



# Restorative for All? Racial Disproportionality and School Discipline Under Restorative Justice

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## **Abstract**

The well-documented racial disparities in school discipline have led many school districts in the U.S. to adopt restorative justice practices. The restorative justice philosophy differs from traditional disciplinary action by placing an emphasis on restitution and improving behavior rather than punishment. While models of restorative justice are descriptively and theoretically promising, research on restorative practices in schools is limited. We use student-level administrative data and a difference-in-difference design to measure the changes in student discipline outcomes that occurred under restorative justice in Pacific City schools between the 2008-2017 school years. Results indicate that restorative justice practices led to an overall reduction in disciplinary action. However, results also show that restorative justice practices had differential effects between racial groups, with White students benefiting most from restorative justice. These findings suggest that while the overall effects of restorative justice are promising, these practices may unintentionally widen the racial disproportionality in school discipline they are instituted to mitigate.

## **Introduction**

Profound racial disparities exist in school discipline, with numerous studies finding that Black and Hispanic students are disciplined at disproportionately high rates compared to their White peers (U.S. Department of Civil Rights, 2014; Skiba et al., 2002). As punitive zero-tolerance approaches to school discipline proliferated, scholars documented racial disproportionalities in suspensions, expulsions, and other disciplinary measures, as well as deleterious effects on students' educational outcomes (Kupchik, 2010; Balfanz et al., 2015; Toldson et al., 2015). To reverse these trends, some schools adopted restorative justice policies, deemphasizing suspension and expulsion in favor of mediation, community building, and other practices that schools hope will improve or *restore* positive behaviors for students with behavioral issues (Morrison et al., 2005).

Restorative justice has become popular in school districts across the U.S. over the last decade, and a joint 2014 report by the U.S. Departments of Education and Justice touted the use of restorative justice as a viable alternative to standard exclusionary disciplinary practices (e.g. suspension or expulsion) in schools. Despite the increasing prevalence of restorative justice, scholarly evaluation and understanding of restorative justice in schools is limited (but see Anyon et al., 2016; Anyon et al., 2014; Gonzalez 2015). While research shows that restorative justice practices lead to an overall reduction in school suspension rates, the impact of restorative justice on racial disproportionality in school discipline is not well understood. This study thus adds to a growing body of literature by evaluating the use of restorative justice discipline practices in Pacific City schools from 2008 to 2017,<sup>1</sup> examining whether the implementation of restorative justice was associated with changes in overall and race-specific discipline rates. Specifically, this study asks the following questions: 1) Does the implementation of restorative justice practices in

schools change student discipline outcomes; and 2) Does the use of restorative justice change racial disproportionality in student discipline?

Consistent with prior studies, our difference-in-difference estimates show that restorative justice practices reduced overall discipline and suspension rates in the district. However, the benefits of restorative justice in Pacific City are not enjoyed by all students, as disciplinary outcomes for Black students were largely unchanged under restorative justice. While the overall effects of restorative justice are thus promising, the adoption of these practices may be widening the racial disproportionality in school discipline they were instituted to mitigate.

### *Schools as Punitive Spaces*

Restorative justice practices in schools are often adopted due to growing concerns about racially disparate discipline practices. Black and Hispanic students in the United States are increasingly funneled into the criminal justice system through punitive school discipline practices, zero-tolerance policies, and security measures (Wald & Losen 2003; Hirschfield 2009). As the U.S. adopted tough-on-crime policies during the War on Drugs era, school districts across the U.S. began to implement zero-tolerance policies, mandating harsh, unrelenting consequences for violation of certain school policies (Kupchik 2010; Weissman 2015). While these zero-tolerance policies were meant to deter unwanted behavior, they promote suspension and expulsion practices that remove students from normal educational environments. These exclusionary policies were initially aimed at preventing high-level offenses but expanded to include minor offenses such as alcohol or tobacco possession, insubordination and dress code violations, such that maximal penalties are often applied for minor infractions (Kupchik 2010; Wilson, 2014; Heitzeg, 2009). As a result, student suspension rates have risen dramatically since the 1970s (Skiba et al., 2002).

Racial disproportionality in school discipline between Black and White students is striking, with Black students three times as likely to be suspended as White students (U.S. Department of Education Office for Civil Rights, 2014). Although Black students are suspended most frequently, delinquency data show that they were not more likely to be participating in serious delinquency at the time they were first suspended, suggesting that their behavior is perceived as being more deserving of punishment than their peers (Shollenberger 2015). While Black students' disproportionate discipline rates are particularly troubling (James, 2011; Boyd, 2009), Hispanic middle and high school students are also more likely than White students to be suspended, even when they commit the same infractions (Skiba et al., 2011; Orozco, 2013).

Students often experience negative outcomes once suspended or expelled from school. Balfanz, Byrnes and Fox (2015) find that out-of-school suspensions are directly related to lower attendance rates, course failure and disengagement from the school environment. Although punishment is aimed at correcting behavior, suspensions can be counterproductive because there is little research to support that student behavior is positively affected by suspension (Kupchik 2010). Academic disengagement is central to this process as it is a strong predictor of truancy, disciplinary referrals and homework completion, all of which affect academic performance (Toldson, McGee & Lemmons 2015). School discipline can also have deleterious effects later in life, as increases in grade retention and the likelihood of dropping out of school decrease lifetime earnings in the labor market (Marchbanks et al. 2015).

#### *Restorative Justice as a Response to Discipline Disparities*

To address these problems, a growing number of school districts across the United States adopted restorative justice programs. Criminal justice activists touted the restorative justice model as a means to reduce recidivism and address equity issues in the criminal justice system.

In schools, restorative justice practices usually follow three core principles. First, schools hope to repair harm done between the perpetrator and the victim. Second, schools aim to build community and relationships between members of the community (i.e. school staff and students) to increase a feeling of responsibility for maintaining a positive environment. Third, schools provide students with prosocial skills that will allow them to better address and diffuse potential conflicts (Shedd 2015; Gonzalez 2015). The restorative justice model maintains that student misconduct cannot be fully restored if the wrongdoer is absent because of a suspension, which means that students should be sent through within-school channels to restore positive behavior. Therefore, restorative justice programs often utilize mediation, focus groups, and training sessions to encourage positive student behavior.

Although the core tenants of the programs are widely consistent, the specific implementation of restorative justice policies varies between schools. Most schools adopt a continuum of practices that are not always directly aimed at discipline but towards building relationships and a connection to the school community (Gonzalez, 2015). Through the adoption of various restorative practices, schools hope that disciplinary cases and problem behavior will decrease.

Importantly, schools that integrate restorative justice into their practices typically do so as an *alternative* that exists alongside normative discipline policies, rather than as a complete *replacement* for normative discipline policies (Gonzalez, 2012). This distinction is important because integrating restorative practices within the traditional disciplinary system increases opportunities for discretion to determine the outcome of disciplinary cases. Rather than the completely new disciplinary system based on restorative principals that proponents advocate, restorative justice becomes one among many options, and school staff determine where, when,

and with whom to utilize restorative justice based on their discretion and zero-tolerance mandates. This increased discretion potentially leads to challenges, as both discretion and subjectivity contribute to racial disproportionality in school discipline (Skiba et al. 2002).

Moreover, local considerations are likely to affect the integration of restorative justice into school policies and procedures. Scholars have documented the challenges with implementing any type of intervention in schools, highlighting burdensome requirements, policy constraints and school cultural shifts that can hinder the implementation of outside programming (Coburn, 2003; Jaycox et al., 2006). While not examining restorative justice programs, Bradshaw et al. (2008) highlight that differences in training access and school focus affect the implementation fidelity of other disciplinary interventions in schools. Efforts to implement restorative justice practices in schools may encounter similar challenges—particularly in less affluent schools that may struggle to find resources for training and implementation of restorative justice.

Recent research on restorative justice policies in schools shows that the practices are promising for addressing disparities in school discipline. Suspension rates in Denver, San Francisco, and Oakland schools decreased after the implementation of restorative justice policies (Baker, 2008; Gonzalez, 2012). Whether the potential benefits of restorative justice are experienced equally by students from different racial groups, and how restorative justice policies affect racial disproportionality in school discipline is largely missing from this literature. Research from Denver shows that students of all racial groups who received a restorative intervention instead of going through the traditional disciplinary process were less likely to be involved in a disciplinary incident the following semester (Anyon et al. 2016). While Hashim et al. (2018) similarly find that the implementation of suspension bans and restorative justice



practices in Los Angeles reduced suspension rates for all racial groups, they also find that racial gaps in school suspensions persist despite these overall declines in suspension rates. Although restorative justice practices were an element of the Los Angeles policy, Hashim et al.'s data do not allow them to disentangle the effects of restorative justice practices from the suspension ban and other disciplinary reforms. Despite the centrality of mitigating racial disparities in school discipline to restorative justice, existing research on restorative justice in schools offers limited insight on this question.

We argue that understanding the outcomes of Black and Latino students in schools with restorative justice should be central in the evaluation of these programs. This is perhaps particularly salient in schools where restorative justice supplements but does not replace existing practices. In these schools, it is unclear if disparities in traditional disciplinary outcomes are impacted by the school's use of restorative justice. Likewise, if students commit an infraction that the school determines still warrants suspension under restorative justice, it is unclear if disproportionality will be mitigated, or if similar disparities will be found in suspensions processed under restorative justice (see Hashim et al., 2018; Anyon et al., 2016). Moreover, because restorative justice does not eliminate traditional means of suspension or expulsion, disproportionality in traditional school discipline practices is still relevant in schools with restorative justice. As such, although restorative justice is theoretically promising, it is unclear if all students benefit equally from restorative justice practices, or if restorative justice has a differential impact depending on a student's race.

#### *Restorative Justice, Discretion and Organizational Reforms*

Restorative justice presents a promising alternative to traditional school discipline practices, but successful implementation faces myriad potential challenges. To make sense of

these, we draw on the concept of discretion—or the autonomy of implementers to make decisions that will contribute to both the implementation of restorative justice and subsequent student outcomes. Lipsky (1980) conceptualized public service employees (i.e. teachers, police officers etc.) as ‘street-level bureaucrats’ that interact with citizens and have discretion in the execution of their work. While this discretion serves a functional purpose, it also creates the opportunity for individual interpretation and bias to influence implementation of policies. Studies of policy implementation and enforcement have found that discretion can lead to a variety of challenges, such as the willingness to implement a policy (Tummers & Bekkers, 2013), policy interpretation in light of ambiguity (Edleman, 1992) and inequality in policy enactment and enforcement (Davis, 1998; Prendergast & Topel, 1993).

Along with discretion, a school’s ability to successfully implement policy heavily depends on organizational practices and capacity for reform. Spillane (1999) posits the success of external reforms heavily depend on zones of enactment—spaces where reform efforts meet teaching or school practice. These enactment zones are influenced by both the type of reform and the capacity and will of school staff to change their practices. Coburn (2003) adds to this discussion by examining how interventions are scaled in schools, highlighting tensions between breadth and depth that increase as reform efforts diverge from normative practice. These organizational mechanisms are particularly relevant for restorative justice, as the theoretical tenants of restorative justice are likely to vary from the version of restorative justice that school staff are willing or able to implement.

When coupled with discretion, organizational constraints represent a number of potential challenges for restorative justice implementors. As trends in school discipline are already impacted by educator discretion (Skiba et al., 2011), adding an additional school discipline

option such as restorative justice arguably increases opportunities for discretion to impact school discipline trends. Because zero-tolerance mandates still govern schools that use restorative justice, the extent to which schools embrace the philosophy in light of existing practices, *how* it is implemented and *who* benefits from the program's adoption are challenges that implementors are likely to face. Thus, it is possible that a school's transition to restorative justice may not be as immediately transformational as advocates hope.

