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## Combining Restorative Practices with Diplomas Now: Impacts on Practices, Problems, Suspensions, and Chronic Absenteeism

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### ABSTRACT

This study tests the impact of adding Restorative Practices within secondary schools implementing the Diplomas Now turnaround model in 8 large U.S. urban districts on: (a) the severity of disciplinary problems in these schools, (b) the probability that students would be suspended three days or more during the school year, and (c) the chronic absenteeism rate. We conducted a school-level randomized control trial in 33 schools—17 treatment and 16 control—within 12 randomization blocks. The combined intervention was implemented in the treatment schools during the 2014–2015 and 2015–2016 school years. The results from the final year on the pre-specified primary outcomes indicate that the intervention significantly reduced the severity of discipline problems in treatment schools ( $ES = -0.13$ ) and the probability that students would be suspended 3 or more days ( $OR = 0.66$ ); reductions in chronic absenteeism were only marginally significant.

Our nation's big cities made considerable progress across the pre-pandemic decade in increasing graduation rates among Hispanic, African American, and low-income students, driving the nation's average high school graduation rate to an all-time high of 84.6% (e.g., four-year adjusted cohort graduation rates, Atwell et al., 2019). Despite this laudable progress, the graduation rates for Black and low-income students still fell below 80%, and the Hispanic graduation rate had just reached 80%. Unfortunately, some of this progress for these groups of students may have been lost during the COVID-19 pandemic, which has re-exacerbated prior inequities because of the disproportionate hardships it has produced for Black, Latino, and low-income families (Padilla & Thomson, 2021). When one-fifth or more of the young people in a community do not receive a diploma, the negative impacts on their lives and on the economic and social well-being of their neighborhoods is devastating (Alexander et al., 2014; Editorial Projects in Education, 2013).

One enduring key to raising graduation rates in high-poverty urban neighborhoods is to find better solutions to the persistent disciplinary problems that derail many of

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the middle and high students in the schools that serve these neighborhoods (Robers et al., 2014). The most common response to these problems—zero-tolerance, punitive, and exclusionary disciplinary policies and practices, combined with prison-like “maximum security” measures involving technological surveillance, security personnel, metal detectors, hall sweeps, and locker searches—is ineffective and places students at greater risk of dropping out (APA Zero Tolerance Task Force, 2008; Devine, 1996). The emphasis on punitive/exclusionary discipline has especially impacted students of color and special education students, who are disproportionately disciplined in school: they receive harsher sanctions for similar offenses and are more often sanctioned for minor offenses (Balfanz et al., 2014; Fabelo et al., 2011; Georgia Applesed Center for Law & Justice, 2011; Losen & Martinez, 2013; Welsh & Little, 2018).

In this study, we aim to contribute to the evidence base of effective alternatives to a punitive zero-tolerance school environment by rigorously evaluating the impacts of one of the most promising alternative approaches—Restorative Practices (as disseminated by the International Institute of Restorative Practices, IIRP; Costello et al., 2009)—when this approach is embedded within the Diplomas Now school turnaround model. Thus, the study tests the combined impacts of these two ambitious reform programs on disciplinary problems, suspensions, and chronic absenteeism. This study adds to the limited rigorous causal research bases surrounding Restorative Practices and Diplomas Now, building on results from prior separate randomized control trials of Restorative Practices and Diplomas Now as stand-alone whole-school reforms (e.g., Augustine et al., 2019; Corrin et al., 2016).

## Literature review

Chronic absenteeism, misbehavior/suspensions, and course failures are key early warning indicators predicting a lower likelihood of high school graduation (Balfanz et al., 2007); it is thus important to address these off-track indicators and their interconnections in efforts to improve student success. Recent reports (e.g., Chang et al., 2019; Corrin et al., 2016; Mac Iver et al., 2020) indicate that the number of students who develop one or more of these early warning indicators can be reduced through reform efforts that help middle and high schools create: more supportive social environments, more engaging and responsive instructional practices that foster deep learning, and a safer and saner school building plagued by fewer problematic behaviors.

Unfortunately, problematic school environments characterized by student and teacher victimization still occur all too frequently. These negative interactions in the school environment: (1) disrupt teaching and learning, (2) lower the social-emotional well-being and safety of students and educators, (3) damage student-student, educator-student, and school-family relationships, and (4) contribute to high levels of teacher turnover and absenteeism, and to student absenteeism, fear/avoidance of school, and academic failure.

Seeking to improve school safety, Congress passed the Gun-Free Schools Act in 2004, mandating a one-year student expulsion for bringing a firearm to school. Shortly thereafter, many districts expanded this zero-tolerance approach to mandate suspensions for a variety of less serious offenses: alcohol or drug use, fighting, disrespect, swearing, truancy, and even repeated dress-code violations (Martinez, 2009). Despite the

popularity of these broader zero-tolerance policies over the past 30 years, most of the evidence describes their negative impact on students (APA Zero Tolerance Task Force, 2008; Curran, 2016). These harsh responses fail because they do nothing to build a can-do school community featuring strong productive relationships; foster positive youth development; or help students and educators embrace their responsibilities to each other.

Zero-tolerance policies have increased schools' reliance on exclusionary discipline which is unfortunate given that research from across the country indicates that middle and high school students who receive suspensions are less likely to graduate from high school (Balfanz et al., 2007; 2014; Balfanz & Buccanfuso, 2008; Everyone Graduates Center, 2010a, 2010b, 2010c, 2011; Mac Iver et al., 2009; Mac Iver & Messel, 2012; Neild & Balfanz, 2006). Furthermore, the proliferation of zero-tolerance disciplinary policies in high-minority, high-poverty districts—combined with an increased police presence—has led to more arrests for school offenses which would previously have been handled by school officials. This, in turn, has fostered a school-to-prison pipeline rather than a school-to-postsecondary-success pathway; this bleak pipeline has disproportionately impacted African American and Latino students (Heitzeg, 2009; Texas Appleseed, 2007; Vanderhaar et al., 2015). Zero-tolerance policies and practices that rely on expulsion, suspensions, and transfers to “alternative” schools are simply not working. As best summed up by the NAACP's Legal Defense and Educational Fund (2018): “these practices harm academic achievement for *all* students while increasing the chances that those excluded will be held back, drop out, and become involved with the juvenile and criminal justice systems”. More recent research on punitive/exclusionary discipline provides converging evidence showing that when schools overuse these practices it harms not just those who receive suspensions—even in-school suspensions (Cholewa et al., 2018)—but also non-suspended students who attend these schools by lowering their achievement and subsequent college enrollment rates (Jabbari & Johnson, 2023).

### ***A different response***

Reducing recurrent or long exclusions has now become the goal in many districts, but policies prohibiting such exclusions prove hard to implement and enforce (e.g., in Philadelphia, Steinberg & Laco, 2017). A promising and increasingly popular alternative approach, Restorative Practices, is grounded in restorative justice. *Restorative Practices* (RP) is a positive youth development approach to helping students acknowledge when harm has occurred, understand its impacts, then think through (and do) what needs to be done to make things right. This approach cultivates empathy in wrongdoers and helps them develop healthy responses to feelings of shame (Marcucci, 2017). It empowers victims and amplifies their voices and builds a culture where former bystanders become defenders of victims. Rather than excluding wrongdoers from the classroom with a long suspension, this approach focuses on repairing relationships and forming a strong school community that holds wrongdoers accountable to their community without banishing or stigmatizing them (Marcucci, 2021).

The theory underlying how RP reduces misbehavior and conflict, improve relationships and engagement, and strengthen learning environments is that “human beings are happier, more cooperative and productive, and more likely to make positive changes in their behavior when those in positions of authority do things *with* them rather than *to* them or *for* them” (Wachtel, 2005, p. 87; Wachtel, 2013). This emphasis on doing things *with* students rather than *to* or *for* them is a major distinction between RP and *Positive Behavior Interventions and Supports* (PBIS), another widespread approach to reducing suspensions and disciplinary problems. For example, rewards and reward systems are hallmarks of PBIS and mentioned 46 times in *The PBIS Team Handbook* (Baker & Ryan, 2014); in contrast, they are not mentioned even once in the *RP Handbook* (Costello et al., 2009). RP instead focuses on helping the entire school community learn how to build mutually-supportive and -accountable relationships (while restoring damaged ones). These processes feature ongoing nurturing, but honest, structured conversations that foster understanding, empathy, accountability, and harm prevention and repair.

Like other transactional intervention theories (e.g., Frey & Nolen, 2010), restorative theory assumes that profound and long-lived changes in developmental trajectories and habitual behaviors generally require supportive changes in the social ecology, including the systematic schoolwide creation of new: a) social norms and expectations, b) social-emotional and communication skills, and c) shared vocabulary and protocols for respectfully resolving conflicts. A restorative approach systematically “reintegrates wrongdoers back into their community” and is more likely to “reduce the likelihood that they will reoffend” (Wachtel, 2016, p. 3) than approaches that stigmatize wrongdoers and push them into a negative societal subculture that further exacerbates negative behavior and attitudes (Braithwaite, 1989).

