Running head: RESTORATIVE PRACTICES AND STUDENT WELL-BEING

RESTORATIVE PRACTICES AND STUDENT WELL-BEING IN URBAN SCHOOLS A DISSERTATION

SUBMITTED TO THE FACULTY

OF

THE GRADUATE SCHOOL OF APPLIED AND PROFESSIONAL PSYCHOLOGY

OF

RUTGERS,

THE STATE UNIVERSITY OF NEW JERSEY

BY

EASTON RAYE GAINES

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

DOCTOR OF PSYCHOLOGY

NEW BRUNSWICK, NEW JERSEY	MAY 2019
APPROVED:	
	Anne Gregory, Ph.D.
	Maurice Elias, Ph.D.
DEAN:	
	Francine Conway, Ph.D.

Copyright © 2018 by Easton Gaines

Abstract

Racial disproportionality in school discipline and achievement has prompted researchers to investigate solutions that may narrow these gaps. Consequently, schoolwide programming, such as restorative practices (RP) and social-emotional learning (SEL), has been used as an alternative to exclusionary discipline practices and to build stronger relationships within classrooms and school buildings. Initiatives are predicated on the assumption that RP provides students with opportunities to develop their social and emotional competencies (i.e., self-awareness, empathy, and emotional and behavioral regulation). However, more research is needed to understand the association between restorative practices and (1) social emotional competencies, (2) grades, (3) educational attainment expectancies, and (4) exclusionary discipline. This dissertation examined the association between RP and self-reported positive (i.e., social-emotional competencies, grades, and educational attainment expectancies) and negative (i.e., behavioral referrals) outcomes in schools. Additionally, it examined whether students' perception of the exposure to and participation in RP was associated with greater equity in exclusionary discipline across racial groups. The current study drew on survey data from 964 students in 4 urban Northeastern U.S. schools from the Spring of 2017. Using multiple regression and logistic regression, the study found the following: As hypothesized, students reporting greater exposure to RP also reported higher grades, higher social emotional competencies, expected to go further in school and received fewer exclusionary discipline practices than their peers that reported less exposure to RP. Also noteworthy was that RP exposure, more than community building circle participation, was associated with these positive outcomes. Finally, the study showed that Black students were more likely to

receive exclusionary discipline than their peers. Even when accounting for exposure to and participation in RP, the link between being Black and exclusionary discipline remained. In other words, RP exposure and participation was not associated with greater racial equity in discipline.

Acknowledgements

This work would not have been possible without the support of my family and friends. I would like to thank my parents, whose love and reassurance backs all of my pursuits, and my sister, who remains my voice and best friend. Thank you, Emma, for your steadfast affection when I need it the most and Shoshana, for your compassion, unending inspiration, and hilarity. Additionally, I must thank my undergraduate advisor, Dr. John Shaw, III, for his unwavering encouragement throughout my academic journey.

I am indebted to my Committee members, Dr. Anne Gregory and Dr. Maurice Elias, who have facilitated my goals and provided me with inspiration to complete them. Moreover, thank you for your generous hospitality throughout my time at Rutgers University. It has been an unparalleled experience witnessing your dedication to the advancement of the field. Each member of my Dissertation Committee has provided me with extensive personal and professional guidance. I would especially like to thank Dr. Anne Gregory, the first chair of my committee. As my instructor and mentor, she has taught me about the persistence and meticulousness necessary to create lasting changes; she typifies an exemplary researcher and a skilled clinician.

TABLE OF CONTENTS

PAG	Έ
ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
LIST OF TABLESv	⁄ii
LIST OF FIGURESvi	ii
INTRODUCTION	1
Racial Discipline Gap	2
Racial Achievement Gap	4
School Discipline Reform.	.5
Restorative Practices.	.6
Key Practices of RP in Schools.	7
Student outcomes linked to RP in schools	9
Social-Emotional Learning1	2
Key SEL Competencies	5
Summary of the current study1	6
METHODS1	8
Participating Schools and Students	8
MEASURES2	0
Exposure to and participation in RP	0
Social Emotional Learning	1
Achievement2	3
Missing Data2	4

Data Analytic Plan	25
RESULTS	28
Descriptive Statistics.	28
Correlations	30
Multiple Regression.	32
Binary Linear Regression.	36
Post-hoc Analyses.	40
DISCUSSION	42
Academic Outcomes	44
Social Emotional Outcomes	45
Exclusionary Discipline Outcomes	47
Findings in the middle school versus the high school	48
Limitations	49
Implications for Practice & Future Directions	55
Implications Specific to School Psychology	55
REFERENCES	57
APPENDIX A	71
APPENDIX B	76
APPENDIX C	77

LIST OF TABLES

Гable		Page
1.	Sample characteristics of 4 schools.	20
2.	Descriptive Analysis of Restorative Practices.	28
3.	Descriptive Analysis of Social Emotional Competencies	28
4.	Descriptive Analysis of Academic Outcomes.	29
5.	Correlations between student demographics and self-reported measures	31
6.	Multiple Regression Academic Outcome Analyses.	33
7.	Multiple Regression SEL Competency Analyses	35
8.	Binary Logistic Regression for Exclusionary Discipline (6a)	37
9.	Binary Logistic Regression for Exclusionary Discipline (6b)	38
10.	. School 2 Multiple Regression Academic Outcome Analyses	40
11.	School 2 Multiple Regression SEL Competency Analyses	41

LIST OF FIGURES

Figure		Page	
1.	Student reported Exclusionary Discipline.	29	
2.	Student reported Exclusionary Discipline by race	30	

Introduction

Studies have shown that Black and Latinx¹ students have less favorable experiences of safety, connectedness, relationships with adults, and opportunities for participation compared to White students (Bottiani, Bradshaw, Mendelson, 2014; Voight, Hanson, O'Malley, & Adekanye, 2015). There is also some evidence that when the school climate gaps are larger, so too are the racial achievement gap (Voight et al., 2015). In addition to the less favorable school climate experiences, students of ethnic minority backgrounds are disproportionately issued suspensions and expulsions; moreover, they are often given the harshest exclusionary penalties for behaviors similar to White peers (Anyon et al., 2014). This is of concern given that it is widely documented that suspension does not prevent further discipline incidents (Skiba & Peterson, 2000; Tobin, Sugai, & Colvin, 1996), but instead can lead to a loss of instructional time (Scott & Barrett, 2004). Moreover, one study found that high levels of suspension in a school over time are associated with declining academic achievement among non-suspended students, even after adjusting for a school's overall level of violence and disorganization (Perry & Morris, 2014). Research has suggested that high suspension rates can undermine student achievement as a whole, even for students who are not personally suspended (Perry & Morris, 2014). Furthermore, Morris and Perry (2016) conclude that school suspensions account for roughly one-fifth of the white-Black achievement gap. In addition, suspension appears to have a negative relationship with indicators of a positive school climate (Bickel & Qualls, 1980; Davis & Jordan, 1994; Wu, Pink, Crain, & Moles, 1982).

¹ Latinx is a term inclusive of gender diversity among individuals with Latin American heritage (Proctor, Williams, Scherr, & Li, 2017)

In order to combat the widespread practice of exclusionary discipline, schools have been implementing schoolwide supports. In New York City alone, more than \$47 million has been provided for training in positive behavioral interventions and support programs or restorative practices (De Blasio, 2016). These programs emphasize noticing patterns in student stress, discussing conflicts, and having disputants make meaningful restitution. Given that restorative programming involves sharing and understanding perspectives, building relationships, and repairing harm (Zehr, 2002), it seems intuitive that they would simultaneously bolster students' social-emotional competencies, such as self-awareness, self-management, social awareness, relationship skills, and relationship decision-making. While there have been claims that this type of learning occurs through RP, few studies have critically examined those claims. The current study addresses these gaps in knowledge.

Racial Discipline Gap and Equity

Racial disparities in school discipline have been widely documented (American Psychological Association Task Force Report, 2012; Gregory, Skiba, & Noguera, 2010). The racial gaps result in disparate outcomes for students of color with most research comparing Black and Latino groups to their White peers. After accounting for student characteristics such as gender, low-income status, special education eligibility, English language proficiency, and teacher-reported disruptive behavior, one study showed that Black students had a higher likelihood of receiving punitive treatment in their classrooms as compared to White peers (Bradshaw et al., 2010). The racial/ethnic trends of Black students receiving punitive treatment in schools are further documented by the National Center for Education Statistics (NCES, 2016) data on school suspension and expulsion.

