School Discipline, Safety, and Climate

A Comprehensive Study in New York City

by Lama Hassoun Ayoub, Elise Jensen, Talia Sandwick, Dana Kralstein, Josephine Wonsun Hahn, and Elise White

School Discipline, Safety, and Climate: A Comprehensive Study in New York City

By Lama Hassoun Ayoub, Elise Jensen, Talia Sandwick, Dana Kralstein, Josephine Wonsun Hahn, and Elise White

© September 2019

Center for Court Innovation
520 Eighth Avenue, 18th Floor
New York, New York 10018
646.386.3100 fax 212.397.0985
www.courtinnovation.org

Acknowledgments

This study would not have been accomplished without the support and contributions of many individuals and organizations. There are many to thank, starting first with the parents, students, and schools that so willingly gave us their time and perspectives. The Advisory Board (members listed below) has been a guiding force in this study since day one and we owe a huge debt of gratitude to its members for sharing their insights, expertise, and time.

The New York City Department of Education was instrumental in every portion of this study: serving on the advisory board; working with us through the legal requirements of obtaining data; providing us with that data; and ensuring that we abided by ethical and legal requirements in our data use. The Research and Policy Support Group, including Brent Morita, Amudha Balaraman, Suzanne Elgendy, and Liliana Donchik, was generous with their time in helping us navigate data requests and providing the student data to us. Special thanks to the leader of the Office of School Safety and Youth Development, Lois Herrera, for her unwavering support of empirical research on all things school safety, discipline, and climate. Special thanks also to Holly Bedwell for doing the hard work of organizing the discipline data for us and helping us to understand it. Thanks also to Joseph Baranello and Michelle Paladino in the Office of the General Counsel.

Special thanks to the New York Police Department School Safety Division, Chief Brian Conroy, and his colleagues who served on the advisory board, who allowed us to interview school safety agents, and shared key perspectives and insight into how the NYPD approaches school safety and works with the Department of Education.

From the New York State Unified Court System, we would like to thank all those who worked to provide us with criminal justice data and spending significant time working with the New York City Department of Education (an unprecedented collaboration) to ensure that both the criminal justice and education data were secure and provided to the research team without identifying information. Specifically, thanks to Valerie Raine, Karen Kane, Chip Mount, Eugene Colon, Carolyn Cadoret, and Amelia Lepore. Many thanks to everyone working behind the scenes at UCS.

Thanks to Ernest Logan and Clem Richardson from the Council for School Supervisors and Administrators for their support and for their support and for helping with school outreach.

From the Center for Court Innovation, this study was accomplished through the work of a cadre of research assistants, researchers, and other staff at all levels of the organization. First, this study would not have been possible without Michael Rempel. He oversaw grant writing to get this study funded, provided guidance as we got it off the ground, and lent his expertise and insight throughout the study. Our research assistants Michael Partis, Janell Johnson-Dash, Tanya Santiago, Isaac Sederbaum, and Nava Bearson were all instrumental at different stages of the study. To all these research assistants, we are grateful. Thanks also to Warren Reich and Kiat Sing Teo for their work on data cleaning and coding. Administrative staff at the Center—Michele Maestri, Margaret Harris, and other facilities staff—helped us with endless tasks including photocopies of consent forms and mass mailings, organizing advisory board meetings, ordering supplies, setting up chairs and tables, and many more that we cannot begin to count. They make our lives much easier and we are grateful. Thanks also to Matt Watkins, Rob Wolf, Samiha Meah, Emma Dayton, and Jess Bird for working on dissemination with us. Many thanks to Amanda Cissner, Rachel Swaner, Mike Rempel, Julian Adler, and Greg Berman for their reviews of this report and other publications emerging from this study.

Finally, we are grateful to Mary Poulin Carlton, Nadine Frederique, Laurie Bright, Phelan Wyrick, and Donna Davis from the National Institute of Justice for their guidance and support over the life of the project. NIJ funded this project but was also instrumental in helping us work through the data and in moving the project along.

The opinions, findings, and conclusions expressed in this publication are those of the authors and not those of the New York City Department of Education, the New York Police Department, the New York State Unified Court System, or any of the organizations represented on the advisory board. None of these entities assumes liability for its contents or use thereof.

This project was supported by Grant No. 2014-CK-BX-0001 awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the positions or policies of the U.S. Department of Justice.

For correspondence, please contact Lama Hassoun Ayoub at (ayoubl@courtinnovation.org) or research director Rachel Swaner (rswaner@nycourts.gov).

Advisory Board

This is a comprehensive list of all individuals who participated in the advisory board, in one way or another. Advisory board members worked with us in various capacities, including attending meetings, reviewing documents, participating in calls, providing feedback via email, and allowing us to attend their meetings and present our research. The advisory board improved this study in every way possible and we cannot thank them enough.

Lois Herrera
Office of Safety and Youth Development
New York City Department of Education

Kenyatte Reid
Office of Safety and Youth Development
New York City Department of Education

Mark Rampersant
Office of Safety and Youth Development
New York City Department of Education

Brian Conroy
School Safety Division
New York Police Department

Dana Kaplan
Mayor's Office of Criminal Justice

Jordan Stockdale
Mayor's Office of Criminal Justice

Elizabeth Sullivan-Yuknis
Human Right to Education
National Economic & Social Rights Initiative

Kim Sweet
Advocates for Children of New York

Kate McDonough
Dignity in Schools
National Economic & Social Rights Initiative

Nancy Ginsburg
Adolescent Intervention and Diversion Practice
Legal Aid Society

Eddie Fergus
Department of Education
Temple University

Emily Horowitz, Ph.D.
Department of Sociology & Criminal Justice
Institute for Peace & Justice
St. Francis College

Jasmine Soltani
Research Alliance for New York City Schools
New York University

Coordinator and Parents of Bronx New Settlement Parent Action Committee

Former Members (affiliation at the time of involvement)

Vincent Schiraldi
Mayor's Office of Criminal Justice

Michele Sviridoff
Mayor's Office of Criminal Justice

Shoshi Chowdhury
Dignity in Schools Campaign
National Economic & Social Rights Initiative

Raye Barbieri
Youth and Community Programs and Planning
Center for Court Innovation

Judith S. Kaye
Former Chief Judge of the New York State Court System

Table of Contents

Acknowledgements **i**
Key Definitions **vi**
Executive Summary **viii**

Chapter 1. Introduction 1

Chapter 2. Quantitative Study Design & Methods 8

Chapter 3. Student and School Outcomes 15

Chapter 4. Case Studies: Restorative Justice and Positive Practices 29

Chapter 5. Discussion and Implications 43

References 50

Appendices

Appendix A. Study Model 58
Appendix B. Variables and Sources 59
Appendix C. Student and School Predictors of Future Incidents by Type 63
Appendix D. Sample Qualitative Study Protocols 65
Appendix E. Case Study Schools Positive Practices 72

Key Definitions

Classroom Removal: According to New York City Chancellor's Regulation A-443, a student may be removed from the classroom by a teacher if the student's behavior is substantially disruptive to the educational process or interferes with the teacher's ability to maintain authority in the classroom.

Chronic Absenteeism: Students who missed 20 days or more or who attended less than 89% of the school year are considered chronically absent by the New York City Department of Education (NYC DOE). This variable was measured in the year prior to the initial incident.

Economic Disadvantage and Economic Need Index: According to the NYC DOE, economically disadvantaged students are eligible for free or reduced-price lunch or have been identified by the Human Resources Administration as receiving certain types of public assistance.

Exclusionary Discipline: School disciplinary actions that remove or exclude students from the school setting fall under the umbrella of exclusionary discipline. This can include classroom removal, in-school or out-of-school suspension, or expulsion.

English Language Learners (ELL): Students who need support learning English, typically whose home language is not English, are classified as ELL students. Children are identified through a New York State administered English language test.

Incident or Disciplinary Incident: A disciplinary incident is defined as any school-based event that resulted in an incident report on the NYC discipline tracking system (OORS), all of which fall into the disciplinary categories found in the NYC DOE Discipline Code, regardless of the response to that incident. Incident levels (1-5) and disciplinary responses (e.g. classroom removal, suspension) are further defined in Chapter 2.

Neighborhood Disadvantage: For the purposes of this study, we calculated a neighborhood disadvantage index from publicly available neighborhood data. The index was based on the neighborhood's median family income, percent of female-headed households,

percent below poverty, percent using food stamps/Supplemental Nutrition Assistance Program, percent with less than a high school diploma, percent black, percent Hispanic, percent unemployed, and the ratio of poverty to income.

Positive Practices: For this report, the term positive practice refers to disciplinary practices that are supportive and inclusionary; i.e., they do not involve excluding the student from school through suspension or other punitive approaches. This can include restorative practices, mediation, conflict resolution, trauma-informed practices, counseling, among others.

Principal's Suspension: In New York City, a principal's suspension can be given for any misconduct in the discipline code and can last from one to five days. In other school districts, this is often referred to as an in-school suspension. Principal's suspensions are at the discretion of the principal and the school is required to arrange for alternate instruction.

Superintendent's Suspension: In New York City, a superintendent's suspension is often used for serious offenses of the discipline code and can last from six days to up to one year. In other school districts, this is often referred to as an out-of-school suspension. These suspensions are requested by principals in response to an incident and are then reviewed centrally by the DOE. The student is required to receive alternate instruction either at school or an alternative learning center during the period of the suspension.

Restorative Justice and Restorative Practices: The definitions of restorative justice and restorative practices are heavily debated in the field. For the purposes of this report, we utilize the definitions of the International Institute for Restorative Practices. Specifically, we view restorative practices as an overarching umbrella that includes restorative justice. Restorative justice, with foundations in criminal justice, is reactive and occurs in response to harm or conflict. Restorative practices involve proactively building community and relationships, in part to prevent harm and reduce its impact after it happens, through formal and informal approaches.

Zero Tolerance Policies: Generally, these policies have historically required school officials to use harsh punishment, such as suspension or expulsion, when students break certain rules, regardless of circumstances. The use and impact of such policies are well-documented and described in the research literature.

Executive Summary

Recent years have seen growing national attention to the detrimental consequences of school suspension and expulsion – often referred to as zero tolerance policies. Mounting evidence indicates that students who are suspended subsequently experience other negative outcomes such as lower academic achievement or justice involvement. However, it remains highly debated to what extent these future outcomes are directly caused by suspension or are, instead, shaped by co-occurring and confounding neighborhood, family, school, or individual student characteristics.

This comprehensive study of 804 New York City public middle and high schools sought to isolate the independent impacts of suspension, as well as to disentangle the effects, if any, of student, school, and neighborhood characteristics. Conversely, the study also explored the relationship of restorative justice and other positive practices to student behavior and school culture. We implemented two overarching research strategies: (1) a quantitative study, drawing on educational and justice data acquired on all public middle and high school students in New York City; and (2) in-depth qualitative case studies of five public schools purposefully selected because they exemplified positive practices and have representative student populations.

Major Findings from the Quantitative Study

The quantitative study focused on those students who had a disciplinary incident during the 2011-2012 and 2012-2013 school years. The purpose of the analysis was to determine which factors were associated with future outcomes over a two-year follow-up period after an initial school incident. Outcomes included suspension on an initial incident, future suspensions after that initial incident, future juvenile or criminal arrests, and grade advancement. For definitions of key terms below, refer to page vi for key definitions.

Description of the Students

The students in this study consisted of 17% of all students in NYC public middle and high schools; that is, only students who had an incident in the sample years (11-12 or 12-13 school years). When compared to all public school students, those in our sample were disproportionately black, male, and born in the United States.

- **Background Characteristics:** The students in this study (those with an incident) were 45% black, 40% Hispanic, 9% white, and 6% Asian. The average age was 14 years old, and the students were 61% male. Three-quarters (75%) were economically disadvantaged, 23% were diagnosed with a learning or other disability, and 84% were born in the United States.

- **Student Performance and Outcomes:** One-third of the sample was classified as having chronic absenteeism prior to the initial incident in our analysis. Forty-four percent were suspended on their initial incident. Following this incident, 61% then had future chronic absenteeism; 51% had one or more future incidents (with 31% having a future violent incident), and 20% had a future juvenile or criminal arrest.

Student Characteristics and Suspension

- **Initial Incident Suspension:** The strongest predictor of suspension on the initial incident was the severity of the incident. However, even when controlling for severity and other factors, race/ethnicity (black and Hispanic) and sex (male) also significantly predicted suspension. Prior chronic absenteeism and prior suspensions also predicted receiving a suspension on the initial incident.

- **Impact of Race and Ethnicity:** Among the strongest predictors of future student outcomes (those after the initial incident) was race and ethnicity. Black students had the greatest likelihood of future suspensions of any subgroup followed closely by Hispanic students were also significantly more likely than others to have future incidents.

- **Additional Student Characteristics:** Economic disadvantage was a significant predictor of future suspension, along with student disability, prior chronic absenteeism, prior suspensions (including receiving a suspension on the initial incident), and being a boy.

Student Characteristics and Arrest

- **Sex, Race, and Ethnicity:** Of student characteristics, being male was the strongest predictor of future arrest. Both black and Hispanic students were also significantly more likely than others to have juvenile or criminal arrests following an initial incident in school.

- **Initial Incident and Behavioral History:** Suspension on the initial incident increased the likelihood that students would experience arrest at some point after the incident. Students with a history of prior arrests as well as prior suspensions were also more likely to have an arrest following the initial incident.

- **Additional Student Characteristics:** Students with disabilities, those who were chronically absent, and those who were economically disadvantaged were more likely to be arrested than their counterparts. ELL students and those who had advanced a grade in the past school year were less likely to be arrested in the future following an incident.

Student Characteristics and Academic Advancement

- **Suspension and Attendance:** Students with a suspension on the initial incident or a history of suspensions were significantly less likely than others to advance to the next grade or graduate. Prior chronic absenteeism was the strongest predictor of not advancing to the next grade.

- **Student Characteristics:** Being an English language learner was a strong predictor of not advancing to the next grade. Older students, boys, black and Hispanic students, and students with a disability were also less likely to advance to the next grade.

School Characteristics and Student Outcomes

- **School Climate:** Schools that create a positive climate influence student discipline and safety outcomes. Net of other factors, individual students who attended schools with a more positive climate (as rated in the annual NYC DOE-administered student, teacher, and parent surveys) were especially *unlikely* to have a future suspension. In addition, when controlling for other school-level characteristics, a more positive climate contributed to lower overall school incident and suspension rates.

- **Student Arrest:** School characteristics played a significant role in predicting future student arrest. The strongest predictor was school suspension rate; that is, schools with high suspension rates increase the likelihood that students face future arrest after an initial incident. School climate also influenced arrest significantly, such that schools with more positive school climate reduced the likelihood of arrest. The percentage of black students and Hispanic students also significantly contributed to future student arrest.

Role of Neighborhood Characteristics

Neither collective neighborhood disadvantage nor neighborhood crime rates significantly predicted the suspension rates within a given neighborhood's schools. These neighborhood-level measures also did not appear to be associated with school climate, indicating some level of independence of schools from their surrounding neighborhoods. The literature has yielded mixed findings, with some studies highlighting the importance of neighborhood on school outcomes, and others, such as ours, indicating that schools may be more immune to neighborhood influence than originally assumed. This is likely due to varying and limited measures of neighborhood characteristics.

Major Findings from the Case Studies

Qualitative case studies were conducted at five public middle and high schools. The five schools were selected through an iterative process that involved specific eligibility criteria (e.g., low suspension rates, representative student population), input from advisory board members, review of publicly available statistics, and indications of school interest and engagement in the research project. In short, although we sought schools with reasonably representative student demographics, we also purposefully sought out schools that offered the potential of yielding information about promising and replicable models. Data was collected through staff interviews and focus groups, school observations, and student and parent focus groups.

Focus on Restorative Justice

In general, the case study schools relied extensively on *restorative justice*, which may be broadly defined as a holistic approach to discipline that seeks to prevent or repair harm through inclusive processes and an effort to shift the focus from discipline to learning. Not all restorative practices involved responding to incidents; schools also used community-building circles and restorative conversations that sought to foster a climate of healthy relationships, empathy, and accountability among staff and students alike. The selected schools also made varying uses of additional positive practices such as peer-led mediation, mentoring, counseling, wrap-around services, and other supportive efforts.

Key Strategies and Challenges

- **Building Community:** Students and staff articulated efforts to foster community values as the foundation of restorative practices. Interviewees cited the positive effects on the

school community of conversations, such as in "advisory" periods, that addressed social issues, social-emotional learning, or budding conflicts, and, ultimately, sought to prevent conflicts in the first place or to address minor issues before they become serious.

- **Setting Priorities and Creating Buy-In:** Students and staff emphasized the role of school leadership in setting the tone for school staff and students by signaling priorities through resource allocation, hiring practices, training time or investment, and other strategies. In turn, interviewees noted that school staff can further reinforce positive priorities and create buy-in by holding circles and other positive practices in which adults, students, and parents all have the opportunity to participate and become invested.

- **Building Adult Accountability:** Because of the existing power dynamics in schools, interviewees identified adult accountability as a challenge of positive practices in schools. Accountability was discussed in terms of creating space for adults to have an ongoing process of learning, self-reflection, and growth, as well as using circles as a place for students and staff to discuss harm when caused by adults in school.

- **Holistic Student Support:** Interviewees described a constant demand for additional student supports. School staff expressed that they are challenged to address student issues that involve external systemic challenges (e.g., poverty, homelessness, access to healthcare).

- **Student Leadership:** Interviewees believed that leadership opportunities for students should be made a priority by school leadership and staff. Connecting this position to restorative practices, interviewees variously noted that students can be peer mentors or circle keepers; they can decide on discussion topics that are relevant to them, or they can be supported in starting student groups to create space for their own priorities.

Conclusion and Implications

The results from our quantitative study provide numerous insights into the causes and consequences of exclusion from school as well as the causes of future disciplinary incidents and arrests *after* the point when a first incident takes place.

In summarizing what we learned, individual student characteristics (race/ethnicity, sex, disability, and poverty) persistently predicted how outcomes in school, even when controlling for other important factors such as incident severity or school characteristics. The

characteristic with the single greatest effect was race/ethnicity, specifically being black followed closely by Hispanic. Schools with high suspension rates play a large role in driving students being arrested after an initial incident. There are several potential explanations for this, but further research to disentangle the complex relationship between high suspension rates in school and arrest rates outside of schools is necessary. When it comes to the role of neighborhood, our results indicate that factors *inside* the schools are likely playing a bigger role in school safety and climate than factors *outside* the school. This implies that schools are not simply reflections of their surrounding neighborhood. Instead, schools have the potential to be safe spaces for children, regardless of what is going on outside of their walls.