RP also address some of the complex and varied causes of chronic absenteeism. Multiple or lengthy suspensions are one cause of such absenteeism: they compel students to be absent for the length of their suspensions and additionally leave suspended students feeling unwelcome after suspensions are over. Students also often develop the habit of avoiding school if they do not feel a sense of belonging or if they are avoiding negative interactions, relationships, or events. A schoolwide RP program can address these relational- and school climate-driven reasons for absenteeism and thus might reduce the likelihood that students become chronic absentees.

### ***The restorative practices (RP) combined with Diplomas Now intervention***

In this study, we particularly examine the impacts of the *SaferSanerSchools* school-wide RP model developed by IIRP as it was combined with Diplomas Now (DN). The DN secondary school reform model—a collaborative intervention developed by Talent Development Secondary, City Year, and Communities in Schools—seeks to reduce secondary school students’ development of early warning indicators of dropout risk (chronic absence, behavioral problems, and course failure; Corrin et al., 2014; Corrin et al., 2016; Sepanik et al., 2015). DN’s four key “pillars” include strong curriculum and instruction with professional development, grade level teacher teams and small learning communities, tiered student supports and interventions guided by an early warning system, and integrated on-site supports involving additional staffing to facilitate

close monitoring of student data and implementation of appropriate interventions for struggling students. The practices in these four pillars are expected to lead to more positive school environments, which in turn are expected to have a positive impact on student attendance, behavior, and course performance (Corrin et al., 2016). Organizing schools into small learning communities is expected to yield more positive relationships and a generally more positive school climate. DN’s professional development and instructional coaching, together with its curriculum for college readiness, are expected to improve instruction, student engagement, and student course performance. The early warning system to monitor student data and guide timely and targeted interventions is expected to improve student attendance, behavior, and course performance. DN’s integrated human capital supports within schools provide additional capacity for implementing interventions in ways that will lead to improved student outcomes.

Prior studies have shown a positive impact of DN on several school climate factors (Corrin et al., 2014; Sepanik et al., 2015) and middle school student outcomes, including attendance (at least 90%) and on-track to graduation status (having no warning indicators in attendance, behavior, or course performance; Corrin et al., 2016). DN’s effects on high school students were not significant. Given persistent issues with exclusionary discipline and school climate in DN schools, the developer sought to combine DN with RP to more directly target those issues. It seemed likely that these interventions could integrate well together as both are implemented at the whole-school level and focus on helping students recover from prior behavior.

The RP logic model in Figure 1 lists the supports IIRP offered to treatment schools, the key components of the intervention, and the primary desired outcomes of the intervention that were pre-specified by the evaluation team. Launching a full-fledged

Logic Model for the Restorative Practices Intervention

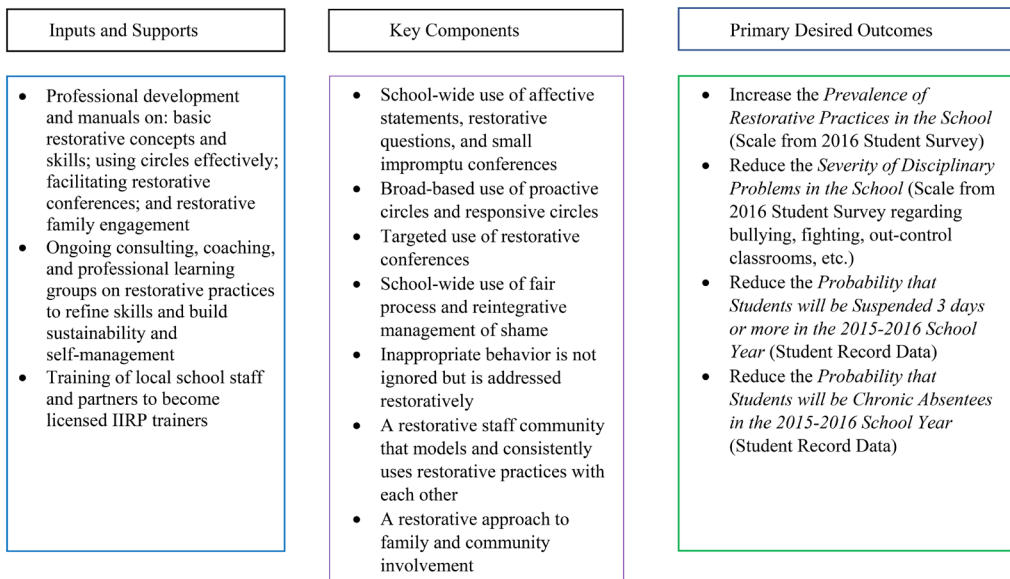


Figure 1. Logic model for the restorative practices intervention.

*Restorative Culture with a Safer, Saner Climate* is a two-year process initiated by a four-day-long professional development series from IIRP for all leaders, teachers, and staff. The series covers basic restorative concepts, skills, and practices, and is accompanied by detailed handbooks (Costello et al., 2009; 2010; Smull et al., 2012; Wachtel et al., 2010) and other implementation resources, protocols, and tools. Once the professional development series is completed, IIRP (a) helps the school develop an explicit implementation and sustainability plan, and (b) provides training and support for the school's professional learning groups as they refine their restorative skills and begin regular use of the essential elements of RP including:

- *affective statements* which make students aware of the specific positive or negative impacts of their behavior;
- *restorative questions* which ask a wrongdoer to think about his/her behavior, how it impacted others, and what needs to be done to make things right, and which provide those harmed with the opportunity to be heard by those who harmed them;
- *small impromptu conferences* using restorative questions to quickly resolve lower-level incidents involving two or more people;
- *proactive circles* which provide opportunities to share feelings, ideas and experiences in order to build trust, mutual understanding, shared values, and shared behaviors;
- *responsive circles* that engage students in the management of conflict and tension by repairing harm and restoring relationships in response to a moderately serious incident or pattern of behavior; and
- formal structured *restorative conferences* led by a trained facilitator in response to serious incidents or a cumulative pattern of less serious incidents that bring together all those involved (and often, their family and friends) to censure the harmful behavior, to allow those involved in the conference to express their negative feelings and then transition to more positive affects while developing their own solutions to the harm resulting from the incident, and to take steps to reintegrate the wrongdoer into the school community.

IIRP's ongoing consulting visits support the deepening of implementation and problem-solving.

### ***The evidence base for restorative practices***

Non-experimental studies have documented the great promise of RP in providing alternative ways of holding students accountable for harmful, disruptive, or violent behavior and thus reducing the need for exclusionary discipline. These studies have documented reductions in average suspension rates and disproportionality in discipline outcomes and have also found positive changes in school culture that benefit students, families, and the larger community (see Fronius et al., 2019; reviews: Darling-Hammond, 2020, Zakszeski & Rutherford, 2021). Many pre-post design and comparison group studies have found decreases in exclusionary discipline practices and violent behaviors following the implementation of RP, including in Denver (Baker, 2008; Gonzalez, 2015),

Minneapolis and Minnesota (McMorris et al., 2013; Riestenberg, 2003), Oakland (Sumner et al., 2010), Texas (Armour, 2016), and around the world (e.g., Scotland; McCluskey et al., 2008). Additionally, qualitative and observational studies have found perceived improvements in the school environment and student-teacher relationships (Gregory et al., 2016; Jain et al., 2014; McCluskey et al., 2008; McMorris et al., 2013). However, some studies find that RP are less successful at reducing racial, gender, or special education disciplinary disparities (Anyon et al., 2016; Gregory et al., 2018) or point to the difficulty of sustainability (Armour, 2016; Riestenberg, 2003).

Several randomized studies underway (Fronius et al., 2019; Green et al., 2019) or recently completed (see below) are beginning to generate stronger conclusions supported by causal evidence about the effects of RP. For example, one smaller study of 6<sup>th</sup> and 7<sup>th</sup> graders in Maine found positive impacts of RP on student outcomes, but only after accounting for students' own usage of RP (Acosta et al., 2019). In another study of early adolescents—in a larger sample in England—Bonell and colleagues (2018) found that their intervention, combining RP with social emotional learning activities, reduced bullying but not aggression. Further, the largest U.S. published results to date, from the Pittsburgh randomized control trial (Augustine et al., 2019), showed both positive and null effects. Conducted and published by RAND, the study tested the effects of the IIRP whole-school model in a sample of 44 schools (including 22 schools randomly assigned to RP) from 2015–2017. Most of the treatment schools (15) were elementary schools (K-5 or K-8). The study found that after the second year of implementation, students in RP schools were suspended for fewer days on average ( $ES = -.06$ ) and had fewer suspensions ( $ES = -.06$ ). Additionally, teachers in RP schools reported a more positive school climate ( $ES = +.31$ ). Further, RP reduced discipline disparities for African-American students (compared to their White peers) but not for male students or students with IEP's. Non-significant effects were found on arrests, attendance, and mobility. Finally, the study found significant negative effects on students' perceptions of teachers' classroom management ( $ES = -.21$ ) and marginally significant negative effects on standardized test achievement ( $ES = -.07$ ).