### *Restorative Justice in Pacific City*

Pacific City first implemented restorative justice programs in 2008 after citywide concerns about discipline disparities became a priority for local schools. African American students were suspended at rates that were more than two times that of White students and were more likely to be disciplined for disruptive offenses. In addition to districtwide goals to deemphasize suspensions, restorative justice practices were implemented to reduce the total number of exclusions (through suspension or expulsion) and reduce the number of police or juvenile justice incidents.

The restorative justice programs operate through the Alliance for Restorative Communities (ARC), a non-profit organization that employs a Restorative Justice Coordinator to help implement restorative justice practices in schools. The Restorative Justice Coordinators are a diverse group of non-profit staff who are extensively trained in areas such as conflict mediation, addressing inequalities in the workplace, and developing restorative justice practices for students. Specific restorative justice practices vary between schools depending on the needs of the school environment, but schools utilized restorative circles, training sessions for teachers and students, in-class coaching and more. The variety of practices is not uncommon, as schools

often create mechanisms to promote restorative justice that administrators feel will fit the school's context (Gonzalez 2012).

The schools in Pacific City that implemented restorative justice used the practices as an alternative to traditional disciplinary punishment. Typically, schools used their Restorative Justice Coordinator to handle some discipline cases, with the goal of resolving issues through a restorative process before considering traditional disciplinary action. Despite the presence of restorative justice, school administrators had autonomy in determining which student discipline cases to use restorative justice and which cases were sent through traditional disciplinary processes. In this way, restorative justice operated as a filter in a school's disciplinary process aiming to deter students from exclusionary discipline. The success of this filter, however, depended on the discretion of school staff, caseload of the Restorative Justice Coordinator, and willing participation of students and staff.

ARC worked with school district administrators to select schools for initial restorative justice implementation. The schools were selected by the district based on perceptions of need. The pilot restorative justice program began at a middle school during the 2008-2009 academic year, with substantial resources allocated to the development of restorative practices in the school. Based on reported success of the pilot, ARC received a grant to pilot restorative justice programs in other schools in Pacific City. One k-8 school began adopting restorative justice policies mid-year during the 2010-2011 school year, with two high schools and a middle school beginning restorative justice practices at the start of the 2011-2012 academic year, and a third high school adopting restorative practices prior to the 2013-2014 school year.<sup>2</sup> Because restorative justice was not implemented in all Pacific City schools, and was rolled out over time to the different schools that did receive it, the differences in discipline practices between and

within schools in the same school district over time can provide insights into the outcomes associated with these changes. Importantly for our purposes, this staggered rollout of the program does not depend on factors that are likely to influence the effectiveness of the program (district policy shifts, school-specific incidents, perceptions of the programs expected effectiveness). Appendix A provides a more detailed account of the restorative justice rollout in Pacific City.

## **Data and Methods**

### *Data*

We use student-level longitudinal administrative records containing disciplinary records of Pacific City students from 2007 to 2017. The student-level data include demographic and academic information that are linked with school identifiers, allowing for the comparison of students in schools (and years) with and without restorative justice programs. Additionally, the discipline data include specific information about each student disciplinary incident. Within each disciplinary incident, the data includes identifiers for the involved students, the date of the infraction, the type of infraction (e.g., attendance violation, fighting, behavioral issues), the type of punishment (e.g., in-school suspension, out-of-school suspension) and the length of punishment (calculated in days missing from school).

To facilitate comparisons between Pacific City schools that did and did not use restorative justice practices, we drop all schools that were specialization schools (e.g. alternative schools, learning centers, etc.) or served less than two hundred students. For the purpose of this study, we only classify schools as restorative justice when they employ a Restorative Justice Coordinator and made procedural changes in their school to transition to restorative justice. This measure thus excludes eight additional schools with limited restorative justice activity (i.e. they used some restorative justice practices without official Restorative Justice Coordinator or

policies), These eight schools were dropped from our analytic sample, though supplemental analyses (available upon request) including these schools as non-restorative justice schools yield similar results.

*Dependent Variables.* The primary outcome measures are dichotomous variables indicating whether a student was suspended in a given year. To capture any differences in the relationship between restorative justice practices and discipline severity we estimate supplemental models in which we predict whether students: 1) received an in-school suspension (vs. those who received no suspension); 2) received an out-of-school suspension (vs. those who received no suspension); or 3) received an expulsion (vs. those who received no expulsion). As the results are largely consistent across outcomes, we focus our discussion on the results predicting who received any suspension (vs. those who received no suspension), and report results for other outcomes in the Appendix.

*Independent Variables.* Our key independent variable is a dichotomous variable indicating whether there was a restorative justice program in a particular school and year. For schools that at some point implemented restorative justice, the years prior to the implementation of restorative justice (and, in a few schools, the years after it was rolled back) are coded as 0, and the years of restorative justice implementation are coded as 1; schools that did not implement restorative justice during the period covered by our data were consistently coded as 0.<sup>3</sup> We also use two alternative specifications of the restorative justice variable. In the first variation, we account for the length of school-level implementation of restorative justice by measuring how long a particular school has used restorative justice practices. Using 0 years of implementation as the reference, we create dummy variables for 1, 2, and 3 or more years of implementation. In addition, because students can be exposed to restorative justice for varying amounts of time, the

second variation of the restorative justice variable accounts for length of student exposure to restorative justice. Here we use 0 years of exposure as the reference, with dummy variables for 1, 2, and 3 or more years of exposure.

As restorative justice programs were implemented in Pacific City to address racial disparities in school discipline between White, Hispanic,<sup>4</sup> and Black students, we estimate interaction effects to examine whether the effects of restorative justice differed across these groups. Given the focus on restorative justice programs on improving disciplinary outcomes for Black and Hispanic students, we focus particularly on differences Black students, Hispanic students, and their White peers, creating dummy variables for Black (vs. White) and Hispanic (vs. White) students.<sup>5</sup>

We additionally control for student gender, socioeconomic status (as measured through free and reduced lunch status), grade level (a series of dummy variables), and special education status. As we discuss below, all models also include school fixed effects and year fixed effects. These fixed effects account for all time invariant characteristics of schools, as well as districtwide year-to-year changes. Taken together, these fixed effects allow us to compare the changes in disciplinary outcomes that occur within a given school (we compare schools to themselves in years with and without restorative justice) while accounting for shared temporal fluctuations.

Demographic statistics on schools with and without restorative justice programs between the 2008-2017 school years are provided in Table 1. Table 1 also shows the percentage of students who were suspended. The data suggest that the schools that implemented restorative justice had higher proportions of Black and Hispanic students, and experienced higher rates of suspensions, relative to other Pacific City schools. Although discipline rates are higher in these

schools, the racial disproportionality between White, Black and Hispanic students is similar across schools with and without restorative justice programs.

[Insert Table 1 here]

### *Methods*

We use a multivariate difference-in-difference approach to test for changes in student discipline when a school implemented restorative justice practices. Intuitively, this analysis examines the difference in student suspension rates before and after the implementation of restorative justice and compares this difference with the differences in suspension rates observed in schools that did not implement restorative justice over the same period. Because of the emphasis on decreasing suspension rates in Pacific City, suspension rates may have decreased during this time even if schools did not use restorative justice. Our difference-in-difference approach allows us to account for any trends as well as year-specific fluctuations that affect schools with and without restorative justice in each year. Further, because our estimates compare students within the same school before and after implementation, they also account for stable, unmeasured characteristics of the school. To estimate the effects of restorative justice, we estimate a series of models that take the following general form:

$$Y_{ist} = \beta X_{ist} + \gamma_s + \delta_t + \varepsilon_{ist} \quad (1)$$

where  $Y_{ist}$  represents a series of binary indicators for different disciplinary outcomes for individual  $i$  in school  $s$  at time  $t$ ,  $X_{ist}$  are our independent variables, including a dummy variable for whether school  $s$  in time  $t$  had a restorative justice program, as well as the control variables noted above,  $\gamma_s$  represent fixed effects for school  $s$ ,  $\delta_t$  represent fixed effects for year  $t$ , and  $\varepsilon_{ist}$  is an error term. In models estimating the differential effects of restorative justice by race,  $X_{ist}$  includes interactions of our indicator of restorative justice and race variables.



In addition, to compare whether student outcomes varied by race when students of different races were involved in the same disciplinary incident  $d$ , we also estimate a supplemental model with disciplinary incident fixed effects:

$$Y_{ist} = \beta X_{ist} + \tau_d + \varepsilon_{ist} \quad (2)$$

where  $\tau_d$  represents fixed effects for school and year specific disciplinary incidents.

*Standard Errors.* We use randomization inference to calculate our standard errors (Heß 2017). Education researchers have long recognized the importance of correcting standard errors to account for the non-independence of students in schools. However, the standard cluster-robust estimators generally employed may not be well-suited for difference-in-difference estimators, particularly when the number of treated clusters is small compared to the total number of clusters (Young 2017). Likewise, in some contexts even wild bootstrapping requires sub-cluster resampling to obtain consistent estimates (Roodman 2018). By contrast, randomization inference works well in such contexts, allowing us to randomly re-assign the treatment (i.e. restorative justice programs) to different cases (i.e. schools) and compute the probability of the treatment rejecting a null hypothesis of having no effect on student outcomes. Utilizing this approach allows us to estimate rigorous standard errors that account for the clustering of students within schools as well as the other complexities of our case.

## Results

Figure 1 displays suspension rates in each restorative justice school before and after program implementation, as well as the average suspension rate for schools that did not implement restorative justice during the period covered by our data. Each gray line represents a single school, with the solid lines representing the pre-restorative justice observations for that school, and the dashed lines representing post-restorative justice. The solid black line represents

the average suspension rate across schools that did not implement restorative justice between 2008 and 2015. As is evident in Figure 1, suspension rates are decreasing in schools with restorative justice and increase in two schools after the schools stopped using the practices. Across the schools that implement restorative justice, we see a relatively uniform decrease across the schools upon adoption. We do not see evidence of divergent pre-trends as models estimating trends confirm that schools that eventually use restorative justice have similar trends before implementation as schools that never implement restorative justice ( $p=0.94$ ).<sup>6</sup>

[Insert Figure 1 here]

Intuitively, the results from the difference-in-difference models that follow can be thought of as taking the difference between the pre- and post-restorative justice school observations from the same school and comparing this to analogous changes from schools that did not implement restorative justice (i.e., our non-restorative justice schools). Figures 2-5 display predicted probabilities of model suspension rates, which includes both in-school and out-of-school suspensions (see Appendix Tables A1-A4 for model coefficients, as well as results from models separating in-school suspensions and out-of-school suspensions).<sup>7</sup> Figure 2 depicts the predicted probabilities from our first set of models, which estimate the overall changes in suspension rates associated with the introduction of restorative justice on disciplinary outcomes. Specifically, the two bars compare the percent of students who were suspended in schools where restorative justice was and was not in place. In schools with restorative justice, only 2.5 percent of students are suspended, compared with 5.1 percent of students in non-restorative justice schools. This 2.6 percentage point change ( $5.1-2.5=2.6$ ) represents a substantial 51 percent decrease in the suspension rate ( $2.6/5.1 = .49$ ).