In the 2013-14 year, 6% of all K-12 students received one or more out-of-school suspensions. However, the percentage is 18% for Black boys; 10% for Black girls; 5% for white boys; and 2% for white girls. Regrettably, Black K-12 students are 3.8 times as likely to receive one or more out-of-school suspensions as white students. Similarly, Black girls are 8% of enrolled students, but 13% of students receiving one or more out-of-school suspensions. To this end, girls of other races did not disproportionately receive one or more out-of-school suspensions. American Indian or Alaska Native, Latino, Native Hawaiian or other Pacific Islander, and multiracial boys are also disproportionately suspended from school, representing 15% of K-12 students but 19% of K-12 students receiving one or more out-of-school suspensions (NCES, 2016). These exclusionary discipline procedures are associated with longer-term negative outcomes for students, such as increased risk of school dropout and contact with the criminal justice system (Christle, Jolivette, & Nelson, 2005; Lee, Cornell, Gregory, & Fan, 2011).

Bottiani, Bradshaw, and Mendelson (2017) found that school-level discipline gaps were associated with Black students' perceptions of less school equity, less school belonging, and increased adjustment problems. These associations held even when researchers accounted for student demographics (i.e., gender, grade level, socioeconomic status) and school-level contextual factors (i.e., socioeconomic status, student diversity, overall suspension rates). However, these associations were not significant for White students. The pervasive gaps continue to be of interest and concern for educational and psychological professionals.

A framework for increasing equity in school discipline was recently published (Gregory, Skiba, & Mediratta, 2017). Preventative measures included: supportive

relationships, bias-aware classrooms. and respectful school environments, academic rigor, culturally relevant and responsive teaching, and opportunities for learning and correcting behavior. Interventions included: data-based inquiry and equity, problemsolving approaches to discipline, the inclusion of student voice on conflicts' causes and solutions, and reintegration of students after conflict or absence. A preventative and intervention principle was that schools use a tiered framework to match increasing levels of intensity of support to students' differentiated needs, or multitiered system of supports (Gregory, Skiba, Mediratta, 2017).

Racial Achievement Gap

Racial disparities in educational achievement are a blaring indication of American inequality and have been a long-standing concern for researchers and policymakers.

According to the National Assessment of Educational Progress (NAEP), the gap has narrowed in the past 40 years (National Center for Education Statistics, 2013). However, significant gaps remain between Black students and White students in reading and mathematics achievement (Hedges & Nowell, 1999; Jencks & Phillips 1998; Magnuson & Waldfogel 2008). A 2016 study of 452 schools across the state of New Jersey found that by high school, 52% of the variance in Language and 59% in Math test scores can be accounted for by SES and racial factors. Researchers found that at this level, a 1% increase in school minority population corresponds to a 0.19 decrease in percent Language proficient and 0.33 decrease for Math (White et al., 2016).

Nationally, at grade 4 the White-Black achievement gap in mathematics narrowed from 32 points in 1990 to 24 points in 2015; nevertheless, the White-Hispanic gap in 2015 (18 points) was not measurably different from the gap in 1990. At grade 8, there

was no measurable difference in the White-Black achievement gap in 2015 (32 points) and 1990. Similarly, the White-Hispanic achievement gap at grade 8 in 2015 (22 points) was not measurably different from the gap in 1990 (NCES, 2017). Historically, Black students made steady gains in closing the gap after school desegregation in the 1960s; however, this progress plateaued in 1990. The gap has fluctuated slightly since then but has ultimately made little progress over the past two decades (Morris & Perry, 2016).

School Discipline Reform

Racial inequality in achievement arises from a complex interplay of school and environmental factors. Gregory, Skiba, and Noguera (2010) have proposed that school discipline could be related to achievement differences. While little empirical work has tested this claim, school exclusionary discipline is a logical explanation for some of the achievement differences. Not only does punishment vary by race, but exclusionary forms of school punishment, (e.g., suspension) remove students from the learning environment, subsequently threatening their academic progress. The effects of suspension are long lasting and set into motion a trajectory of poor performance even if a student is not suspended again (Morris & Perry, 2016). Interestingly, school suspensions had a marked increase beginning in the 1990s, which parallels the waning narrowing of the achievement gap. This indicates that overuse of exclusionary discipline may pose barriers in efforts to reduce racial inequalities in education (Morris & Perry, 2016).

Beginning in the 1990s, school discipline approaches began to mirror the criminal justice system (e.g., school resource officers, security cameras, random searches, and "zero tolerance" policies). The shift in mentality led to a sharp increase in school suspension; suspension rates in U.S. public schools have doubled since the 1970s (Losen

& Gillespie 2012). An APA task force concluded that zero tolerance discipline does not enhance school climate or school safety (see American Psychological Association, 2008). Moreover, The U.S. Departments of Education (DOE) and Justice (U.S. DOE, 2014) recommended using exclusionary discipline as a last resort and building positive school climates to prevent disciplinary referrals in the first place. In recent years, New York City schools' suspension rates have decreased slightly (Kang, 2017). Still, the gaps remain; for example, about 50% of New York City's suspensions went to Black students even though they represent 27% of the student population (Zimmerman, 2016).

Restorative Practices

Traditional and zero-tolerance disciplinary approaches to improve U.S. schools are failing. Subsequently, there has been a shift in how to address the behaviors of so-called offenses, offenders, and victims (Zehr, 2002). Restorative Practices (RP) have been an integral part of discipline reform efforts undertaken in various school districts around the U.S. (see: Fronius, Persson, Guckenburg, Hurley, & Petrosino, 2016). RP is an offshoot of Restorative Justice, which is defined by Dr. Howard Zehr as, "a process to involve, to the extent possible, those who have a stake in a specific offense and to collectively identify and address harms, needs, and obligations, in order to heal and put things as right as possible" (Zehr, 2002, p. 37). Many agree that RP in education emerged from indigenous or pre-colonial systems of conflict resolution and the subsequent development of RP in criminal and juvenile justice systems internationally (Fronius et al., 2016; McCluskey, 2018).

Zehr places emphasis on the importance of community and mending broken relationships when harm occurs. While many definitions of RP have been posited, the

International Institute for Restorative Practices (IIRP) states the focus of RP is to "build healthy communities, increase social capital, reduce the impact of crime, decrease antisocial behavior, repair harm and restore relationships" (Watchel, 2016, p. 1). Again, the relational approach of the intervention is emphasized. In schools, RP programming has been used as an alternative to exclusionary discipline practices to instead build stronger relationships within classrooms and school buildings.

In schools, RP focuses on: repairing harm rather than punishing the offender, including student voice in the process, integrating a whole-school approach (culture), and incorporating practices and strategies to build students' social and emotional skills. RP may serve as a way to react to student offenses, but more importantly, is a preventative measure to avert, as well as resolve, discipline issues. In addition to handling discipline, RP is used to improve school culture and even teach classroom content. Experts contend that RP can lead to skill-building for students, particularly skills relevant to social and emotional learning (e.g., how to communicate with peers and teachers, talk about situations in a calm environment, give context to situations before jumping to conclusions; Guckenburg, Hurley, Persson, Fronius, & Petrosino, 2015). Implementing RP in schools is not just about reducing suspensions and expulsions, it is also about changing the way students and teachers interact, giving students a voice and opportunity to change their behavior, and creating a whole-school culture that values all the individuals in the school community (Guckenburg et al., 2015).

Key Practices of RP in Schools

Restorative approaches to school discipline include a continuum of practices that range from preventing infractions (Amstutz & Mullet, 2005; Blood & Thorsborne, 2005)

to intervention after an infraction (McCluskey et al., 2008). While school-based training organizations vary in their approach, common practices used in RP include affective statements, restorative questions, community-building circles, reactive circles, and restorative conferences (Amstutz & Mullet, 2005).

Used throughout RP, active listening is a technique that requires the listener to restate or paraphrase what they heard from another in the listener's own words (Guckenburg et al., 2015). Affective Statements provide opportunities for an individual to express personal feelings in response to specific behaviors of others with the absence of punitive language. Teachers are taught to use these statements when responding to student conflict or disciplinary infractions and encourage students to use the same language. Restorative Questions are used when there is a disagreement or when harm has been done. Restorative questioning involves open-ended questions to help individuals process an incident and reach a solution. For example, a teacher may ask students: What happened? Who has been affected by the actions? What do you think needs to happen to make things right? This practice supports the integration of student voice into disciplinary problem-solving.