### ***This study***

Using a subsample of schools from a school-level cluster randomized controlled trial (RCT), this study tests the efficacy of combining RP with Diplomas Now (DN). The 33 schools in this study were originally recruited in 2011 and 2012 to participate in the i3 validation study of the DN model that consisted of 62 low-performing middle and high schools in 23 randomization blocks in 11 districts. After several years of the DN study, school partners and researchers realized that DN—though significantly reducing the proportion of students who developed early warning indicators, especially in the middle grades—was not significantly reducing suspension rates nor reducing the severity of disciplinary problems in the schools. The researchers hypothesized that adding RP in the treatment schools could help address these issues.

We invited all districts in the DN Validation Study sample to participate in the RP sub-study in 2014, and eight districts agreed for at least some of their randomization blocks to participate. Based on these district level decisions, all 33 schools in 12 of



the original 23 randomization blocks joined the RP study, with the already randomized treatment schools receiving the RP intervention professional development resources and the already randomized control schools in these blocks continuing “business as usual.” It is possible that districts most supportive of RP may have responded first to the invitation to participate in the RP substudy, and that randomization blocks selected by districts included treatment schools with principals most enthusiastic about participation. There was not sufficient funding for all the original 62 schools in the DN study to be part of the substudy. While assignment to treatment and control conditions remained random as originally assigned, the group of schools participating in the RP substudy were not randomly selected from the original larger sample. For this reason, we cannot causally assess the impact of RP/DN compared to DN alone.

The study provides the highest level of scientific evidence on the impacts of RP when combined and integrated with an ongoing whole school reform effort, DN. The central research questions of the study for the primary outcomes evaluation are: during the 2015–2016 academic year, did the combined Restorative Practices/Diplomas Now (RP/DN) intervention:

1. increase the Prevalence of RP in schools as reported by students?
2. reduce the occurrence of problematic behaviors in the school as reported by students?
3. reduce the likelihood that students would be suspended for 3 days or more?
4. reduce the likelihood that students would be chronically absent (less than 90% attendance)?

Following these central questions, we also evaluated more exploratory outcomes under the research questions: during the 2015–2016 academic year, did the combined RP/DN intervention:

1. increase the Prevalence of RP, as reported by teachers?
2. reduce the probability that students would be suspended at least once?
3. reduce the occurrence of problematic behaviors in the school, as reported by teachers?
4. increase students’ overall attendance rates?

Finally, we addressed the following research question related to the impact of RP/DN on disparities among subgroups: during the 2015–2016 academic year, were the beneficial impacts of the combined intervention on primary outcomes larger for students of color, overage students, and special education students than for other students?

## **Method**

### ***Sample and setting***

The combined intervention is designed to transform challenging urban secondary schools in need of major reform. The study schools are from large urban districts and represent some of the most challenged middle and high schools in the United States.

Prior to randomization, the schools were identified by their district as in need of transformation. Statistical inferences from our study can strictly be made only to schools in the districts in our study, but the conclusions may generalize to the many other high-poverty, high-minority urban districts across the United States similar to those in our study. Hence, the study generates helpful lessons regarding the efficacy and implementation of the combined intervention in high-needs secondary schools from large urban districts.

This impact study had a total sample size of 33 secondary schools (20 middle and 13 high schools) from 8 large urban districts from different states and a variety of regions. These districts were large—averaging 425 schools and 262,000 students per district—and served large populations of minority and special education students. The districts and schools were originally recruited in the 2010–2011 and 2011–2012 school years to participate in the i3 validation study of the Diplomas Now model. Separate blocks were formed within each district by school type (i.e., middle schools and high schools in different blocks) and by year of randomization. Within each block, approximately half of the schools were randomized by MDRC to become treatment schools and the others to serve as control schools. As described above, in 2014, we recruited all of the schools from 12 of the 23 randomization blocks to participate in this follow-up study of the combined impact of DN and RP. The 17 treatment schools in these blocks added implementation of RP during the 2014–2015 and 2015–2016 school years to their ongoing implementation of DN and the 16 control schools in these blocks continued implementing “business as usual” practices of their own choosing.

### **Baseline equivalence**

Table A1 describes the enrollment, % of students receiving free or reduced lunches, and % of minority students in all of the study schools at baseline, prior to any treatments. On average, the schools enrolled 1,004 students with 76% of these students receiving free or reduced priced lunches, and 96% of these students were from traditionally underserved minority groups. As would be expected given random assignment, the differences between treatment and control schools on these school characteristics at baseline were not statistically significant. However, the difference between the percentage of minority students in treatment schools (97.2%) and those in control schools (95.4%) was large enough in standard deviation units (.31) to indicate that the two groups of schools were not equivalent at baseline on this characteristic. To account for these demographic differences at baseline, all analytic models adjusted for students’ individual race/ethnicity and school-level proportions of students eligible for free or reduced priced lunches. Table A2 examines characteristics of the analytic samples for each outcome domain in 2014, after DN was implemented but prior to RP. At this point there were also no statistically significant differences between schools in the treatment and control conditions.

### **Measures**

Outcome measures draw on either: surveys (for the prevalence of restorative practices and disciplinary problems) or student administrative records (suspensions and

absenteeism). In the final year of the study, among the 12 blocks of schools, student records were partially or fully unavailable for three blocks, student surveys were unavailable for two blocks, and teacher surveys for three blocks (see [Table A3](#)).

### ***Prevalence of restorative practices***

Our primary measure of the prevalence of RP in study schools comes from students' reports of their experiences with (and active involvement in) these practices at their school. We were able to obtain this measure from ten randomization blocks: those blocks that allowed us to collect student questionnaire data from both treatment and control schools in Spring 2016. The questionnaire included 20 items, designed by the research team to overall capture the RP components described above, that asked the student to report on their teachers' use of key restorative practices and to report his or her own level of involvement in these practices. (The items on this scale and their loadings on a single factor, using principal components analysis, are presented in [Table A4](#)) To test the impact of the intervention on the prevalence of restorative practices in these schools, we computed a composite score for each student that was the mean response of the student across all items that the student had answered. To receive a score, a student needed to have responded to at least 13 of the 20 items on the composite. 93% of the students participating in the surveying met this criteria. The composite had a high internal consistency reliability ( $\alpha = .88$ ) and adequate to high loadings (.36 – .66) on a single factor when examined using a principle components analysis. For a secondary outcome, teachers also reported on their own usage of RP on a seven-item scale ( $\alpha = .84$ ) in Spring 2016. Teachers from nine of the randomization blocks responded to the survey.

### ***Severity of disciplinary problems***

Our primary measure was based on responses to the Spring 2016 student questionnaire. Students were asked “how much of a problem” things like bullying, fighting, students cutting classes, and out-of-control classrooms are at the school. (See the full list of ten problems in [Table A5](#)). Students rated each of the problems on a four-response scale (1 = *not a problem*, 2 = *a small problem*, 3 = *a medium problem*, 4 = *a big problem*). The composite score for each student was the mean score of the student across all items that the student had answered. The *Severity of Disciplinary Problems* composite had high internal consistency reliability ( $\alpha = .91$ ). An exploratory, secondary measure of the severity of such problems (based upon a teacher reports) was obtained in Spring 2016 from educators in nine of the randomization blocks who responded to a seven-item version of the composite. The teacher version also had high internal consistency reliability ( $\alpha = .90$ ).

### ***Suspensions***

Our primary suspension outcome was a binary measure indicating whether the student had been suspended for three or more days during the 2015–2016 school year. We also explored a secondary suspension outcome: a binary measure indicating whether the student had been suspended one or more times during that year. Both the primary

and the secondary suspension outcomes are based upon anonymized student-level data from districts' administrative datasets. Unfortunately, a midwestern district changed their data-sharing policies after the study began and their new policy forbids them from sharing suspension data. As a result, for the randomization block in that district, we have baseline student-level suspension data but no data from the key 2015–2016 outcome year. Our impact analyses of suspension outcomes are based upon nine of the study's 12 randomization blocks (representing the six districts who shared such data for 2015–2016).

### **Absenteeism**

Our primary outcome in this domain, *chronic absenteeism*, is a binary measure indicates whether a student was chronically absent in 2015–2016 (missed more than 10% of the days enrolled). We also obtained an exploratory continuous outcome measure, *attendance rate* (the percentage of enrolled days that a student was present at school in 2015–2016). Our impact analyses in this domain are based upon 10 of the study's 12 randomization blocks because not all districts shared students' attendance records in 2015–2016.