[Insert Figure 2 Here]

Figure 3 reports analogous findings for models predicting race-specific changes in suspension rates. White and Hispanic students are suspended less in restorative justice schools than in non-restorative justice schools. In the case of White students, the percentage point differences are small and statistically significant, but relative to the base rate, the reduction is sizable (a 62.6 percent). Though statistically insignificant, Hispanic students also experience a sizable reduction in their suspension rate under restorative justice (55.8 percent). For Black students, we find a statistically insignificant slight decrease in rates of suspension after restorative justice. While the presence of restorative justice is not associated with a statistically significant decrease in the suspension rates of Black students, we note that restorative justice is associated with a statistically insignificant ( $p = .277$ ) increase in the gap between White and Black students' suspension rates (see Appendix Table A2). By contrast, as both White and Hispanic students receive fewer suspensions in restorative justice schools, there is no statistically significant difference in the Hispanic-White gaps in schools with or without restorative justice.<sup>8</sup>

[Insert Figure 3 here]

Figures 2 and 3 treat all time spent in a school with a restorative justice program as equivalent. In Figures 4 and 5 we relax this assumption, examining whether differences in disciplinary outcomes vary by how long a school has had a restorative justice program, and how much exposure to restorative justice programs students have had. Figure 4 examines whether the outcomes associated with restorative justice vary by how long the restorative justice program has been in place, testing whether new and established programs yield similar results. We find a steady decline in the suspension rates of White students as restorative justice programs are implemented. While the drop in White students' suspension rates in the first two years of the program is not statistically significant, schools with mature restorative justice programs have

suspension rates for White students that are statistically significantly lower than they were in the absence of the program. Schools with programs that are in their third year or more are a sizable 4.42 percentage points lower than non-restorative justice schools, with White student suspension rates of only .07 percent (seven-tenths of a percentage point). Suspension rates for Hispanic students follow a similar trajectory as for White students, but are not statistically significant.<sup>9</sup> In contrast, Black students' suspension rates follow a markedly different pattern as restorative justice programs are rolled out. Although restorative justice programs are not associated with statistically significant changes in the suspension rates of Black students, the direction of the coefficients is suggestive of increases in years one and two, which begin to decrease in years 3 and later.<sup>10</sup>

[Insert Figure 4 here]

Despite steady declines in suspension rates for White students, we find no statistically significant differences in the gaps between White, Hispanic and Black student suspension rates throughout years of implementation (see Appendix Table A3). Though not statistically significant, coefficients suggest that the gap between White and Black students widens over time. These findings suggest that the implementation of the racial equity components of restorative justice practices may vary over time, with suspensions decreasing relatively quickly for White students, at a somewhat slower pace for Hispanic students, and remaining mostly stagnant for Black students.

In Figure 5 we examine whether differences in suspension patterns vary based on how many years a particular student was exposed to restorative justice (see full model results in Appendix Table A4). Though not statistically significant until the third year or later, White students' likelihood of suspension decreases monotonically with restorative justice exposure.

Although White students with one and two years of restorative justice exposure are not statistically significantly less likely to be suspended than their non-restorative justice counterparts, students who had been exposed for three or more years of restorative justice were about 2.49 percentage points less likely to be suspended. By contrast, the decrease in Hispanic students' suspensions rates fluctuates through years of exposure to restorative justice, ranging from a statistically insignificant .84 percentage point reduction to a 1.1 percentage point reduction in years 3+. Though statistically insignificant, Black students are more likely to be suspended in their first year of exposure to restorative justice. Their likelihood of suspension begins to decrease in year two, though still above Black students in non-restorative justice schools. By their third year of exposure to restorative justice, Black students are 2.15 percentage points less likely to be suspended than students in non-restorative justice schools. This 2.15 percentage point decrease is statistically insignificant, which could be driven by the low number of Black students who experience restorative justice for 3 or more years.<sup>11</sup>

[Insert Figure 5 here]

Broadly, we see in Figure 5 that students benefit from increased exposure to restorative justice programs, although Hispanic students appear to benefit more or less equally from any exposure. The results for Black students are perhaps surprising, as they experience an initial increase in their suspension rate in the first year and second of exposure to restorative justice, but potentially benefit from being exposed for three or more years. While we cannot test our explanation, informal discussions with ARC staff suggest that the racial equity facet of restorative justice has been slower to gain traction in these schools, which may contribute to persistent racial disparities in suspensions.

We also estimate incident fixed effects models that account for differential outcomes that may occur within a given disciplinary incident. As disciplinary incidents are specific to a particular school and year, we are unable to estimate a main effect of restorative justice within incident. We can, however, compare the within incident racial differences between schools with and without restorative justice. These models thus enable us to examine whether the racial differences that we observe in Figure 3 are attributable to differences in how students who are referred for the same disciplinary incident are treated, or whether differences arise earlier in the process (e.g., whether somebody is given a disciplinary referral).<sup>12</sup> In these analyses we focus on differences in the number of days students were suspended, which we transform using an inverse hyperbolic sine transformation. Results from these models, reported in Appendix Table A5, indicate that the racial differences we observe in Figure 3 are not present within given incidents, so that the racial differences that we observe are occurring prior to the stage of the disciplinary process when consequences are assigned. If anything, our results suggest that at this stage of the discipline process, Black students receive slightly less severe suspensions in restorative justice schools, though this difference is only marginally significant.

Finally, to ensure that our results are not being driven by students selecting into schools that have restorative justice programs, we also estimate a supplemental model in which we restrict the sample to only students who did not change schools to attend a school that had a restorative justice program. Results focusing on students who were already at restorative justice schools prior to program implementation are presented in Appendix Table A6. Given that these results mirror our findings from Figure 3, we conclude that our main findings do not simply reflect differences in the students who are attracted to schools with restorative justice programs, but rather represent programmatic changes.

## Discussion

From one perspective, the restorative justice practices implemented in Pacific City were successful: Schools that implemented restorative justice saw marked decreases in their suspension rates. These findings are consistent with prior studies (see Hashim et al., 2018; Anyon et al., 2016) and suggest that restorative justice practices in Pacific City helped lower the number of students excluded from school spaces through suspension and expulsion. Despite the overall reduction of exclusionary discipline under restorative justice, however, the differential reductions observed across racial groups are striking. Although the restorative justice policies were implemented to improve disciplinary practices that were disproportionately harming Black and Hispanic students, the practices were more effective at reducing exclusionary discipline for White and Hispanic students than for Black students. We find a similar reduction in suspension rates for White (2.75%) and Hispanic (2.68%) students under restorative justice.<sup>13</sup> However, the lack of change for Black students indicates that rather than reducing racial disproportionality between White and Black students, disproportionality has widened under restorative justice. This disproportionality is perhaps attributable to two key facets of how restorative justice operated in Pacific City schools.

First, restorative justice programs in Pacific City were instituted for race-specific reasons, but a review of the district's restorative justice handbook reveals that the extent to which the policies included a race-specific focus is unclear. Using language that is race-neutral and colorblind makes it difficult for schools to implement restorative practices that target the specific needs of the populations that they are being implemented to help. While ARC implementors may have race-specific goals, it is possible that those messages were diluted in the practices that schools embraced. Lewis (2003) details the role of colorblind ideology in furthering the

advantage of White students even in schools that claimed to be racially progressive. The furthering of advantage is far from intentional in these spaces, but the absence of race-specific language in schools results in a perpetuation of racially disparate treatment and discipline practices (Lewis and Diamond, 2016). Research in other spheres finds that identity-conscious structures, and not identity-blind structures were positively associated with employment outcomes for people of color (Konrad and Linnehan 1995). Likewise, in evaluating the use of race-neutral alternatives to affirmative action, Ellison and Pathak (2016) found that nonwhite student populations decreased in competitive Chicago high schools when race was removed from the language of the admissions process.

The conspicuous absence of race in the restorative justice policies and materials also suggests that more focus should be given to the local implementation strategies of restorative justice programs in schools. Karp and Breslin (2001) find that schools integrating restorative justice have different languages for restorative practices, with some that even omit the word “justice.” They also found that schools often experience external and internal resistance to restorative justice, leading to substantial variation in implementation (c.f. Dusenbury et al. 2003). Further, the relationship between restorative justice consultants (i.e. organizations like ARC) and school implementors should be explored, as the differing goals of both entities may impact successful implementation of restorative justice programs (Song and Swearer, 2016).

Such selective implementation may result in schools implementing restorative justice practices that differ from the original restorative justice philosophy, or focusing on a narrow subset of the broader goals of restorative justice. For example, a school might seek to: 1) reduce exclusionary discipline practices and supplement them with restorative practices; 2) reduce racial disproportionality in discipline and achievement outcomes; and 3) improve social relationships



and build community through restorative practices. While each of these three goals are implicit in the restorative justice philosophy, they likely require different strategies and some goals may be easier to reach than others (i.e. reducing suspensions but not reducing racial disproportionality). As Mcluskey and colleagues (2008) show, variability in restorative justice adoption is possible as teachers and administrators may vary in their perceptions of what it means to be “restorative.” To the degree that restorative justice materials from Pacific City schools lack an explicit discussion of race, school staff in this context may take a colorblind approach and focus more on reducing overall suspension rates, and less explicitly on addressing racial disproportionality in disciplinary outcomes.

A second factor that might help explain the continued disproportionality we observe is the implementation of restorative justice *within* the existing disciplinary system. Rather than establishing restorative justice as a system that is comprised of an autonomous set of norms regarding school discipline, restorative justice practices in Pacific City are embedded within the traditional disciplinary system and likely subject to the same processes that lead to racially disparate school discipline outcomes. A Restorative Process Discipline Chart from a Pacific City school (see Appendix Figure 1) shows that while the school has integrated restorative practices into their discipline procedures, students can still be filtered back into the traditional disciplinary system at each step of the restorative process. This integration of restorative justice within traditional disciplinary procedures suggests that school-level implementations of restorative justice practices may not always lead to school structures that are fundamentally different. Further, while restorative justice is a promising alternative to exclusionary discipline, personnel in restorative justice schools are not exempt from the implicit biases, differential perceived

threat, and cultural dissonance that lead to race-based disciplinary disparities in schools and elsewhere (Eberhardt et al. 2004; Levinson 2007; Okonofua & Eberhardt 2015).

Because school actors use discretion to determine use of restorative practices or exclusionary practices, it is likely that implicit biases continue to play a role in disciplinary outcomes for students in restorative justice schools. If the behavior of Black students is perceived as more problematic than similar behavior from White students, it is possible that their capacity for restitution may be negatively perceived as well. This could lead to restorative practices being offered disproportionately to White students, with Black students being more likely to receive traditional disciplinary actions. If so, then increasing the discretion of those involved in school discipline might actually serve to increase racial disproportionality.

While this paper largely examines the evaluation of restorative justice as a disciplinary policy shift, future research should examine the long-term school cultural changes that accompany restorative justice policies. As Morrison, Blood and Thorsborne (2005) explain, restorative justice addresses the need for affirming social relationships in schools. These social relationships can help foster a sense of community and responsibility to the school environment. While the rules and expectations of school culture can be implicit, restorative justice seeks to make behavioral expectations and implications explicit to students who behave in a manner that is not aligned with the expectations of the school. Therefore, restorative justice models inherently seek to transmit social capital through the building of relationships, and cultural capital through various behavioral intervention techniques (Morrison, Blood & Thorsborne, 2005; Morrison 2003). Examining school culture under restorative justice may help scholars better understand the effects of restorative justice that cannot be captured by discipline outcomes and mechanisms behind persisting inequalities.

In this vein, it is perhaps promising that Black students who have been exposed to restorative justice programs for three or more years begin to experience reductions in suspension rates. This may suggest that the relationships and support of restorative justice practices are slower to reach Black students, but the longevity of student exposure may mitigate this discrepancy as a student spends time and builds relationships in one school. Second, it is also possible that the transition from zero-tolerance discipline to restorative justice requires an adjustment period that may initially cause an uptick in Black student suspension. This uptick could be due to initial expectations, prior student incidents or biases, or implicit biases among teachers becoming more freely expressed in contexts where they believe institutional racism has been addressed (c.f., Bobo and Kluegel, 1993).

However, the results from our models examining differences by the maturity of a school's restorative justice program are less encouraging. At the best, looking at the results for Hispanic students suggests that schools may implement the procedural and equity facets of restorative justice at different paces. If equity-focused work manifests at a slower pace than school procedural shifts, it is possible that the final effects of restorative justice on racial disproportionality may lag for a number of years after initial implementation. Because White students experience the quickest reduction from restorative justice, the potential for discipline disproportionality to be mitigated through years of implementation remains unseen. This echoes work examining school turnaround efforts which indicates that whole-scale changes to school culture and support emerge gradually and take three or more years before improvements are fully realized (Sun, Penner, & Loeb, 2017). Our results for Black students, however, are substantially less optimistic, as even in schools with restorative justice programs that have been in place for three years or more, Black students' suspension rates are similar to their suspension rates prior to

implementing restorative justice. This suggests that even if it is the case that the benefits of restorative justice for ameliorating disproportionality develop later, they may not develop for all students.