The qualitative case studies further highlight that there may be a less punitive way forward in addressing discipline and disparities, but that path requires significant investment resources and sufficient time to ensure whole-school culture change, paired with a commitment to a fundamental transformation in how we think about discipline and safe schools.

While many of the school-level factors that predicted poor student outcomes signal a need for resource reallocation and greater investment and supports, school administrators, principals, teachers, parents, and students must think critically about the underlying factors that are causing black students—particularly black boys—and poor students to be disproportionately disciplined, even in schools with positive school climates and low suspension rates. Just as states and cities across the country are making strides towards decarceration, with support from politicians and policymakers across political parties and groups, we can address social exclusion and criminal justice involvement where it begins: in schools and with young people who are dealing with multiple layers of disadvantage and are being excluded from education.

Chapter 1

Introduction

In response to high crime rates of the 1990s along with the rise of mass school shootings, schools across the United States began implementing zero tolerance policies, imposing punishments for all disciplinary infractions, even minor ones, and making greater use of the exclusionary sanctions of suspension and expulsion. Simultaneously, school systems increased the presence of law enforcement; some schools created and hired school safety officers or agents, while others received support from local police.

New York City, the largest school district in the country, was no exception to these trends. However, in recent years, extensive pressure from both inside and outside schools, backed by increasing evidence of the deleterious impact of punitive policies on both students and schools, have created opportunities to rethink school discipline, safety, and climate.

Research Questions

This comprehensive study of New York City schools aimed to examine the neighborhood-, school-, and student-level factors that contribute to student disciplinary outcomes, future justice system involvement, and academic advancement. The study sample included a total of 526,658 public middle and high school students from across the city. From this total, we isolated a sample of 87,471 students with at least one disciplinary infraction during either the 2011-2012 or 2012-2013 school years. Our goal was to answer the five essential research questions, below. To answer our questions, we implemented two overarching research strategies: (1) a quantitative study, utilizing official administrative education and criminal justice data; and (2) qualitative case studies of five public schools, purposefully selected because they exemplify positive practices and representative student populations.

Research Question 1: How do the personal characteristics of students involved in incidents, including their race/ethnicity, sex, economic status, disability status, and other factors, predict: (a) an initial suspension; (b) a future suspension; (c) a future arrest; and (d) academic advancement?

Research Question 2: How do school composition, discipline, and climate predict: (a) initial suspension; (b) a future suspension among students involved in initial incidents; (c) a future arrest among the same students; and (d) student academic advancement?

Research Question 3: How does school composition affect school climate? Alternatively, how do both school composition and climate impact overall school incident and discipline rates?

Research Question 4: How do neighborhood characteristics affect school suspension rates and school climate?

Research Question 5: How do positive practices work on the ground, and what lessons can be shared with other schools?

Prior Literature

Exclusionary School Discipline

Concern about school safety and violence led to the use of suspension and expulsion, key forms of exclusionary discipline, as a mechanism for removing problem students and deterring further misbehavior. The underlying basis for such practices holds that removing disruptive students should increase academic achievement for students overall because removal of disruptive influences enables more time to be spent on teaching rather than behavioral management (Bowditch 1993; Ewing 2000; Kang-Brown et al. 2013). A severe response is also meant to serve as a deterrent to misbehavior by others, again thought to potentially improve student safety overall (Noguera 1995; Skiba and Peterson 1999).

Longitudinal studies have shown that more than one-third of students in the United States will be suspended at least once between kindergarten and twelfth grade (Shollenberger 2015). However, no evidence has been found in support of improved academic performance due to the removal of students (Arum and Preiss 2009; Losen and Martinez 2013; Skiba et al. 2008), nor have studies found a deterrent effect (Bowditch 1993; Tobin, Sugai and Colvin 1996; Costenbader and Markson 1998; Raffaele-Mendez 2003). Moreover, for suspended students, research shows that suspension is linked to future academic failure, truancy, dropout, more suspension, anti-social behavior, and justice system involvement (Wald and

Losen 2003; APA Task Force 2008; Dynarski et al. 2008; Matjasko 2009; Balfanz, Byrnes and Fox 2012). A statewide Texas study that tracked seventh-grade students over eight years found that suspended or expelled students were almost three times more likely to be involved in the juvenile justice system a year later, even when controlling for school and individual factors (Fabelo et al. 2011). This trajectory, where suspended or expelled students are put on a path leading to increased justice system involvement, which in turn creates barriers for future success, has been dubbed the "school-to-prison pipeline" (ACLU 2008).

Disparities in Discipline

Black and brown students are most likely to be excluded from school and to suffer the downstream consequences of that exclusion. Controlling for behavior issues, teacher ethnicity, and other classroom factors, research has found that black and Hispanic students—especially boys—are disciplined at higher rates than are white students (Bradshaw et al. 2010). As evidence of the racial discipline gap, particularly affecting young black boys, prior research has consistently associated race with suspension, expulsion, and office referrals (Raffaele-Mendez, Howard and Ferron 2002; Skiba et al. 2002; Wallace et al. 2008; Gregory et al. 2010; Losen and Martinez 2013). Gregory and Weinstein (2007) provide evidence that black students are more likely to be suspended for simply defiant behavior, while other groups receive lesser disciplinary actions for comparable behaviors.

In addition to students of color, disparate enforcement of discipline policies also affects students who are economically disadvantaged and those with disabilities (Wu et al. 1982; Brantlinger 1991; Skiba et al. 1997; Noguera 2003; Achilles, McLaughen and Croninger 2007; Gregory and Weinstein 2007; Fabelo et al. 2011). Sullivan, Van Norman, and Klingbail (2014) showed that students with disabilities, students receiving free or reduced lunch, and students whose parents obtained a high school diploma or less education are disproportionately represented among suspended students. The intersection of these factors—for example, among students who are boys, black, poor, *and* have a disability—is believed to contribute to increased risk of exclusionary discipline, although no studies have fully documented this effect. Additionally, recent research has highlighted the school exclusion of girls of color, especially black girls, as particularly problematic (Morris 2016). Finally, school systems rarely, if ever, collect data on gender non-conforming and LGBTQ+ identifying youth, but some research has shown that they are also more likely to receive exclusionary discipline in response to their behavior (Snapp et al. 2015; Chmielewski et al. 2016).

Unfortunately, much of the research on disparities in discipline is limited by research designs with small sample sizes (often samples comprised of one school or school district) and cross-sectional data limited to a snapshot in time, without the context permitted by extended or multiple observation periods. Moreover, many analyses of racial and other disparities have failed to control for inter-correlated variables (e.g., race, socioeconomic status, prior academic achievement, school, community characteristics) that may each be linked to disciplinary outcomes. Among studies controlling for many such variables, two studies confirmed that the racial gap persisted (Fabelo et al. 2011; Skiba et al. 2011); a third study, however, found that school-level factors (total enrollment, percent black in the school, and principal perspectives on discipline) predicted suspension or expulsion more than individual student race, sex, and socioeconomic status (Skiba et al. 2014). Accordingly, as in many of the areas discussed above, research is suggestive—but limited.

Positive Interventions

Over time, declining public support for zero tolerance policies and concerns over the negative ramifications of suspension and expulsion prompted many schools to explore positive interventions instead (Lassen et al. 2006). One such approach, known as School-Wide Positive Behavior Support (SWPBS), combines a multitude of evidence-based practices, including examining individual student needs through data; developing school-wide expectations; teaching and reinforcing expectations via pro-social supports; and monitoring implementation and progress (Sugai and Horner 2002; Lassen et al. 2006). Evaluations of SWPBS have been mixed; some have found a decline in misbehavior (Oswald et al. 2005); detentions (Sunderland 2000); office disciplinary referrals and suspensions (e.g., see Metzler et al. 2001; Scott 2001; McCurdy et al. 2003; Lassen et al. 2006; Barrett et al. 2008; Muscott et al. 2008; Bradshaw et al. 2010) However, most of these studies lacked a true experimental or even quasi-experimental design, and fidelity to the evidence-based practices was found to be inconsistent.

In addition to positive behavioral interventions, schools have increasingly incorporated restorative approaches (Karp & Breslin 2001; Morrison 2005; Opportunity to Learn Campaign 2014). Restorative practices are a holistic, integrated approach to building school community and addressing conflict. Such practices allow for each person involved in an incident to be heard, hold accountable those who are responsible, and restore their relationship with the school community. Early research on restorative approaches found reduced future incidents, but the studies lacked appropriate comparison groups (McCold 2003; Hansen 2005; Stinchcomb, Bazemore, and Reistenberg 2006; IIRP 2009).

More recent studies have shown mixed results. The limited available research on restorative practices, overall, suggests that such approaches reduce incidents in school and suspensions, most notably for black and Hispanic students (Gregory et al. 2014; Anyon et al. 2016). However, Payne and Welch (2015) found that schools with larger populations of black students tended to employ fewer restorative practices. Although restorative interventions may reduce reliance on punitive discipline practices, Anyon et al. (2016) found that racial disparities in discipline generally remain. Black students, students eligible for free lunch, students with emotional disabilities, and students receiving special education services were still suspended at higher rates. A recent randomized controlled trial of 44 schools showing reduced suspension rates and reductions in racial disparities, along with no impact or a negative impact on academic outcomes. They also found no impact on gender and disability disparities and no impact on arrest (Augustine et al. 2018). Another cluster randomized controlled trial of 13 schools relying primarily on self-report data by students found no significant impact of a restorative practices intervention on 11 self-reported outcomes, such as bullying victimization and school connectedness. However, students' experience with restorative practices predicted improved school climate, school connectedness, peer relations and reductions in cyberbullying victimization (Acosta et al. 2019).

Neighborhood Characteristics and Schools

Prior research has explored the connection between neighborhood and school safety, with mixed results. Some studies have demonstrated that neighborhood factors such as concentrated poverty and chronic unemployment are connected to poor academic outcomes, youth delinquency, and violence and crime in schools, although few studies look at direct impacts (Gorman-Smith and Tolan 1998; Hay et al. 2007; Nieuwenhuis and Hooimeijer 2016). Neighborhood-level factors, including social disorganization and socioeconomic status, have been shown to be associated with school crime and disorder (Chen and Weikart 2008). Other studies have found no impact of neighborhood characteristics on school crime and violence, concluding that school-level factors such as student-teacher ratios and proportion of students of color play a larger role (Limbos and Casteel 2008).

New York City Schools

New York City, home to the largest school district in the United States, is no exception to the trends described above. The city's public schools educate over 1.1 million children across 1,800 schools, more than half of which operate in buildings shared with other public schools, charter schools, or non-profit organizations. The city's school system is divided into 34

separate school districts, all overseen by the NYC Department of Education (DOE).[1] The city also has the largest school safety agent force in the country, with over 5,000 agents—more than the entire Washington, DC police force. School safety agents are controversial; they are not employed by the DOE, nor are they police officers, but instead, serve as unarmed civilian employees of the New York Police Department (NYPD). An additional 200 police officers across the city are assigned to schools, tasked with post-incident surveillance and monitoring and random metal detector scanning, among other responsibilities.

New York City schools also show trends in the use of suspension similar to those seen across the country.[2] In 2011, the total number of suspensions in the city peaked at 73,441, before beginning a widely documented decline that continues to this day (Hassoun Ayoub 2013; Veiga 2017). Due to intentional efforts by the NYPD School Safety Division in collaboration with the DOE, along with declining crime rates overall, school-based arrests declined to an all-time low in the 2017-2018 school year (Mayor's Management Report 2018).

In recent years, the Mayor's Office and the DOE have unveiled a series of policies, practices, and resources aimed at addressing disparities in discipline and academic achievement. In 2015, they announced restrictions on the use of suspension, limitations on handcuffing, and new training for school safety agents in public schools (Decker and Snyder 2015). Revisions to the discipline code have made it harder to suspend students in grades K-2. Although an outright ban of suspensions for the youngest children has been recommended for years by advocacy groups and was seriously reviewed by the DOE, it was not ultimately approved. Expanded use of restorative practices and additional resources for mental health support by the DOE have also signaled an interest in addressing the root causes of student behavior.

Although New York City schools have followed many national trends in terms of discipline, safety, and academics, it is important to note the uniqueness of this school system. The student population in the city is exceptionally diverse, with over 40% of students speaking a language other than English at home (only about 14% are English language learners). Nearly

---

[1] Unlike many other school districts, New York City public schools are not overseen by an elected Board of Education (BOE), but a centralized Department of Education under the control of the city mayor with power granted by the state every 1-2 years.
[2] Expulsion is generally not allowed in New York City public schools, so this study and much research in NYC focuses on suspension or classroom removal. Children may be formally expelled only if they are older than 17 years old and are in general education (not a student with a disability or with an IEP), and the principal's request is reviewed and approved (potentially with a hearing at the student or parent's request) by the DOE.

three-quarters of students are considered economically disadvantaged, and the student population is predominantly children of color, with 41% Hispanic students and 26% black students. Only 15% of students are white (NYC Department of Education 2018). These demographics differ from New York City overall, which, according to the latest census, is 45% white, 29% Hispanic, and 24% black, suggesting that many white families may be choosing to educate their children outside of the public school system (Census 2017). In 2012, an examination of school systems across the country identified New York City as the third-most segregated school system, after Chicago and Dallas, despite reduced residential segregation (Fessenden 2012). More recent data have shown New York as the city with the most segregated schools in the country (Toure, 2018; Chokshi, 2014).

Additionally, when compared to the rest of the country, New York City has a slightly higher percentage of students with disabilities, with 19% of public school students having a disability (i.e. emotional, learning, behavioral, and physical) compared with only 13% nationally (National Center for Education Statistics 2018). Students with disabilities in New York may learn in fully integrated classrooms alongside peers who have no diagnosed disability or may learn in separate classrooms within integrated schools. The city also has a separate school district, D75, exclusively serving students with disabilities.

The Present Study

The unique combination of education data and criminal justice data allows in the current study enables us to fill a void in the literature on school discipline. Where prior studies have been limited to smaller samples, we will be able to add considerable strength to the existing literature with the largest school district in the country. In addition, we can match school data with justice system data to track student outcomes over time, and, essentially, test the existence and impact of the school-to-prison pipeline. We will explore the relationships between individual, school, and neighborhood characteristics with student and school outcomes, a study at this scale has not been conducted previously. Last, the use of qualitative case studies will add contextual information about the use of positive practices and their potential role in changing how schools approach discipline.

The remainder of this report includes a chapter describing the study design and methods for the quantitative study (Chapter 2). We present the findings from the quantitative analysis in Chapter 3 and the qualitative case study findings in Chapter 4. The report concludes with Chapter 5, which summarizes the study results, implications, and limitations.

Chapter 2

Quantitative Study Design & Methods

This chapter provides an overview of the quantitative study methods. (Qualitative methods are covered at the beginning of Chapter 4.) We describe the official records quantitative data, the sampling frame, key variables and outcomes of interest, and the analytic plan.[3] A study model diagram is available in Appendix A.

Data Sources

The quantitative study uses data from multiple sources at the individual, school,[4] and neighborhood levels. Data was requested from the New York City Department of Education (DOE) on all students grades six through twelve during the 2010-2015 school years. Data was also requested from the New York State Office of Court Administration (OCA) on all individuals under the age of 21 arrested in New York City during the same time period. OCA provided information from both its adult criminal court data and juvenile and family court data to ensure all relevant ages were included.[5] Due to confidentiality concerns, OCA transferred the data securely to the DOE's Research and Policy Support Group. DOE staff then used identifiers—including names and aliases, date of birth, sex, race, and any other

[3] We also collected primary data that included a survey of middle and high school principals in NYC public schools. The purpose of this survey was to gather information not collected by NYC DOE about security measures, resources, positive discipline, school environment, and principals' attitudes about suspension. Out of an initial list of 891 schools, 470 responded, but we were only able to use 230 due to duplicates, blank surveys, and schools that did not match with our student incident file. Several regression models were tested; however, the measures created poorly predicted the outcomes. We ultimately decided not to include the survey in the report.

[4] Not all NYC public schools were included in the analysis. Specifically, charter schools, Districts 75, 79, and 88; home instruction schools, and alternative programs were excluded from the study. The excluded schools represent nontraditional and/or specialized schools with student populations that differ from the general student population.

[5] In New York during the study period, cases involving criminal charges against youth ages 16 and above were heard in the criminal court, while criminal charges against youth under age 16 were handled by the juvenile and family court. Adult criminal court data includes all cases, including dismissals. Family court data for those under 16 does not include cases that did not make it to court.

relevant information—to match the OCA data to their student data. We were provided with a set of de-identified data files, with a scrambled student identification variable that matched across all datasets.

For neighborhood data, we utilized publicly available sources. First, we used U.S. Census data from the American Community Survey 2010-2015 estimates to obtain information on neighborhood demographics and economic indicators for each Neighborhood Tabulation Area (NTA).[6] We used specialized mapping software (ArcGIS) to identify the NTA location of each school address. Second, we calculated crime rates based on NYPD arrest data and then assigned a neighborhood crime rate to each school. Each police precinct reports arrest data; however, precincts do not easily fit within NTAs. We compared NTA and precinct maps and assigned arrest data according to which precinct covered *most* of any NTA served by more than one precinct. In instances where multiple precincts fell within a single NTA, we compared arrest data from each encompassed precinct for substantial differences. Because we did not detect substantial differences in any of these (16) cases, no further adjustments were made; the entire NTA was assigned the crime rate for the principal overlapping precinct.

For analytic purposes, the data was ultimately reduced and combined into three data files: (1) student data; (2) school data; and (3) neighborhood data.