### **Data analyses**

Our analyses estimate the RP/DN intervention's impacts at the end of the second year of implementation of *Restorative Practices* (allowing time for treatment schools to embed these practices into their continuing implementation of Diplomas Now). All analyses use a basic two-level fixed-effects model, which combines models at the student and school levels to answer the central research questions regarding the impacts of the intervention. Table A6 in the appendix summarizes the specification for each outcome analytic model.

In analyzing the effect of RP/DN on outcomes, we take the following approach. Level 1—students-within-schools—describes the relationship between students' outcomes and their background characteristics. The Level 1 model is given by:

$$Y_{ij} = \beta_{0j} + \sum_S \beta_{1s} X_{sij} + e_{ij}, \quad (1)$$

where  $Y_{ij}$  is an outcome for student  $i$  in school  $j$ ;  $X_{ij}$  is a set of  $S$  student-level covariates for student  $i$  in school  $j$ , measured prior to students' first exposure to the intervention; and  $e_{ij}$  is a random error term for student  $i$  from school  $j$ , assumed to be independently and identically distributed across students within schools (i.e., the "within-school" residual). Therefore,  $\beta_{0j}$  is the average of outcome  $Y$  at school  $j$  for the "average" student in the sample (i.e., with mean value on the  $S$  covariates).

Given that random assignment occurs at the school level, treatment impacts are estimated at the school level. Thus, Level 2 examines the difference between the school-level adjusted outcomes ( $\beta_{0j}$ ) of the treatment and control schools, controlling for school characteristics and random assignment blocks, where blocks are defined by the district and school level. Therefore, we have:

$$\beta_{0j} = \gamma_{00} + \sum_K \delta_k D_k + \gamma_1 T_j + \sum_M \gamma_{2m} W_{mj} + u_{0j}, \quad (2)$$

where  $T_j = 1$  if school  $j$  was randomly assigned to implement the program (RP/DN) and 0 otherwise;  $D_k$  denotes random assignment block indicators; equal to 1 if student  $i$  is in random assignment block  $k$  (defined by district, school-level, and time of randomization) and 0 otherwise;  $W_{mj}$  is a set of  $M$  school-level covariates for school  $j$  measured in the year of random assignment (prior to the first year of program implementation), and centered on the grand mean of the sample (where continuous); and  $u_{0j}$  is a random error term for school  $j$ , assumed to be independently and identically distributed across schools (i.e., the “between-school” residual). Therefore,  $\gamma_{1k}$  is the difference between the school-level average of outcome  $Y$  in the program schools and the non-program schools, i.e., the impact of the intervention on outcome  $Y$ .<sup>1</sup>

The two-level model can be estimated by substituting (2) into (1):

$$Y_{ij} = \gamma_{00} + \sum_K \delta_k D_k + \gamma_1 T_j + \sum_M \gamma_{2m} W_{mj} + \sum_S \beta_{1s} X_{sij} + u_{0j} + e_{ij} \quad (3)$$

and then fitting Equation (3). All covariates were estimated as randomly varying (e.g.,  $\beta_{1female} = \gamma_{10} + u_{1j}$ ), with the exception of grade level which was estimated as non-randomly varying. There are several features to note about these models. The average impact of the intervention across school district-school level blocks ( $\gamma_1$ ) was obtained by weighting the block-level impacts ( $\gamma_{1k}$ ) by the number of program schools in the block. Thus,  $\gamma_1$  is a fixed-effects estimate of the impact of the intervention for the average program school in the study sample. Therefore, the average estimate cannot be used to make statistical inferences about the impact of the program in some larger population of schools. This “fixed effects” approach to obtaining a pooled impact estimate is used because the school districts in the study were selected purposefully and are not a random sample of districts from a larger target population.

Indicators for random assignment blocks ( $D_k$ ) are included in the model to capture a central feature of the research design in which random assignment was conducted separately for each school district and subgroup of schools within the district. The model also includes student-level covariates and student characteristics ( $X_{ij}$ ) to reduce both within- and between-school variation in the outcome measure, thereby increasing the precision of the impact estimates. All models adjusted (at level 1) for students’ individual demographic variables: gender, ethnicity, and grade-level. Student record models additionally included (due to their availability in the datasets): ELL status, special education status, FRL status, and overage status. Finally, school-level covariates ( $W_{mj}$ ) were used to reduce between-school random variation in outcomes, therefore increasing the precision of the impact estimates. All models adjusted for the school’s overall percent of students receiving free or reduced priced lunches.

Models predicting discrete outcomes (chronic absentee status, being suspended 3 days or more) were similar to what is noted above for the continuous outcomes. The main difference with these models is that they predict the log odds of experiencing the binary outcome in question (e.g., being suspended 3 or more days) using a logarithmic linking function and thus do not include an individual level random error term ( $e_{ij}$ ).

For models that sought to test if the treatment was especially beneficial for certain student subgroups, and therefore helped to reduce disparities within treatment schools, the dummy variable for treatment schools was included in the Level 2 equation for each student background characteristic ( $\beta_{1...xj} = \gamma_{10...x0} + \gamma_{11...x1}T_j + u_{1...xj}$ ). In effect, this tested for an interaction to see if the relationship between a student’s subgroup and the outcome (i.e., odds of being suspended 3 days or more if a student was black) was significantly different in treatment schools.

## Results

The results evaluating the impact of RP/DN on the outcomes are presented in five parts: on the prevalence of restorative practices, the severity of disciplinary problems, suspension outcomes, absenteeism, and disparities in these outcomes by important subgroups. Impacts on the primary outcomes are summarized below and reported in Table 1; impacts on exploratory outcomes are described in the text.

### Impact of the treatment on the prevalence of restorative practices

The first row of Table 1 shows the adjusted mean prevalence of restorative practices in the 2015–2016 school year in treatment and comparison schools according to student ratings across twenty specific practices, our primary measure the frequency of these practices in study schools during the second implementation year. In both treatment and control schools, the average prevalence rating was above the response scale’s midpoint of 3 (e.g., the typical practice occurred more than “sometimes” but less than “often”). Students in treatment schools reported that the typical restorative practice occurred about one-eighth of a point more often than did students in control schools, a significant but modest treatment impact of 0.13 ( $p < .01$ ). Restating this impact coefficient as effect size, restorative practices were used 18 hundredths of a standard deviation more frequently in treatment schools than in control schools.

In addition, we estimated the impact of the treatment on teacher’s self-reported usage of restorative practices, a secondary (exploratory) measure. Similar to students,

**Table 1.** The impact of treatment on the primary outcomes.

Scale	Scales from 2016 Student Survey		Impact	p	Effect Size
	Treatment Adj. Mean	Control Adj. Mean			
Prevalence of Restorative Practices <sup>1</sup>	3.16	3.03	.128	.007	0.18
Severity of Disciplinary Problems <sup>2</sup>	2.42	2.53	−0.116	.019	−0.13
Binary Outcomes from 2015–2016 School Year					
Outcome			Impact (Odds ratio)	p	
Suspended 3 or More Days			0.66	.027	
Displayed Chronic Absenteeism <sup>3</sup>			0.80	.096	

<sup>1</sup>Each item on the scale ranges from 1 to 5 (e.g., from “Not at All” to “Always”).

<sup>2</sup>Each item ranges from 1 to 4 (from “Not a Problem” to “A Big Problem”).

<sup>3</sup>An attendance rate of less than 90%.

teachers reported that the typical restorative practice occurred about one-eighth of a point more often in treatment schools (adjusted  $M=3.63$ ) than in control schools (adjusted  $M=3.52$ ). Given the smaller sample size and the larger standard deviation of the secondary measure, this impact of the treatment was only marginally significant ( $p = .08$ ) and represented an effect of only 0.13 standard deviations. Overall, teachers reported a higher prevalence of restorative practices than did students, in both treatment and control schools.

### ***Impact of the treatment on the severity of disciplinary problems***

As shown in Table 1, the treatment significantly reduced the severity of discipline problems in school as reported by students across a ten-item inventory of problems ( $p < .05$ ,  $ES = -0.13$ ). The adjusted mean severity rating in control schools indicated that the average problem in those schools was about halfway between “a small problem” and “a medium problem.” In treatment schools, the average problem was reported as about twelve hundredths of a point “less big” (on a four-point scale ranging from “not a problem” to “a big problem”). Teacher reports (on a 7-item inventory of problems)—our secondary measure in this domain—were similar to student reports in indicating that problems were less severe in treatment schools (adjusted  $M=2.49$ ) than control schools (adjusted  $M=2.63$ ), but the impact on this exploratory outcome ( $ES = -0.17$ ) was NOT statistically significant ( $p = .33$ )

### ***Impact of the treatment on suspension outcomes***

As shown in Table 1, the primary suspension outcome was a binary variable indicating whether the student had made it through the 2015–2016 school year without being suspended 3 or more days. This indicator is more sensitive than other suspension metrics in measuring a school’s success in preventing and addressing problem behavior in a student because it indicates that the student did not commit a major violation (a violation that yielded more than a two-day suspension) **and** that the student was not a persistent violator (did not earn multiple suspensions totaling 3 days or more). The treatment aimed to both prevent minor misbehavior episodes from escalating into persistent or major violations and provide restorative/recovery/reintegration supports to anyone who is suspended so that it didn’t happen again.