### *Limitations*

Although this study provides novel and important insights into racial disproportionality under restorative justice, it also has several limitations. First, beyond descriptive accounts of restorative justice activity in each school, we cannot account for variation in school-level implementation fidelity. This limitation is important because even though we can use fixed effects to compare schools to themselves pre- and post-implementation, we are unable to evaluate differences in how—and to what extent—schools are engaged and integrating restorative justice into their practices, and how this might affect outcomes. Furthermore, it is unclear which students received restorative justice interventions, and the extent of the interventions they received. If collected, this data would likely provide nuance and specificity to the patterns that we find in Pacific City. Finally, while we have no reason to believe that our results are particularly idiosyncratic, as with all case studies it is unclear how broadly generalizable our findings are. Given the focus on being responsive to local contexts in restorative justice programs, and the school-to-school variation that this implies, understanding how the processes described here play out in other settings is an important avenue for future research.

### *Conclusion*

Our findings show that while the overall effects of restorative justice are promising for lowering suspension rates, they were not particularly effective in ameliorating persistent racial inequality in Pacific City school discipline. These findings should not be interpreted as a critique

of the restorative justice philosophy, but rather as highlighting the challenges of addressing systematic and multi-layered racial inequalities even using promising policies. The persistence of racial disproportionality under restorative justice points to the need for further evaluation of restorative justice practices and should be a major focus for schools that adopt equity-based discipline policies in the future. As the restorative justice framework focuses on inclusion, schools should be more intentional about addressing the racial inequities in school exclusions as they integrate restorative justice. Our findings thus underscore both the promise of restorative justice practices in schools, as well as the possibility that the racial equity intentions of restorative justice can be diluted as schools integrate restorative justice into the colorblind logic that governs their day-to-day operations.

## Notes

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<sup>1</sup> We use pseudonyms throughout the paper.

<sup>2</sup> Two schools of these schools (a middle school and a high school) later abandoned their restorative justice programs in the fall of the 2015-2016 school year.

<sup>3</sup> See Appendix A for more details on the rollout of the program.

<sup>4</sup> The racial identifiers (i.e. Hispanic) were self-identified by each student in the data based on demographic information collected by schools. The racial categories used in this paper are reflective of those in schools' administrative records.

<sup>5</sup> This study focuses exclusively on discipline disproportionality between White, Hispanic and Black students since those were the racial groups that were targeted by Pacific City's restorative justice programs. Our models also include a dummy variable for Asian students, and a residual "Other race" category; analyses including disciplinary outcomes for all racial groups can be found in the Appendix.

<sup>6</sup> Supplemental analyses also confirm that restorative justice is not associated with the rates at which students change schools ( $p=0.91$ ).

<sup>7</sup> We display results from the combined in-school and out-of-school suspension variable as it is indicative of total-time removed from a classroom due to a disciplinary infraction. As there is more variation in in-school suspension rates, our results are mostly driven by differences in in-school suspensions. See Appendix tables A1-A4 for additional results.

<sup>8</sup> Although the percentage point differences between groups are relatively small, the base rates of suspensions are also relatively low. Hispanic students are 1.10 times more likely to be suspended than White students in non-restorative justice schools (4.92 percent of Hispanic students vs. 4.47 percent of White students), and 1.20 times more likely than White students in restorative justice schools (3.28 percent of Hispanic students vs. 2.74 percent of White students). Likewise, Black students experience a sizable increase in relative likelihood of suspension; in schools without restorative justice programs Black students are 2.17 times more likely than White students to be suspended (9.71 percent vs. 4.47 percent), while in restorative justice schools they are 3.72 times more likely to be suspended (10.21 percent vs. 2.74 percent).

<sup>9</sup> The point estimate for Hispanic students suggests no that there is little average difference between Hispanic students' suspension rates in schools before and in the first year after implementing restorative justice programs (see Appendix Table A3). Further, as is evident in Appendix Table A3, White and Hispanic students experience a similar decrease in the second year of restorative justice schools (relative to when the school had no restorative justice program). Supplemental tests find that the difference between Hispanic students in a school with a restorative justice program in its second year (vs. no restorative justice program) is only marginally significant ( $p=.10$ ). As none of the Hispanic X restorative justice interaction effects are statistically significant, we conclude that the changes associated with program implementation are similar among White and Hispanic students.

<sup>10</sup> Although the Black students' suspension rate does not experience a statistically significant change as restorative justice is implemented (i.e., Black students in restorative justice and non-restorative justice schools are suspended at similar rates), we do observe a statistically significant difference in the trajectories of White and Black students as restorative justice is implemented, as Black students do not experience the decrease in suspension rates that White students do.

<sup>11</sup> To ensure that our results looking at schools with established restorative justice programs or students with longer exposure to restorative justice are not being driven by a single school, we

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conduct supplementary analyses in which we omit each of the schools in turn and re-estimate our results. While the point estimates change slightly, this exercise confirms that our results are not driven by a single idiosyncratic school.

<sup>12</sup> As disciplinary incidents are specific to a particular school and year, we are unable to estimate a main effect of restorative justice within incident. We can, however, compare the within incident racial differences between schools with and without restorative justice.

<sup>13</sup> As we noted above, even similar percentage point reductions can have important implications for relative suspension rates. That is, although the percentage point reductions for White and Hispanic students are similar (1.73 percentage points for White students vs. 1.64 percentage points for Hispanic students), given the lower base rate for White students (4.47 percent vs 4.92 percent), we find that Hispanic students in schools without restorative justice programs are 1.1 times more likely to be suspended than White students ( $4.92/4.47=1.10$ ), in schools with restorative justice programs Hispanic students are 1.22 times more likely to be suspended than White students ( $3.28/2.74=1.19$ ).

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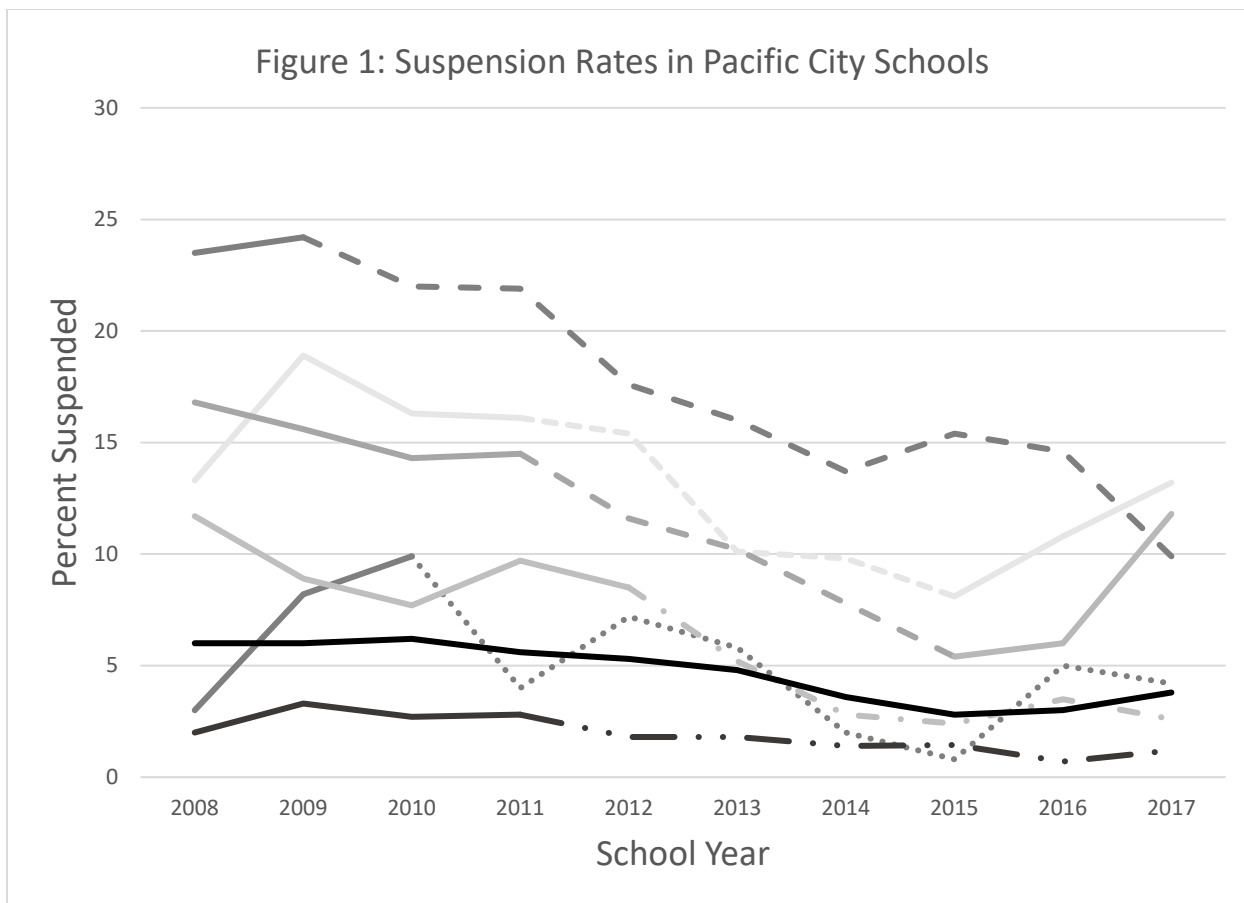
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## Tables and Figures

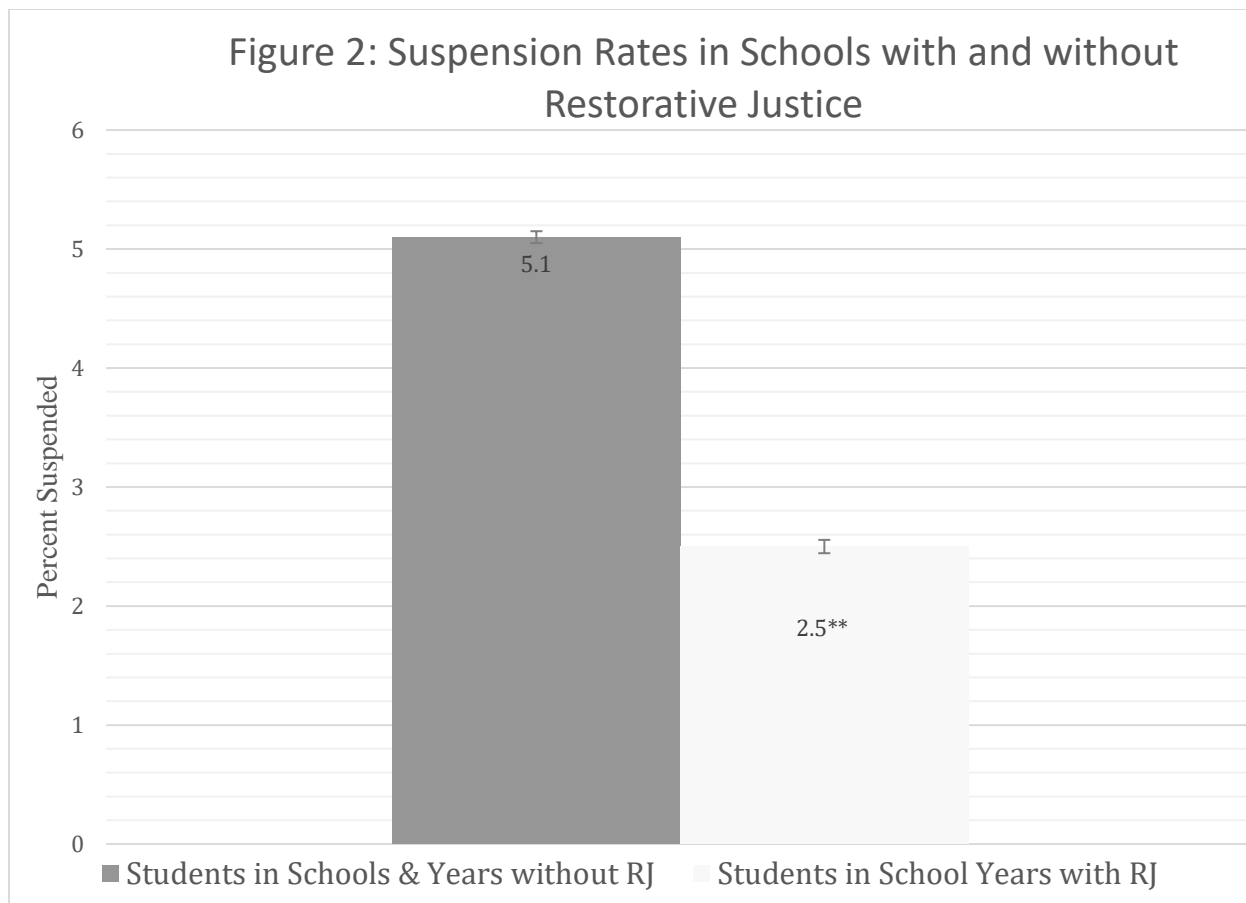
Table 1: Demographic and Suspension Descriptions of Pacific City Students between 2008-2017