Sample

The sample includes 87,471 middle and high school (grades 6-12) students attending NYC public schools, who had one or more disciplinary incident during the 2011-2012 or 2012-2013 school years (hereafter, 12SY and 13SY). To be clear, our sample represented a subset

---

[6] We collected data based on NTAs rather than census tracts because there were too few schools per census tract to conduct a multilevel analysis. According to the NYC Department of City Planning, NTAs are “aggregations of census tracts from the 2010 census that are subsets of New York City's 55 Public Use Microdata Areas (PUMAs), which roughly represent the city’s Community Districts....Regarding the decennial census, these geographic areas offer a good compromise between the very detailed data for census tracts (2,168) and the broad strokes provided by PUMAs (55). For the American Community Survey, NTAs offer a statistically reliable alternative to the high sampling error that renders data for most individual census tracts unusable.” (See https://www1.nyc.gov/assets/planning/download/pdf/data-maps/maps-geography/census-factfinder/cff-faq.pdf for more information).

of the 526,658 students who attended a public middle or high school across the two sample years; the sample exclusively includes students from either sample year *who had at least one disciplinary incident.* A disciplinary incident is defined as any school-based event that resulted in an incident report on the NYC discipline tracking system (OORS), all of which fall into the disciplinary categories found in the NYC DOE Discipline Code, regardless of the response to that incident. Data were obtained for all 87,471 students from 2010 to 2015.

For each student, an initial incident was selected from either 2011-2012 (12SY) or 2012-2013 (13SY). For students who only had one incident, that single incident was chosen as the reference point; for students with more than one incident in the sample years, the initial incident was chosen randomly. Students who did not have an incident in those two sample years were excluded from the analysis.

Incidents prior to the date of the initial incident (as early as September 8, 2010) were coded as *prior incidents*; events after the date of the initial incident (as late as June 26, 2015) were coded as *future incidents*. Students were tracked for two years after their initial incident.

Key Variables

Outcome Measures reflect both student- and school-level outcomes and were created using DOE data. For students, all dependent variables were calculated after identifying an initial incident and included an initial suspension (i.e. a suspension on the initial incident), any future school incident, any future school suspension, any future classroom removal, future other response, and any future arrest (arrest could be as late as December 31, 2015). The matched criminal justice data was incorporated into the student-level dataset. Future grade advancement (from grade to grade or to graduation) was also part of the DOE data.

School suspensions in New York City are divided into two types: principal's suspensions and superintendent's suspensions. Principal's suspensions are the equivalent of in-school suspensions and are five days or less. Superintendent's suspensions are out-of-school suspensions and are six days to one year. Superintendent's suspensions require approval from central DOE offices while principal's suspensions do not. We examined both outcomes in this study but often reported them as one statistic: suspension. As noted in later chapters, the results demonstrated the same trends for both principal's and superintendent's suspensions.

Incidents in New York City schools are categorized by level according to the discipline code. The discipline code is updated annually and can be found online.[7] For the purposes of data reduction, we categorized incident levels in the following way:

- Low-level: Level 1 and 2 incidents, described as “uncooperative” or “non-compliant behavior”; for example, lateness and absenteeism, dress code violations, and profane language.
- Medium-level: Level 3 incidents, described as “disruptive behavior”; for example, disobeying authority, using slurs, minor altercations, and vandalism.
- High-level: Level 4 and 5 incidents, described as “aggressive/injurious behavior” and “seriously dangerous or violent behavior”; for example, rape and sexual assault, illegal drugs, weapons possession or use, serious physical violence, and group violence.

We also recoded incidents based on their descriptions in the discipline code to a series of categories. For the purposes of this report, we focus only on the categories that were most common in the sample: violent (e.g., physically aggressive behavior, creating a risk of injury); disruptive/inappropriate (e.g., rude or disruptive behavior disrupting the educational process, defying authority); and absenteeism (e.g., unexcused absence from school). All outcomes were recoded as binary variables (1=yes; 0=no).

Student-level variables were created using DOE data, including demographic information, attendance, prior academic advancement, prior disciplinary incidents, severity level (medium and high) of the initial incident, and initial suspension.[8] Using the matched criminal justice data, prior arrests (as early as January 1, 2010) were calculated based on the previously-identified initial incident in school.

School-level variables included a demographic profile for each school, student-teacher ratio, and incident and suspension rates. School climate was obtained using the total safety and respect score from the 2012-2013 annual NYC School Survey. The total score includes

---

[7] See the following website for a copy of the full discipline code: https://www.schools.nyc.gov/school-life/rules-for-students/discipline-code.
[8] Initial incident suspension is an outcome in our first MLM model, and it is a predictor in our following MLM models.

student, teacher, and parent responses.[9] School safety and respect is defined by 17 items (see Appendix B for the full list of questions), including questions about whether students treat each other with respect and feel safe from being bullied or harassed by other students; the fairness of discipline; and safety on and outside of school property. Response categories range from one ("strongly disagree") to four ("strongly agree"). Students are also asked to report how often they see the following: illegal alcohol and drug use and gang activity. Response categories range from one ("never") to four ("all of the time"). Teachers and parents are asked variations of the same questions.

Table 2.1. Variables Used in the Analyses by Level

Level		
Outcomes	Initial Suspension Disciplinary Incident Suspension Classroom Removal Other Disciplinary Action	Arrest Grade Advancement High-level incident Violent Incident Disruptive/Inappropriate Incident Absenteeism Incident
Student Characteristics	Age Male Black Hispanic Student with Disability English Language Learners	Economic Disadvantage Prior Grade Advancement Prior Chronic Absenteeism Number of Prior Incidents Number of Prior Arrests
School Composition	Racial/Ethnic Composition Students with Disabilities English Language Learners	Economic Disadvantage Student-Teacher Ratio
School Climate & Discipline	Perceptions of School Safety and Respect	Suspension Rate
Neighborhood Characteristics	Neighborhood Disadvantage	Crime Rate

Neighborhood-level variables included a neighborhood disadvantage index, calculated based on the neighborhood's median family income, percent of female-headed households, percent below poverty, percent using food stamps/SNAP, percent with less than a high school diploma, percent black, percent Hispanic, percent unemployed, and the ratio of poverty to income. All measures were standardized and summed (Cronbach's alpha = .775).

---

[9] For more information on the NYC School Survey Report Guide, see https://infohub.nyced.org/docs/default-source/default-document-library/2015nycschoolsurveyguide6252015.pdf?sfvrsn=30efb133_2.

The crime rate for each neighborhood was the second neighborhood variable and was a combination of major felonies, non-major felonies, misdemeanors, and violations. All categories were summed and divided by the neighborhood population.

Table 2.1 lists the variables used in the analyses at each level. The first row specifies the outcome variables. The rows beneath are the variables for the student-, school-, and neighborhood-level measures. See Appendix B for a full list of variables, details on how the conceptual measures in Table 2.1 are operationalized, and data sources.

Quantitative Analysis

Multilevel Modeling (MLM) was used to answer research questions regarding the impact of upper-level variables (i.e., neighborhood or school) on lower-level outcomes (i.e., school or student). MLM techniques are appropriate in instances where data is nested within one or multiple levels. Such is the case in the current study, where schools are nested within neighborhoods and students are nested within schools. Unlike traditional regression, MLM takes into account that students within one school, for example, could be more similar to each other than students across different schools, which could lead to inaccurate conclusions about the data. Hierarchical linear modeling (HLM) software was used for the multilevel analysis (Raudenbush and Bryk 2002).[10] Ordinary least squares regression (OLS) was also used to predict school-level only outcomes.[11]

---

[10] Hierarchical logistic modeling, the primary type of analysis, was used where the outcome variables were binary (e.g., future incidents, future arrest, high suspension rate). Poisson regression models were also used test continuous outcome variables (i.e., number of suspensions and number of arrests), because they were heavily skewed to the right. The results were no different from the logistic models. We ultimately chose to use hierarchical logistic modeling, because the interpretation of odds ratios can be easier for different audiences. Hierarchical linear modeling was used in the neighborhood analysis because school climate is a continuous variable.

[11] The log of incident and suspension rates was taken to avoid specification errors in the models, because of the non-linear relationships between the independent variables and incident and suspension rates.

A Note about Identity Variables

The datasets provided by the DOE included a variety of identity variables, primarily race (categorized as black, white, Hispanic, Asian, other, and unknown), sex (male and female), and disability (a series of categories, along with a yes/no variable). For the purposes of quantitative analyses, we use these categories as-is, since we do not have any way of verifying the information. We use the term Hispanic throughout this report, although we recognize that the term Latinx may be considered more inclusive. However, since DOE utilizes Hispanic in its registration process, we cannot determine how people would have responded if the term Latinx had been used instead (i.e., Hispanic might include some but not all individuals who identify as Latinx and vice versa).

The limitations of these types of problematic categories for race/ethnicity have been documented in many fields (Choo and Ferree 2003; Kaplan and Bennett 2003; Cole 2009), but there are some important considerations when thinking about school data in particular. Parents or guardians are likely the ones to register and indicate identifying characteristics for their children, although this may vary based on student age. The sex variable is a simple M/F selection on the school registration form and may not be a true representation of gender identity for all students. We utilize the term sex in this report as biological sex at birth, in order not to confuse the data available with true gender identity.

Parent selection of race/ethnicity or gender may also not be representative of how a young person identifies themselves and we acknowledge the limitations of relying on such variables. Additionally, the race/ethnicity categories are mutually exclusive and important sub-populations (such as people who identify as both black and Hispanic) are not identified appropriately. While the DOE does have a multi-racial category, the percentage is so low that it was combined with the other category (along with Native Hawaiian, Native American, and Pacific Islander). Disability data was also used as-is, but we primarily focused on the dichotomous variable (i.e., any noted disability, yes or no) and did not explore the nuances of disability subtype for this report.

Other data that we believe is relevant to student outcomes, such as sexual orientation of students, is not collected in administrative data sources. In our qualitative research, we did not ask for personally identifiable characteristics from study participants and did not report on them.

Chapter 3

Student and School Outcomes

This chapter covers results from the quantitative study and research questions one through four, examining the associations of neighborhood, school, and student characteristics with both school and student outcomes.

Overview of Final Sample

Data were obtained for 526,658 students across 1,571 public schools across New York City. Corresponding to official DOE statistics, this student population was 14% white, 40% Hispanic, 29% black, and 17% Asian. The sample was 51% male and the average age was 14 years old. Twelve percent of the sample was composed of English language learners, and 14% were students with disabilities. Most students in the sample (71%) were economically disadvantaged[12] and born in the United States (77%). Ninety percent had advanced to the next grade in the prior year, and 33% were chronically absent.[13]

As described in Chapter 2, this study examined only the subset of all students with incidents in the school years 2011-2012 and 2012-2013 (17%). The final sample of students with an index event (incident) during the study years included 87,471 students across 804 schools and 84 neighborhoods in New York City. Henceforth, when referring to "the sample," we are referring to this specific subset of students with an incident, rather than to all students in the full student population.

---

[12] Economically disadvantaged is defined as students who are eligible for free or reduced price lunch or who have been identified by the Human Resources Administration as receiving certain types of public assistance, according to the NYC DOE.
[13] Students who miss one or more months or who attend less than 89% of the school year are considered chronically absent by the DOE.

Demographics

As would be expected for this sample, students with an incident differed from the overall student population in several important ways. They were slightly older, on average, than the general student population (15 years of age). Consistent with the literature on school discipline, black students (45%), boys (61%), students with disabilities (23%), and economically disadvantaged students (75%) were over-represented in the sample (see Table 3.1).

Table 3.1. Student Demographics

Total Sample	87,471
Avg. age at incident	14.5
Grade at Incident	
6th-8th grade	45%
9th grade	19%
10th grade	17%
11th grade	11%
12th grade	9%
Race/Ethnicity	
White	9%
Black	45%
Hispanic	40%
Asian	6%
Unknown	1%
Sex	
Male	61%
Female	39%
Other Student Characteristics	
English language learner (ELL)	11%
Student with disability	23%
Economically disadvantaged	75%
Born in the US	84%

[1] Prior grade advancement is missing for 10% of students. The percentages reported here are out of the valid number of students.

Behavioral History

Nearly half of the sample (42%) had a prior incident; each of these prior incidents was met with one of four response types: principal's suspension, superintendent's suspension, classroom removal, or other (an ambiguous category that could include responses ranging from parent outreach to detention to other decisions by the principal). Students cannot

receive more than one disciplinary response for each incident. A majority (81%) had advanced from one grade to the next in the year prior to their index event. Fourteen percent had been chronically absent, and six percent had an arrest in the prior year (see Table 3.2).

Table 3.2. Student Behavioral History[1]

Total Sample	87,471
Prior Academic Behavior	
Prior chronic absenteeism	14%
Prior grade advance[2]	81%
Prior Disciplinary Action	
Any prior school incident	42%
Average number of prior school incidents	1.35
Any prior disciplinary response[3]	
Any suspension	26%
Any principal suspension (1-5 days)	23%
Any superintendent suspension (5+ days)	7%
Any classroom removals	5%
Any other response	29%
Prior Arrest	
Any prior arrest (family, criminal, or supreme court)	6%

[1] The data in this table refers to the behavioral history of the student during the year prior to the students' initial incident.
[2] Prior grade advance data was missing for 13% of students. The percentages reported here are out of the valid number of students.
[3]The percentages will not always add up to the expected percent because a student could have more than one prior incident with different disciplinary responses.

Initial Incident and Discipline

Table 3.3 presents the characteristics of students' initial incidents that resulted in study eligibility. Definitions of high-, medium-, and low-level incidents are presented in Chapter 2. Of students' initial incidents, 44% were high-level, 27% were medium-level, and 29% were low-level. Apart from the NYC DOE incident level distinctions, 41% of incidents were violent; 30% were disruptive/inappropriate, and 12% were related to absenteeism.[14] The majority of these incidents (55%) resulted in a response other than suspension or classroom

---

[14] We created these categories using the NYC DOE 2013 Discipline Code descriptive incident information. For more information, see the variable descriptions table in Appendix B.

removal. Suspensions were given in 40% of incidents, with principal suspensions occurring more often (33% principal, 7% superintendent). Last, 5% of incidents resulted in classroom removal.

Table 3.3. Initial Incident Type and Student Discipline

Number of Students	All 87,471	Black 39,308	Hispanic 34,632	White 7,914	Asian 4,967
Initial Incident Severity Level					
Low (Levels 1–2)	29%	28%	28%	32%	26%
Medium (Level 3)	27%	27%	26%	30%	30%
High (Levels 4–5)	44%	46%	46%	38%	44%
Incident Type[1]					
Violent	41%	43%	40%	37%	39%
Disruptive/inappropriate behavior	30%	22%	19%	19%	14%
Absenteeism	12%	10%	14%	15%	12%
Incident Disciplinary Actions					
Suspensions	40%	41%	40%	35%	40%
Principal suspensions (1-5 days)	33%	33%	33%	31%	34%
Superintendent suspensions (5+ days)	7%	8%	7%	4%	6%
Classroom removals	5%	5%	5%	4%	3%
Other response	55%	55%	55%	61%	57%

Note: Incident data includes only those incidents that resulted in disciplinary action.
[1]Violent, Disruptive/inappropriate behavior, and absenteeism were reported in this table because they were the three most common incidents. Other incidents include gang, sex offense, harassment/bullying, bias, attempted violent, weapon, property, drug, clothing, and other. Each of these incidents comprised less than 10% in the sample.

Future Incidents and Discipline

More than half of the sample of students with an initial incident (51%) had a future incident (a day or more after the initial incident) during the study period. One-third of future incidents (32%) were high-level, while 28% and 26% were medium- and low-levels, respectively. Thirty-one percent of incidents were violent; 24% were disruptive/inappropriate, and 15% were related to absenteeism. A third (32%) of these future incidents were met with a suspension; 7% resulted in a classroom removal; 39% received some “other” form of disciplinary action. Twenty percent had a future arrest, that is, an arrest that occurred at least one day after the initial incident. Sixty-one percent were chronically absent in the period after the initial incident and 78% moved on to the next grade (see Table 3.4).

Table 3.4. Future Student Discipline, Arrest, and Academic Behavior

Number of Students	All 87,471	Black 39,308	Hispanic 34,632	White 7,914	Asian 4,967
Future School Incidents					
Any future school incidents	51%	57%	51%	42%	33%
Future Incident Severity Level					
Any low-level incidents	26%	30%	25%	23%	14%
Any medium-level incidents	28%	32%	26%	22%	16%
Any high-level incidents	32%	37%	31%	22%	18%
Future Incident Type					
Any violent	31%	36%	29%	21%	17%
Any disruptive/inappropriate behavior	24%	28%	22%	18%	11%
Any absenteeism	15%	17%	15%	12%	8%
Future Disciplinary Actions					
Any future disciplinary actions	51%	57%	51%	42%	33%
Future disciplinary action rate/year[1]	0.99	1.19	0.89	0.74	0.47
Any future suspensions	32%	37%	30%	23%	18%
Future suspension rate/year	0.33	0.40	0.30	0.23	0.16
Any principal suspensions (1-5 days)	28%	32%	26%	21%	16%
Any superintendent suspensions (5+ days)	11%	17%	10%	5%	5%
Any future classroom removals	7%	8%	6%	5%	2%
Any future other response	39%	39%	37%	32%	23%
Future Arrests					
Any future arrests	20%	23%	19%	14%	12%
Future arrest rate/year	0.16	0.19	0.15	0.10	0.09
Future Arrest Severity					
Any violations	3%	4%	3%	3%	2%
Any misdemeanors	17%	20%	17%	12%	10%
Any felonies	6%	8%	5%	3%	3%
Future Academic Advancement[2]					
Future grade advance	78%	78%	77%	83%	85%

Note: Incident data includes only those incidents that resulted in disciplinary action.

[1] Rates for future discipline and arrest are used in lieu of count outcome variables. For dichotomous outcomes, students were tracked for up to two years.

[2] Future chronic absenteeism is not included due to missing data related to student graduation.

The Role of Student Characteristics

The first research question focused on the personal characteristics of students and whether those characteristics are related to suspension on their initial incident, as well as a future suspension, a future arrest, and academic achievement. We hypothesized that students' demographics (i.e., black, male, and student with a disability), school behavioral history (i.e., prior academic achievement, prior chronic absenteeism, and disciplinary history), and severity of the incident (medium- and high-levels) would predict suspension on the initial incident. In addition, students' demographics, school behavioral history, and an initial suspension would predict a future suspension, as well as a future arrest. We further anticipated that the same characteristics would predict the diminished likelihood of advancing to the next grade.

Research Question 1: How do the personal characteristics of students involved in incidents, including their race/ethnicity, sex, economic status, disability status, and other factors predict: (a) an initial suspension; (b) a future suspension; (c) a future arrest; and (d) academic advancement?