The treatment significantly reduced the probability that students would be suspended for 3 or more days ( $p < .05$ ), with students at treatment schools 34% less likely than students at control schools to be suspended this many days.

The impact of the treatment on the secondary/exploratory suspension-related outcome—the probability that a student would be suspended one or more times—was in the desired direction but not statistically significant. Students at treatment schools were 22% less likely than other students to be suspended 1 or more times ( $p = .12$ ). In sum, treatment schools were more successful than control schools in preventing a major suspension (or repeated minor suspensions) totaling 3 days or more but were not significantly more successful in preventing students from experiencing at least one suspension during the school year.

**Impact of the treatment on absenteeism**

Chronic absenteeism was the primary outcome in this domain because the intervention was targeted at reducing **problematic** levels of absenteeism that put students off-track to graduation (rather than being targeted at helping students with acceptable attendance to reach even better attendance rates.) As shown in Table 1, students were indeed 20% less likely to become chronic absentees (students who attended less than 90% of the school days) in treatment schools than in control schools, but this impact was only marginally significant ( $p < .10$ ). This marginal impact on chronic absenteeism did **not** translate into significantly higher overall attendance rates (an exploratory outcome) in treatment schools versus control schools. Specifically, the average attendance rate of students in treatment schools was only 1 percentage point higher than in control schools ( $ES = .06, p < .16$ ). In other words, students attended roughly 2 days more per year in treatment schools than in control schools.

**Impact of treatment on disparities among subgroups in suspensions and absenteeism**

We predicted that beneficial impacts of treatment on reducing major episodes of suspensions and chronic absenteeism would be higher for Black, Hispanic, Overage, and Special Education students (subgroups who often suffer the most under zero-tolerance/punitive approaches to addressing problem behavior). As an initial test of this prediction, we conducted a series of analyses to estimate whether the treatment’s beneficial impacts were stronger for students in these subgroups than in other subgroups (see Table 2).

These analyses revealed that the treatment’s impact in reducing major suspensions and chronic absenteeism was NOT significantly different across the various races and

**Table 2.** Main effects and interactions involving subgroups: were the treatment’s beneficial impacts on reducing major suspensions and chronic absenteeism stronger in certain student subgroups?

Effect Estimated	Suspended 3 or more days Odds Ratio ( <i>p</i> )	Chronically Absent Odds Ratio ( <i>p</i> )
1. Treatment	0.23 (.090)	0.79 (.499)
2. Black	2.68 (.052)	0.98 (.950)
3. Treatment × Black	0.76 (.713)	1.18 (.709)
4. Latinx	1.16 (.749)	1.06 (.861)
5. Treatment × Latinx	0.80 (.753)	0.97 (.936)
6. Other Ethnic Group	0.42 (.216)	0.61 (.253)
7. Treatment × Other Ethnic Gp.	1.14 (.894)	1.66 (.416)
8. Overage	1.65 (.027*)	2.31 (.000***)
9. Treatment × Overage	1.21 (.565)	0.76 (.166)
10. Students with “disabilities” (SWD)	0.80 (.275)	1.29 (.058)
11. Treatment × SWD	2.73 (.003**)	1.06 (.747)
12. ELL	0.64 (.111)	0.49 (.000***)
13. Treatment × ELL	1.82 (.146)	1.81 (.004**)
14. Female	0.64 (.046*)	1.04 (.623)
15. Treatment × Female	1.10 (.759)	0.91 (.447)
16. Gets FRL	1.49 (.178)	1.22 (.321)
17. Treatment × FRL	2.19 (.123)	0.96 (.888)

Note. Both outcome impacts are estimated in odds ratio form. P-values are reported in parentheses besides each coefficient.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



ethnic groups in our sample. That is, there were no significant treatment by ethnic group category interactions (see rows 3, 5, and 7 in Table 2). Nonetheless—to illumine how “minoritized” students in treatment and control schools fared on the study’s primary suspension outcome compared to White students—Table A7 in the appendix shows the predicted probability of being suspended 3 or more days in treatment schools and in control schools for three subgroups: Blacks, Hispanics, and Whites. As shown in Table A7, the probability of being suspended 3 or more days was higher in control schools than in treatment schools for each of the three largest racial groups in our sample. In treatment schools, the probability of being suspended for 3 days or more was reduced by 26% for Blacks (from 0.61 in control to 0.45 in treatment schools), by 34% for Hispanic (from 0.41 to 0.27), and by 22% for Whites (from 0.37 to 0.29). Although the treatment reduced the estimated disparities between Blacks and Whites and between Blacks and Hispanics on this outcome, Blacks were still more likely to be suspended than students of other races.

There was a significant interaction between students’ treatment condition and their special education status in predicting the probability that they would be suspended for more than 3 days (Table 2, Column 1, Row 11). The predicted probabilities involved in this interaction are shown in Table A7. “General education” students (students without an IEP) were significantly more likely to be suspended if they were in a control school than in a treatment school. In contrast, students with disabilities were slightly less likely to be suspended for 3 or more days in control schools. Specifically, as shown in Table A7, the treatment decreased the probability of being suspended for 3 days or more by 37% for general education students (from 0.46 in control to 0.29 in treatment schools) but slightly increased that probability for students with disabilities from 0.41 to 0.47.

Finally, English Language Learners (ELL) were less likely than others to be chronically absent (Table 2, column 2, row 12) but the ELL advantage over non-ELL students in avoiding absenteeism was smaller in treatment schools than in control schools (Table 2, row 13 and Table A7).

## Discussion

This impact study provided a rigorous test of the efficacy of an ambitious multifaceted intervention designed to advance our nation’s efforts to reduce the severity of disciplinary problems in high-poverty, urban secondary schools and to decrease the probability that the students in these schools would experience major suspensions or become chronically absent. The results from this study of Restorative Practices combined with Diplomas Now (RP/DN) provide “gold standard” evidence showing that this combined intervention increased schools’ use of restorative practices significantly compared to the uptake of these practices in the control schools. Additionally, the intervention reduced significantly both disciplinary problems and major exclusions (but the hoped-for reductions in chronic absenteeism were only marginally significant.)

The intervention can be judged successful in making treatment schools, safer, saner, more inclusive places. But, these beneficial effects were not miraculous in size.

For example, the significant difference in uptake of restorative approaches in treatment and control schools was under one-fifth of a standard deviation and the reduction in disciplinary problems in treatment schools (of 13 hundredths of a standard deviation)—though greatly welcomed by these schools—was not large enough to make the average problem disappear (i.e., to be rated “not a problem”). These small effect sizes may reflect: a) the difficulty in winning over some of the schools that had been randomly assigned to implement the treatment to embrace the full-range of Restorative Practices during the first two years of implementation, and b) the fact that some of the control schools had above average use of these practices.

Regarding the second point about control schools, some control schools were in districts where the Restorative Practices approach already had a foothold with teachers and leaders in many sites across the district. Some of these schools had some personnel who were already using and advocating a restorative approach to discipline at the start of the study and/or may have had such personnel enter the school after 2011 or 2012 (when recruitment and randomization occurred) bringing the approach with them, thus reducing the observed treatment contrast on the prevalence of Restorative Practices in these districts. This is similar to the findings from Acosta et al., 2019 study where, similarly, the contrast between treatment and control groups in the usage of Restorative Practices was minimal.

Regarding suspensions, the study found a substantial and statistically significant beneficial impact of the intervention on the primary suspension outcome: students in the RP/DN treatment schools were 34% less likely to be suspended 3 or more days during 2015–2016 than those in the control schools. However, the impact of the intervention on preventing a student from *ever* experiencing a suspension (e.g., experiencing a one-day, one-time suspension in 2015–2016) was less substantial and not statistically significant. The intervention helped prevent long or repeated suspensions from occurring but did not eradicate the use of brief exclusionary discipline. This pattern of findings may reflect a belief, even in schools who have embraced restorative practices, that a one-day exclusion may be beneficial in certain cases of hurtful behavior. This break, when used in a restorative context, allows affected parties a day to cool off, to reflect on what occurred and what needs to happen to make things right, and to prepare for a productive restorative circle or conference among those impacted on a subsequent day.

It is encouraging to note that the intervention’s beneficial impact of reducing the probability that students would experience a major exclusion was NOT significantly different across the various races and ethnic groups in the study’s sample. Students of *all* races were less likely to be excluded in treatment schools than in the control schools, and there were no statistically significant *intervention by race* interactions in receiving exclusions totaling 3 days or more. However, Black students were still more likely than students in other groups to experience a major exclusion, even in treatment schools, as shown in Table A7. The hyper-exclusion of Black secondary students in our nation’s schools is well-documented. This phenomenon stubbornly persisted as a systemic issue even in the second year of a restorative intervention and even in schools, like those in this study, where over 95% of the students are “of color.”