Community-building circles provide opportunities for students to share feelings and experiences, voice problems, and engage in problem-solving in a structured manner. Students typically sit facing each other without barriers (e.g., backpacks, desks), and when students are handed the "talking piece," they have an opportunity to voice their perspective. These meetings allow students and others to come together for problem-solving, resolving disciplinary issues, receiving content instruction, and discussing concerns related to difficult topics, such as violence in the community or racial tensions.

Participants engage in sharing and open dialogue in order to build trust and understanding between circle members. Teachers are trained in methods of facilitating these circles.

Finally, restorative conferencing or reactive circles are a structured meeting between offenders, victims and both parties' family and friends, in which they postulate the best way to repair the harm. Schools may utilize restorative circles either in the classroom, if the incident affected the class as a whole, or in a designated space if the incident involves select individuals. Conferences provide victims and others with an opportunity to confront the offender, express their feelings, ask questions and have a say in the outcome. Disputants hear firsthand how their behavior has affected people.

Conferences are often used in lieu of, or as a supplement to, traditional discipline policies. Infusing these RP elements into the classroom context is theorized to reduce crime, repair harm, restore relationships, and improve human behavior (Watchel, 2016).

Student outcomes linked to RP in schools

Since 2006, a large urban district comprised of over 90,000 students and 180 schools implemented restorative interventions in response to school discipline incidents. A recent study found that each restorative intervention (RI) a student received (e.g., circles, mediations, or conferences) during their first semester, their odds of receiving another office discipline referral (ODR) or out of school suspension (OSS) in the second semester were lower (Anyon et al., 2016). This association held after accounting for sociodemographics (e.g., race, gender, free/reduced lunch eligibility), educational placements (e.g., general or special education), frequency or seriousness of office referrals (e.g., detrimental behavior, third-degree assault, dangerous weapon possession), and diverse school environments in terms of grade level (e.g., elementary school, high

school), size of the student body, proportion of Black and low-income students, and school-level RI rate. The study also found that the negative association between participation in RIs and adverse discipline outcomes was similar across racial groups; in other words, student race did not have a moderating role (Anyon et al., 2016).

Only a handful of studies have examined RP in relation to student achievement and academic progress. Considered together, the evidence for positive correlates of RP is is still in its infancy. In 2008, Minneapolis Public Schools offered RP services for students that were recommended for expulsion. Here, the restorative conference program utilized family group conferencing as an intervention strategy. Researchers collected preand post-conference surveys from students and one participating parent/guardian (McMorris et al., 2013). Additionally, they collected school record data (i.e., attendance, suspensions, and indicators of academic achievement) during the year prior, the year of the disciplinary intervention, and the year after. A total of 83 students and 90 guardians completed pre-conference surveys over the course of four school years (2009-10 to 2012-13) and, of those, 59 students and 73 family members completed a post-conference survey (approximately 6 weeks later). Most students were African American males (55%) and 63%, respectively). Results indicate that participation in the conferencing was associated with perceptions of increased student and parent connection to school and improved family communication and student self-report behavior. Post-conference data indicated that students who participated in the conferencing had better attendance, fewer suspensions, continued credit accrual, and slight increases in GPA relative to before the conference (McMorris et al., 2013). Jain and colleagues (2014) noted a sizeable gain in graduation rates for schools implementing RP compared to non-RP high schools. Three

years post-implementation, cumulative graduation rates rose 60 percent in RP schools compared to just 7 percent in non-RP schools (Jain et al., 2014).

Beyond discipline and grades, only a handful of studies have found an association between RP and a range of positive student outcomes. It is theorized that when teachers use RP methods and encourage students to share their perspectives, they establish norms for the classroom that are useful for addressing issues beyond discipline, such as increasing concerns about negative school climate and culture. To this end, RP has been a welcomed approach by some (Fronius, Persson, Guckenburg, Hurley, & Petrosino, 2016). Restorative practices such as circles have been associated with helping educators and students understand the root of conflicts, teaching social and emotional literacy, creating a space for individuals to be held accountable for their actions, fostering a sense of community, and improving academic outcomes, relationships, and school climate overall (Adams, 2008; Cameron & Thorsborne, 2000; Lewis, 2009; Macready, 2009; Shaw, 2007).

In a sample of 35 high school students and 25 staff and administrators involved in the schoolwide implementation of RP, semi-structured interviews were conducted and coded for themes (Ortega, Lyubansky, Nettles, & Espelage, 2016). Based on the identified themes, positive outcomes of restorative circles included: ownership of the process, interrupting the school to prison pipeline, improved relationships, prevention of destructive ways of engaging conflict, meaningful dialogue, and academic and social achievements. The themes that emerged were maturity, better behavior, and self-confidence of students (Ortega, Lyubansky, Nettles, & Espelage, 2016). Additionally, IIRP released a report showing how RP implementation in six American schools

correlated with a decrease in referrals to the office, student detentions, out-of-school suspensions, and incidences of disruptive behavior (Lewis, 2009). Despite the handful of aforementioned studies, empirical studies examining the link between RP and a broad range of positive outcomes are lacking.

Social-Emotional Learning

Given concerns regarding academic motivation and achievement, school dropout rates, and children's mental health, there is increased attention to children's social and emotional competence (Schonert-Reichl & O'Brien, 2012). Interventions must move beyond a deficit-oriented framework (i.e., focusing on remediation instead of promotion of assets) and address protective and risk factors that affect successful completion of youths' developmental tasks. SEL focuses on building students' personal competencies, social skills, and attitudes through increased positive relationships, social supports, and opportunities that strengthen assets and ensure students flourish within their environments (Taylor, Oberle, Durlak, & Weissberg, 2017). Through thoughtful, sustained, and systematic attention to children's SEL, Elias (1997) posits that students will become more knowledgeable, responsible, and caring. In a longitudinal study, social emotional competencies assessed in childhood have been linked to health, education, and well-being later in life (Hawkins, Kosterman, Catalano, Hill, & Abbott, 2008). In 2002, a systematic review of 25 positive youth development evaluations found that SEL interventions improved young people's self-control, interpersonal skills, problem-solving, the quality of their peer and adult relationships, commitment to schooling, and academic achievement. Additionally, some interventions decreased substance use, risk taking, and problem behaviors (Catalano, Berglund, Ryan, Lonczak, & Hawkins 2002).

A more recent meta-analysis corroborated the benefits of SEL programming. According to a meta-analysis of 213 studies involving more than 270,000 students, those who participated in evidence-based SEL programs showed an 11 percentile-point gain in academic achievement compared to students who did not participate in such programs. Additionally, the participating students showed improved classroom behavior, an increased ability to manage stress and depression, and more adaptive attitudes about themselves, others, and school compared to those who did not participate. Here, it is important to note that the most sustained and powerful effects happened after at least a second year of the intervention (Durlak et al., 2011).

School-based SEL involves implementing practices and policies that help students and adults alike both acquire and apply knowledge, skills, and attitudes that enhance personal development, social relationships, ethical behavior, and effective, productive work (Elias et al., 2015). School-based SEL interventions that have effectively promoted SEL competencies have subsequently enhanced both social and academic adjustment while reducing levels of conduct problems and emotional distress (Taylor et al., 2017). Interestingly, results from one study regarding a universal SEL intervention indicated that students from ethnic minority groups or low SES status benefit more from intervention. Stronger intervention effects are seen for students from low SES families on school attachment and achievement (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999). This is suggestive that for some marginalized groups, SEL programming may be especially promotive of positive development.

In a recent meta-analysis of SEL follow-up effects by Taylor and colleagues (2017), school-based SEL programming demonstrated significant positive benefits in

seven outcomes collected, on average, from 56 to 195 weeks following program participation. The analysis examined 82 research studies involving about 100,000 students in the U.S. and abroad. The seven assets and indicators included: SEL skills. attitudes, positive social behavior, academic performance, conduct problems, emotional distress, and drug use. Although based on only eight studies, the long-term academic outcomes are notable (ES = .33). In this meta-analysis, consistent positive effects at follow-up were found for SEL interventions with student populations from different racial groups. Not only were the programs successful in promoting positive outcomes, but they affected negative indicators of well-being and served as a protective factor against the development of subsequent problems, as well. Additionally, researchers found that enhanced skills, as opposed to attitudes, predicted long-term follow-up effects (Taylor et al., 2017). This is consistent with growing research that states that children's interpersonal competencies (e.g., self-regulation, problem-solving, and relationship skills) enhance their academic performance and behavior (Domitrovich, Staley, Durlak, & Weissberg, 2016). Finally, the meta-analysis found important developmental outcomes collected up to 18 years post intervention in a subsample of studies. These included improved social relationships, increased high school graduation rates and college attendance, and reduced later negative outcomes such as arrests or the presence of clinical disorders relative to students who did not participate in SEL programming (Taylor et al., 2017). However, the meta-analysis was unable to address the continued presence/absence of SEL and positive school culture and climate over time. Therefore, it is possible that sustainability may be based on contextual learning and a retention of skills on the part of the students.