Initial Suspension

The strongest predictor of suspension on the initial incident was the severity of the incident, as shown in Table 3.5. Students with a history of chronic absenteeism or a disciplinary history were more likely to receive a suspension on the initial incident. Further, older students, boys, and black students were significantly more likely to receive a suspension on the initial incident, when controlling for other factors, including incident severity. Notably, excluding severity, the odds ratios for other factors are almost uniformly close to 1.0 indicating very small effect sizes.

Future Suspension

Table 3.5 also shows the results for students receiving a suspension in the future—that is, any time after the response to the initial incident. Race emerged as the strongest predictor; black students were most likely to have a future suspension. Hispanic students also showed significantly greater likelihood of having a future suspension, second only to black students. Boys, those students who had a disability, who were economically disadvantaged, and those who were chronically absent were also more likely to have a future suspension. As expected, students who were suspended on their initial incident were also more likely to be suspended again in the future. Similarly, number of prior suspensions was a significant predictor of

future suspension. The results followed similar trends across disciplinary outcomes (i.e. classroom removal and other discipline) as well as across incidents and subcategories (i.e., violent, disrupt/inappropriate, and absenteeism) (see Appendix C).

Table 3.5. Student and School Predictors of Initial and Future Suspension

	Initial Suspension	Future Suspension
Number of Cases (Students)	87,471	87,471
Number of Cases (Schools)	804	804
Student-Level[1]	**Odds Ratios**	**Odds Ratios**
Age	1.078***	.837***
Male	1.036*	1.263***
Black	1.064*	1.702***
Hispanic	1.048	1.667***
English language learner	.989	.948
Student with disability	.963*	1.291***
Economically disadvantaged	1.033	1.121***
Prior grade advance	.957	.951
Prior chronic absenteeism	1.157***	1.246***
Number of prior suspensions	1.085***	1.486***
Initial incident severity	6.557***	
Initial Suspension		1.293***
School-Level[2]	**Odds Ratios**	**Odds Ratios**
% Black	1.003	.999
% Hispanic	1.008*	.997
% Students with disabilities	1.000	1.032***
% English language learners	.997	1.004
% Economically disadvantaged	.996*	.998
Student-teacher ratio	1.063**	.963***
School climate	.955	.942
Constant	.602***	.204***

Note: Initial and Future suspensions are binary outcomes (1=yes, 0=no).
[1] Initial incident severity was not used to predict future suspension.
[2] Suspension rate is not included as a school-level variable, because it was created using suspensions at the incident level, which would inflate the odds ratio.
*p<.05, **p<.01, ***p<.001

Future Arrest

In addition to predicting future school discipline, this study explored the relationship between student characteristics, school characteristics, and future student arrest (Table 3.6). In alignment with our expectations, being male was the strongest individual-level predictor of future arrest and having a history of arrest was also a significant predictor. Notably, suspensions significantly increased the likelihood of having a future arrest. Specifically,

students with a greater number of prior suspensions and those with a suspension on their initial incident were more likely to be arrested. Further, students with prior chronic absenteeism were also more likely to have a future arrest, as well as black students, Hispanic students, those with a disability, and those with economic disadvantage. English language learners and students who advanced to the next grade or graduated were less likely to have a future arrest.

Table 3.6. Student and School Predictors of Future Arrest

	Future Arrest
Number of Cases (students)	87,471
Number of Cases (schools)	804
Student-Level	**Odds Ratio**
Age	1.248***
Male	2.236***
Black	1.389***
Hispanic	1.125**
English language learner	.784***
Student with disability	1.113***
Economically disadvantaged	1.196***
Prior grade advance	.731***
Prior chronic absenteeism	1.826***
Number of prior suspensions	1.284***
Number of prior arrests	1.888***
Initial suspension	1.281***
School-Level	**Odds Ratio**
% Black	1.006***
% Hispanic	1.005**
% Students with disabilities	.992
% English language learners	.996
% Economically disadvantaged	1.012***
Student-teacher ratio	1.026*
School climate	.904*
Suspension rate	2.709***
Constant	.092***

Note: Arrest is a binary outcome (1=yes, 0=no).
*p<.05, **p<.01, ***p<.001

Academic Advancement

Exclusionary school discipline has also been shown to negatively impact student academics. Although we ultimately utilized a simplified measure of academic achievement (grade advancement), the results are still instructive (Table 3.7). Grade advancement includes both

advancing to the next grade and graduating for students who were in twelfth grade during our sample years. Students in our sample (those with an incident) who had advanced grades in the past were more likely to advance to the next grade or graduate the following year. Notably, students who received a suspension on their initial incident were less likely to advance to the next grade, as were those with a history of suspensions. Additionally, students with prior chronic absenteeism were also less likely to advance to the next grade or graduate.

Table 3.7. Student and School Predictors of Grade Advancement

	Grade Advancement
Number of Cases (students)	87,471
Number of Cases (schools)	804
Student-Level	**Odds Ratio**
Age	.806***
Male	.906***
Black	.897***
Hispanic	.847***
English language learner	.692***
Student with disability	.907***
Economically disadvantaged	1.086**
Prior grade advance	1.257***
Prior chronic absenteeism	.408***
Number of prior suspensions	.868***
Initial suspension	.885***
School-Level	**Odds Ratio**
% Black	.992***
% Hispanic	.993**
% Students with disabilities	1.007
% English language learners	.998
% Economically disadvantaged	.994
Student-teacher ratio	.961**
School climate	1.148**
Suspension rate	.455***
Constant	7.647***

Note: Grade Advancement is a binary outcome (1=yes, 0=no).

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

The Role of School Characteristics

Impact on Student Outcomes

The second research question sought to examine the role of the school on student outcomes. Results are presented in Tables 3.5 through 3.7 above; school characteristics are presented in the lower portion of the tables. We hypothesized that schools with higher percentages of students who were black, Hispanic, with disabilities, and economically disadvantaged would have a greater likelihood of suspension on the initial incident, future suspension, and future arrest for students. We also hypothesized that these schools would be less likely to have students advancing to the next grade. Conversely, we anticipated that students in schools with a positive school climate would have fewer incidents and suspensions, and greater academic advancement.

Research Question 2: How do school composition, discipline, and climate predict: (a) initial suspension; (b) a future suspension among students involved in initial incidents; (c) a future arrest among the same students; and (d) student academic advancement?

Initial Suspension Of the measures of school composition presented in Table 3.5 above, student-teacher ratio emerges as the strongest predictor of receiving a suspension on the initial incident. That is, schools with more students per teacher see higher incidence of suspension on the initial incident. Students in schools with a higher proportion of Hispanic students are also slightly more likely to be suspended on the initial incident; students in schools with a greater proportion of economically disadvantaged students were slightly *less* likely to receive a suspension. On the other hand, school climate does not appear to significantly predict initial suspension.

Future Suspension As shown in Table 3.5, in predicting future suspension, the primary significant predictor that emerged (beyond student-level predictors) was disability. That is, students attending schools with a higher proportion of students with disabilities are more likely to have a future suspension. As opposed to initial suspension, student-teacher ratio in this case appears to reduce the likelihood of future suspension, although it is important to note that both odds ratios are close to 1.00.

Future Arrest With regards to future arrest (Table 3.6), many school-level factors predicted future arrest. The most significant predictor of student arrest was schoolwide suspension rate; that is, students in schools with higher suspension rates were significantly more likely to have a future arrest. Students in schools with greater proportions of black students, Hispanic students, and economically disadvantaged students were also more likely to be arrested in the future. Student-teacher ratio was also a significant predictor. Conversely, students in schools with a more positive school climate were less likely to have an arrest.

Academic Advancement Some school characteristics also impacted grade advancement for students with initial incidents (Table 3.7). Notably, students in schools with a positive school climate were significantly more likely to advance to the next grade or graduate. On the other hand, students were less likely to advance to the next grade or graduate if they attended schools with higher percentages of black students or Hispanic students or schools with more students per teacher. A high overall school suspension rate had a particularly strong negative impact on grade advancement.

Impact on School Outcomes

The third research question focused on the role of school characteristics on school outcomes. We predicted that incident and discipline rates would increase in schools with higher percentages of students who were black and Hispanic, with disabilities, economically disadvantaged, and schools with a negative school climate.

Research Question 3: How does school composition affect school climate? Alternatively, how do both school composition and climate impact overall school incident and discipline rates?

School Incident and Discipline Rates School characteristics were related to both school incident and suspension rates (Table 3.9).[15] Notably, schools with a more positive school climate had significantly lower incident and suspension rates. In addition, the percent of students with disabilities in schools was significantly related to higher incident and

[15] Residuals in both outcomes exhibited a non-linear relationship between the predictor and outcome variables; therefore, a log transformation was applied to both to correct for non-linearity.

suspension rates.[16] Schools with higher proportions of black and Hispanic students had higher suspension rates, despite *not* having significantly different incident rates.

Table 3.9. The Impact of School Characteristics on Incident and Suspension Rates

	Incident Rate (log)		Suspension Rate (log)	
Number of Schools	804		804	
	Coefficient	S.E.	Coefficient	S.E.
% Black	-.001	.002	.012	.002***
% Hispanic	.005	.003	.012	.003***
% Students with disabilities	.024	.007***	.030	.006***
% English language learners	.004	.003	.007	.003*
% Economically disadvantaged	-.006	.004	-.008	.004*
Student-teacher ratio	.097	.015***	.001	.014
School climate	-.908	.060***	-.670	.056***
Constant	8.366	.654***	1.005	.609

Note: The logs of incident and suspension rates were used to correct for non-linearity.
*p<.05, **p<.01, ***p<.001
S.E = standard error

School Climate Incident rate was the only disciplinary measure that was significantly related to school climate (suspension rate was not included in the table); those schools with lower incidence rates had a more positive school climate (Table 3.10). Schools with more black students, students with disabilities, and economically disadvantaged students, as well as schools with fewer teachers per student had lower school climate scores—i.e., worse perceptions of school climate.

---

[16] In addition to conducting a significance test, we calculated the effect size for both models, and they were .43 (incident rate) and .55 (suspension), indicating a medium effect size. Classroom removal and other discipline rates were analyzed, but the R-squared and effect size of both were below .1, indicting the predictors were a poor fit and had a low effect on the outcomes. Thus, they were not included in the report.

Table 3.10. The Impact of School Characteristics and Incident Rates on School Climate

	School Climate	
Number of Schools	804	
	Coefficient	S.E.
% Black	-.004	.001**
% Hispanic	.001	0.001
% Students with disabilities	-.019	.004***
% English language learners	-.001	.002
% Economically disadvantaged	-.005	.002*
Student-teacher ratio	-.045	.008***
Incident Rate	-1.337	.119***
Constant	9.303	.190***

Note: School climate is a continuous variable.

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

S.E = standard error

The Role of Neighborhood

The fourth research question focused on the role of the local neighborhood in school outcomes. We hypothesized that schools in neighborhoods with greater disadvantage and more crime would have higher suspension rates and a negative school climate due to their surroundings.

Research Question 4: How do neighborhood characteristics affect school suspension rates and school climate?

The results to answer this research question are presented in Table 3.11. Contrary to our hypothesis, neither neighborhood disadvantage nor crime rates significantly predicted high suspension rates[17] when controlling for school-level variables.[18] We examined multiple

[17] Discipline rates were transformed into three binary outcomes: low, medium, and high. None of the outcomes were significant. High suspension rate is the only outcome that is presented.
[18] Only the neighborhood-level results are presented. Predictors at the school-level include % black, % Hispanic, % students with disabilities, % English language learners, % economically disadvantaged, student-teacher ratio, and perceptions of safety and respect.

models, isolating violation-level crime, misdemeanors, non-major felonies, and major felonies. None of them were significantly related to school outcomes.

Table 3.11. Neighborhood Predictors of High Suspension Rate

Number of Neighborhoods	High Suspension Rate 84
	Odds Ratio
Neighborhood disadvantage	.980
Crime rate	1.420
Constant	.275***

Note: High Suspension Rate is a binary outcome (1=yes, 0=no).
*p<.05, **p<.01, ***p<.001

We also tested the impact of neighborhood characteristics on school climate, presented in Table 3.12. Neighborhood disadvantage and crime did not significantly affect school climate when controlling for school-level characteristics[19]. That is, the climate of schools in neighborhoods with higher crime and relatively more disadvantage was not significantly worse than the climate of schools in neighborhoods with less crime and disadvantage. It is possible that the neighborhood units covered too large of an area, resulting in null findings for both models. A smaller unit of analysis, such as a census block, would have been ideal; however, there were too few schools per block for a multilevel model, running the risk of incorrect estimates.

Table 3.12. Neighborhood Predictors of School Climate

Number of Neighborhoods	School Climate 84	
	Coefficient	S.E.
Neighborhood disadvantage	-.009	.006
Crime rate	-.031	.297
Constant	7.546	.034

Note: School climate is a continuous outcome.
*p<.05, **p<.01, ***p<.001
S.E. = standard error

[19] Only the neighborhood-level results are presented. Predictors at the school-level include % black, % Hispanic, % students with disabilities, % English language learners, % economically disadvantaged, student-teacher ratio, and suspension rate.

Chapter 4

Case Studies: Restorative Justice and Positive Practices

This chapter presents methods, findings, and lessons learned from the qualitative case studies. Given the existing literature on poor student outcomes with increased use of suspension and exclusionary discipline practices, and findings from Chapter 3 on significant disparities in school discipline and student outcomes, it is important to better understand how schools can move away from traditional models of discipline to more positive ways of addressing incidents. This study component aims to answer research question five.

Research Question 5: How do positive practices work on the ground, and what lessons can be shared with other schools?

Case Study Methods

To explore how promising positive practices (e.g., community-building circles, circles responding to incidents/harm, restorative conversations, staff- and peer-led mediation, mentoring, counseling, wrap-around supports) work on the ground, we utilized a case study approach to gather comprehensive, systematic data about these non-traditional models of discipline at five schools in New York City.

Case Selection

Study schools were selected based upon a review of available data, and recommendations from the study advisory board. Eligible schools met the following criteria: (a) was a middle school, high school, or school serving grades 6-12; (b) had student demographics that were reasonably representative of typical NYC students; (c) was currently implementing positive practices in response to discipline; (d) had limited use of exclusionary discipline; and (e) had a principal who agreed to be part of the study.

To understand positive approaches in a range of contexts, we sought to select a diverse set of schools. Table 2.1 presents key characteristics of the five schools. In summary, three of the schools were high schools (9-12), one was a middle school (6-8), and one encompassed

grades 6 through 12. One school is a transfer high school, a small school designed to work with and re-engage students who have previously dropped out or who have fallen behind in credits (including students returning from incarceration or other challenging situations).

Data Collection

The data were collected through interviews and focus groups with key stakeholders at each school, as well as through observations, school tours, and other informal relationship building. Key stakeholders included school staff with key roles in restorative or other positive practices, school support staff, students, parents, and school safety agents. In most cases, parents and students participated in focus groups, while school staff and school safety agents participated in one-on-one interviews. In a few cases, parents were interviewed individually because of low focus group turnout. Likewise, in a few cases, school staff participated in a focus group due to their own preferences. All participants were asked a similar set of questions, varied slightly based on participant role and age, but included questions that covered the following domains: school safety, including definitions and perceptions of safety; school responses to student behavior, including use of suspension and positive practices, types of incidents, and types of students who get in trouble; and school resources, strengths, challenges, and recommendations. Instruments are available in Appendix D.

School staff was instrumental in outreach and recruitment efforts, particularly with student and parent participants. We recruited additional participants at school events, such as family nights. In total, 109 participants across five schools participated in the study, including 44 students, 32 school staff, 23 parents, and ten school safety agents. Samples at each school ranged from 19 to 26 people (see Table 4.1 for details).

Qualitative Analysis

Interview, focus group, and observation data were analyzed thematically, both manually and using Dedoose, a cloud-based qualitative analysis program. Key themes across all five schools were identified and coded, and school-specific differences were outlined separately. Data were combined across participant category for confidentiality purposes; thus, the category of school staff includes everyone from principals to teachers. Follow-up phone calls and meetings were conducted with school staff once preliminary analyses were complete; those discussions helped to provide further context. For the purposes of this report, all qualitative results are aggregated and reported across the five schools.

Table 4.1. Case Study Schools

School	Demographics	Key Features	Sample
School 1 (Year 5 of RJ; mediation for 40+ years)	492 students 27% black 70% Hispanic 94% free lunch 25% special education	•Grades 9-12 •Alternative school for transfer students •Standalone school •No metal detectors	**Total: 20** •7 staff •3 school safety agents •8 students •2 parents
School 2 (Year 5 of RJ)	285 students 33% black 66% Hispanic 100% free lunch 24% special education 25% ELLs	•Grades 9-12 •Extensive arts curricula •Community school •Shared campus with 5 schools •Metal detectors	**Total: 26** •7 staff •2 school safety agents •8 students •9 parents
School 3 (Year 3 of RJ)	445 students 30% black 58% Hispanic 78% free lunch 22% special education	•Grades 9-12 •Inquiry-based learning •Shared campus with 5 schools •Metal detectors	**Total: 19** •6 staff •2 school safety agents •9 students •2 parents
School 4 (Year 2 of RJ)	566 students 70% Black 25% Hispanic 80% free lunch 20% special education	•Grades 6-12 •Strong writing curricula •Community school •Shared campus with 2 schools •No metal detectors	**Total: 24** •8 staff •2 school safety agents •10 students •4 parents
School 5 (Year 2 of Mediation)	265 students 66% Black 30% Hispanic 82% free lunch 27% special education	•Grades 6-8 •Hip-hop pedagogy/STEAM •Shared campus with 2 schools •No metal detectors	**Total: 20** •4 staff •1 school safety agent •9 students •6 parents

Overview of Case Study Schools

Restorative practices were the central approach to implementing positive practices and reducing the use of exclusionary discipline in the case study schools.[20] The schools were in varying stages of implementation, ranging from one veteran school with a 45-year history of

[20] Restorative practices are a holistic approach to discipline that involves building community and shared values, repairing harming through inclusive processes, and shifting the focus from discipline to learning. See key definitions, page ii.

mediation and five years of restorative practices, to a relative newcomer in the first year of restorative practices, but with a strong foundation of community-building strategies. In each of the schools, restorative practices were approached as a holistic, school-wide effort with an emphasis on relationship-building, conflict resolution, and social support provision.