	<b>% of student body</b>	<b>Suspension Rate (%)</b>
<i>Panel A: Restorative Justice Schools in Restorative Justice Years</i>		
White	34.8	7.6
Hispanic	27.0	7.8
Black	18.8	14.4
Asian	10.9	3.4
Other	8.4	10.1
Male	51.0	12.2
Female	49.0	4.9
Free/reduced price lunch	56.1	10.1
Special education student	36.6	9.5
N (school X year)	45,224	3,864
N (schools)	6	6
<i>Panel B: Never-Restorative Justice Schools</i>		
White	48.1	3.8
Hispanic	23.8	3.9
Black	13.4	9.8
Asian	5.1	1.7
Other	9.6	4.1
Male	50.7	6.6
Female	49.3	2.1
Free/reduced price lunch	42.1	6.7
Special education student	28.0	5.9
N (school X year)	386,945	17,461
N (schools)	74	74

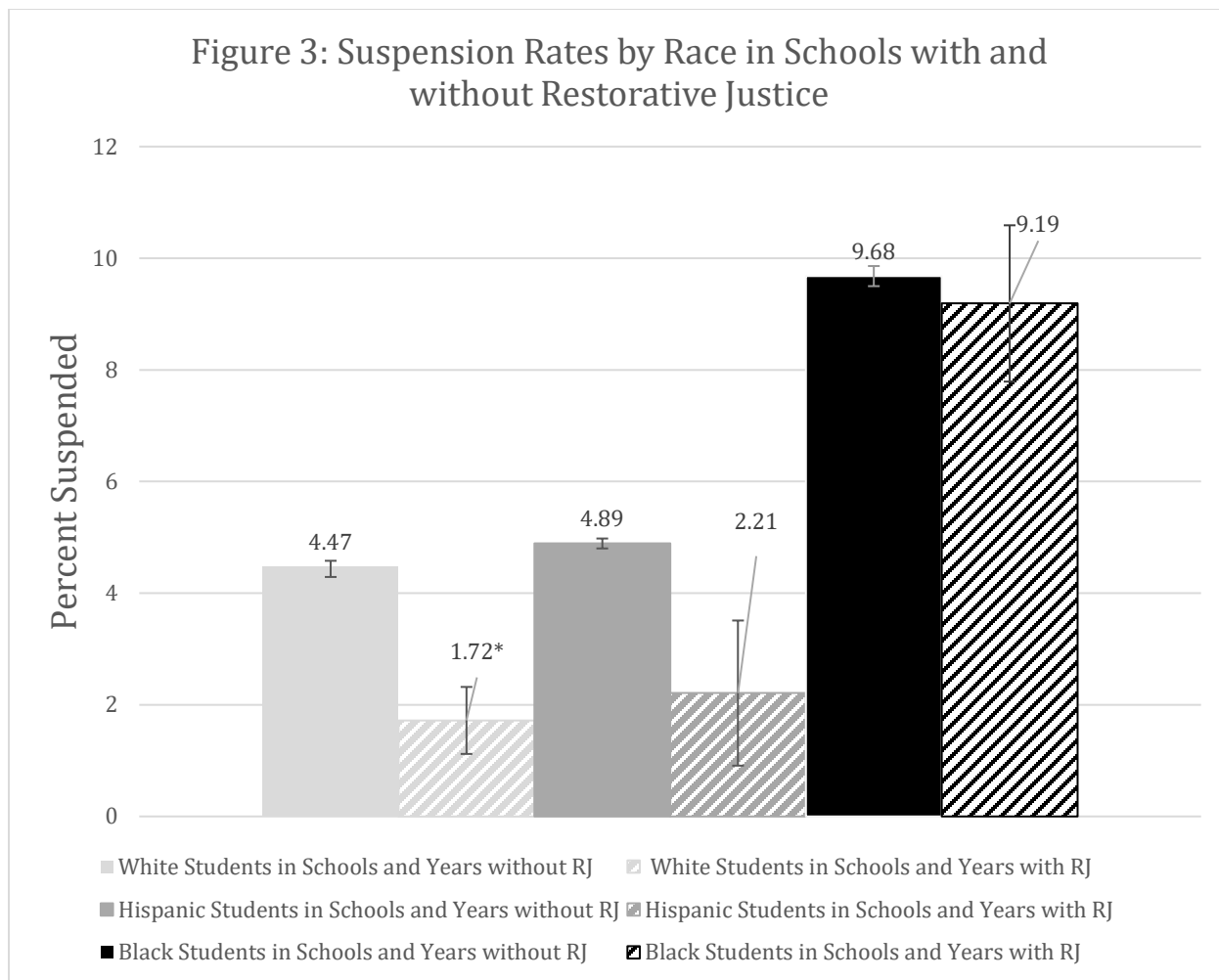
Note: Table displays descriptive information on students in Pacific City Schools. Panel A displays students in schools that used restorative justice in those years. Panel B displays schools that never used restorative justice at any point. While these tables include information for Asian and Other race students, subsequent analyses focus on outcomes for White, Black and Hispanic students as the program focused primarily on these groups.



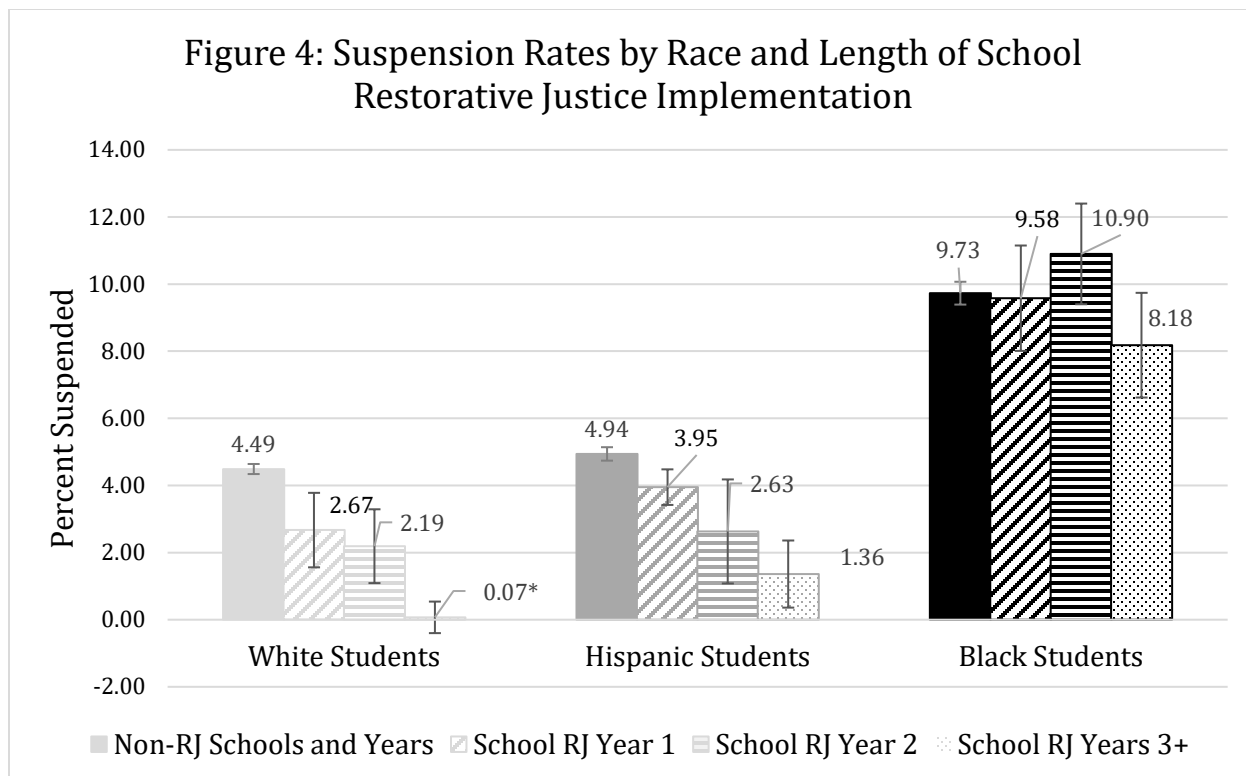
Note: Solid gray lines represent schools in years without restorative justice practices, while dashed lines represent years with restorative justice practices. The solid black line represents Pacific City schools that never implemented restorative justice.



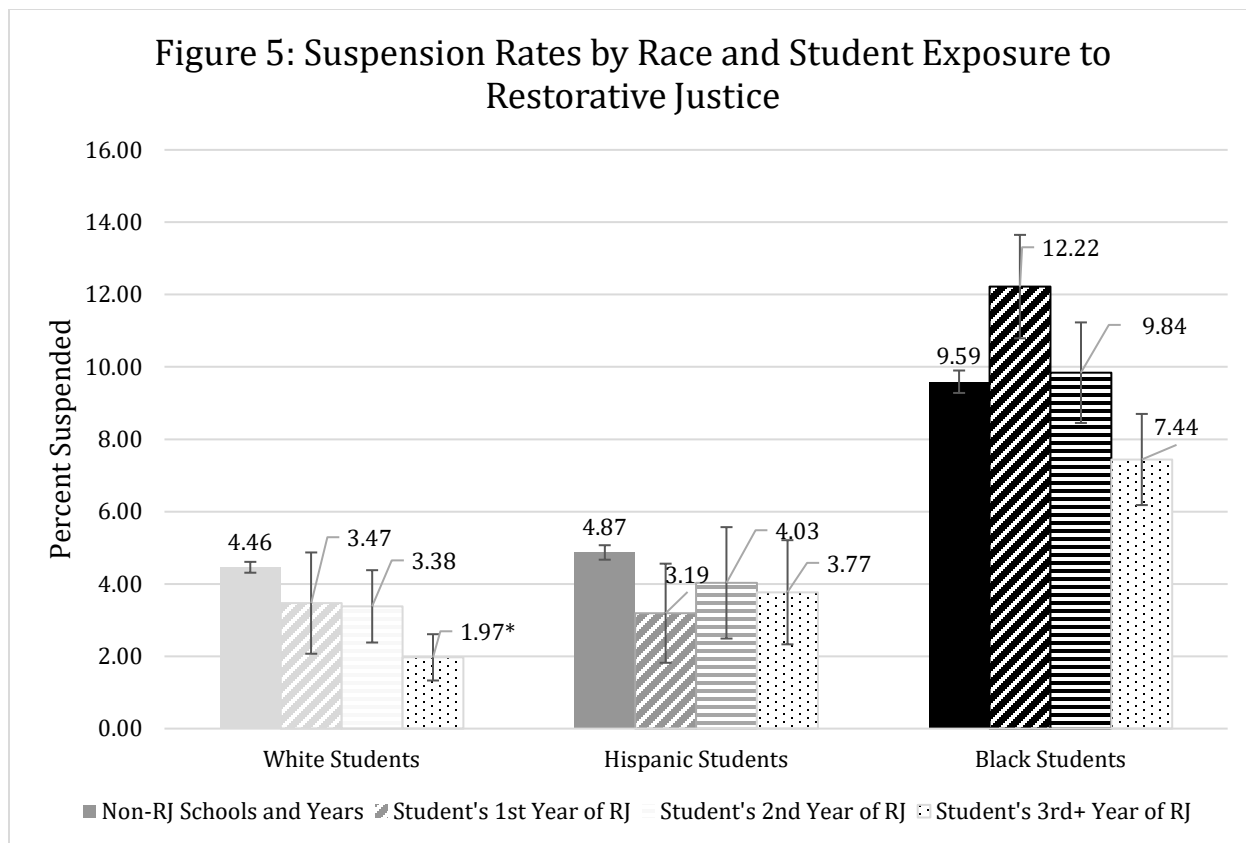
Note: Figure 2 displays predicted probabilities of suspension rates in schools with and without restorative justice. The predicted probabilities are based on model results reported in Appendix Table A1, which controls for student socioeconomic status, gender, special education status, grade level fixed effects, year fixed effects, and school fixed effects. The standard errors and p-values are calculated using randomization inference.