Another indication that the RP/DN intervention is not a panacea is that there is no evidence here that it benefited students with IEPs or classified as ELLs. Looking

specifically at the former group, unlike general education students—whose probability of experiencing a major exclusion dropped from .46 in control schools to .29 in treatment schools—students with IEPs’ probability of receiving a major suspension in treatment schools (.47) was slightly *higher* than the probabilities observed for both general education students (.46) and students with IEPs (.41) in the control schools. This finding deserves deeper investigation in future studies especially given the troubling findings in Augustine et al. (2019) where students with IEPs were less likely to benefit from restorative practices and actually more likely to be absent and have lower achievement. We suspect that such disappointing results may result from a reluctance by school personnel to include special education students fully in their school’s whole school reforms.

For example, one frustrating challenge faced by DN personnel in the current study was the reluctance of schools to include special education students in DN’s early warning indicator (EWI) monitoring and tiered student support system. School personnel were often afraid that the supports or interventions crafted during EWI response team meetings might produce “IEP violations.” As a result, these personnel often advocated that the supports provided for students with IEPs needed to be determined and provided by the school’s special education professionals rather than by the interdisciplinary EWI response teams. Thus, in treatment schools, the EWI team might arrange for a regular education student with behavior or attendance problems to receive targeted supports from a City Year corps member and/or intensive case-managed supports from a Communities in Schools site coordinator/social worker. But, in many of the treatment schools, the EWI response team was directed to let the school’s SPED professionals worry about tracking and responding to the EWIs of students with IEPs. Potentially, this decision in many treatment schools to exclude students with disabilities from the jurisdiction of the EWI response teams and from small group supports and individualized supports provided by DN personnel may have negatively impacted the behavior of these students (who presumably noticed their differential treatment). Whatever supports students with IEPs did receive from the schools’ formal special education support structures must not have been effective in compensating for the students’ exclusion from the schools’ new system of tiered supports for the rest of the student population. Similarly, it may be that “IEP dictates,” rather than restorative practices were followed when students with IEPs misbehaved. If this occurred, it is not surprising that this differential treatment might actually exacerbate the problematic behavior of these students.

There was less anecdotal evidence to help explain our findings that students classified as ELLs were more likely to be chronically absent in RP/DN schools compared to control school. Given the heavy reliance of RP on dialogue and communication, it is perhaps not surprising that students with more limited English skills or who have less confidence in their English skills would feel unable to participate fully and thus benefit fully from RP. In a deeper case study of RP in a culturally and linguistically diverse school, Ingraham et al. (2016) describe in detail the extra efforts they implemented to adapt the generic RP model to their specific cultural context including translation and outreach (see Table 4 in Ingraham et al., 2016, p. 369). Future quantitative studies would do well to further look at how ELLs interact with RP across different types of schools and to assess what program adaptations are most fruitful for this subgroup of students.

### ***Limitations and future directions***

The findings should be interpreted in light of the study's limitations. One limitation is that the study was conducted by one of the three organizations that had worked together to create and disseminate the Diplomas Now model and then, several years later, had recruited IIRP to join forces with DN in creating a revised model that integrated RP into DN. Thus, this study is not an independent third-party evaluation of the combined intervention.

Also, although the study extends a randomized control trial, it is based on a non-randomly selected subsample of randomization blocks from the original study. The funding for the extended substudy was insufficient to support having all study blocks add Restorative Practices to the DN (treatment) schools in their block, so only the first 12 blocks who signed up for the extension were able to participate in the extension. District leaders (and their school leaders) who were not among the first 12 to sign up for the extension study may have been less supportive of the RP intervention, and the generalizability of the findings may be limited by this.

Further, although randomization produced rough baseline equivalence in student demographics in treatment and control schools, we were unable to assess this equivalence on pre-intervention measures of our outcome measures. Additionally, our sample is not a representative sample of secondary schools in the nation. Generalizability of our results is thus potentially limited to the schools in our sample, but more likely to similar U.S. schools: low-performing urban, middle and high schools serving large proportions of students from historically underserved backgrounds. That said, the multiple sites involved in the study and sample of low-performing schools should increase the generalizability beyond other randomized control trials, showing impacts across districts and in the districts who are the typical targets for education reforms like RP and DN. The reduction in our analytic sample from the original randomized sample recruited for this study could also reduce the generalizability of our findings to schools who are more likely to continue participating in data collection efforts over many years. [The current study asked schools and districts to extend their participation in annual student and teacher surveying and in sharing student records beyond the 4 years that they had agreed to when they joined MDRC's original i3 Validation Study of DN.] Although the study sample agreed to this extension of data gathering, our success rate in obtaining outcome data was lower in 2016 than it had been in the early years MDRC's study. Finally, this study ultimately tests the combined treatment of RP with Diplomas Now rather than the impact of restorative practices or DN alone, so the results are most relevant to districts seeking to implement a very ambitious and comprehensive school turnaround intervention that includes the key components of both models.

The variability in actual RP usage is reflected in the impact estimates. Although most of our average treatment effects were statistically significant in the hypothesized direction, individual schools and blocks varied widely in how much they used RP and also in the estimated impact of the intervention on the outcomes described above. This mirrors findings in Pittsburgh (Augustine et al., 2019) and Maine (Acosta et al., 2020) which showed that the story of Restorative Practices effectiveness is likely to be complicated. A key task for researchers in building this

evidence base will be to describe and specify the variation in the effects of Restorative Practices: for *whom* does it work, *when* does it work, and *where* (under what *circumstances or situations*)? This variability is important for administrators and policy-makers to incorporate into their planning of RP implementation and reinforces the necessity of needs and readiness assessments during these early stages (Garnett et al., 2020).

A key part of this variability in impact is likely related to the quality of implementation, as has been suggested in other studies of Restorative Practices (e.g., Acosta et al., 2019; Jain et al., 2014). Although we cannot draw causal inferences about the impact of these variations in implementation on schools' outcomes (since schools were not randomly assigned to varied levels of RP), future studies of implementation can help the field to better understand this relationship and to help provide suggestive evidence for practitioners and policymakers. Early results from these analyses of our data, to be shared in full elsewhere (e.g., Grant, 2022), revealed a link between more frequent RP implementation and more positive school climate. In particular, the amount of RP-related PD that teachers reported receiving consistently linked with both more positive school climate and their greater intentions to remain teaching at their school. Additionally, looking at the sample from this study as a whole—regardless of a school's status as a treatment or control school—teachers who used more RP themselves were also more likely to intend to stay at their school.

Future study is also needed to probe the potential negative impacts on the subgroups of students: students with IEP's and English language learners. This evidence suggests the whole school model of RP may need to integrate further explicit training or inclusion practices for these groups of students. For example, students with disabilities and English Language Learners may have difficulty participating in the dialogue that is so integral to the RP process.

## Conclusion

The findings from this study of Restorative Practices with Diplomas Now add important new evidence about the effectiveness of restorative practices to increase the use of restorative practices and to reduce suspensions, chronic absenteeism, and problematic behaviors. The study adds to our knowledge about restorative practices in particular due to its: randomized design (for stronger claims about cause and effect), sampling across eight different US cities (for potential greater generalizability), and implementation among schools with high need of turnaround (for greater policy relevance). Restorative practices are a viable tool to reduce exclusionary discipline and to improve the school environment in U.S. urban schools, but more research is needed, particularly studies that focus on enhancing and sustaining implementation and long-term effects of RP.

## Note

<sup>1</sup>We chose to model one average treatment effect, unlike the treatment-block interaction models MDRC used in their earlier study of Diplomas Now alone, due to our limited subsample, particularly the smaller number of blocks and respondents per block in our extended study.

## Disclosure statement

The authors report there are no competing interests to declare.