Key SEL Competencies

SEL interventions promote asset development by enhancing five interrelated cognitive, affective, and behavioral competencies considered to be important for success in both life and school. The five main SEL competencies that have been linked to various emotional and academic gains: self-management, self-awareness, social awareness, relationship skills, and relationship decision-making skills (CASEL, 2012). Self-management is the ability to regulate one's emotions, thoughts, and behavior effectively in different situations. Students with strong self-management skills tend to be prepared for class, pay attention, follow directions, allow others to speak without interruption, and work independently with focus. Self-management includes *persisting* towards goals. Additionally, self-control has been linked to high school and college completion (Moffitt et al., 2011).

CASEL defines self-awareness as the "ability to accurately recognize one's own emotions, thoughts, and values and how they influence behavior" (Self-Awareness section, para. 1). Additionally, *self-awareness* encompasses the ability to accurately assess one's strengths and limitations with confidence and optimism. Self-awareness consists of identifying emotions, recognizing one's strengths, and self-efficacy.

Social awareness is the ability to take the perspective of and *empathize* with others from diverse backgrounds and cultures, to understand social and ethical norms for behavior, and to recognize family, school, and community resources and supports (LaRocca, 2017). Students who demonstrate strong social awareness benefit from peer learning and know how to take advantage of social supports (Gehlbach, Young, & Roan, 2012).

Relationship skills are the ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups. Relationship skills include the ability to communicate clearly, listen well, cooperate with others, resist inappropriate social pressure, negotiate conflict constructively, and seek and offer help when needed. Finally, relationship decision-making skills are the ability to make constructive choices about personal behavior and social interactions based on ethical standards, safety concerns, and social norms. Here, *emotional regulation* and *behavioral self-control* are important. A recent longitudinal study demonstrated that, even after controlling for socioeconomic status and early academic ability, higher social competence in kindergarten led to higher odds of graduating from high school and college (Jones, Greenberg, & Crowley, 2015).

Summary of the current study

RP involve sharing individual perspectives to learn from one another, building relationships, and repairing harm when it occurs. RP aim to give students an opportunity to develop skills such as active listening, problem-solving, and social perspective taking (Gregory et al., 2014). It seems intuitive that such interactions in school could foster students' SEL competencies (i.e., self-awareness, empathy, emotional and behavioral regulation). While there have been claims that RP foster such learning, few studies have critically examined those claims. The current study addresses gaps in knowledge about a range of positive outcomes associated with students' exposure to RP in schools such as SEL competencies and academic achievement (i.e., student self-reported educational expectancies, self-reported grades). Additionally, the current study examined if exposure to RP was associated with lower receipt of exclusionary discipline. Finally, it addressed the link between RP and racial equity in disciplinary interactions.

Schulte, Easton, and Parker (2009) define *participant exposure* as the "amount of the treatment received by the participant," and *exposure* as the "number and length of sessions; the frequency with which a treatment was implemented" (pp. 463). The current study, instead, uses slightly different conceptualizations and makes a distinction between student "participation" in community-building circles and students' "exposure" to educators' restorative interactions. Participation is seen as students' objective reports of whether they attended a circle, during which they may or may not have been actively engaged. PR exposure, on the other hand, may or may not draw on students' personal interactions with educators. It can also draw on the degree to which they witnessed educators engaging with *other* students in a restorative way.

Three central research questions are put forth:

- I. Is students' greater exposure to and participation in restorative practices associated with higher self-reported positive outcomes including their social-emotional competencies, grades, and educational attainment expectancies, relative to students with less exposure?
 - It was hypothesized that greater exposure to and participation in restorative practices would be positively associated with social-emotional competencies, grades, and educational attainment expectancies.
- II. Is students' greater exposure to and participation in restorative practices associated with lower self-reported negative outcomes, specifically their receipt of exclusionary discipline, relative to students with less exposure?

It was anticipated that, similar to previously-established national trends, greater exposure to and participation in restorative practices would be negatively associated with receipt of exclusionary discipline.

III. Is students' greater exposure to and participation in restorative practices associated with greater equity in exclusionary discipline across racial groups, relative to students with less exposure and participation?

It was hypothesized that student-reported restorative practices would be positively associated with equity in exclusionary discipline across racial groups. In other words, it was anticipated that greater exposure to and participation in restorative practices would moderate the link between race and receipt of exclusionary discipline.

Methods

Participating Schools and Students

The four participating middle and high schools had been implementing RP for at least a school year. All schools were located in a northeastern U.S. city and comprised of mostly low-income students (M = 85%). On average, we had a high response rate (M = 72%), with a total of 1154 students completing the 20-minute RP school climate survey. The sample was predominantly comprised of Black (52%) and Latinx students (20%) with fewer White (9%), Asian (7%) and Multiracial students (6%). One-third reported being born outside of the U.S. From the original sample, 190 students were excluded from analyses with a total of 964 included (See Missing Data section below and Appendix C for detail).

School 1 (n = 384) comprised of predominately Black or African American

students (59%) with fewer Hispanic/Latinx (16%), Multiracial (9%) and Asian (8%) students with 74% of students receiving Free/Reduced lunch. About half of the respondents were male (52%) and equally distributed between grades 9 through 12. Compared to a citywide average of 74%, 84% of students in School 1 graduated within four years of entering.

Half of the students in School 2 (n = 92) reported being Black or African American (50%) while more than a third reported being Hispanic/Latinx (37%) and fewer reported Multiracial (4%) and Other (7%) students with 96% of students receiving Free/Reduced lunch. More than half of the students were female (53%). Respondents were predominately in the 8th grade (40%) with fewer in 7th (35%) and 6th (25%) grades. Twelve percent of students met NY State standards on the State English compared to 41% of students citywide. Similarly, 14% of students met NY State standards on the State Math compared to 33% of students citywide.

Of the 4 schools, School 3 was the largest and most racially diverse. School 3 (*n* = 423) comprised of mostly White (36%) students with fewer Hispanic/Latinx (20%), Black/African American (15%) and Asian (15%) students with 100% of students receiving Free/Reduced lunch. Half of the respondents were male (50%) and equally distributed between grades 9 through 11. Fewer respondents were in grade 12 (16%). Compared to a citywide average of 74%, 67% of students in School 3 graduated within four years of entering.

School 4 (n = 65) comprised of predominately Black or African American students (83%) with fewer Other (8%) and Hispanic/Latinx (5%) students with 71% of students receiving Free/Reduced lunch. More than half of the respondents were female

(59%) and equally distributed between grades 10 through 12. Fewer students were in grades 9 (11%), 8 (5%), and 7 (5%). Compared to a citywide average of 74%, 47% of students in School 4 graduated within four years of entering (See Table 1 for sample characteristics).

Table 1

Sample Characteristics of 4 Schools

G 1 137 1					
School Number	<u>l</u>	2	3	4	Total
% Female	44.5	53.3	47.5	61.9	51.8
% Multiracial	8.5	4.4	8.7	3.2	6.2
% Black	59.4	50.0	14.6	82.5	51.6
% Hispanic	16.4	36.7	20.1	4.8	19.5
% Asian	8.0	2.2	15.0	1.6	6.7
% White	1.6	0.0	35.9	0.0	9.4
% Other	6.1	6.7	5.6	7.9	6.6
% Free or Reduced Lunch	74.0	96.0	100.0	71.0	85.3
Total Students (<i>n</i>)	384	92	423	65	964

Measures

Exposure to and participation in RP. Students rated the amount of RP exposure they experienced (See Appendix A). Given the time constraints for data collection, a short RP Use scale was developed from IIRP's 50-item RP self-assessment scale with multiple items for a range of RP elements (e.g., Affective Statements, Proactive Circles, Fair Process). The specific items were purposely selected to reflect four of the 11 Essential Elements of RP that are used by teachers in classrooms (See Appendix B). The RP Use Scale is comprised of seven items and uses a 5-point Likert scale ranging from not at all (1) to always (5). The elements represented are Affective Statements (i.e., "My teacher asks students to express their feelings, ideas, and experiences"); Restorative Questions (i.e., "When someone misbehaves: my teacher asks students questions about their side of the story; my teacher has that person to talk to who they hurt and asks them

to make things right; and my teacher has those who were hurt have a say in what needs to happen to make things right"); Proactive Circles (i.e., "My teacher uses circles as a time for students to share feelings, ideas, and experiences"); and Fair Process (i.e., "My teacher takes the thoughts and ideas of students into account when making decisions; the administration (principal, vice principal) listens to my side of the story"). In the current sample, the RP use scale was found to have a Cronbach's alpha of 0.86, indicating good internal consistency. In one sample, the scale demonstrated concurrent validity; students who indicated their teacher frequently used RP in their classrooms on the RP Use scale reported having a greater sense of community as compared to their peers in classrooms who reported less frequent RP use by their teachers (Gregory, 2016). It is important to note that some questions appear inferential while others are behavioral in nature.