The schools utilized a combination of community-building circles, circles responding to incidents/harm, restorative conversations, staff- and peer-led mediation, mentoring, counseling, wrap-around supports, and other efforts (collectively referred to as positive practices).[21] Emphasis on specific practices varied across the five schools (e.g., some schools used mediation more often or extensively than restorative circle processes; see Appendix E for details). However, all schools adopted a flexible and individualized approach to addressing student needs, often using various practices in conjunction to respond appropriately to a specific incident. For example, a single incident might indicate a restorative conversation with students in conflict; staff-led mediation or restorative circles; conversations with parents; counseling or other referrals; and, for students removed from the classroom, a reentry circle upon their return to class. In most instances, these processes are led by staff, but there was an increasing focus in most schools on student-led processes, such as peer mediation or peer mentoring.

Perceived Impact

Across the five schools, a majority of interviewees described restorative justice and related practices as having a positive impact on their schools.[22] Restorative justice was discussed as a culture shift, one that required thinking about people and relationships, rather than a siloed practice or program. When the researchers shared flowcharts that we developed to document and understand the schools' restorative justice processes, one staff person stated:

> This is a really nice flowchart, but this just really doesn't mean anything. The work is all in people being able to develop relationships and feel empathetic. (Staff, School 4)

---

[21] A circle generally consists of students siting in a circle facing each other. The circle process, including using a talking piece, is facilitated by the circle keeper, usually an adult.
[22] Interviewee refers to research participants who were interviewed individually or as a part of a focus group.

Interviewees reported that their school's restorative approaches achieve several important objectives: (1) handling conflict resolution and de-escalation; (2) addressing the root causes of conflict better than exclusionary discipline; (3) reframing conflict and mistakes as learning opportunities; (4) reducing future harm and collateral consequences of disciplinary responses; and, (5) fostering empathy, relationships, and accountability among staff and students. One staff person explained:

> Just understanding that if the kid has their head down, or is late to school, it doesn't mean that they're being disrespectful to you, or are bored by you, or don't like you. It just means they may have stuff going on. That awareness alone impacts how you respond to that child. (Staff, School 5)

Essentially, this interviewee suggested that helping staff reflect upon students' lives outside of school—fostering empathy and considering root causes of behavior—can help prevent conflict.

Additionally, interviewees believed that restorative practices had a notable impact on suspension rates and attendance at their schools. They perceived that students were more likely to attend class and less likely to receive exclusionary discipline because of their school's positive practices.

Interviewees also discussed the need for schools to shift away from a punitive mindset—away from punishment (e.g., suspension) and *toward* what they perceived to be a stronger form of accountability afforded by restorative practices. One staff member said of suspensions and other exclusionary discipline practices, "It does not work, but it's quick." This sentiment was reflected in the interviews of many school staff similarly struggling with these issues. While restorative practices, counseling, mediation, mentoring, and other positive practices may be more time consuming, they were perceived as providing an opportunity for students to learn important life skills—relationship building, empathic dialogue, and conflict resolution strategies—that will serve them in the long-term, as well as impacting the school community more immediately. One staff person described those skills:

> These skills of learning how to be a good listener, learning how to advocate for yourself, being able to articulate how you feel, being able to exercise empathy. It may be part of the circle but, those are skills we want them to internalize and use in all areas of their lives. (Staff, School 2)

Together, the perceived impacts of restorative practices were widely viewed as contributing to improved feelings of physical and emotional safety. One staff member explained:

> Do we never have any incidents? No. I'm dealing with teenagers…Things happen. I think we're a really safe community…I don't just think about safe in terms of free from violence. I think about safety in terms of being able to express yourself, who you are…I think we have a space where, yes, students sometimes get in conflict, but students also know…this is a place where it can be resolved. (Staff, School 2)

Students also shared the perception that the positive practices in the school, especially student-led efforts, helped increase feelings of safety. One student stated, "Students feel more safe because they're actually talking to somebody who understands the struggle of being a student" (Student, School 5).

Key Challenges

Interviewees described varied challenges to the successful implementation of restorative practices and other positive practices at their schools. These challenges broadly fit into two categories: (1) systemic barriers and (2) implementation barriers.

Systemic Barriers

When it comes to systemic barriers, interviewees identified numerous aspects of school life that were outside of their direct control.

External Stressors Interviewees discussed the external stressors in the lives of students that infiltrate the school environment. Specifically, students experienced challenges at the individual, family, and community levels, such as marginalization and vulnerability due to poverty, structural racism, housing instability, and neighborhood violence. Interviewees also discussed student anxiety regarding police bias and violence. All of these issues spilled over into the school environment and often exacerbated school-based conflict.

School Structures Interviewees discussed the ways in which school structures can limit restorative practices and community building. Some interviewees suggested that restorative practices provided avenues for more inclusive discussions for learning and space to implement culturally relevant pedagogy, but limited school time, testing requirements, and

outdated or Eurocentric curricula limited the ability of staff to make significant changes to the learning environment.

Resource Limitations Interviewees stated that school resources are limited, particularly in terms of funding and time, and that staff leading restorative practices were often over-worked, unfunded, and navigating competing demands for time (e.g., test preparation). Schools struggle to find time, financial resources for desired training, and necessary social supports for students (e.g., counseling). Because restorative practices were time-consuming and require extensive coordination and communication, interviewees indicated that it was often difficult to pursue such positive practices over the "easier" route of exclusionary discipline. This was particularly difficult at the middle school level, where a higher volume of low-level incidents was difficult for staff to address.

Implementation Barriers

Interviewees identified several barriers to implementation. As with systemic issues around limited school resources, staff described challenges with their own lack of time and energy. In addition, they discussed the following challenges.

Standardization v. Flexibility For interviewees, significant tension exists between the desire to standardize restorative practices (i.e., create a one-size-fits-all, teacher curriculum) and the desire to keep the work flexible and responsive to each student and conflict. Standardization of any program has the potential to increase efficiency and provide structure for improving resource allocation—including the possibility of sharing the resource burden across the school system. However, interviewees believed that standardization would likely be detrimental to restorative practices and their perceived effectiveness. School staff reported struggling with this issue, and some efforts were being made to find a balance between standardized implementation and adaptable programming (e.g., a customizable template for facilitating harm circles).

Support Staff described a need for more support, particularly from their colleagues and school leadership. The work of restorative practices takes an emotional toll, as staff work with students to resolve conflicts, hearing the underlying causes and life circumstances that lead to the frustrations of young people. Without formal space for adult staff members to debrief and find support, staff believed that they become more likely to burn out quickly. Interviewees discussed a need for more professional development and training as well as more resources, funding, and time devoted to staff support systems.

Accountability Interviewees discussed concerns with the accountability mechanisms available in restorative approaches. A few interviewees worried that too much emphasis was placed on supporting the person responsible for harm and too little support was available for the person harmed. In some situations, interviewees described poor communication and follow-up when restorative justice was used to address harm. Other interviewees discussed the challenges with extending accountability processes to the adults in the school, especially at the middle school level. There is an inherent struggle in holding adults accountable for their behavior in a setting where they hold most of the power. It challenges traditional views of teacher authority and requires school staff to rethink their roles and to be willing to be held accountable when they cause harm.

School Safety Agents Interviewees described tensions between the school safety agents and the schools, due to a perceived culture clash. Communication between school safety agents and the schools was considered insufficient by both parties, and interviewees acknowledged that the agents have different training, mandate, and authority than school personnel. School safety agents do not work for the DOE or the principals and can make independent decisions, particularly in terms of arrest or issuance of summons. Such tensions have previously been documented in New York City schools (Mukherjee and Karpatkin Fellow 2007) but are particularly concerning in schools trying to move away from a punitive culture.

Parental Involvement Interviewees described varied parental involvement, despite a desire to include parents in restorative and positive practices when appropriate. There was some perceived parental resistance to positive discipline practices reported by staff and parents; parents may not have had time to adjust to the new culture around discipline being embraced by these schools. In one school, a few parent and staff interviewees also suggested that exploring unfamiliar approaches to discipline requires strong, trusting relationships between parents and staff and that it is difficult to foster such trust when there is a majority white staff teaching in a school serving majority families of color. Parental involvement was also heavily weighed down by structural barriers: poverty, multiple jobs/difficult work schedules, child care for younger siblings, immigration concerns, and language barriers. In some cases, staff interviewees described situations where parental involvement escalated the conflict rather than assisting to resolve it.

Buy-In While the vast majority of interviewees personally endorsed restorative practices, many staff and student interviewees expressed concern that others in their community were

not as invested in the approach. Student interviewees questioned some of their peers' sincerity in embracing restorative processes and their peers' commitment to following through on implementation agreements. Students were also concerned about ensuring that staff are sufficiently held accountable for adult behavior that may be harmful to students (or other adult staff) and described a general desire to have staff listen more and be more respectful of students. Additionally, interviewees discussed issues around staff demographics; each of the schools serves predominately economically disadvantaged students of color, but school staff are more likely to be white, have greater economic security, and live outside the school neighborhood. This disconnect in identity and presumed experience between the staff and students (and their families) was perceived to hinder community-building efforts that could help facilitate programmatic buy-in.

Key Strategies

Numerous strategies emerged across the five schools to address the challenges above and work towards the successful adoption of restorative and positive practices.

Building Community

Community-building is one of the most important ways of building the foundation for restorative justice. Conflict resolution and accountability to the community can only occur if there is a sense of belonging and a strong community in the first place. To accomplish this, the schools had several concrete strategies.

First, an institutionalized structure and space for community-building were vital. To accomplish this, most of the study schools relied heavily on advisory—a period during the school day in which educator "advisors" met in smaller groups with students to focus on topics beyond traditional academics, such as social issues, social-emotional learning, or college preparation. This period provided a more informal space for honest conversations without taking up valuable learning time. In some cases, advisory teachers led the students in the format of a community-building circle, with increased opportunity for students to facilitate over time. Some unique examples of creating space for community building include utilizing weekly professional development time for staff to train on advisory circles, personally test out activities they plan to assign, and troubleshoot as a group; having upperclassmen lead freshman advisory; and utilizing school social workers as advisory facilitators.

Integrating other opportunities for circles into the school was also valuable. The more exposure to circles that people had, the more comfortable they became with the process, and the stronger community relationships grew. Additionally, for resistant staff or students, spending time in circle was often described as a pivotal way to build buy-in. For example, one staff member cited their first time in circle:

> I remember our first circle…That was really intense, actually. Really emotional. I think by that point everybody was on board with it. We felt this is actually a useful way even adult to adult. Even to engage each other in a way that's more constructive. (Staff, School 2)

Across the five schools, community-building circles were used outside of formal advisory periods—as part of schoolwide events, staff meetings, regular class time (learning circles), and even at parent events to introduce the larger school community to the approach.

Having a foundation of community-building was considered important and central to conflict prevention and resolution efforts. Interviewees described having formal mechanisms for addressing issues before they grew larger:

> …[M]ost likely when you're in a mad mood, a teacher or staff will recognize you and they will ask you what's going…when there's a problem, teachers immediately know, maybe they're magic or something…there hasn't been a physical argument just yet. (Student, School 2)

> It's just the actual emphasis that is placed on building relationships with students…whenever it comes to troubleshooting or problem-solving, we always turn the conversation back to building relationships with students. (Staff, School 4)

Setting Priorities and Creating Buy-In

Interviewees discussed the importance of school leadership support for restorative practices and the need for school leaders to signal priorities through resource allocation. Even within limited resource environments, there are ways in which principals and other senior administrative staff can prioritize restorative practices and ensure that staff and students are fully aware of the priority. This can be accomplished through hiring priorities, forming staff

teams focused on restorative practices, allocating space (i.e., a designated circle room), and making time for it during professional development days and staff meetings.

> I think if you designate the space, that means you value the initiative and everybody knows it's there. I feel like that's a huge part of saying this is important… I think setting up priorities if a principal of any school really cares... or really feels like it's an important thing to do, then they need to also have things set up to really facilitate that happening. Not just say, “Let's do circles” and not have the proper set up for it. (Staff, School 2)

Other support tactics include leadership modeling/coaching restorative practices and providing informal staff support such as principals facilitating harm circles or having staff who are more experienced with restorative practices available to answer questions and discuss emergent issues.

Supporting staff and providing space for them to support each other was also instrumental in ensuring sustainability.

> Staff members there [at other schools] are getting a lot of resistance and pushback from their principals…I can't imagine having to do my job without the support. I get tons and tons of support from the staff, up from the principal all the way through. (Staff, School 4)

Building Adult Accountability

Another key challenge was creating the culture shift so that both staff and students were accountable through the same processes, a shift that requires rethinking the power paradigm in most classroom settings.

Interviewees at the case study schools suggested the importance of rolling out the same activities and processes for staff and students, with staff going first and students second. In some instances, restorative practices were implemented with students first while giving more time to build buy-in among staff, but lessons from those efforts suggest that training and building community among *staff* should be the first step. By emphasizing adult growth, reflection, and accountability (including for principals and school leaders), the move from a punitive school environment to a positive school community can be facilitated. “If we have

an ask for students to do something, we have to do the same thing because we're hypocrites if we don't" (Staff, School 1).

Students also described the importance of adult reflection, transparency, and accountability. One student described their relationship with their advisor,

> Our relationship with [our advisor] is like super cool because we can talk to him about anything and he is very open with us as well. We know what's going on with him, he knows what's going on with us. Being that transparent with us, just makes us want to be transparent with him and open up to him and say, "Hey I'm not feeling good today, here's why…" (Student, School 2)

In the case study schools, interviewees described different spaces where staff focused on their own development and growth, including town halls focused on staff voice and concerns, and a reality pedagogy working group at one school, which focused on interrogating race and class differences between school staff and students and understanding the implications of such differences for teaching and learning. These varied efforts for staff development are rooted in the belief that staff—not just students—should engage in an ongoing process of learning, self-reflection, and growth.

Holistic Student Support

Interviewees described the need for extensive social supports and community partners to provide student support. In general, the case study schools were in one of the following situations: (a) had nonprofit organization staff working in their buildings; (b) had strong relationships with external organizations who provide resources onsite; or (c) were part of New York City's community school program, where schools become community hubs through an infusion of resources.[23] Relationships with these organizations varied; some had donated their resources to the school through cultivated relationships with school leadership; others were funded by formal initiatives such as New York City Council's Restorative Justice Pilot or the community schools program. However, despite these resources, interviewees at all schools still felt that more resources were needed. Because of the emotional spillover of the systemic barriers in students' lives, there was a need for mental health supports, in particular counseling, mentoring, and trauma-informed approaches.

---

[23] For more information about New York Community Schools, see: https://www1.nyc.gov/site/communityschools/index.page

Interviewees also cited the importance of health clinics, after-school programs, academic support programs, and childcare (for students). Community partners, where they existed, were also perceived to provide critical additional resources, including support for restorative justice efforts, such as training and counseling for staff.

Student Leadership

Interviewees felt that student leadership was critical. Creating space for students to discuss their lives and frustrations is a key aspect of restorative circles. However, this is often difficult to achieve in schools, especially if students do not feel comfortable with staff (e.g., because of differences in identity and life experiences, or generational divide).

In the case study schools, students were able to create student-led spaces to address these concerns, such as holding a Black Lives Matter circle, educating each other about hate speech, and building LGBTQ+ student groups or gay-straight alliance groups. One student described the benefits of student leadership:

> [Now] a lot of things that would normally just rush to teachers… is really not happening as often. Where it is like, boom, it got to a student and somebody is taking charge. (Student, School 4)

And when school leadership and staff provided support and opportunities for student leadership or student-led efforts, students were able to see and describe the difference. One student stated, "They see the leaders in us that we didn't see in ourselves" (Student, School 4).

Transformative Justice

A number of the interviewees described strategies for addressing harm and building community that incorporate a structural analysis of the conditions under which harm occurs in the first place. This resonates with what some refer to as "transformative justice"—a critical response and extension of restorative justice. Transformative justice is rooted in the belief that in order for individual-level harm to be repaired and prevented (the goal of restorative justice), work must be done to transform structures and institutions that perpetuate systemic harm (e.g., structural racism; Kershnar et al. 2007; Morris 2000).

While interviewees did not themselves use the term "transformative justice," many described its principles through their recommendations to increase anti-bias training for educators and

political education of students, fostering conversations about current events, and having a school-wide critical analysis of social issues. Schools that conduct professional development for their staff around bias and racism may, over time, work with staff to develop advisory circles to address these topics. At least one school prioritized hiring staff who were representative of the student population (e.g., in terms of race, or neighborhood). Creating space for both celebrating diversity and venting about life challenges (for both students and adults) was necessary for these schools. Strong engagement with such structural questions was seen as essential to the growth and efficacy of restorative justice work at the case study schools.

Chapter 5
Discussion and Implications

This comprehensive study of schools across New York City sought to isolate the impacts of suspension on student outcomes and to disentangle the independent effects, if any, of student, school, and neighborhood characteristics. The study also explored the relationship between restorative justice and other positive practices, student behavior, and school culture. To compare students appropriately, the quantitative analysis focused on only the 17% of students involved in a disciplinary incident.

This chapter includes a summary of key findings, implications for policy and practice, and study limitations.

Summary of Key Findings

Student Characteristics

It was evident from the outset—before conducting multivariate analyses—that there were disparities in terms of which students were involved in formal disciplinary incidents. When comparing the basic demographics of students with an incident to the overall student population, black students (45% with an incident v. 29% of the general population) and boys (61% with an incident v. 51% of the general population) were overrepresented.

Even when we isolate only students with disciplinary incidents, black students, boys, students with disabilities, and poor students did worse in the future—accruing additional disciplinary actions and criminal arrests. Being black was the strongest predictor of future incidents and suspensions, followed closely by being Hispanic. These results suggest that disparities do not end at the point of the disciplinary incident. The differences persisted even when controlling for disciplinary history, arrest history, incident severity, and other confounding factors.

School Characteristics

School characteristics were related to student outcomes, including future suspension and future arrest. Students were more likely to receive future suspensions in schools with higher percentages of students with disabilities. Students in schools with high percentages of black

and Hispanic students were more likely to have a future arrest. Future arrest was most strongly related to school suspension rate, with students in schools with high suspension rates are more likely to be arrested.