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## References

- Acosta, J., Chinman, M., Ebener, P., Malone, P. S., Phillips, A., & Wilks, A. (2019). Evaluation of a whole-school change intervention: findings from a two-year cluster-randomized trial of the restorative practices intervention. *Journal of Youth and Adolescence*, 48(5), 876–890. doi:10.1007/s10964-019-01013-2
- Alexander, K., Entwisle, D., & Olson, L. (2014). *The long shadow: Family background, disadvantaged urban youth, and the transition to adulthood*. Russell Sage Foundation.
- Anyon, Y., Gregory, A., Stone, S., Farrar, J., Jenson, J. M., McQueen, J., Downing, B., Greer, E., & Simmons, J. (2016). Restorative interventions and school discipline sanctions in a large urban school district. *American Educational Research Journal*, 53(6), 1663–1697. doi:10.3102/0002831216675719
- APA Zero Tolerance Task Force. (2008). Are zero tolerance policies effective in the schools? An evidentiary review and recommendations. *American Psychologist*, 63(9), 852–862. doi:10.1037/0003-066X.63.9.852
- Armour, M. (2016). *Ed white middle school restorative discipline evaluation: Implementation and impact, 2014/2015*. Austin, TX. The Institute for Restorative Justice and Restorative Dialogue (IRJRD). <https://irjrd.org/wp-content/uploads/2016/01/Year-3-FINAL-Ed-White-report.pdf>
- Atwell, M. N., Balfanz, R., Bridgeland, J., Ingram, E. (2019). *Building a Grad Nation: Progress and challenge in raising high school graduation rates – Annual update 2019*. Washington, DC & Baltimore, MD: CIVIC and the Everyone Graduates Center at the School of Education at Johns Hopkins University. <https://www.americaspromise.org/2019-building-grad-nation-report>
- Augustine, C. H., Engberg, J., Grimm, G. E., Lee, E., Wang, E. L., Christianson, K., & Joseph, A. A. (2019). *Can restorative practices improve school climate and curb suspensions? An evaluation of the impact of restorative practices in a mid-sized urban school district*. RAND Corporation. [https://www.rand.org/pubs/research\\_reports/RR2840.html](https://www.rand.org/pubs/research_reports/RR2840.html)
- Baker, B., & Ryan, C. (2014). *The PBIS team handbook*. Free Spirit Publishing.
- Baker, M. L. (2008). *DPS restorative justice project executive summary 2007-2008*. Denver, CO: Denver Public Schools. <http://restorativesolutions.us/wp-content/uploads/2013/11/RestorativeSolutions-DPSRJ-ExecSum07-08.pdf>
- Balfanz, R., & Buccanuso, C. (2008). *Falling off the path to graduation: Middle grade indicators in Indianapolis, IN*. Center for the Social Organization of Schools.
- Balfanz, R., Bridgeland, J., Fox, J. H., DePaoli, J. L., Ingram, E. S., & Maushard, M. (2014). *Building a grad nation: Progress and challenge in ending the high school dropout epidemic – 2014 annual update*. Civic Enterprises, the Everyone Graduates Center at Johns Hopkins University's School of Education, America's Promise Alliance and the Alliance for Excellent Education. <https://files.eric.ed.gov/fulltext/ED556759.pdf>

- Balfanz, R., Byrnes, V., & Fox, J. (2014). Sent home and put off-track: The antecedents, disproportionalities, and consequences of being suspended in ninth grade. *Journal of Applied Research on Children: Informing Policy for Children at Risk*, 5(2), 13.
- Balfanz, R., Herzog, L., & Mac Iver, D. J. (2007). Preventing student disengagement and keeping students on a graduation path in high-poverty middle-grades schools: Early identification and effective interventions. *Educational Psychologist*, 42(4), 223–235. doi:10.1080/00461520701621079
- Bonell, C., Allen, E., Warren, E., McGowan, J., Bevilacqua, L., Jamal, F., Legood, R., Wiggins, M., Opondo, C., Mathiot, A., Sturgess, J., Fletcher, A., Sadique, Z., Elbourne, D., Christie, D., Bond, L., Scott, S., & Viner, R. M. (2018). Effects of the learning together intervention on bullying and aggression in English secondary schools (INCLUSIVE): A cluster randomised controlled trial. *Lancet (London, England)*, 392(10163), 2452–2464. doi:10.1016/s0140-6736(18)31782-3
- Braithwaite, J. (1989). *Crime, shame, and reintegration*. Cambridge University Press.
- Chang, H. N., Osher, D., Schanfield, M., Sundius, J., & Bauer, L. (2019). *Using chronic absence data to improve conditions for learning*. Attendance Works and American Institutes for Research. <https://www.attendanceworks.org/wp-content/uploads/2019/06/Attendance-Works-Using-Chronic-Absence-2019-embargoed-Final.pdf>
- Cholewa, B., Hull, M. F., Babcock, C. R., & Smith, A. D. (2018). Predictors and academic outcomes associated with in-school suspension. *School Psychology Quarterly: The Official Journal of the Division of School Psychology, American Psychological Association*, 33(2), 191–199. doi:10.1037/spq0000213
- Corrin, W., Sepanik, S., Gray, A., Fernandez, F., Briggs, A., & Wang, K. K. (2014). *Laying tracks to graduation: The first year of implementing Diplomas Now*. MDRC.
- Corrin, W., Sepanik, S., Rosen, R., & Shane, A. (2016). *Addressing early warning indicators: Interim impact findings from the investing in innovation (i3) evaluation of Diplomas Now*. <https://files.eric.ed.gov/fulltext/ED566904.pdf>
- Costello, B., Wachtel, J., & Wachtel, T. (2009). *The restorative practices handbook for teachers, disciplinarians, and administrators*. IIRP.
- Costello, B., Wachtel, J., & Wachtel, T. (2010). *Restorative circles in schools: Building community and enhancing learning*. IIRP.
- Curran, F. C. (2016). Estimating the effect of state zero tolerance laws on exclusionary discipline, racial discipline gaps, and student behavior. *Educational Evaluation and Policy Analysis*, 38(4), 647–668. doi:10.3102/0162373716652728
- Darling-Hammond, S., Fronius, T. A., Sutherland, H., Guckenburger, S., Petrosino, A., & Hurley, N. (2020). Effectiveness of restorative justice in US K-12 schools: A review of quantitative research. *Contemporary School Psychology*, 24, 295–308. doi:10.1007/s40688-020-00290-0
- Devine, J. (1996). *Maximum security: The culture of violence in inner-city schools*. University of Chicago Press.
- Editorial Projects in Education. (2013). Second chances: Turning dropouts into graduates. *Diplomas Count*, 32(34).
- Everyone Graduates Center. (2010a). *Early indicator analysis: Arkansas*. Johns Hopkins University.
- Everyone Graduates Center. (2010b). *Early indicator analysis: Tennessee*. Johns Hopkins University.
- Everyone Graduates Center. (2010c). *Early indicator analysis for Metro Nashville Public Schools*. Johns Hopkins University.
- Everyone Graduates Center. (2011). *Early indicator analysis of high school and post-secondary outcomes: Florida*. Johns Hopkins University.
- Fabelo, T., Thompson, D., Plotkin, M., Carmichael, D., Marchbanks, M. P., Booth, E. A. (2011). *Breaking schools' rules: A statewide study how school discipline relates to students' success and juvenile justice involvement*. Council of State Governments Justice Center. [https://knowledgecenter.csg.org/kc/system/files/Breaking\\_School\\_Rules.pdf](https://knowledgecenter.csg.org/kc/system/files/Breaking_School_Rules.pdf)
- Frey, K. S., & Nolen, S. B. (2010). Taking “Steps” toward positive social relationships: A transactional model of intervention. In J. L. Meece and J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 478–496) Routledge.
- Fronius, T., Darling-Hammond, S., Persson, H., Guckenburger, S., Hurley, N., & Petrosino, A. (2019). *Restorative justice in US schools: An updated research review*. WestEd.