Note: Figure 3 displays predicted probabilities of suspension rates by race in schools with and without restorative justice. The predicted probabilities are based on model results reported in Appendix Table A2, which controls for student socioeconomic status, gender, special education status, grade level fixed effects, year fixed effects, and school fixed effects. The standard errors and p-values are calculated using randomization inference.



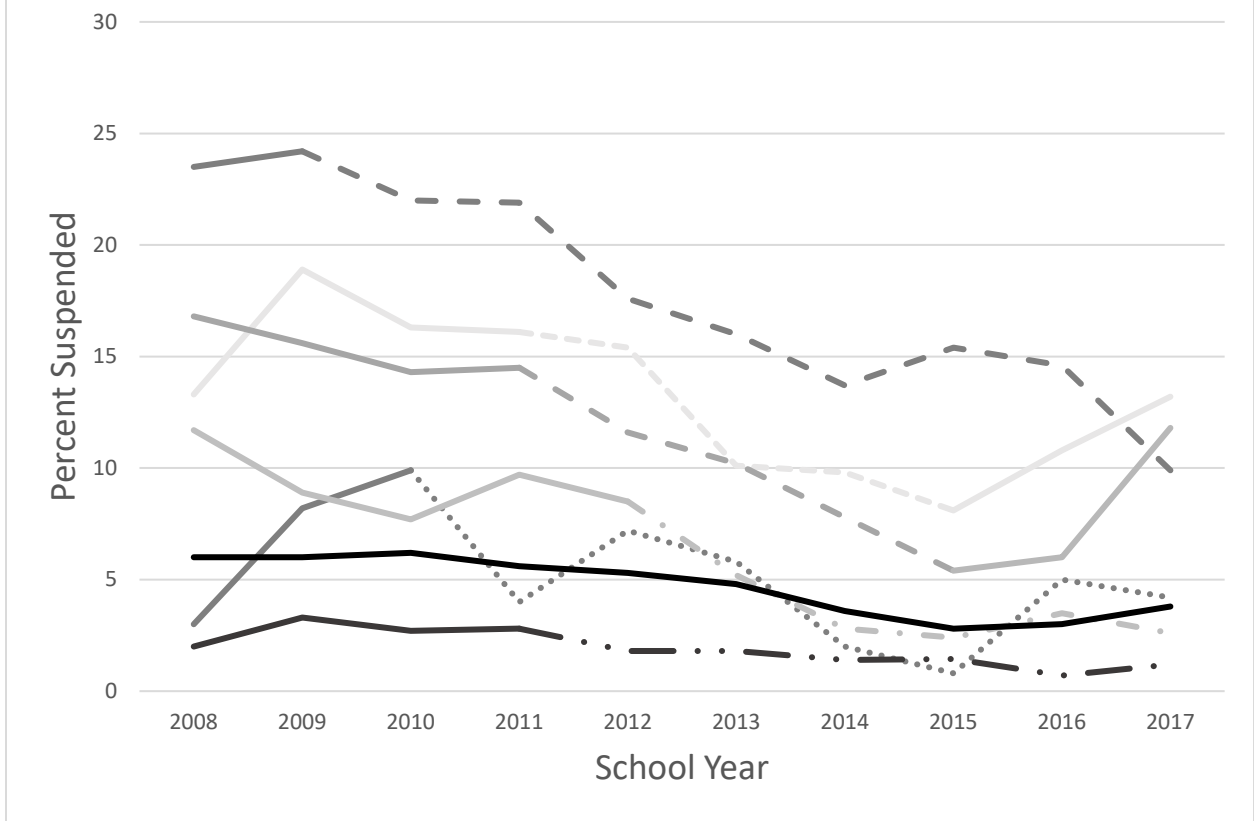
Note: Figure 4 displays predicted probabilities of suspension rates by race in schools in different years of restorative justice implementation. The predicted probabilities are based on model results reported in Appendix Table A3, which controls for student socioeconomic status, gender, special education status, grade level fixed effects, year fixed effects, and school fixed effects. The standard errors and p-values are calculated using randomization inference.



Note: Figure 5 displays predicted probabilities of suspension rates by race based on the number of years a student has been exposed to restorative justice. The predicted probabilities are based on model results reported in Appendix Table A4, which controls for student socioeconomic status, gender, special education status, grade level fixed effects, year fixed effects, and school fixed effects. The standard errors and p-values are calculated using randomization inference.

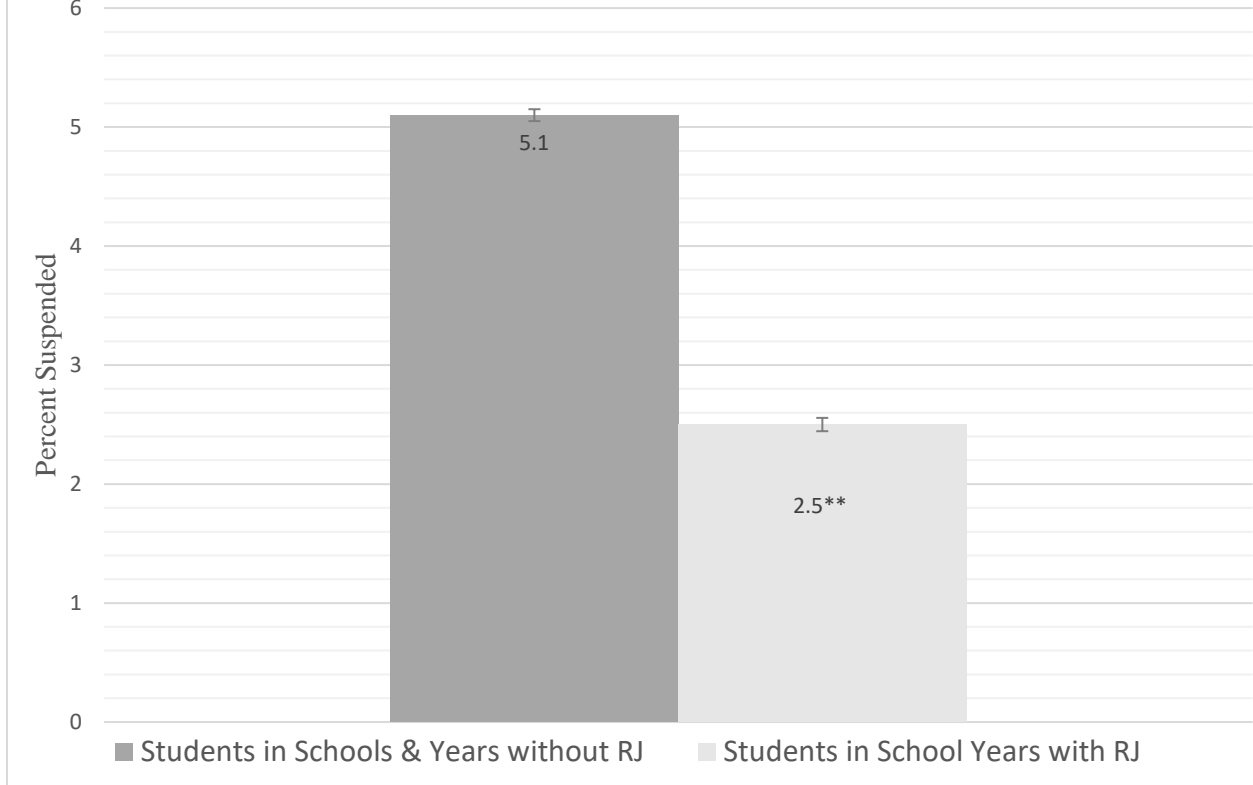


Figure 1: Suspension Rates in Pacific City Schools

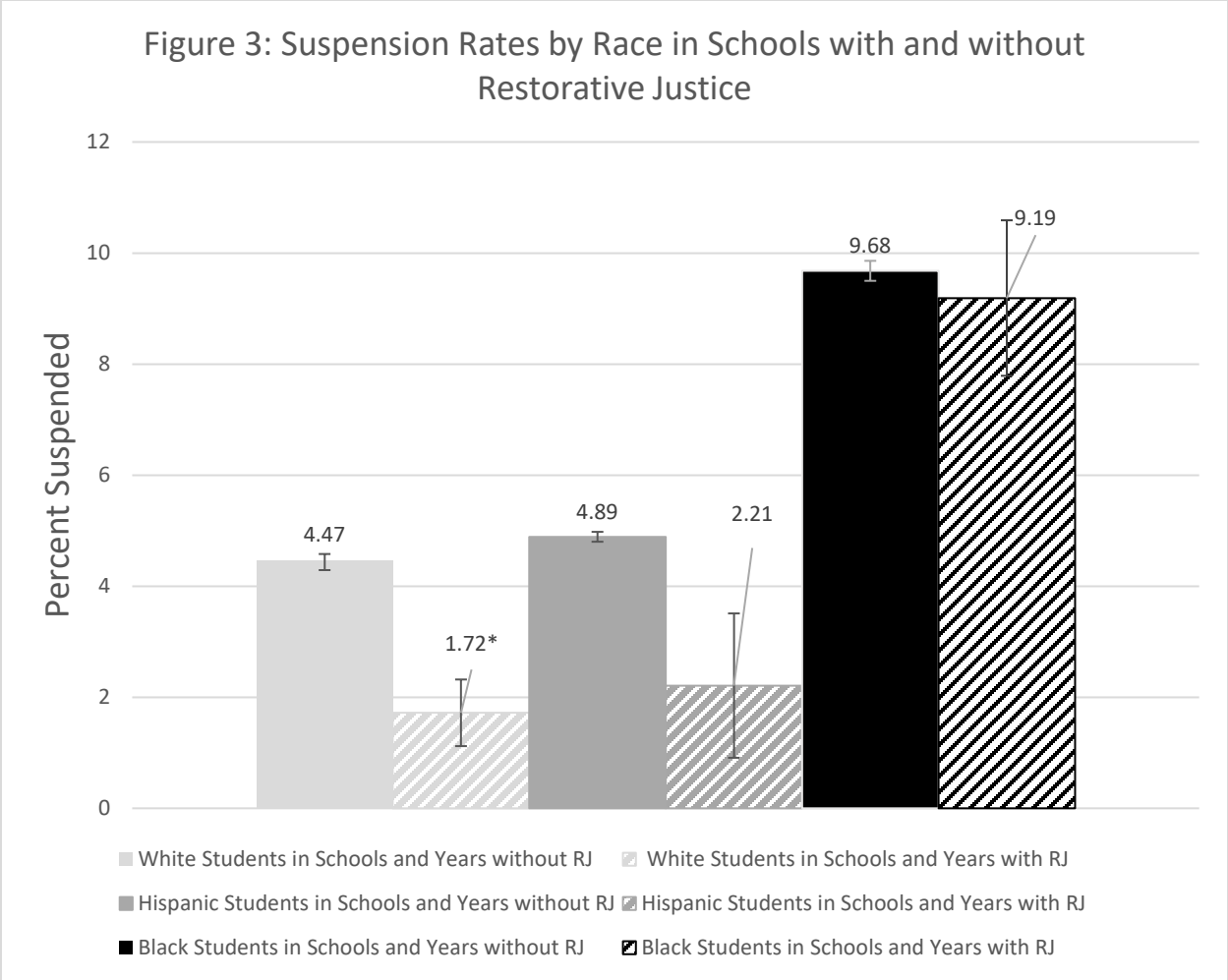


Note: Solid gray lines represent schools in years without restorative justice practices, while dashed lines represent years with restorative justice practices. The solid black line represents Pacific City schools that never implemented restorative justice.