We also explored the relationship of school demographics and disciplinary rates to school climate—that is, are schools that use less negative, punitive disciplinary action considered more (or less) safe? Do students, parents, and staff in schools with more disciplinary incidents rate their schools as less safe? We found that school climate *was* associated with school demographics; specifically, schools with more black students, students with disabilities, and poor students elicited negative school climate assessments. The nuances of this association are not entirely clear and leave many unanswered questions. Do schools with these characteristics actually have an objectively negative school climate? Are they *perceived* as having a negative school climate because of their student populations and (implicit or explicit) bias on the part of the survey respondents? These are nuanced questions that are beyond the scope of the present study. Lower school climate ratings were also associated with higher disciplinary incident rates in schools, an expected finding that highlights how schools with better school climate are those with fewer incidents and suspensions. Notably, the direction of this relationship is unclear: do schools have more positive climate because of fewer incidents and suspensions or do fewer incidents create the improved school climate? These factors are likely mutually influencing each other through complex mechanisms.

Neighborhood Characteristics

This study further examined the role of the neighborhood setting of schools—specifically neighborhood disadvantage and crime—and found no significant relationship with either school climate or suspension rate. It is important to note that NYC schools vary in whether students live in the surrounding neighborhood or commute from a neighborhood elsewhere in the city.[24] Nonetheless, even though students may travel from other parts of the city to attend

---

[24] The citywide high school choice program allows high school students to attend any public high school in the city, regardless of location, if they meet its admission criteria. Despite debates around school choice, most high school students do not attend high school in their neighborhood, and a significant portion of middle school students also travel to other neighborhoods to attend school. Further, media attention has highlighted stark differences based on race and income in the program including racial disparities in student selection at highly-ranked high schools and

a specific school, the potential role of the surrounding neighborhood remains of significant interest. Our results indicated that neighborhood crime and disadvantage had no significant impact on student, teacher, and parent perceptions of safety and a respectful climate in school. This suggests that the surrounding neighborhood may not play as strong a role as we originally hypothesized; while our qualitative findings indicate that students arrive at school with emotional distress brought on by systemic barriers, personal histories, and multiple traumas, those concerns may not be specifically related to the local neighborhood's crime or poverty rate. If students, parents, and teachers in schools located in lower crime, lower poverty neighborhoods are equally likely to perceive their school as safe as those in schools in higher crime or poverty neighborhoods (after controlling for individual-level differences among students), then neighborhood factors per se may not have the independent impact on school environment that we had initially anticipated.

Our findings on the null effect of neighborhood characteristics allow us to draw two important conclusions, while keeping the limitations of these analyses in mind. First, factors *inside* the schools are likely playing a bigger role in school safety and climate than factors *outside* the school. This implies that schools are not simply reflections of their surrounding neighborhood, leading to our second conclusion: Schools have the potential to be safe spaces for children, regardless of what is going on outside of their walls. Findings from our qualitative case studies indicate that students bring emotional distress and challenges from home into the school environment, thereby highlighting the need for schools, teachers, and other school staff to play a role in helping students navigate their lives outside of school walls.

Case Studies

Our qualitative case studies provide encouraging evidence in support of alternative approaches to discipline, but that path requires significant investment of time and money and perhaps a fundamental transformation of schools and the school system. Students in the case study schools spoke about the need for critical dialogue; for shifting the power paradigm; for holding both students and adults accountable for harm; for more diverse school staff; and for building a supportive, inclusive, non-punitive school community. While it is clear that most students and staff in case study school supported restorative and positive approaches to

---

differences in which students stay at neighborhood schools. All of these New York City dynamics likely play a role in our findings.

discipline, significant barriers to implementation exist and schools must employ a wide variety of strategies to address them.

Study Limitations

This study was an ambitious project, aimed at examining the relationships between school discipline, climate, and safety across New York City. There are some noteworthy limitations.

First, the official administrative education and justice data posed problems of the sort generally present in large datasets from city or government agencies. The matching process between criminal justice and educational data was likely imperfect since there are no common identification numbers. We do not have reason to believe that incomplete information was anything other than random and therefore do not anticipate that imperfect matching systematically biased our results. DOE data is complex and reducing it was challenging (due to large amounts of missing or incongruent data); our final sample (87,471) had sufficient statistical power and represented the relevant student population. We are also aware that students transfer to other schools within the school system or move away and return, but those cases were not consistently recorded in the administrative data. For transfer students, it is impossible to isolate the impact of one school on their future behavior when it might be attributed to another school. If a student moved away and subsequently returned, we would not detect additional school incidents or arrests, because we only have data from NYC.

Second, the vast number of students included in the study can be problematic for statistical purposes. Significant findings can be inflated, underlining the importance of examining the magnitude of the effect and not relying on significance alone (McLean and Ernest 1998).

Third, some limitations exist in our analysis. Specifically, while we examined incident severity on the initial incident and suspension, we were unable to include incident severity for future suspensions as a control variable since most of the sample had more than one future incident or suspension. Further, we could not control for time at risk. That is, suspension inherently takes students out of school, thereby reducing the number of days in which they are available in school to receive another suspension. Since the data did not include detailed information on each suspension (e.g. number of days suspended), we could not adequately examine this factor.

Fourth, the qualitative data is rich, but when it comes to school staff, it primarily represents the perspectives of school staff directly involved in positive practices at the case study schools. Thus, the sample is limited, and we did not obtain feedback from those opposed to or skeptical about restorative approaches. Parent and student focus groups were more mixed, with most parents, in particular, having heard of the programs but not having participated in them. While the case studies provide a limited snapshot, in-depth qualitative data collection and analyses in a representative sample of schools was beyond the scope of this project. Further research on restorative practices in schools is necessary and forthcoming in the field.

Finally, this study was unable to rigorously test the impact of positive practices, such as those observed during case studies, on student outcomes. The DOE data we received did not include instances where students were, for example, asked to attend a restorative justice circle or be part of mediation in lieu of suspension. Therefore, we are unaware of any effect that positive practices might have had on future incidents or arrests or on school climate.

However, despite these limitations, we believe the depth and breadth of data collected and analyzed in this study makes an important contribution to the literature.

Conclusions and Implications

A major strength of this study is that it examines school discipline within the largest school district in the United States. The large sample size and depth of the data collected allowed this study to provide insight into many questions that other studies have been unable to answer. Our results are consistent with the literature thus far and provide additional food for thought—for school reformers, education advocates, parents, students, teachers, and everyone interested in children's education.

In many ways, our findings provide evidence of a relationship between school exclusion and criminal justice involvement for youth. That said, the strongest predictors of negative outcomes were student race, disability status, and economic disadvantage. Student characteristics appear to play a larger role than school or neighborhood factors, and disparities persist even when incident severity is held constant.

Our key findings regarding the relationship of race/ethnicity, sex, economic disadvantage, and disability status could be attributed to implicit bias among teachers and administrators, as well as to stereotypes and attitudes related to achievement and success among students with disabilities, black boys and girls, and poor children that are perpetuated in our schools.

Notably, historic, structural, and systemic disparities in resource allocation for schools and neighborhoods influence the ability of schools to address the needs of each of their students—and resource distribution remains a contentious issue in most large cities in America.

We found that schools with high suspension rates have a strong relationship with student arrests after an initial incident. There are several potential explanations for this: students who are suspended are not in school and are therefore more likely to become involved in criminal activity outside of school; actions by schools, parents, students, or others are leading to arrests for school-based incidents in which students received suspensions; students in high-suspending schools are more likely to engage in misbehavior both inside and outside of school; or high-suspending schools exist in neighborhoods with high crime or high police presence, resulting in more student arrests. Further research to disentangle the complex relationship between high suspension rates in school and arrest rates outside of schools is needed.

Restorative justice may provide one framework for addressing the disparities and negative consequences of punitive discipline, but as with many whole-school approaches, implementation is challenging, and full transformation of schools takes time. The evidence base in support of this approach has not yet been fully established, leading some to express skepticism until further research establishes positive results. Even with supporters in education administration, building momentum for rethinking discipline in education is difficult—especially in the face of ever-increasing demands on teachers and students to focus on test performance.

Given the current push towards decarceration in states and cities across the country, with support from politicians and policymakers across political parties and groups, we can seek solutions to address social exclusion and criminal justice involvement where it begins: in schools and with young people who are dealing with multiple layers of disadvantage and are being excluded from education. While many of the school-level factors that predicted poor student outcomes signal a need for resource reallocation and greater investment and supports, school administrators, principals, teachers, parents, and students must think critically about the underlying factors that are causing black students—particularly black boys—and poor students to be disproportionately disciplined, even in schools with positive school climates and low suspension rates.

New York City, Los Angeles, and other school systems around the country are taking steps to reform punitive policies—such as banning suspensions for certain infractions and increasing mental health resources—while also investing in new models, such as resource-rich community schools. However, much of the thinking around school disciplinary policies continues to mirror the punitive approach of criminal justice. Just as the justice system incarcerates individuals who commit crimes—removing them from the community—exclusionary discipline practices remove students from their school community. As incarceration grew during the 1970s until a few years ago, so has the exclusion of students from schools expanded in the same time period. Not only are these two phenomena disproportionately affecting black and Hispanic young people, as our results highlight, but they are also inextricably tied together in complex ways that must be addressed holistically.

References

Achilles, Georgiana M., Margaret J. McLaughlin, and Robert G. Croninger. 2007. "Sociocultural Correlates of Disciplinary Exclusion among Students with Emotional, Behavioral, and Learning Disabilities in the SEELS National Dataset." *Journal of Emotional and Behavioral Disorders* 15(1):33-45.

Acosta, Joie, Matthew Chinman, Patricia Ebener, Patrick S. Malone, Andrea Phillips, and Asa Wilks. 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):1-15.

Anyon, Yolanda, Ann Gregory, Susan Stone, Jordan Farrar, Jeffrey M. Jenson, Jeanette McQueen, Barbara Downing, Eldridge Greer, and John Simmons. 2016. "Restorative Interventions and School Discipline Sanctions in a Large Urban School District." *American Educational Research Journal* 53(6):1663-1697.

Augustine, Catherine H., John Engberg, Geoffrey E. Grimm, Emma Lee, Elaine L. Wang, Karen Christianson, and Andrea Joseph. 2018. "Can Restorative Practices Improve School Climate and Curb Suspensions?" Santa Monica: CA: RAND Corporation. Retrieved March 23, 2019 (https://www.rand.org/content/dam/rand/pubs/research_reports/RR2800/RR2840/RAND_RR2840.pdf).

Balfanz, Robert, Vaughn Byrnes, and Joanna Fox. 2012. *Sent Home and Put Off-Track: The Antecedents, Disproportionalities, and Consequences of Being Suspended in the Ninth Grade*. Paper prepared for the Center for Civil Rights Remedies and the Research-to-Practice Collaborative, National Conference on Race and Gender Disparities in Discipline, Los Angeles, CA.

Bowditch, Christine. 1993. "Getting Rid of Troublemakers: High School Disciplinary Procedures and the Production of Dropouts." *Social Problems* 40:493-507.

Bradshaw, Catherine P., Mary M. Mitchell, Lindsey O'Brennan, and Phillip J. Leaf. 2010. "Multilevel Exploration of Factors Contributing to the Overrepresentation of Black Students in Office Disciplinary Referrals." *Journal of Educational Psychology* 102(2):508-520.

Brantlinger, Ellen. 1991. “Social Class Distinctions in Adolescents’ Reports of Problems and Punishment in School.” *Behavioral Disorders* 17:36–46.

Chen, Greg, and Lynne A. Weikart. 2008. "Student Background, School Climate, School Disorder, and Student Achievement: An Empirical Study of New York City's Middle Schools.” *Journal of School Violence* 7(4):3-20.

Chmielewski, Jennifer F., Kimberely Belmonte, Michelle Fine, Brett G. 2016. “Intersectional Inquiries with LGBTQ and Gender Nonconforming Youth of Color: Participatory Research on Discipline Disparities at the Race/Sexuality/Gender Nexus.” Pp. 171-188 in *Inequality in School Discipline*, edited by R.J. Skiba, M. Kavitha Mediratta, and M. K. Rausch. New York, NY: Palgrave Macmillan.

Choo, Hae Yeon, and Max M. Ferree. 2010. “Practicing Intersectionality in Sociological Research: A Critical Analysis of Inclusions, Interactions, and Institutions in the Study of Inequalities.” *Sociological Theory* 28(2):129–149.

Chokshi, Niraj. 2014. “The most segregated schools may not be in the states you’d expect.” *The Washington Post*, May 5. Retrieved March 23, 2019.

Chu, Elizabeth M., and Douglas D. Ready. 2018. “Exclusion and Urban Public High Schools: Short- and Long-Term Consequences of School Suspensions.” *American Journal of Education* 124(4):479–509.

Cole, Elizabeth R. 2009. “Intersectionality and Research in Psychology.” *American Psychologist* 64(3): 170-180.

Costenbader, Virginia K., and Samia Markson. 1998. “School Suspension: A Study with Secondary School Students.” *Journal of School Psychology* 36:59-82.

Decker, Geoff, and Stephanie Snyder. 2017. “Long-awaited discipline policy changes further restrict suspensions, restraints.” *ChalkBeat*. February 13. Retrieved July 15, 2018 (https://www.chalkbeat.org/posts/ny/ 2015/02/13/long-awaited-discipline-policy-changes-further-restrict-suspensions-restraints/).

Dynarski, Mark, Linda Clarke, Brian Cobb, Jeremy Finn, Russell Rumberger, and Jay Smink. 2008. “Dropout Prevention: A Practice Guide.” Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved February 2, 2014 (http://ies.ed.gov/ncee/wwc).

Ewing, Charles P. 2000. "Sensible Zero Tolerance Protects Students." *Harvard Education Letter* Volume 16(1).

Fabelo, Tony, Michael D. Thompson, Martha Plotkin, Dottie Carmichael, Miner P. Marchbanks III, and Eric A. Booth. 2011. "Breaking Schools' Rules: A Statewide Study of How School Discipline Relates to Students' Success and Juvenile Justice Involvement." New York, NY: Council of State Governments Justice Center. Retrieved February 2, 2014 (https://csgjusticecenter.org/wp-content/uploads/2012/08/Breaking_Schools_Rules_Report_Final.pdf).

Fessenden, Ford. 2012. "A Portrait of Segregation in New York City's Schools." New York Times, May 11, Retrieved March 23, 2019 (https://archive.nytimes.com/www.nytimes.com/interactive/2012/05/11/nyregion/segregation-in-new-york-city-public-schools.html?ref=education).

Gorman-Smith, Deborah, and Patrick Tolan. 1998. "The Role Of Exposure to Community Violence and Developmental Problems among Inner-City Youth." *Development and Psychopathology* 10(1):101-116.

Gregory, Ann, and Rhona Weinstein. 2008. "The Discipline Gap and African Americans: Defiance or Cooperation in the High School Classroom." *Journal of School Psychology* 46:455-475.

Gregory, Anne, Kathleen Clawson, Alycia Davis, and Jennifer Gerewitz. 2014. "The Promise of Restorative Practices to Transform Teacher-Student Relationships and Achieve Equity in Student Discipline." *Journal of Educational and Psychological Consultation* 26(4):325-353.

Hassoun Ayoub, Lama. 2013. "School Safety in New York City: Policy, Practice, and Programs from 2002-2013." New York, NY: Center for Court Innovation. Retrieved May 17, 2015 (https://www.courtinnovation.org/sites/default/files/documents/School%20Safety%20Policy%20Brief.pdf).

Hay, Carter, Edward N. Fortson, Dunsten R. Hollist, Irshad Altheimer, and Lonnie M. Schaible. 2007. "Compounded Risk: The Implications for Delinquency of Coming from a Poor Family that Lives in a Poor Community." *Journal of Youth and Adolescence* 36(5):593-605.

International Institute for Restorative Practices (IIRP). 2009. “Improving School Climate: Findings from Schools Implementing Restorative Practices.” Bethlehem, PA: International Institute for Restorative Practices, Retrieved March 4, 2017 (www.iirp.edu).

Kang-Brown, Jacob, Jennifer Trone, Jennifer Fratello, and Tarika Daftary-Kapur. 2013. “A Generation Later: What We’ve Learned about Zero Tolerance in Schools.” New York, NY: Vera Institute of Justice, Retrieved January 8, 2018 (https://www.vera.org/publications/a-generation-later-what-weve-learned-about-zero-tolerance-in-schools).

Kaplan Judith B., and Trude Bennett. 2003. “Use of Race and Ethnicity in Biomedical Publication.” *JAMA* 289(20):2709–2716.

Karp, David R., and Beau Breslin. 2001. “Restorative Justice in School Communities.” *Youth & Society* 33(2):249-272.

Kershnar, Sara, Staci Haines, Gillian Harkins, Alan Greig, Cindy Wiesner, Mich Levy, Palak Shah, Mimi Kim, and Jesse Carr. 2007. “Toward transformative justice: A liberatory approach to child sexual abuse and other forms of intimate and community violence.” generation FIVE, Retrieved January 8, 2018 (http://www.generationfive.org/wp-content/uploads/2013/07/G5_Toward_Transformative_Justice-Document.pdf).

Limbos, Mary A., and Cari Casteel. 2008. “Schools and Neighborhoods: Organizational and Environmental Factors Associated with Crime in Secondary Schools.” *Journal of School Health* 78(10):539-544.

Losen, Daniel J., and Tia E. Martinez. 2013. *Out of School & Off Track: The Overuse of Suspensions in American Middle and High Schools*. Los Angeles, CA: The UCLA Center for Civil Rights Remedies.

Matjasko, Jennifer L. 2011. “How Effective are Severe Disciplinary Policies? School Policies and Offending from Adolescence into Young Adulthood.” *Journal of School Psychology* 49: 555-572.

McClean, James E., and James M. Ernest. 1998. “The Role of Statistical Significance Testing in Educational Research.” *Research in the Schools* 5(2):15-22.

McCold, Paul. 2008. “Evaluation of a Restorative Justice Milieu: Restorative Practices in Context,” Pp. 99-137. in *Restorative Justice: From Theory to Practice*, edited by H. Ventura Miller. Bingley, UK: Emerald Group Publishing Limited.

Metzler, Carol W., Anthony Biglan, Julie C. Rusby, and Jeffrey R. Sprague. 2001. "Evaluation of Comprehensive Behavior Management Program to Improve School-wide Positive Behavior Support." *Education and Treatment of Children* 24(4):448-479.

Morris, Monique W. 2016. *Pushout: The Criminalization of Black Girls in Schools*. New York, NY: The New Press.

Morris, Ruth. 2000. *Stories of transformative justice*. Toronto, CA: Canadian Scholars' Press.