Individual participation in an RP procedure was measured on the survey as well. Students were asked a single question about participation in one of the community-building RP activities, typically held during advisory, "In the past month, how many community-building circles in your classrooms have you participated in?"

Social Emotional Learning

California Healthy Kids Survey- Social Emotional Health Module- Short.

Students rated their inter- and intra-personal strengths (See Appendix A). The California Healthy Kids Survey (CHKS) Social Emotional Health Module (SEHM) was developed by researchers at UC Santa Barbara (Furlong, Redshaw, Smith & O'Malley, 2013). The original SEHM focuses on four social emotional assets: confidence or positive belief in self, belief-in-others, a sense of emotional competence, and feeling engaged in daily living. These SEL skills were assessed using seven subscales scales, each of which was

comprised of three items.

For the purposes of this study, four subscales that, on the face, were most related to SEL and RP were selected for analysis. Specifically, the items were purposely selected to reflect four of the constructs that are integral to both RP and SEL. The SEHM-Short Scale used a 5-point Likert scale ranging from not at all true of me (1) to very much true of me (5). The SEL constructs represented were Self-Awareness (i.e., "There is purpose to my life; I understand my moods and feelings; I understand why I do what I do"); Emotional Regulation (i.e., "I accept responsibility for my actions; When I make a mistake I admit it; I can deal with being told no"); Behavioral Self-Control (i.e., "I can wait for what I want; I don't bother others when they are busy; I think before I act"); and Empathy (i.e., "I feel bad when someone gets their feelings hurt; I try to understand what other people go through; I try to understand how other people feel and think"). Research studies have corroborated the reliability and validity of the scales (Dowdy, Furlong et al., in press; Furlong, You et al., 2013; Renshaw, Furlong et al., 2014; You, Furlong et al., 2013), and found support for their construct validity (Furlong, You et al., 2013; You, Furlong et al., 2013).

Using principal components factor analysis with varimax rotation, distinct factors were extracted with eigenvalues greater than 1.00. For the SEHM- Short scale, 6 items loaded .64 or higher on the first factor (behavioral and emotional regulation), accounting for 42% of the variance with adequate internal consistency (Cronbach's alpha = .83). Given the loading of two of the scales onto a single factor, the behavioral self-control and emotional regulation subscales were grouped as one combined *behavioral and emotional regulation* subscale. In principal components factor analysis, additional factors emerged:

Three items loaded .80 or higher on the second factor (self-awareness) and accounted for 14% of the variance with adequate internal consistency (Cronbach's alpha = .79). Finally, three items loaded .78 or higher on the third factor (empathy) and accounted for 9% of the variance with adequate internal consistency (Cronbach's alpha = .86).

Achievement

Self-reported educational attainment expectations. Students responded to the question, "How far do you expect to go in school?" by selecting one of the following: I expect to complete post-graduate studies (such as a master's degree or doctoral degree) after graduating from a four-year college, I expect to graduate from a four-year college, I expect to graduate from a two-year college or technical school, I expect to graduate from high school, I might or might not graduate from high school, or I do not expect to graduate from high school. Expectations are linked to their future educational attainment. In one study, expectations explained 15% of the variance in postsecondary education, which is more than the explanatory power (9%) of the student characteristics (e.g., race, gender, achievement, SES; Gregory & Huang, 2013).

Self-reported grades. Students responded to the question, "What grades did you make on your last report card?" They chose from: Mostly D's and F's, Mostly C's and D's, Mostly C's, Mostly B's and C's, Mostly B's, Mostly A's and B's, Mostly A's. It is not uncommon for school-based research to use students' self-reported grades (e.g., Huang, Eklund, & Cornell, 2016; O'Malley, Voight, Renshaw, & Eklund, 2014).

Self-reported behavioral referrals. Students were asked, "*In the past month*, how many times have you been asked to leave a classroom for discipline/behavioral reasons?" and "*In the past month*, how many times did security or a staff member escort

you out of class for discipline/behavior reasons?" For both questions, students wrote in numbers. Additionally, students were asked, "How many times during this school year have you been suspended from school?" They then selected one of the following: I have **not** been suspended from school this year, I have been suspended for one day, I have been suspended for two days, I have been suspended for three days, or I have been suspended four or more days. The responses were dichotomized (1/0) given the skewed distribution. Then, the items were combined such that if a student reported one or more times for any of the three forms of exclusionary discipline, he or she was issued a 1.

Missing Data

An analysis of missing data was conducted to evaluate the amount, distribution, and pattern of missing data. SPSS Missing Values Analysis (MVA) was used to highlight patterns of missing values (Tabachnick & Fidell, 2013). Data were present for more than 86% of the dataset (of 42,698 values in the dataset, 36,872 values were present).

The social-emotional scale (CHKS SEHM) was included in the back of the survey and prefaced with, "IF YOU STILL HAVE TIME, please complete the following." Thus, perhaps not unexpectedly, 15.3% (*n* = 177) of the sample discontinued before completing the CHKS SEHM scale. The 177 students with no CHKS SEHM data were excluded from analyses given the centrality of this dependent variable to the dissertation. The students who did not complete the SEHM differed from those who did; those less likely to complete the SEL scale were less likely to be White, Latinx, and more likely to be female relative to those with SEL scale data (see Appendix C for detail). Additionally, 13 students were excluded because their data was unusable (e.g., patterns in responses, all same number for scale with reverse scored items). After removing 190 students from the

dataset using listwise deletion, additional analyses were conducted on the remaining 964 students. Next, multiple imputation was used to create five new datasets. All analyses used the imputed datasets.

Data Analytic Plan

Data analysis involved three steps: I examined descriptive statistics and correlations among the variables to identify general trends in the data; I ran multivariate regression analyses with the following dependent variables: social-emotional competencies, grades, and educational attainment expectancies; and I conducted logistic regression with students' receipt of exclusionary discipline data. I then re-ran statistical models with the suspension item to ascertain if the results remained similar. Finally, I reran all models again with individual schools to compare aggregated results with schoolby-school results. Race was dummy coded into 5 variables. Black/African American was the largest group in the sample, therefore, it was used as the reference group. Gender was dummy coded into 2 variables (e.g., female, non-binary²) with male as the reference group. Similarly, sexual orientation was recoded as a dichotomous variable (e.g., either heterosexual or LGBQ). All regression analyses included student race, gender, LGBQ status, and parental educational attainment in order to test whether restorative practices exposure was linked with outcomes beyond the contribution of demographic factors. **Research Question 1:** Is students' greater exposure to and participation in restorative practices associated with higher self-reported positive outcomes including their social-

² While some societies recognize just two genders, male and female, many people have a gender which is neither male nor female and may identify as both male and female at one time, as different genders at different times, as no gender at all, or dispute the very idea of only two genders. The umbrella terms for such genders are 'genderqueer' or 'non-binary' genders (See Richards et al., 2016).

emotional competencies, grades, and educational attainment expectancies, relative to students with less exposure?

Statistical analyses were conducted to examine whether RP exposure and number of monthly circles were significant predictors of the dependent variables social-emotional competencies, grades, and educational attainment expectancies. For the multivariate regression analyses, blocks of predictors were entered consecutively. Multiple linear regression analyses were performed to examine the relationships between student exposure to RP and their self-reported positive outcomes (social-emotional competencies, grades, and educational attainment expectancies). Demographic factors (race/gender/LGBQ status/parental educational attainment) were entered as covariates in Block 1, the number of monthly circles students reported attending was entered in Block 2, and the centered mean RP exposure variable was entered in Block 3.