- Garnett, B., Moore, M., Kidde, J., Turner, T. A., Kervick, C. T., Bedinger, L., Smith, L. C., & Sparks, H. (2020). Needs and readiness assessments for implementing school-wide restorative practices. *Improving Schools*, 23(1), 21–32. doi:10.1177/1365480219836529
- Georgia Applesseed Center for Law & Justice. (2011). *Effective student discipline: Keeping kids in class*. <https://gaappleseed.org/initiatives/esd/keepingkidsinclass/report.pdf>
- Gonzalez, T. (2015). Socializing schools: Addressing racial disparities in discipline through Restorative Justice. In D. J. Losen (Ed.), *Closing the school discipline gap: Equitable remedies for excessive exclusion* (pp. 3352–3659). Teachers College Press.
- Grant, A. A., Mac Iver, D. J., & Mac Iver, M. A. (2022). The Impact of Restorative Practices with Diplomas Now on School Climate and Teachers' Turnover Intentions: Evidence from a Cluster Multi-Site Randomized Control Trial. *Journal of Research on Educational Effectiveness*, 15(3), 445–474. doi:10.1080/19345747.2021.2018745
- Green, A. E., Willging, C. E., Zamarin, K., Dehaiman, L. M., & Ruiloba, P. (2019). Cultivating healing by implementing restorative practices for youth: Protocol for a cluster randomized trial. *International Journal of Educational Research*, 93, 168–176. doi:10.1016/j.ijer.2018.11.005
- Gregory, A., Clawson, K., Davis, A., & Gerewitz, J. (2016). The promise of restorative practices to transform teacher-student relationships and achieve equity in school discipline. *Journal of Educational and Psychological Consultation*, 26(4), 325–353. doi:10.1080/10474412.2014.929950
- Gregory, A., Huang, F. L., Anyon, Y., Greer, E., & Downing, B. (2018). An examination of restorative interventions and racial equity in out-of-school suspensions. *School Psychology Review*, 47(2), 167–182. doi:10.17105/SPR-2017-0073.V47-2
- Heitzeg, N. A. (2009). Education or incarceration: Zero tolerance policies and the school to prison pipeline. *Forum on Public Policy*, 2009(2), 1–21.
- Ingraham, C. L., Hokoda, A., Moehlenbruck, D., Karafin, M., Manzo, C., & Ramirez, D. (2016). Consultation and collaboration to develop and implement restorative practices in a culturally and linguistically diverse elementary school. *Journal of Educational and Psychological Consultation*, 26(4), 354–384. doi:10.1080/10474412.2015.1124782
- Jabbari, J., & Johnson, O.Jr. (2023). The collateral damage of in-school suspensions: A counterfactual analysis of high-suspension schools, math achievement, and college attendance. *Urban Education*, 58(5), 801–837. doi:10.1177/0042085920902256
- Jain, S., Basse, H., Brown, M. A., Kalra, P. (2014). Restorative justice in Oakland schools. Implementation and impact: An effective strategy to reduce racially disproportionate discipline, suspensions, and improve academic outcomes Prepared for the Office of Civil Rights U.S. Department of Education. Data in Action, LLC. <https://www.ousd.org/cms/lib07/CA01001176/Centricity/Domain/134/OUSD-RJ%20Report%20revised%20Final.pdf>
- Losen, D. J., Martinez, T. E. (2013). *Out of school and off track: The overuse of suspensions in American middle and high schools*. The Civil Rights Project, UCLA. <https://civilrightsproject.ucla.edu/resources/projects/center-for-civil-rights-remedies/school-to-prison-folder/federal-reports/out-of-school-and-off-track-the-overuse-of-suspensions-in-american-middle-and-high-schools>
- Mac Iver, D. J., Mac Iver, M. A., & Clark, E. (2020). Impacts of a student engagement focused high school teacher professional development series [Paper presentation]. Paper Presented to Annual Meeting of the American Educational Research Association, San Francisco, CA. <https://eric.ed.gov/?id=ED613203>
- Mac Iver, M. A., Balfanz, R., Byrnes, V. (2009). *Advancing the “Colorado Graduates” agenda: Understanding the dropout problem and mobilizing to meet the graduation challenge*. Colorado Children's Campaign. <https://files.eric.ed.gov/fulltext/ED539116.pdf>
- Mac Iver, M. A., Messel, M. (2012). *Predicting high school outcomes in the Baltimore City Public Schools (The Senior Urban Education Research Fellowship Series, Volume 7)*. Council of the Great City Schools. <https://files.eric.ed.gov/fulltext/ED536739.pdf>
- Marcucci, O. (2017). Restoring relationships: How restorative justice can be a multitiered antibullying intervention. In A.F Onsnloo, R. Reed, & J. P. Schwartz (Eds.), *Creating and negotiating collaborative spaces for socially just anti-bullying interventions* (pp. 387–401) Information Age Publishing.



- Marcucci, O. (2021). Why restorative justice works in schools: An investigation into the interactional dynamics of restorative circles. *Learning, Culture and Social Interaction*, 31, 100561. doi:10.1016/j.lcsi.2021.100561
- Martinez, S. (2009). A system gone berserk: How are zero-tolerance policies really affecting schools? *Preventing School Failure: Alternative Education for Children and Youth*, 53(3), 153–158. doi:10.3200/PSFL.53.3.153-158
- McCluskey, G., Lloyd, G., Kane, J., Riddell, S., Stead, J., & Weedon, E. (2008). Can restorative practices in schools make a difference? *Educational Review*, 60(4), 405–417. doi:10.1080/00131910802393456
- McMorris, B. J., Beckman, K. J., Shea, G., Baumgartner, J. J., Eggert, R. C. (2013). *Applying restorative justice practices to Minneapolis public schools students recommended for possible expulsion: A pilot program evaluation of the Family and Youth Restorative Conference Program*. School of Nursing and the Healthy Youth Development. Prevention Research Center, Department of Pediatrics, University of Minnesota. [https://www.legalrightscenter.org/uploads/2/5/7/3/25735760/lrc\\_umn\\_report-final.pdf](https://www.legalrightscenter.org/uploads/2/5/7/3/25735760/lrc_umn_report-final.pdf)
- NAACP's Legal Defense and Educational Fund. (2018). *Case: School to Prison Pipeline*. <http://www.naacpldf.org/case/school-prison-pipeline>
- Neild, R. C., Balfanz, R. (2006). *Unfulfilled promise: The dimensions and characteristics of Philadelphia's dropout crisis, 2000-2005*. Philadelphia Youth Transitions Collaborative. <https://files.eric.ed.gov/fulltext/ED538341.pdf>
- Padilla, C. M., Thomson, D. (2021). More than one in four Latino and Black households with children are experiencing three or more hardships during COVID-19. Child Trends. <https://www.childtrends.org/publications/more-than-one-in-four-latino-and-black-households-with-children-are-experiencing-three-or-more-hardships-during-covid-19>
- Riestenberg, N. (2003). *Restorative schools grants final report*. Minnesota Department of Education. [http://crisisresponse.promoteprevent.org/webfm\\_send/1200](http://crisisresponse.promoteprevent.org/webfm_send/1200)
- Robers, S., Kemp, J., Rathbun, A., & Morgan, R. (2014). *Indicators of school crime and safety: 2013*. (NCES 2014-042/NCJ 243299). USDOE and USDOJ. <https://nces.ed.gov/pubs2014/2014042.pdf>
- Sepanik, S., Corrin, W., Roy, D., Gray, A., Fernandez, F., Briggs, A., & Wang, K. K. (2015). *Moving down the track: Changing school practices during the second year of "Diplomas Now"*. MDRC,
- Smull, E., Wachtel, J., & Wachtel, T. (2012). *Family power: Engaging and collaborating with families*. International Institute for Restorative Practices.
- Steinberg, M. P., Lacoie, J. R. (2017). *The academic and behavioral consequences of discipline policy reform: Evidence from Philadelphia*. The Fordham Institute. <https://fordhaminstitute.org/sites/default/files/publication/pdfs/1205-academic-and-behavioral-consequences-discipline-policy-reform-evidence-philadelphia.pdf>
- Sumner, M. D., Silverman, C. J., Frampton, M. L. (2010). *School-based restorative justice as an alternative to zero-tolerance policies: Lessons from West Oakland*. Thelton E. Henderson Center for Social Justice, University of California, Berkeley, School of Law. [https://www.law.berkeley.edu/files/thcsj/10-2010\\_School-based\\_Restorative\\_Justice\\_As\\_an\\_Alternative\\_to\\_Zero-Tolerance\\_Policies.pdf](https://www.law.berkeley.edu/files/thcsj/10-2010_School-based_Restorative_Justice_As_an_Alternative_to_Zero-Tolerance_Policies.pdf)
- Texas Appleseed (2007). *Texas' school to prison pipeline: Dropout to incarceration – The impact of school discipline and zero tolerance*. [https://www.texasappleseed.org/sites/default/files/01-STPP\\_Report2007.pdf](https://www.texasappleseed.org/sites/default/files/01-STPP_Report2007.pdf)
- Vanderhaar, J. E., Petrosko, J. M., & Munoz, M. A. (2015). Reconsidering the alternatives: The relationship among suspension, placement, subsequent juvenile detention, and the salience of race. In D. J. Losen (Ed.), *Closing the school discipline gap: Equitable remedies for excessive exclusion* (pp. 4946–5306) Teachers College Press.
- Wachtel, T. (2005). The next step: Developing restorative communities [Paper presentation]. Paper Presented at the 7th International Conference of the International Institute for Restorative Practices, "Conferencing, Circles, and Other Restorative Practices, Manchester, England, UK. <https://www.iirp.edu/news/the-next-step-developing-restorative-communities>

- Wachtel, T. (2013). *Dreaming of a new reality: How restorative practices reduce crime and violence, improve relationships and strengthen civil society*. Piper's Press.
- Wachtel, T. (2016). *Defining restorative*. IIRP Graduate School. [https://www.iirp.edu/images/pdf/Defining-Restorative\\_Nov-2016.pdf](https://www.iirp.edu/images/pdf/Defining-Restorative_Nov-2016.pdf)
- Wachtel, T., O'Connell, T., & Wachtel, J. (2010). *Restorative justice conferencing: Real Justice and the conferencing handbook*. International Institute for Restorative Practices.
- Welsh, R. O., & Little, S. (2018). The school discipline dilemma: A comprehensive review of disparities and alternative approaches. *Review of Educational Research*, 88(5), 752–794. doi:10.3102/0034654318791582
- Zakszeski, B., & Rutherford, L. (2021). Mind the gap: A systematic review of research on restorative practices in schools. *School Psychology Review*, 50(2–3), 371–387. doi:10.1080/2372966X.2020.1852056