Figure 2: Suspension Rates in Schools with and without Restorative Justice

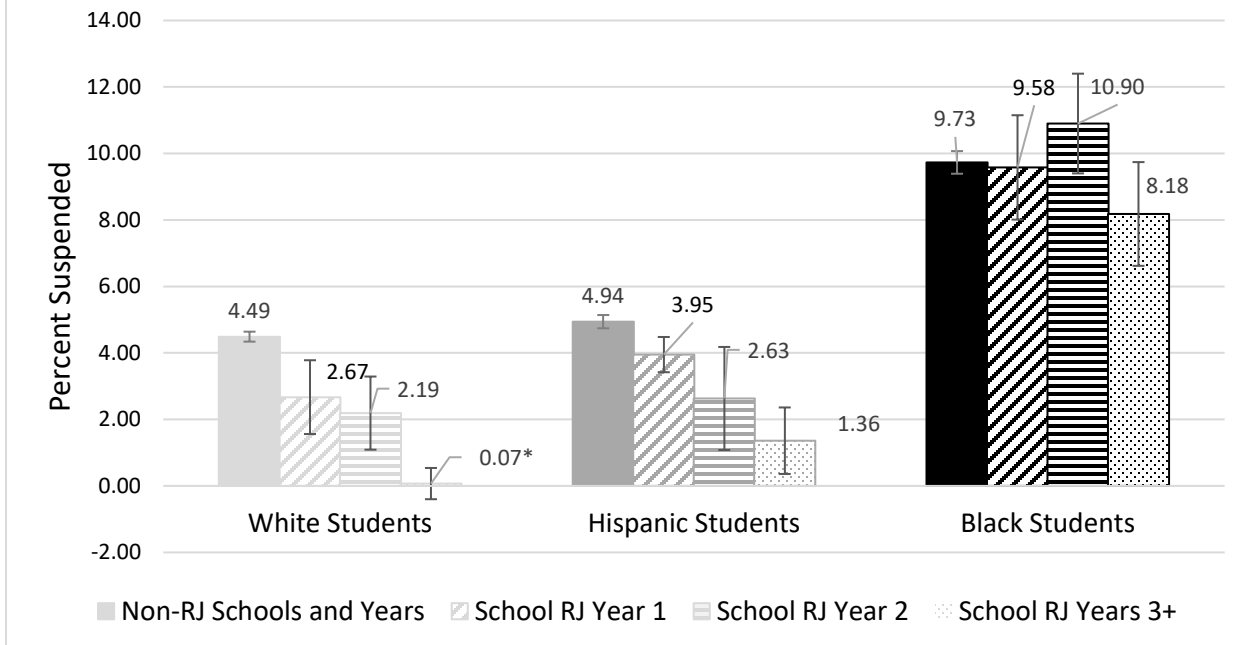


Note: Figure 2 displays predicted probabilities of suspension rates in schools with and without restorative justice. The predicted probabilities are based on model results reported in Appendix Table A1, which controls for student socioeconomic status, gender, special education status, grade level fixed effects, year fixed effects, and school fixed effects. The standard errors and p-values are calculated using randomization inference.



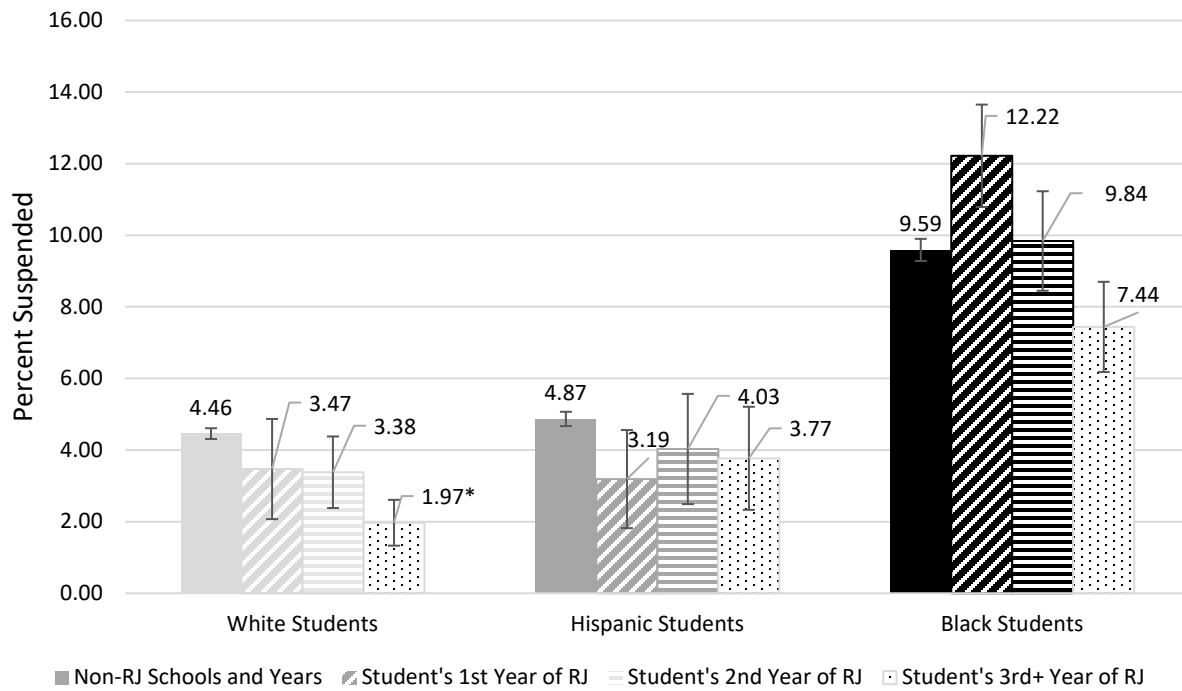
Note: Figure 3 displays predicted probabilities of suspension rates by race in schools with and without restorative justice. The predicted probabilities are based on model results reported in Appendix Table A2, which controls for student socioeconomic status, gender, special education status, grade level fixed effects, year fixed effects, and school fixed effects. The standard errors and p-values are calculated using randomization inference.

Figure 4: Suspension Rates by Race and Length of School Restorative Justice Implementation



Note: Figure 4 displays predicted probabilities of suspension rates by race in schools in different years of restorative justice implementation. The predicted probabilities are based on model results reported in Appendix Table A3, which controls for student socioeconomic status, gender, special education status, grade level fixed effects, year fixed effects, and school fixed effects. The standard errors and p-values are calculated using randomization inference.

Figure 5: Suspension Rates by Race and Student Exposure to Restorative Justice



Note: Figure 5 displays predicted probabilities of suspension rates by race based on the number of years a student has been exposed to restorative justice. The predicted probabilities are based on model results reported in Appendix Table A4, which controls for student socioeconomic status, gender, special education status, grade level fixed effects, year fixed effects, and school fixed effects. The standard errors and p-values are calculated using randomization inference.

## Appendix Tables

Table A1: Difference-in-Difference Estimates of Restorative Justice Effects

	All suspensions	In-School Suspension	Out-of-School Suspension	Expulsion
Restorative Justice	-0.0262* (0.0056)	-0.0300+ (0.0163)	0.0029 (0.0076)	-0.0002+ (0.0001)
Free and reduced lunch	0.0228*** (0.0024)	0.0074** (0.0022)	0.0161*** (0.0019)	0.0001+ (0.0000)
Special education student	0.0572*** (0.0050)	0.0178*** (0.0040)	0.0420*** (0.0038)	-0.0001 (0.0000)
Female	-0.0440*** (0.0048)	-0.0185*** (0.0039)	-0.0269*** (0.0020)	-0.0002** (0.0001)
Year Fixed Effects	✓	✓	✓	✓
School Fixed Effects	✓	✓	✓	✓
Grade Fixed Effects	✓	✓	✓	✓
Constant	0.0183*** (0.0039)	0.0070+ (0.0035)	0.0117*** (0.0020)	0.0001+ (0.0001)
Observations	420717	408316	420717	420758
R-squared	0.071	0.053	0.036	0.001

Note: Coefficients represent percentage point differences in student discipline rates. Although many coefficients are small, they should be interpreted relative to the base rate for each model. Standard errors in the “All Suspensions” columns are calculated using randomization inference. Other models are provided for comparison, and report standard Huber-White cluster-robust standard errors that account for clustering at the school level.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

Table A2: Difference-in-Difference Estimates of Restorative Justice Effects by Race

	All suspensions	In-School Suspension	Out-of-School Suspension	Expulsion
Restorative Justice	-0.0276* (0.0048)	-0.0322+ (0.0179)	0.0036 (0.0066)	-0.0001 (0.0002)
Hispanic	0.0042 (0.0026)	0.0026 (0.0018)	0.0020 (0.0016)	0.0000 (0.0001)
Black	0.0521*** (0.0055)	0.0194*** (0.0037)	0.0352*** (0.0035)	0.0000 (0.0001)
Asian	-0.0232*** (0.0044)	-0.0093** (0.0032)	-0.0145*** (0.0021)	-0.0001* (0.0000)
Other	0.0015 (0.0016)	0.0002 (0.0012)	0.0014 (0.0010)	0.0000 (0.0000)
Hispanic X RJ	0.0007 (0.0140)	0.0031 (0.0033)	-0.0024 (0.0042)	0.0000 (0.0002)
Black X RJ	0.0226 (0.0142)	0.0164 (0.0113)	0.0091 (0.0113)	-0.0001 (0.0002)
Asian X RJ	-0.0395** (0.0138)	-0.0263** (0.0084)	-0.0156* (0.0065)	-0.0002+ (0.0001)
Other X RJ	0.0182 (0.0158)	0.0106 (0.0068)	0.0087 (0.0097)	-0.0003** (0.0001)
Free and reduced lunch	0.0166*** (0.0024)	0.0049* (0.0023)	0.0121*** (0.0016)	0.0001 (0.0000)
Special education student	0.0549*** (0.0047)	0.0168*** (0.0037)	0.0407*** (0.0038)	-0.0001 (0.0000)
Female	-0.0448*** (0.0050)	-0.0189*** (0.0041)	-0.0274*** (0.0021)	-0.0002** (0.0000)
Year Fixed Effects	✓	✓	✓	✓
School Fixed Effects	✓	✓	✓	✓
Grade Fixed Effects	✓	✓	✓	✓
Constant	0.0214*** (0.0043)	0.0084* (0.0039)	0.0135*** (0.0022)	0.0001* (0.0001)
Observations	410448	398221	410448	410486
R-squared	0.080	0.057	0.042	0.001

Note: Coefficients represent percentage point differences in student discipline rates. Although many coefficients are small, they should be interpreted relative to the base rate for each model. Standard errors in the “All Suspensions” columns are calculated using randomization inference. Other models are provided for comparison, and report standard Huber-White cluster-robust standard errors that account for clustering at the school level.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

Table A3: Difference-in-Difference Estimates of Restorative Justice Effects by Race and Length of School Implementation