Research Question 2: Is students' greater exposure to and participation in restorative practices associated with lower self-reported negative outcomes, specifically their receipt of exclusionary discipline, relative to students with less exposure?

Statistical analyses using logistic regression were conducted to examine whether RP exposure and number of monthly circles were significant predictors of the dependent variables: asked to leave the classroom, escorted out of class, and suspended. Given that RP may be linked to more or less serious forms of exclusionary discipline and due to policy changes, a logistic regression analysis was conducted on just suspension data as well. Again, regardless of how many

days a student reported being suspended, the variable was dichotomized (i.e., yes they were suspended or no they were not) given the skewed distribution.

Research Question 3: Is students' greater exposure to and participation in restorative practices associated with greater equity in exclusionary discipline across racial groups, relative to students with less exposure?

To test the hypothesis that RP exposure was associated with greater equity in exclusionary discipline across racial groups, and more specifically whether RP exposure or RP participation moderates the link between being Black and receipt of exclusionary discipline, two separate binary logistic regression analyses were conducted; Steps one through three remained the same in both analyses. In the first step, demographics were included. In Step 2, the number of monthly circles, or RP participation was added and RP Exposure was added in Step 3. To avoid potentially problematic high multicollinearity with the interaction term, the variables were centered and interaction terms between race (dummy coded race variables) and RP exposure were created.

Next, the interaction terms between race and RP exposure or RP participation were entered (Step 4) to ascertain whether RP exposure or participation moderated the link between being Black and the probability of receiving exclusionary discipline.

Results

Descriptive Statistics. Descriptive statistics were run for RP exposure, number of circles in which students reported participating, the social emotional health subscales, and academic outcomes. As seen in Tables 2 - 4 below, the full scale range was used by the students when reporting on RP exposure, SEL competencies, and academic outcomes. Student ratings of all three SEL competency subscales indicate that students had an overall positive perception of their SEL competencies (See Table 3). Similarly, the mean ratings of RP exposure indicate that students perceived being exposed to RP often, however, the majority of students reported not participating in circles (41%; See Table 2). The number of monthly circles students reported participating in varied greatly (M = 3.36; SD = 6.48, Min = 0, Max = 50; See Table 2).

Descriptive Analysis of Restorative Practices

Table 2

Table 3

Variable	%	M	SD	Range
RP Exposure		3.02	0.88	1 - 5
Number of Circles		3.36	6.48	0 - 50
0	41.1			
1 - 2	21.2			
3 - 5	18.4			
6 +	19.3			

Note. Number of circles reflects the past month

Descriptive Analysis of Social Emotional Competencies

Descriptive intarysis of Social Emotional	Competen	CICS	
Variable	M	SD	Range
Self-Awareness	3.19	0.75	1 - 4
Empathy	3.03	0.85	1 - 4
Emotional and Behavioral Regulation	3.07	0.67	1 - 4

Academically, almost half (45%) of respondents expect to complete post-graduate studies and one-third report attaining mostly A's and B's (See Table 4).

Table 4

Acad	emic	Outco	mes

Variable	%
Educational Expectations	
Not graduate HS	0.0
Might graduate HS	1.5
Expect to graduate HS	9.4
2 year college/tech school	10.2
4 year college	34.1
Post-graduate studies	44.8
Grades Made	
Mostly D's and F's	3.4
Mostly C's and D's	5.7
Mostly C's	3.0
Mostly B's and C's	23.7
Mostly B's	10.5
Mostly A's and B's	34.0
Mostly A's	19.7

Over one-quarter of all respondents reported being asked to leave class, escorted out of class, or suspended at least once in the 2016-2017 school (See Figure 1).

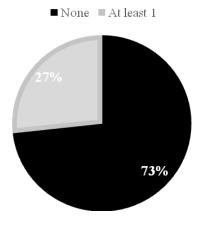


Figure 1. Student-reported Exclusionary Discipline

Disparate student exclusionary discipline practices are displayed below (See Figure 2). While only 12% and 13% of White and Asian students received any form of exclusionary discipline, 39% and 38% of students that identified as "other" and Black reported receiving at least one form of exclusionary discipline.

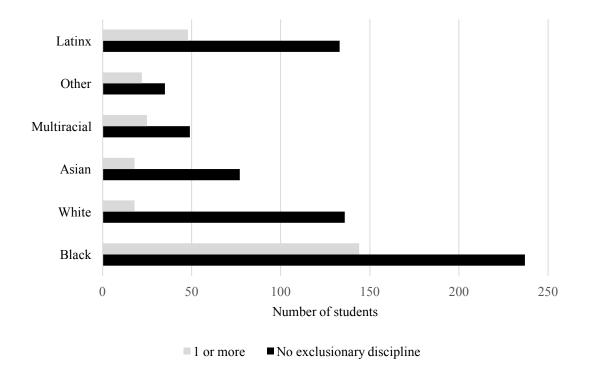


Figure 2. Student reported Exclusionary Discipline by race

Correlations. Pearson's correlations were computed to ascertain the nature of the association between the independent, dependent, and control variables. Table 5 shows the intercorrelations among variables. Significant correlations between various variables were observed and the relationships were in the expected direction. For example, the more a student reported being exposed to RP programming, the further they expected to go in school (r = .13, p < .01), the higher their self-reported grades (r = .21, p < .01) and SEL competencies (self-awareness, r = .28, p < .01; empathy, r = .36, p < .01; emotional and behavioral regulation r = .39, p < .01), and the fewer amount of times they have been asked to leave the classroom for discipline reasons (r = -.07 p < .05), and been suspended (r = -.11 p < .01). Discipline discrepancies remain disproportionate as White respondents were significantly less likely than their Black peers to report exclusionary discipline of any kind (r = -.17 p < .01; See Table 5).

Table 5

Correlations between student demographics and self-reported measures

	Correlations between student demographics and self-reported measures																			
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Exclusionary Discipline (1+/0)	.56**	.89**	.66**	0.05	0.03	-0.08	17**	-0.03	-0.01	-0.00	08*	15**	18**	08*	0.03	0.04	09**	09**	22**
2	Suspended (1+/0)		.37**	.51**	0.05	0.02	-0.06	09**	-0.03	-0.03	0.01	07*	13**	14**	09**	.08*	-0.01	11**	06*	15**
3	Leave Class (1+/0)			.65**	0.05	0.02	-0.05	15**	-0.01	-0.02	-0.04	09**	14**	17**	09**	0.05	0.04	08*	09**	19**
4	Escorted Class (1+/0)				0.06	-0.03	-0.01	10**	-0.04	-0.02	-0.05	-0.06	12**	11**	-0.06	0.05	.11**	-0.01	11**	12**
5	Ethnicity: Other (1/0)					-0.07	-0.09	11**	12**	-0.04	-0.02	-0.02	0.00	-0.02	-0.05	.12**	-0.00	0.02	-0.02	-0.05
6	Multiracial (1/0)						-0.09	-0.13	14**	0.06	-0.06	-0.06	0.00	-0.05	.09**	-0.01	0.02	-0.06	0.01	-0.03
7	Asian/Pacific Islander (1/0)							-0.15	16**	-0.04	09**	0.00	0.05	0.03	0.01	0.02	-0.03	0.02	0.01	.14**
8	White (1/0)								22**	.19**	-0.01	0.04	.09**	.14**	-0.01	0.01	-0.05	.14**	0.06	.16**
9	Latinx (1/0)									19**	0.04	-0.05	0.02	0.03	0.00	-0.03	-0.06	0.02	13**	09**
	Parent																			
10	Educational Attainment										0.04	.09*	-0.01	.10**	07*	0.00	-0.04	0.02	.19**	.13**
11	Heterosexual (1/0)											.18**	-0.03	0.06	21**	20**	-0.03	0.01	0.05	0.00
12	Self-Awareness												.27**	.47**	06*	14**	0.05	.28**	.16**	.17**
13	Empathy													.54**	.13**	0.01	.08*	.36**	.13**	.25**
	Emotional &																			
14	Behavioral														-0.02	-0.03	.08*	.39**	.12**	.24**
	Regulation															1044	0.06	0.02	1000	1044
15	Female (1/0)															18**	0.06	0.03	.12**	.12**
16	Non-binary (1/0)																-0.05	-0.05	-0.03	-0.03
17	Number of Circles																	.22**	-0.01	.10**
18	RP Exposure																		.13**	.21**
19	Educational Expectancies																			.27**
20	Grades Made																			

Note. Exclusionary Discipline, Suspended, Asked to leave class, Escorted out of class = 1 or more versus none Black/African American reference group (0)

Male reference group (0)

Multiple Regression Analyses

Sociodemographic characteristics and academic outcomes. Model 1 shows the sociodemographic variables in Step 1 accounted for 5.3% of the variability in educational expectancies, or how far students expected to go in school (Model 1). Parental educational attainment, gender, sexual orientation, and identifying as Hispanic/Latinx significantly predicted educational expectancies (β = .13, p < .00; β = .29, p = .00; β = .18, p < .05; β = -.29, p < .01 respectively). Said differently, students from families whose parents went further in school, female students, and LGBQ students reported they would go farther in school, while Latinx students reported that they would *not* go as far as their Black/African American peers. Model 2 shows that sociodemographic variables explained 7.2% of the variance in student-reported grades, as shown in Step 1 of the multiple regression analysis. Again, parental educational attainment and gender significantly predicted grades (β = .13, p = .00; β = .44, p = .00 respectively). However, White or Asian/Pacific Islander students reported higher grades relative to Black students (β = .73, p = .00; β = .87, p = .00 respectively).

