary incidents occur.

REFERENCES


Date Received: May 11, 2017
Date Accepted: January 7, 2018

Guest Editor: Catherine Bradshaw
AUTHOR BIOGRAPHICAL STATEMENTS

Anne Gregory is currently an associate professor at Rutgers University in the school psychology department. Her work addresses the persistent trend of Black adolescents being issued school suspensions and expulsions at higher rates than adolescents from other racial–ethnic groups. Through research and intervention, she aims to address this trend by strengthening the characteristics of teachers, classrooms, and schools associated with the successful schooling of Black students.

Francis L. Huang is an assistant professor in the Statistics, Measurement, and Evaluation in Education Program in the Department of Educational, School, and Counseling Psychology at the University of Missouri. He is an applied quantitative methodologist with current substantive interests in school climate, the disproportional use of exclusionary disciplinary sanctions, and various policy-relevant topics. His methodological focus has been on the analysis of clustered data and the development of empirically supported scales and measures.

Yolanda Anyon, PhD, is an assistant professor in the Graduate School of Social Work at the University of Denver. She is the principal investigator of the DU-DPS research–practice partnership on school discipline. Her research focuses on the role of schools and community-based organizations in shaping developmental outcomes for youth of color.

Eldridge Greer, PhD, is the associate chief of the Division of Student Equity and Opportunity at DPS, where his focus is removing structural barriers that negatively impact educational opportunity. Dr. Greer has been nationally recognized for his work in Denver for discipline reform efforts, with a particular focus on eliminating the racial disparities in discipline. His current work is focused on leading DPS in creating Whole Child supports. He is the proud parent of current and former DPS students.

Barbara J. Downing, PhD, is a school psychologist in the Division of Student Equity and Opportunity at Denver Public Schools. Supporting the social–emotional learning of all students is the focus of Dr. Downing’s work in DPS. She is responsible for the coordination of student discipline policy and practice in DPS. Dr. Downing is also the developer and manager of the Deployment Platform and process for the DPS Whole Child Supports Team.