	All suspensions	In-School Suspension	Out-of-School Suspension	Expulsion
Hispanic	0.0042 (0.0101)	0.0025 (0.0017)	0.0020 (0.0016)	0.0000 (0.0001)
Black	0.0522 (0.0010)	0.0194*** (0.0038)	0.0352*** (0.0035)	0.0000 (0.0001)
Asian	-0.0232 (0.0000)	-0.0093** (0.0031)	-0.0145*** (0.0021)	-0.0001* (0.0000)
Other	0.0014 (0.0153)	0.0001 (0.0011)	0.0015 (0.0011)	0.0000 (0.0000)
RJ Year 1	-0.0179 (0.0099)	-0.0166+ (0.0084)	-0.0020 (0.0060)	-0.0003*** (0.0001)
RJ Year 2	-0.0223 (0.0101)	-0.0235 (0.0153)	0.0004 (0.0084)	-0.0003*** (0.0001)
RJ Years 3+	-0.0370** (0.0043)	-0.0460+ (0.0241)	0.0077 (0.0064)	0.0001 (0.0002)
Hispanic X RJ Year 1	0.0088 (0.0146)	0.0048 (0.0080)	0.0051 (0.0037)	-0.0001 (0.0001)
Hispanic X RJ Year 2	-0.0012 (0.0060)	0.0076 (0.0105)	-0.0087+ (0.0048)	0.0006 (0.0004)
Hispanic X RJ Years 3+	0.0013 (0.0111)	0.0056* (0.0025)	-0.0044 (0.0051)	-0.0001 (0.0004)
Black X RJ Year 1	0.0179 (0.0148)	0.0159 (0.0196)	0.0047 (0.0204)	-0.0001 (0.0001)
Black X RJ Year 2	0.0351 (0.0150)	0.0295 (0.0215)	0.0096 (0.0104)	-0.0000 (0.0001)
Black X RJ Year 3+	0.0224 (0.0148)	0.0146 (0.0093)	0.0107 (0.0131)	-0.0002 (0.0003)
Asian X RJ Year 1	-0.0175 (0.0158)	-0.0146 (0.0108)	-0.0041 (0.0038)	0.0001 (0.0001)
Asian X RJ Year 2	-0.0356 (0.0099)	-0.0223* (0.0099)	-0.0150* (0.0074)	0.0001 (0.0000)
Asian X RJ Years 3+	-0.0445* (0.0055)	-0.0272** (0.0092)	-0.0201* (0.0089)	-0.0003* (0.0002)
Other X RJ Year 1	0.0345+ (0.0075)	0.0230+ (0.0119)	0.0144 (0.0127)	-0.0001 (0.0001)
Other X RJ Year 2	0.0411* (0.0036)	0.0234+ (0.0124)	0.0213* (0.0098)	-0.0000 (0.0000)
Other X RJ Years 3+	0.0080 (0.0155)	0.0046 (0.0088)	0.0033 (0.0139)	-0.0004** (0.0002)



Free and reduced lunch	0.0162*** (0.0022)	0.0045* (0.0020)	0.0121*** (0.0016)	0.0001+ (0.0000)
Special education student	0.0550*** (0.0047)	0.0169*** (0.0037)	0.0407*** (0.0038)	-0.0001 (0.0000)
Female	-0.0448*** (0.0050)	-0.0189*** (0.0041)	-0.0274*** (0.0021)	-0.0002** (0.0000)
Year Fixed Effects	✓	✓	✓	✓
School Fixed Effects	✓	✓	✓	✓
Grade Fixed Effects	✓	✓	✓	✓
Constant	0.0208*** (0.0040)	0.0077* (0.0035)	0.0137*** (0.0022)	0.0001* (0.0001)
Observations	410448	398221	410448	410486
R-squared	0.081	0.058	0.042	0.001

Note: Coefficients represent percentage point differences in student discipline rates. Although many coefficients are small, they should be interpreted relative to the base rate for each model. Standard errors in the “All Suspensions” columns are calculated using randomization inference. Other models are provided for comparison, and report standard Huber-White cluster-robust standard errors that account for clustering at the school level.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

Table A4: Difference-in-Difference Estimates of Restorative Justice Effects by Race and Length of Student Exposure

	All suspensions	In-School Suspension	Out-of-School Suspension	Expulsion
Hispanic	0.0041 (0.0093)	0.0030 (0.0018)	0.0015 (0.0016)	0.0000 (0.0000)
Black	0.0513 (0.0000)	0.0194*** (0.0039)	0.0344*** (0.0034)	0.0000 (0.0001)
Asian	-0.0221 (0.0000)	-0.0092** (0.0032)	-0.0135*** (0.0019)	-0.0001* (0.0000)
Other	0.0006 (0.0031)	-0.0003 (0.0015)	0.0009 (0.0012)	-0.0000 (0.0000)
1 RJ Year	-0.0100 (0.0156)	-0.0118 (0.0077)	0.0013 (0.0043)	-0.0002 (0.0002)
2 RJ Years	-0.0108 (0.0140)	-0.0163 (0.0108)	0.0052 (0.0048)	-0.0004** (0.0001)
3+ RJ Years	-0.0250* (0.0071)	-0.0253+ (0.0150)	-0.0006 (0.0052)	0.0001 (0.0003)
Hispanic X 1 RJ Year	-0.0068 (0.0158)	-0.0061 (0.0042)	-0.0011 (0.0046)	0.0002 (0.0002)
Hispanic X 2 RJ Years	0.0024 (0.0128)	0.0037 (0.0051)	-0.0014 (0.0038)	0.0005 (0.0005)
Hispanic X 3+ RJ Years	0.0139+ (0.0094)	0.0112+ (0.0064)	0.0033 (0.0036)	-0.0003 (0.0003)
Black X 1 RJ Year	0.0361* (0.0063)	0.0195* (0.0076)	0.0210** (0.0076)	0.0001 (0.0003)
Black X 2 RJ Years	0.0133 (0.0157)	0.0100 (0.0092)	0.0050 (0.0068)	-0.0000 (0.0001)
Black X 3+ RJ Years	0.0034 (0.0065)	0.0086 (0.0084)	-0.0052 (0.0065)	-0.0002 (0.0004)
Asian X 1 RJ Year	-0.0373+ (0.0093)	-0.0228* (0.0103)	-0.0167** (0.0057)	-0.0001 (0.0001)
Asian X 2 RJ Years	-0.0437* (0.0060)	-0.0233** (0.0080)	-0.0230** (0.0079)	0.0000 (0.0000)
Asian X 3+ RJ Years	-0.0288 (0.0102)	-0.0155* (0.0061)	-0.0148** (0.0049)	-0.0005** (0.0001)
Other X 1 RJ Year	0.0173+ (0.0087)	0.0034 (0.0045)	0.0149** (0.0047)	-0.0001 (0.0001)
Other X 2 RJ Years	0.0032 (0.0132)	0.0004 (0.0025)	0.0028 (0.0088)	-0.0000 (0.0001)
Other X 3+ RJ Years	-0.0039	0.0029	-0.0069	-0.0001

	(0.0125)	(0.0073)	(0.0068)	(0.0005)
Free and reduced lunch	0.0170***	0.0051*	0.0123***	0.0001+
	(0.0023)	(0.0022)	(0.0016)	(0.0000)
Special education student	0.0545***	0.0165***	0.0406***	-0.0001
	(0.0047)	(0.0036)	(0.0038)	(0.0000)
Female	-0.0455***	-0.0194***	-0.0277***	-0.0002**
	(0.0052)	(0.0043)	(0.0021)	(0.0000)
Year Fixed Effects	✓	✓	✓	✓
School Fixed Effects	✓	✓	✓	✓
Grade Fixed Effects	✓	✓	✓	✓
Constant	0.0226***	0.0096*	0.0136***	0.0001+
	(0.0046)	(0.0044)	(0.0022)	(0.0001)
Observations	418493	405873	418493	418531
R-squared	0.079	0.055	0.042	0.001

Note: Coefficients represent percentage point differences in student discipline rates. Although many coefficients are small, they should be interpreted relative to the base rate for each model. Standard errors in the “All Suspensions” columns are calculated using randomization inference. Other models are provided for comparison, and report standard Huber-White cluster-robust standard errors that account for clustering at the school level.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

Table A5: Incident Fixed Effects Estimates of Restorative Justice by Race

	Suspension Days	All Suspensions	In-school Suspension	Out-of-School Suspension	Expulsion
Hispanic	0.0080 (0.0403)	0.0003 (0.0099)	-0.0273 (0.0270)	0.0369* (0.0163)	-0.0000 (0.0001)
Black	-0.0094 (0.0306)	-0.0021 (0.0135)	-0.0078 (0.0171)	0.0347 (0.0377)	0.0002 (0.0002)
Asian	-0.2667* (0.1041)	0.0196 (0.0197)	0.1741+ (0.0933)	0.0328 (0.0911)	-0.0004 (0.0004)
Other	-0.0090 (0.0811)	0.0029 (0.0144)	-0.0566 (0.0433)	0.0392 (0.0421)	-0.0000 (0.0001)
Hispanic X RJ	-0.0883 (0.1427)	-0.0187 (0.0127)	0.0293 (0.0326)	0.0727** (0.0267)	0.0003 (0.0004)
Black X RJ	-0.1037+ (0.0583)	-0.0216 (0.0260)	0.1025 (0.0854)	-0.2267+ (0.1184)	-0.0000 (0.0001)
Asian X RJ	0.1386 (0.2669)	-0.0139 (0.0241)	-0.1203 (0.0948)	-0.0746 (0.1480)	-0.0009 (0.0014)
Other X RJ	-0.0694 (0.1014)	-0.0192 (0.0173)	-0.1859 (0.1263)	-0.0330 (0.0932)	0.0009 (0.0011)
Free and reduced lunch	-0.0055 (0.0299)	0.0031 (0.0164)	0.0020 (0.0157)	0.0338** (0.0113)	-0.0002 (0.0002)
Female	-0.0299 (0.0415)	0.0233 (0.0356)	0.0448 (0.0384)	-0.0431+ (0.0254)	-0.0001 (0.0001)
Special education student	-0.0241 (0.0397)	0.0363+ (0.0200)	0.0791*** (0.0219)	0.0201 (0.0186)	-0.0032 (0.0036)
Constant	0.8850*** (0.0475)	0.4997*** (0.0315)	0.3534*** (0.0433)	0.2854*** (0.0284)	0.0019 (0.0014)
Observations	89341	89287	63937	89287	89341
R-squared	0.001	0.006	0.020	0.020	0.003

Note: Coefficients represent percentage point differences in student discipline rates. Although many coefficients are small, they should be interpreted relative to the base rate for each model. Standard errors in the “Suspension Days” column are calculated using randomization inference. Other models are provided for comparison, and report standard Huber-White cluster-robust standard errors that account for clustering at the school level.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10

Table A6: Model Predicting Disciplinary Outcomes by Restorative Justice and Race among Students Who do not Change Schools

	All Suspensions
Restorative Justice	-0.0108* (0.0053)
Hispanic	0.0034 (0.0023)
Black	0.0425*** (0.0046)
Asian	-0.0207*** (0.0041)
Other	-0.0038 (0.0030)
Hispanic X RJ	0.0022 (0.0053)
Black X RJ	0.0158 (0.0140)
Asian X RJ	-0.0315* (0.0121)
Other X RJ	0.0143 (0.0145)
Free and reduced lunch	0.0152*** (0.0025)
Special education student	0.0447*** (0.0037)
Female	-0.0408*** (0.0048)
Year Fixed Effects	✓
School Fixed Effects	✓
Grade Fixed Effects	✓
Constant	-0.0079 (0.0096)
Observations	262028
R-squared	0.068

Note: Coefficients represent percentage point differences in student discipline rates. These models compare students who were (and remained) in restorative justice schools the year before it was implemented to students who were (and remained) in non-restorative justice schools. Although many coefficients are small, they should be interpreted

relative to the base rate for each model. All models report Huber-White cluster-robust standard errors that account for clustering at the school level.

\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$