RP and academic outcomes. In both models 1 and 2, the multiple regression models show that the RP variables explain unique variance above and beyond the sociodemographic characteristics of the students. For student-reported grades, RP participation explains a statistically significant 1.2% of the variance beyond student demographics. The more circles a student reported attending, the higher their reported grades ($\beta = .03$, p = .00). Including RP exposure in Model 1, Step 3 explained an additional 1.8% of the variance in educational expectancies and in Model 2, Step 3, it explained an additional 2.3% of the variance in student-reported grades. The more a

Table 6

Multiple Regression Academic Outcome Analyses

Muniple Regression Academ		del 1	Model 2			
	Educational	Expectancies	Gra	des		
	β	R ² Change	β	R ² Change		
Step 1		.062***		.082***		
Female (1/0)	0.29***		0.44***			
Non-binary (1/0)	0.10		0.03			
Heterosexual (1/0)	0.18*		0.19			
Parental Ed Attainment	0.13***		0.13***			
Ethnic: Other (1/0)	-0.07		-0.07			
Multiracial (1/0)	-0.13		-0.07			
Asian/Pacific I. (1/0)	-0.02		0.87***			
Hispanic/Latinx (1/0)	-0.29**		-0.04			
White (1/0)	0.02		0.73***			
Step 2		.000		.012***		
Female (1/0)	0.29***		0.42***			
Non-binary (1/0)	0.10		0.06			
Heterosexual (1/0)	0.18*		0.19			
Parental Ed Attainment	0.13***		0.13***			
Ethnic: Other (1/0)	-0.07		-0.05			
Multiracial (1/0)	-0.13		-0.07			
Asian/Pacific I. (1/0)	-0.017		0.91***			
Hispanic/Latinx (1/0)	-0.29**		0.00			
White (1/0)	0.02		0.76***			
Number of Circles	0.00		0.03***			
Step 3		.018***		.023***		
Female (1/0)	0.28***		0.41***			
Non-binary (1/0)	0.13		0.12			
Heterosexual (1/0)	0.18		0.18			
Parental Ed Attainment	0.13***		0.13***			
Ethnic: Other (1/0)	-0.11		-0.12			
Multiracial (1/0)	-0.12		-0.05			
Asian/Pacific I. (1/0)	-0.05		0.85***			
Hispanic/Latinx (1/0)	-0.32**		-0.06			
White (1/0)	-0.06		0.64***			
Number of Circles	-0.01		0.02			
RP Exposure	0.17***		0.29***			

^{*} *p* < .05, ** *p* < .01, *** *p* = .00.

Note. At each step of the regression, these are pooled, unstandardized estimates

Exclusionary Discipline, Suspended, Asked to leave class, Escorted out of class = 1 or more versus none

Black/African American reference group (0)

Male reference group (0)

student reported being exposed to RP, the further they expected to go in school (β = .17,

p = .00) and the higher their reported grades (β = .29, p = .00).

Sociodemographic characteristics and SEL outcomes. The sociodemographic variables in Step 1 accounted for 5.1% of the variability in self-awareness (Model 3) and 2.6% of the variability in empathy (Model 4) and emotional and behavioral regulation (Model 5). Identifying one's gender as non-binary led to lower self-awareness (β = -.50, p = .00) and identifying one's sexuality as heterosexual led to higher self-awareness (β = .28, p = .00). Female, Asian/Pacific Islander, and White students reported more empathy (β = .23, p = .00; β = .24, p < .05; β = .31, p = .00 respectively) compared to male and Black/African American students. Students whose parents had higher educational attainment tended to report greater emotional and behavioral regulation (β = .04, p < .05), relative to their peers with parents of less formal education. Similar to the empathy scale, students who identified as Hispanic/Latinx, Asian/Pacific Islander, and White reported more emotional and behavioral regulation (β = .14, p < .05; β = .16, p < .05; β = .27, p = .00 respectively) relative to Black/African American students.

RP and SEL outcomes. Step 2 of the multiple regression models shows that the number of monthly circles explain unique variance above and beyond sociodemographic characteristics of the students. Circle participation explained a statistically significant 1.3% (Model 4) of the variance in self-reported empathy and it accounted for 1.1% in self-reported emotional and behavioral regulation (Model 5). Students that reported attending more circles reported significantly higher levels of empathy and emotional and behavioral regulation ($\beta = .01$, p < .01; $\beta = .01$, p < .01 respectively).

Table 7 Multiple Regression SEL Competency Analyses

	Mode Self-Awa			Model 4 Empathy	Model 5 Emotional & Behavioral Regulation		
	β	R ² Change	β	R ² Change	β	R ² Change	
Step 1	•	.061***	•	.036***	·	.036***	
Female (1/0)	-0.09		0.23***		-0.02		
Non-binary (1/0)	-0.50***		0.12		-0.09		
Heterosexual (1/0)	0.28***		-0.00		0.09		
Parental Ed Attainment	0.04		-0.01		0.04*		
Ethnic: Other (1/0)	-0.02		0.14		0.06		
Multiracial (1/0)	-0.19		0.08		-0.03		
Asian/Pacific I. (1/0)	0.02		0.24*		0.16*		
Hispanic/Latinx (1/0)	-0.11		0.15		0.14*		
White (1/0)	0.02		0.31***		0.27***		
Step 2		.002		.013***		.011**	
Female (1/0)	-0.09		0.22***		-0.03		
Non-binary (1/0)	-0.49***		0.13		-0.09		
Heterosexual (1/0)	0.28***		-0.00		0.09		
Parental Ed Attainment	0.04*		-0.00		0.05*		
Ethnic: Other (1/0)	-0.02		0.15		0.06		
Multiracial (1/0)	-0.19		0.08		-0.02		
Asian/Pacific I. (1/0)	0.02		0.25**		0.18*		
Hispanic/Latinx (1/0)	-0.09		0.17*		0.16**		
White (1/0)	0.03		0.32**		0.29***		
Number of Circles	0.01		0.01**		0.01**		
Step 3		.070***		.106***		.125***	
Female (1/0)	-0.09*		0.21***		-0.04		
Non-binary (1/0)	-0.45***		0.19		-0.03		
Heterosexual (1/0)	0.27***		-0.02		0.08		
Parental Ed Attainment	0.03		-0.01		0.04*		
Ethnic: Other (1/0)	-0.07		0.07		-0.01		
Multiracial (1/0)	-0.17		0.11		-0.00		
Asian/Pacific I. (1/0)	-0.03		0.18		0.12		
Hispanic/Latinx (1/0)	-0.14		0.10		0.10		
White (1/0)	-0.07		0.18*		0.17**		
Number of Circles	-0.00		0.00		0.00		
RP Exposure	0.23***		0.33***		0.28***		

* p < .05, ** p < .01, *** p = .00.

Note. At each step of the regression, these are pooled, unstandardized estimates

Exclusionary Discipline, Suspended, Asked to leave class, Escorted out of class = 1 or more versus none; Black/African American reference group (0) Male reference group (0)

The inclusion of RP exposure in Step 3 of the models explained an additional 7% for student-reported self-awareness, 10.6% for empathy, and 12.5% for emotional and behavioral regulation rates (Table 7). Students that reported more RP exposure tended to report more self-awareness, empathy, and emotional and behavioral regulation (β = .23, p = .00; β = .33, p = .00; β = .28, p = .00 respectively).