Morrison, Brenda, Peta Blood, and Margaret Thorsborne. 2005. "Practicing Restorative Justice in School Communities: Addressing the Challenge of Culture Change." *Public Organization Review* 5(4):335-357.

Mukherjee, Elora and Marvin M. Karpartkin Fellow. 2007. "Criminalizing the classroom: The over-policing of NYC schools." New York, NY: New York Civil Liberties Union, Retrieved July 15, 2018 (https://www.nyclu.org/sites/default/files/publications/nyclu_pub_criminalizing_the_classroom.pdf).

Muscott, Howard S., Eric L. Mann, and Marcel R. LeBrun. 2008. "Positive Behavioral Interventions and Supports in New Hampshire: Effects of Large Scale Implementation of School-wide Positive Behavior Support on Student Discipline and Academic Achievement." *Journal of Positive Behavior Interventions* 10:190–205.

National Center for Education Statistics. 2018. "Children and Youth with Disabilities. Institute of Education Science." Washington, DC: National Center for Education Statistics, Retrieved March 23, 2019 (Retrieved https://nces.ed.gov/programs/ coe/indicator_cgg.asp).

Nieuwenhuis, Jaap, and Pieter Hooimeijer. 2016. "The Association Between Neighbourhoods and Educational Achievement, a Systematic Review and Meta-analysis." *Journal of Housing and the Built Enviro*nment 31(2):321-347.

Noguera, Pedro A. 1995. "Preventing and Producing Violence: A Critical Analysis of Responses to School Violence." *Harvard Educational Review* 65:189-212.

Noguera, Pedro A. 2003. "The Trouble with Black Boys: The Role and Influence of Environmental and Cultural factors on the Academic Performance of African American Males." *Urban Education*, 38(4):431-459.

Payne, Alison A., and Kelly Welch. 2015. "Racial Threat and Punitive School Discipline." *Youth & Society* 47(4):539-564.

Raffaele-Mendez, Linda M. 2003. "Predictors of suspension and negative school outcomes: A longitudinal investigation." Pp. 17-34 in *New Directions for Youth Development: No. 99. Deconstructing the School-to-Prison Pipeline*, edited by J. Wald and D. J. Losen. San Francisco: Jossey-Bass.

Raffaele-Mendez, Linda M., Howard M. Knoff, and John Ferron. 2002. "School Demographic Variables and Out-of-school Suspension Rates: A Quantitative and Qualitative Analysis of a Large, Ethnically Diverse School District." *Psychology in the Schools* 39(3):259-277.

Raudenbush, Stephen W. and Anthony S. Bryk. 2002. *Hierarchical Linear Models: Applications and Data Analysis Methods* (Second ed.). Thousand Oaks, CA: Sage.

Shollenberger, Tracey L. 2015. "Racial Disparities in School Suspension and Subsequent Outcomes: Evidence from the National Longitudinal Survey of Youth." Pp. 31-43. in Closing the School Discipline Gap: Equitable Remedies for Exclusion, edited by D. Losen. New York, NY: Teachers College Press.

Skiba, Russell J., Choong-Geun Chung, Megan Trachok, Timberly L. Baker, Adam Sheya, Robin L. Hughes. 2014. "Parsing Disciplinary Disproportionality: Contributions of Behavior, Student, and School Characteristics to Suspension and Expulsion." American Educational Research Journal, 51(4):640-670.

Skiba, Russell J., Robert H. Horner, Choong-Geun Chung, M. Karega Rausch, Seth L. May, and Tary Tobin. 2011. "Race is Not Neutral: A National Investigation of African American and Latino Disproportionality In School Discipline." *School Psychology Review 40*(1):85-107.

Skiba, Russell J., and Kimberly Knesting. 2001. "Zero Tolerance, Zero Evidence: An Analysis of School Disciplinary Practice." *New Directions for Youth Development* 92:17-43.

Skiba, Russell J., Robert S. Michael, Abra C. Nardo, and Reece L. Peterson, R. 2002. "The Color of Discipline: Sources of Racial and Gender Disproportionality in School Punishment." *The Urban Review* 34(4):317-342.

Skiba, Russell J., Reece L. Peterson, and Tara Williams. 1997. “Office Referrals And Suspension: Disciplinary Intervention in Middle Schools.” *Education and Treatment of Children* 20:295–315.

Skiba, Russell J., Cecil R. Reynolds, Sandra Graham, Peter Sheras, Enedina Garcia, Jane C. Conoley, Enedina Garcia-Vazquez, Rena Subotnik, Heidi Sickler, Ashley Edmiston, and Ron Palomares. 2008. “Are Zero Tolerance Policies Effective in the Schools? An Evidentiary Review and Recommendations.” *American Psychologist* 63:852-62.

Skiba, Russell J., Ada Simmons, Lori Staudinger, Marcus Rausch, Gayle Dow, and Renae Feggins. 2003. “Consistent Removal: Contributions of School Discipline to the School-Prison Pipeline.” Paper presented at the Harvard Civil Rights School to Prison Pipeline Conference, Cambridge, MA.

Snapp, Shannon D., Jennifer M. Hoenig, Amanda Fields, and Stephen T. Russell. 2015. “Messy, Butch, and Queer: LGBTQ Youth and the School-to-Prison Pipeline.” *Journal of Adolescent Research*, 30(1):57–82.

Stinchcomb, Jeanne B., Gordon Bazemore, and Nancy Reistenberg. 2006. “Beyond Zero Tolerance: Restoring Justice in Secondary Schools.” *Youth Violence and Juvenile Justice* 4(2):123-147.

Sullivan, Amanda L., Ethan R.Van Norman, and David A. Klingbeil. 2014. “Exclusionary Discipline of Students With Disabilities: Student and School Characteristics Predicting Suspension.” *Remedial and Special Education* 35(4):199-210.

Tobin, Tary, George Sugai, and Geoff Colvin. 1996. “Patterns in Middle School Discipline Records.” *Journal of Emotional and Behavioral Disorders* 4(2):82-94.

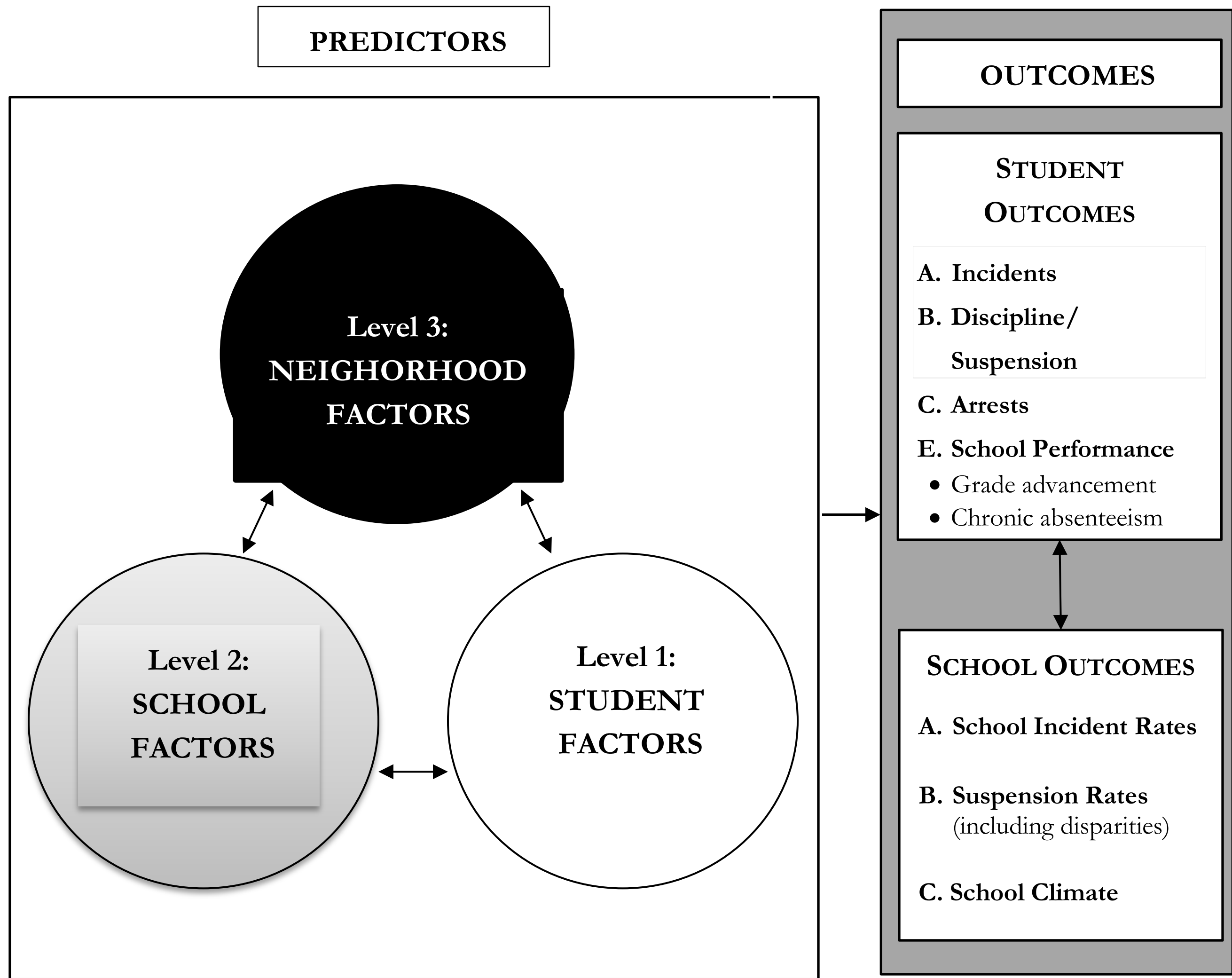
Toure, Madina. 2018. “NYC Has the Most Segregated Schools in the Country. How Do We Fix That?,” *The Observer*, June 14th. Retrieved March 23, 2019 (https://observer.com/2018/06/new-york-city-public-school-segregation/).

Voight, Adam M., Thomas Hanson, Meagan O’Malley, and Latifah Adekanye. 2015. “The Racial School Climate Gap: Within-School Disparities in Students’ Experiences of Safety, Support, and Connectedness.” *American Journal of Community Psychology* 56(3):252-267.

Wald, Johanna and Daniel L. Losen. 2003. “Defining and Redirecting a School-To-Prison Pipeline.” *New Directions for Youth Development* 99:9–15.

Wallace Jr., John M., Sara Goodkind, Cynthia M. Wallace, and Jerald J. Bachman. 2008. "Racial, Ethnic, and Gender Differences in School Discipline among U.S. High School Students: 1991-2005." *Negro Educational Review* 59 (1-2):47-62.

Appendix A. Study Model



Appendix B. Variables and Sources

Variable	Definition
Student-Level[25]	
Demographics	
Age	Age of the student at the time of the index event.
Sex	
Male	Binary: 1=yes, 0=no
Race/ethnicity	
Black	Binary: 1=yes, 0=no
Hispanic	Binary: 1=yes, 0=no
Student with Disability	Binary: 1, yes, 0=no. Students with an Individualized Education Program (IEP). This variable includes learning, emotional, and behavioral disabilities.
English Language Learner	Binary: 1=yes, 0=no. Students learning English as a second language.
Economically Disadvantaged	Binary: 1=yes, 0=no. Students who qualify for free or reduced lunch or receive social service benefits.
Prior Behavior	
Prior Chronic Absenteeism	Binary: 1=yes, 0=no. Students who missed 20 days or more or who attended less than 89% of the school year are considered chronically absent by the DOE. This variable was measured in the year prior to the initial incident.
Prior Grade Advancement	Students who had increased one grade level prior to their initial incident grade.
Prior Disciplinary Actions	The number of times a student received a principal or superintendent suspension, class removal, or other (e.g. alternative disciplinary action) discipline for an incident. All incidents are disciplined. Therefore, the number of disciplinary actions also represents the number of incidents.
Prior Criminal Justice Involvement	The number of criminal and family and juvenile court arrests prior to the initial incident. Source: NYC Office of Court Administration (for students16 years and older), and the NYC Juvenile and Family Court (for students under 16 years of age).
Initial Incident	
Suspension	Binary: 1=yes, 0=no. The student was suspended for the initial incident.
Incident Severity	Binary: 1=yes, 0=no. Incident severity includes medium and high-level incidents (levels 3-5 in the 2013 NYC DOE Discipline Code).

[25] All student data was received from the NYC Department of Education (DOE) Research and Policy Support Group (RSPG).

Future Behavior	
Future Incidents	Binary: 1=yes, 0=no. Whether a student has any incident after the initial incident.
Future High-Level Incidents	Binary: 1=yes, 0=no. Incidents classified as Level 4 or 5 by the 2013 NYC DOE Discipline Code.
Future Violent Incidents	Binary: 1=yes, 0=no. Twelve types of incidents listed in the 2013 NYC DOE Discipline Code that describe the incident as behavior that is aggressive with a substantial risk of injury.
Future Disruptive/Inappropriate Incidents	Binary: 1=yes, 0=no. Five types of incidents listed in the 2013 NYC DOE Discipline Code that are described as disruptive, disrespectful and defying authority.
Future Absenteeism Incidents	Binary: 1=yes, 0=no. Four types of incidents listed in the 2013 NYC DOE Discipline Code that involve cutting class, unexcused absences, being late or leaving school early.
Future Suspension[26]	Binary: 1=yes, 0=no. Whether a student has any suspension after the initial incident.
Future Classroom Removal	Binary: 1=yes, 0=no. Whether a student has any classroom removal after the initial incident.
Future Other	Binary: 1=yes, 0=no. Whether a student has any other disciplinary action after the initial incident. The "other' category is a disciplinary action that is not specifically identified in the discipline database, but it is not a traditional response to discipline and may involve an alternative approach.
Grade Advancement	Binary: 1=yes, 0=no. Whether a student advanced to the next grade or graduated after the initial incident.
Future Arrests	Binary: 1=yes, 0=no. Whether a student has an arrest after the initial incident[27]. Source: NYC Office of Court Administration (for students16 years and older), and the NYC Juvenile and Family Court (for students under 16 years of age).
School-Level[28]	
Student Characteristics (by percent)	
Black Students	Percent of Black students. Source: *Demographic Snapshot*. https://infohub.nyced.org/reports-and-policies/citywide-information-and-data/information-and-data-overview
Hispanic Students	Percent of Hispanic students. Source: *Demographic Snapshot.* https://infohub.nyced.org/reports-and-policies/citywide-information-and-data/information-and-data-overview
Students with Disabilities	Percent of students with an IEP (includes learning, emotional, and behavior disabilities). Source: *Demographic Snapshot.* https://infohub.nyced.org/reports-and-policies/citywide-information-and-data/information-and-data-overview

[26] Principal suspension (5 days or less) and superintendent suspension (6 days or more, up to a year) were combined into one variable, because there were too few superintendent suspensions for a separate analysis.
[27] Students could be arrested while still enrolled in school.
[28] All publicly available school data was taken from the 2012-2013 school year.

English Language Learners	Percent of students who are learning English as a second language. Source: *Demographic Snapshot.* https://infohub.nyced.org/reports-and-policies/citywide-information-and-data/information-and-data-overview
Economic Disadvantage Index	An index created by the NYC DOE that includes the percent of students receiving free or reduced school lunch and the percent of students below poverty-level. Source: *Demographic Snapshot.* https://infohub.nyced.org/reports-and-policies/citywide-information-and-data/information-and-data-overview
Student-teacher ratio	The average ratio of students to teachers. Source: https://infohub.nyced.org/reports-and-policies/government/intergovernmental-affairs/class-size-reports/class-size-reports-archive
School climate	An index of 17 questions from the 2012-2013 NYC School Survey, measuring student, teacher, and parent perceptions of safety and respect at their school. Students were asked rate the following questions on a scale of one to four (1-strongly disagree; 4-strongly agree): "Most students in my school help and care about each other;" "Most students in my school just look out for themselves;" "Most students in my school treat each other with respect;" "I stay home because I don't feel safe at school;" "Students threaten or bully other students at school;" "Students get into physical fights at my school;" "Adults at my school yell at students;" "Students in my school are harassed or threatened based on race, color, creed, ethnicity, national origin, citizenship/immigration status, religion, gender, gender identity, gender expression, sexual orientation or disability;" "There is a person or program in my school that helps students resolve conflicts;" "Discipline in my school is fair;" "I am safe in my classes;" "I am safe in the hallways, bathrooms, and locker rooms at my school;" "I am safe on school property outside my school building;" "My school is kept clean;" "If your school has School Safety Agents: The presence and actions of School Safety Agents help to promote a safe and respectful learning environment. Students were also asked how often the following occurred on a scale of one to four (1-none of the time; 4-all of the time): "At my school, students drink alcohol, use illegal drugs or abuse prescription drugs while at school;" "There is gang activity in my school" Variations of the same questions were asked to parents and teachers. The current study uses the total survey score[29], which averages and weights responses of students, parents, and teachers.[30] Source: https://infohub.nyced.org/reports-and-policies/school-quality/nyc-school-survey/survey-archives.

[29] Separate statistical models tested the impact of each of the surveys on the outcome. Each of them had the same impact. Therefore, the total measure was used to simplify the models.

[30] For more information on the NYC School Survey Report Guide, see https://infohub.nyced.org/docs/default-source/default-document-library/2015nycschoolsurveyguide6252015.pdf?sfvrsn=30efb133_2.

Incident Rate	The number of incidents per school enrollment. Incidents were aggregated from the student-level disciplinary files for the 2012-2013 school year.
Suspension Rate	The number of suspensions (principal and superintendent) per number of incidents. Suspensions were aggregated from the student-level disciplinary files for the 2012-2013 school year.
Neighborhood-Level	
Neighborhood Disadvantage	The 2010 U.S. Census and the 2012-2016 American Community Survey(ACS) were used to gather neighborhood demographics and socio-economic characteristics within Neighborhood Tabulation Areas (NTAs)[31] Concentrated disadvantage is an index comprised of nine items often cited and tested in the socio-ecological literature (Massey 1996; Sampson, Raudenbaush and Earls 1997); percent Black, percent Hispanic, percent Single female-headed families, percent with less than a high school degree, percent of households receiving food stamps/SNAP, percent unemployed, median family income, percent below poverty, ratio of income to poverty under .50. All items were standardized and the index (Cronbach's alpha =.775). Source: https://popfactfinder.planning.nyc.gov/#12.25/40.724/-73.9868.
Crime Rate	2013 publicly available arrest data by precinct from the Division of Criminal Justice Services. The crime rate (per 100,000 people) is a composite measure of violations, misdemeanors, non-major felonies (i.e., possession of a stolen property, forgery/theft_fraud/identity theft, arson, sex crimes, dangerous drugs, dangerous weapons, criminal mischief and related felonies), and major felonies (i.e., murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft). Source: https://www1.nyc.gov/site/nypd/stats/crime-statistics/historical.page.

[31] NTAs were used instead of census tracts, because there were too few schools per census tract to conduct a multilevel analysis. according to the NYC Department of City Planning, NTAs are "aggregations of census tracts from the 2010 census that are subsets of New York City's 55 Public Use Microdata Areas (PUMAs), which roughly represent the city's Community Districts....Regarding the decennial census, these geographic areas offer a good compromise between the very detailed data for census tracts (2,168) and the broad strokes provided by PUMAs (55). For the ACS, NTAs offer a statistically reliable alternative to the high sampling error that renders data for most individual census tracts unusable." Source: https://www1.nyc.gov/site/planning/data-maps/open-data/dwn-nynta.page.

Appendix C. Additional Tables

Student and School Predictors of Future Incidents by Type and Future Discipline

	All Incidents Odds Ratio	High-Level[32] Incidents Odds Ratio	Violent Incidents Odds Ratio	Disruptive/Inappropriate Incidents Odds Ratio
Number of Cases (Students)	87,471	87,471	87,471	87,471
Number of Cases (Schools)	804	804	804	804
Student-Level				
Age	.814***	.808***	.771***	.866***
Male	1.188***	1.108***	1.090***	1.220***
Black	1.691***	1.822***	1.891***	1.686***
Hispanic	1.267***	1.287***	1.288***	1.325***
English language learner	.982	.936*	.997	.928*
Student with disability	1.380***	1.337***	1.393***	1.329***
Economically disadvantaged	1.146***	1.137***	1.153***	1.102***
Prior grade advance	.927**	.973	1.002	.964***
Prior chronic absenteeism	1.281***	1.215***	1.156***	1.210
Number of prior disciplinary suspensions	1.521***	1.432***	1.375***	1.348***
Initial suspension	1.040*	1.181***	1.112***	.989
School-Level				
% Black	.997*	.996**	.996*	.998
% Hispanic	.993***	.996*	.992***	.994**
% Students with disabilities	1.033***	1.031***	1.039***	1.027***
% English language learners	1.004	1.001*	1.004	1.004
% Economically disadvantaged	.999	1.001**	1.004	1.000
Student-teacher ratio	.940***	.953***	.953***	.955***
School climate	.919*	1.016	1.012	.916*
Constant	.516***	.226***	.195***	.139***

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

[32] Models were run with low and medium-level incidents, and there were no meaningful differences.

	Absenteeism Incidents	Future Classroom Removal	Future Other Discipline
Number of Cases (Students)	87,471	87,471	87,471
Number of Cases (Schools)	804	804	804
Student-Level	**Odds Ratios**	**Odds Ratios**	**Odds Ratios**
Age	.924***	.726***	.832***
Male	1.012	1.399***	1.123***
Black	1.255***	1.541***	1.584***
Hispanic	1.191***	1.255***	1.227***
English language learner	1.006	.925	.979
Student with disability	1.236***	1.200***	1.366***
Economically disadvantaged	1.084**	1.128**	1.149***
Prior grade advance	.857***	.785***	.914**
Prior chronic absenteeism	1.505***	1.107**	1.234***
Number of prior suspensions	1.239***	1.196***	1.343***
Initial suspension	.860***	.875***	.894***
School-Level [33]	**Odds Ratios**	**Odds Ratios**	**Odds Ratios**
% Black	.997	.993*	.996*
% Hispanic	.991***	.995	.990***
% Students with disabilities	1.017**	1.031**	1.030***
% English language learners	1.007	.995	1.004***
% Economically disadvantaged	1.006	1.001	1.002
Student-teacher ratio	.931***	.882***	.937***
School climate	.838**	.946	.943
Constant	.107***	.036***	.343***

Appendix D. Sample Qualitative Study Protocols

SCHOOL STAFF/STAKEHOLDER INTERVIEW

Thank you so much for agreeing to talk with me. Just to give you a sense of how we'll move through this interview, I'll start by asking you some questions about your background in schools, then move into specific questions about [SCHOOL NAME] *and your feelings about your work here, the school environment, and things like that. Do you have any questions for me before we get started?*

Professional Background

First, we'd like to know about your professional background.

1. How long have you worked in education?
2. How long have you worked at this school?

School Environment and Relationships

Next, we'd like to know your opinions about your school environment and relationships.

3. Tell me about your school and what it's like to work there.
    a. What are some of the best things about your school?
    b. What are some of the most challenging things about your school?
    c. Do you think your experiences are common among other school staff? How so?

4. Next, let's talk about relationships here. *[adjust questions based on person's role]*
    a. What is your relationship like with students? What makes the relationship this way?
    b. What is your relationship like with parents? What makes the relationship this way?
    What is your relationship like with SSAs? What makes the relationship this way?
    What is your relationship like with other school staff? What makes the relationship this way?
    What is your relationship like with school administrators? What makes the relationship this way?

5. What are the values of your school's leaders (e.g. what is their vision for the school, what do they care about, what are they trying to do in the school community)?
    a. Do you think this vision or these values are shared by most school staff? By school safety agents in the building?
    b. Why or why not?

School Safety

Now we have a few questions for you about school and student safety at [SCHOOL NAME].

6. Overall, do you think your school is safe?
    a. Why or why not? In what ways? (Prompts: tone/tension vs actual crime)
    b. Is there a difference between how safe you think people are at school versus when traveling to/from school?

a. IF SCHOOL IS A CAMPUS→How about in relation to other schools in the building/campus?

7. [IF STAFF DO NOT DISCUSS, REVIEW LIST OF SAFETY MEASURES AT CHILD'S SCHOOL—E.G., METAL DETECTORS, VIDEO CAMERAS, ROLE OF LAW ENFORCEMENT, EMERGENCY PLANNING]:
    a. In your opinion, which of these works? Why?
    b. In your opinion, which of these don't work? Why?

Responses to Student Behavior and Resources
Next, we'd like to hear more about discipline at [SCHOOL NAME], *and your opinions about programs and resources at your school. Before we start I want to invite you to think back to last year, the whole year. Think about all the times you saw, heard about, or were involved in incidents in school, like kids getting in trouble or doing things that were against school rules. Just take a minute and try to remember those different events, and when you're done just look at me so I know you're ready.* [GIVE PARTICIPANT A MINUTE]. *As you think about answers to the next set of questions, try to answer them with ALL those events in mind. I also want you to be careful about sharing too much about one student's specific situation unless you feel really comfortable talking about it in this interview, and as a reminder please don't use any specific names here.*

Discipline

8. How often do students get in trouble at your school?
    a. What kinds of things do they usually get in trouble for?
    b. What is the process after a student gets in trouble? (Prompts: what is the school's response, who is involved in terms of school staff and families, how are those involved notified, how much do other students and parents know about what happens)
    c. Do you feel like these approaches to dealing with problems work? Why or why not?
    d. How do you think students who get in trouble are affected by school responses?
    e. Do certain groups of students seem to get in trouble more than others? (Prompts: e.g. students of different races, sexual orientation or gender identity, or those with disabilities/IEPs? Can you give examples?)
    f. [IF PARENTS DO NOT DISCUSS] Do students ever get suspended at [SCHOOL NAME]? For what?
        - Do students ever get summonses or arrested at school? For what?
        - Are these approaches fair? Why or why not?
    g. Do you think your school's disciplinary responses are similar to those at other middle/high schools in the city? Why or why not?

Positive Programs

9. I've heard your school has a few programs that are supposed to help with problems at school [NAME ALL OF THEM OR PICK TOP 3]. I'd like to get your opinions about

them. First, let's talk about [SPECIFIC PROGRAM; RUN THROUGH ALL QUESTIONS FOR EACH].
   a. How often is it used?
   b. For what kinds of things?
   c. What do you think is the goal of this program?
   d. What kind of effect do you think this program has on [whatever they think it's used for]?
   e. Do you think certain groups of students and families have the same experiences in the program(s) (e.g., those of different race/ethnicities, sexual orientation or gender identity, or those with disabilities/IEPs)? Why or why not?
   f. Are there any barriers to participating in these programs?
   g. Were you around before these programs started?
      - If yes, how do you think they changed things at school?
   h. Do you have a role in implementing any of these programs?
      - If yes, have you attended trainings? Were the trainings sufficient? Would you like more training?

Resources

10. How does your school help or support students (e.g., help with schoolwork, help from teachers, guidance counselors, social workers or psychologists, clinics, any other school resources)?
    a. What's available for all students (e.g., help with schoolwork, help from teachers, guidance counselors or any other staff, clinics or other school resources)?
    b. What's available for students with IEPs (e.g., help with school work, help from teachers, guidance counselors or any other staff)?
    c. What's available in terms of students who've gotten in trouble (e.g., help with schoolwork, help from teachers, guidance counselors, social workers or psychologists, clinics, any other school resources)?

Recommendations

Finally, we'd like to know your opinions about what should be done at your school and others to improve school climate, relationships and disciplinary responses. As we've said before, we want your opinions to guide the Department of Education and NYC public schools.

11. You've mentioned that [LIST OUT CONCERNS] are issues at your school. What do you think would improve these?
    a. How can these be made better?
    b. What else do you think would help you or other students, parents, teachers or staff?
    c. Are there any key resources that you think are missing, or that would help staff or administrators better support students or themselves?
12. What do you think other schools could learn from the positive interventions and supports that [SCHOOL NAME] has implemented? How about the process of implementation?

*****Thank you all so much for participating!

STUDENT FOCUS GROUP SCRIPT

Introduction, Consent, and Questions

Thank you all for taking the time to meet with us. My name is ________ and this is _________.

Before we start, we want to make sure that we have collected everyone's signed parental consent forms. Can you turn in the form if you haven't given it to us already? *[Signed parental consent forms should be collected at student entry. Count consent forms and # of students].*

We are handing out consent forms to you all so that you will have information about the study to take with you and so we can make sure you all understand why we're here and sign the form.

The consent forms say:

- We are researchers from a NYC organization called the Center for Court Innovation. Our organization does research on a lot of topics related to youth, schools, and criminal justice.
- We're here today to learn from you about your school environment and what happens when kids get in trouble. This is part of a big study we're doing across New York City to learn about what is going in our schools.
- Today's discussion group will be about an hour and will be a conversation between all of us about your opinions and experiences at your school.
- **You don't have to participate.** If you sign the form, you can still stop at any time or skip any questions that you don't feel comfortable answering. If you want to leave at any time, just let us know.
- On the consent form, you'll find information for someone at school who can reach out to after the group is over, if you have any questions or concerns.
- Your choice to participate in the research will not have any impact on your participation in school or school-related activities or services.
- You will get $10 for participating, whether or not you finish the focus group.

Do you all have any questions before we get started?

Let's take a few minutes for you to read the consent forms and decide what you want to do. If you agree to participate, sign on the last page and hand that page back to me. You should keep the rest of the consent form for yourself. If you're over 18, make sure you sign on the bottom-half of the signature page.

We also want to audio-record the conversation, so if you agree to be audio-recorded, please initial under your signature.

Anyone who doesn't want to be part of this conversation should feel free to leave. *[Facilitator collects consent/assent forms from all students; escorts any students out who don't want to stay]*

STUDENT FOCUS GROUP

To get us started, I'd like to go around the room and have everyone introduce themselves. When it's your turn, please say your first name only and current grade (e.g., 10th grade) and how long you've attended [SCHOOL NAME]. *I'll start. My name is* [FIRST NAME]. [Go around the circle.]

School Environment
First, we'd like to know your opinions about the [SCHOOL NAME] environment and relationships (meaning how you feel about the school, students, parents and school staff).

1. What's it like to go to [SCHOOL NAME]? If a student was thinking about transferring here, what would you tell them to help them make their decision?
    a. What are some of the best things about your school? [CHART ANSWERS to both A and B]
    b. What are some of the most challenging things about your school?
    c. Do you think your experience is similar to other students' experiences here? How so?

Key Relationships
Let's talk about relationships at your school, especially the stronger or weaker ones. Please keep in mind we'd like to hear about both specifics and in general.

2. What are your relationships like with people at school?
    a. Other students
    b. Teachers
    c. Administrators (e.g., principals, assistant principals)
    d. School staff like guidance counselors, social workers or teacher's aides
    e. School safety agents or other law enforcement at the school (if any)
    f. Do you think your experience is common for students at your school? How is your experience similar to/different from other students'?

School Safety
3. Overall, do you think your school is safe?
    a. What about your school makes it feel safe?
    b. What about your school makes it feel unsafe?
    c. Is there a difference between how safe you feel in the school building versus coming to and from school?
    d. IF SCHOOL IS A CAMPUS→How about in relation to the other schools in the same building/campus?

4. [IF STUDENTS DO NOT DISCUSS, REVIEW LIST OF SAFETY MEASURES AT CHILD'S SCHOOL—E.G., METAL DETECTORS, VIDEO CAMERAS, ROLE OF LAW ENFORCEMENT, EMERGENCY PLANNING]*:*
    a. In your opinion, which of these works to keep your school safe? Why?
    b. In your opinion, which of these doesn't work to keep your school safe? Why?

Responses to Student Behavior and Resources
Next, we'd like to hear more about discipline at [SCHOOL NAME], *and your opinions about programs and resources at your school. Before we start I want to invite you think back to last year, the whole year. Think about all the times you saw, heard about, or were involved in incidents in school, like kids getting in trouble or doing things that were against school rules. Just take a minute and try to remember those different events, and when you're done just look at me so I know you're ready.* [GIVE GROUP A MINUTE]. *As you think about answers to the next set of questions, try to answer them with ALL those events in mind. I also want you to be careful about sharing too much about your own specific situation unless you feel really comfortable talking about it in this group setting, and as a reminder please don't use any specific names here.*

Discipline

5. What happens when students get in trouble at [SCHOOL NAME]?
    a. What kinds of things do they usually get in trouble for?
    b. What happens after a student gets in trouble? (Prompts: what does the school usually do, who is involved in terms of school staff and kids' families, how are those involved notified, how much do other students and parents know about what happens)
    c. Do you feel like these approaches to dealing with problems are work? Why or why not?
    d. How do you think students who get in trouble are affected by how the school handles the situation?
    e. Do certain groups of students seem to get in trouble more than others? (Prompts: do students of different races, sexual orientation or gender identity, students with disabilities/IEPs have the same experience? Can you give examples?)
    f. [IF STUDENTS DO NOT DISCUSS, USE PROMPT:] Do students ever get suspended at school? For what?
        - Do students every get summonses or arrested at school? For what?
        - Are these approaches fair? Why or why not?

Positive Programs

6. I've heard your school has a few programs that are supposed to help with problems at school [NAME ALL OF THEM OR PICK TOP 3]. I'd like to get your opinions about them. First let's talk about [SPECIFIC PROGRAM; RUN THROUGH ALL QUESTIONS FOR EACH]. *(If appropriate, do small group breakouts by program type.)*
    a. Have you heard of this program or been involved in the program?
        - How did you learn about it?
        - What do you know about it (e.g., specify role, experience)?

- What do you think is the goal of this program?
- What do students who go through the program have to do?

b. Do you think the program works? Why or why not?
c. Do you think certain groups of students have the same experiences in the program(s) (e.g., students of different race/ethnicities, sexual orientation or gender identity, or those with disabilities/IEPs)? Why or why not?
d. Are there any barriers to participating in these programs for students and families?
e. Were any of you around before these programs started? If yes, how do you think they changed things at school?

Resources

7. How do you think your school helps or supports students?
    a. What's available for all students (e.g., help with schoolwork, help from teachers, guidance counselors or any other staff, clinics or other school resources)?
    b. What's available for students with IEPs (e.g., help with school work, help from teachers, guidance counselors or any other staff)?
    c. What's available for students who've been suspended or come back from jail (e.g., help with schoolwork, help from teachers, guidance counselors, social workers or psychologists, clinics, any other school resources)?

Recommendations

Finally, we'd like to know your opinions about what should be done at [SCHOOL NAME] and others to improve school climate, relationships and disciplinary responses. As we've said before, we want your opinions to guide the Department of Education and NYC public schools.

8. You've mentioned that [LIST OUT CHARTED STUDENT CONCERNS] are issues at your school.
    a. What do you think would improve these?
    b. How can these be made better?
    c. Are there other things you think would help you or other students, parents, teachers or staff to create a positive and supportive atmosphere at the school?
9. What do you think other schools could learn from the positive interventions and supports that [SCHOOL NAME] has implemented?

*****Thank you all so much for participating! Here are the next steps to receive your stipend.
[List specific steps for student participants, under 18 years old.]

Appendix E. Case Study Schools Positive Practices

Strategy	School 1	School 2	School 3	School 4	School 5
Community-building (Tier I) circles	Yes	Yes	Yes	Yes	Limited
Restorative conversations: one-on-one informal & formal check-ins	Yes	Yes	Yes	Yes	Yes
Staff-led mediation: Staff facilitate a conversation between two parties in conflict	**Main RJ approach** (with circles)	Used alone or combined with circles	**Main RJ approach** (with circles)	Used alone or combined with circles	**Main RJ approach** (used with classroom removal)
Tier II circles: Used for interpersonal conflict, harm caused	Used with mediation	**Main RJ approach**	Used with mediation	**Main RJ approach**	None
Tier III circles: Used for person-specific issues (attendance, grades, mental health, etc.)	Not discussed explicitly	**Main RJ approach**	Not discussed explicitly	**Main RJ approach**	None
Student-led processes	No specific programs	Tier I circles Leadership Class Peer mentoring Informal peer-led Tier II & III circles	PGC Peer Mediation Youth Court	Informal peer mediation, mentoring RJ Advisories Tier I Circles	Peer mediation
Reentry processes: reentry circles, restorative conversations	Yes	Yes	Yes	Yes	Informal
Counseling: most of the schools have many avenues for students to access individual or group counseling	Yes	Yes	Yes	Yes	Yes
Staff-led mentoring (formal & informal)	Yes	Yes	Yes	Yes	Some informal

Center
for
Court
Innovation

520 Eighth Avenue
New York, NY 10018
p. 646.386.3100
courtinnovation.org