Binary Logistic Regression

Sociodemographic characteristics and exclusionary discipline. Tables 8 and 9 presents the effects of student gender, sexual orientation, parental educational attainment, race, and RP variables in the logistic regression model that predicts student receipt of exclusionary discipline. The odds ratio (OR) associated with each predictor and the 95% confidence intervals for each OR represent the effect of an individual predictor (e.g., number of monthly circles) on the dependent variable (e.g., exclusionary discipline). If an OR is larger (or smaller) than 1.00, it depicts the increase (or decrease) of the chance of receiving a form of exclusionary discipline for a unit increase (or decrease) on the scale of a predictor. If the OR for a predictor is statistically different from 1.00, it can be observed that the 95% confidence interval does not contain 1.00. Results showed that identifying as female, Asian/Pacific Islander, Hispanic/Latinx, or White had statistically significantly lower ORs (.66, p < .01; .39, p < .01; .59, p < .01; .21, p = .00) compared to peers on the chance that a student would receive any form of exclusionary discipline.

Table 8

Binary Logistic Regression for Exclusionary Discipline

Model 6a Exclusionary Discipline 95% CI Variables OR Upper Lower Step 1 0.66** 0.48 0.89 Female (1/0) Non-binary (1/0) 1.06 0.69 1.61 Heterosexual (1/0) 0.90 0.60 1.35 Parental Ed Attainment 0.99 0.89 1.11 0.94 Ethnic: Other (1/0) 0.52 1.68 Multiracial (1/0) 0.85 0.49 1.46 0.39** Asian/Pacific I. (1/0) 0.22 0.67 0.59** Hispanic/Latinx (1/0) 0.39 0.88 0.21*** White (1/0) 0.12 0.36 Step 2 0.65** Female (1/0) 0.48 0.89 Non-binary (1/0) 1.07 0.47 2.42 0.90 0.60 1.35 Heterosexual (1/0) Parental Ed Attainment 0.99 0.89 1.11 0.94 Ethnic: Other (1/0) 0.52 1.70 Multiracial (1/0) 0.86 0.50 1.47 0.39** 0.22 0.68 Asian/Pacific I. (1/0) 0.59** Hispanic/Latinx (1/0) 0.40 0.89 0.21*** White (1/0) 0.12 0.36 Number of Circles 0.98 1.01 1.04 Step 3 0.65** 0.48 0.89 Female (1/0) 2.33 Non-binary (1/0) 1.03 0.45 0.91 1.37 Heterosexual (1/0) 0.61 0.99 Parental Ed Attainment 0.89 1.12 0.98 Ethnic: Other (1/0) 0.54 1.78 Multiracial (1/0) 0.84 0.49 1.45 Asian/Pacific I. (1/0) 0.40** 0.23 0.71 Hispanic/Latinx (1/0) 0.62* 0.41 0.93 0.23*** White (1/0) 0.13 0.39 Number of Circles 1.02 0.99 1.04 0.83* 0.99 RP Exposure 0.69 Step 4 Female (1/0) 0.66** 0.48 0.91 Non-binary (1/0) 1.03 0.45 2.35 Heterosexual (1/0) 0.92 0.61 1.38 1.00 0.89 Parental Ed Attainment 1.12 0.98 1.76 Ethnic: Other (1/0) 0.54 0.79 1.40 Multiracial (1/0) 0.45 0.40** Asian/Pacific I. (1/0) 0.23 0.71 0.62* 0.410.93 Hispanic/Latinx (1/0) 0.23*** White (1/0)0.13 0.39 0.99 Number of Circles 1.02 1.04 RP Exposure 0.88 0.68 1.13 RP x Other 0.78 0.40 1.49 RP x Multi 0.78 0.42 1.45 RP x Asian 1.09 0.58 2.04 RP x White 0.79 0.39 1.57 RP x Latinx 0.97 0.62 1.53

Note. OR = odds ratio; CI = confidence interval. At each step of the regression, these are pooled, unstandardized estimates; *p < .05, *** p < .01, **** p = .00. Black/African American reference group (0); Male reference group (0)

Table 9

Binary Logistic Regression for Exclusionary Discipline

N	Model 6b	
Exclusion	nary Discipline	,

Exclusionary Discipline								
Variables	OR	95% CI						
variables	OK	Upper	Lower					
Step 1								
Female (1/0)	0.66**	0.48	0.89					
Non-binary (1/0)	1.06	0.69	1.61					
Heterosexual (1/0)	0.90	0.60	1.35					
Parental Ed Attainment	0.99	0.89	1.11					
Ethnic: Other (1/0)	0.94	0.52	1.68					
Multiracial (1/0)	0.85	0.49	1.46					
Asian/Pacific I. (1/0)	0.39**	0.22	0.67					
Hispanic/Latinx (1/0)	0.59**	0.39	0.88					
White (1/0)	0.21***	0.12	0.36					
Step 2	0.21	0.12	0.50					
Female (1/0)	0.65**	0.48	0.89					
Non-binary (1/0)	1.07	0.47	2.42					
Heterosexual (1/0)	0.90	0.60	1.35					
Parental Ed Attainment	0.99	0.89	1.11					
Ethnic: Other (1/0)	0.94	0.52	1.70					
Multiracial (1/0)	0.86	0.50	1.47					
Asian/Pacific I. (1/0)	0.39**	0.22	0.68					
Hispanic/Latinx (1/0)	0.59**	0.40	0.89					
White (1/0)	0.21***	0.12	0.36					
Number of Circles	1.01	0.12	1.04					
Step 3	1.01	0.76	1.04					
Female (1/0)	0.65**	0.48	0.89					
Non-binary (1/0)	1.03	0.45	2.33					
Heterosexual (1/0)	0.91	0.43	1.37					
Parental Ed Attainment	0.99	0.89	1.12					
Ethnic: Other (1/0)	0.98	0.54	1.78					
Multiracial (1/0)	0.84	0.34	1.78					
Asian/Pacific I. (1/0)	0.40**	0.49	0.71					
Hispanic/Latinx (1/0)	0.62*	0.23	0.71					
White (1/0)	0.02*	0.41	0.39					
Number of Circles	1.02	0.13	1.04					
	0.83*	0.69	0.99					
RP Exposure	0.83	0.69	0.99					
Step 4 Female (1/0)	0.66**	0.48	0.90					
Non-binary (1/0)	1.00	0.48	2.31					
	0.91	0.44						
Heterosexual (1/0) Parental Ed Attainment	1.00	0.89	1.37 1.12					
	1.19	0.89	2.51					
Ethnic: Other (1/0)								
Multiracial (1/0)	0.99	0.54	1.84					
Asian/Pacific I. (1/0)	0.38**	0.19	0.76					
Hispanic/Latinx (1/0)	0.63	0.39	1.04					
White (1/0)	0.22***	0.12	0.40					
Number of Circles	1.02	0.98	1.06					
RP Exposure	0.83*	0.69	0.99					
Num Circles x Other	0.94	0.81	1.09					
Num Circles x Multi	0.96	0.87	1.05					
Num Circles x Asian	1.03	0.91	1.16					
Num Circles x White	1.01	0.95	1.08					
Num Circles x Latinx	0.99	0.90	1.09					

Note. OR = odds ratio; CI = confidence interval. At each step of the regression, these are pooled, unstandardized estimates; *p < .05, **p < .01, ***p = .00. Black/African American reference group (0); Male reference group (0)

RP and exclusionary discipline. Results in Step 2 were non-significant; the number of monthly circles a student reported attending (e.g., RP participation) was not related to a student's odds of receiving any form of exclusionary discipline. Results in Step 3 showed an effect of RP exposure on the chance of a student receiving any form of exclusionary discipline (OR = .83, p < .05) while holding parental educational attainment, race, gender, and sexual orientation at a fixed value. In Model 6a, a student with one unit higher RP exposure was .23 times *less* likely to receive any form of exclusionary discipline during that school year. In addition to the predictors in Steps 1 through 3, the interaction terms were entered in Step 4 and they did not significantly predict whether or not students reported receiving any form of exclusionary discipline above and beyond the original predictors for both models 6a and 6b. In other words, RP exposure and RP participation did not moderate the link between race and receipt of exclusionary discipline. In fact, in Model 6a and 6b, race variables remain predictors of exclusionary discipline. Results in Model 6a showed that identifying as female, Asian/Pacific Islander, Hispanic/Latinx, or White had statistically significantly lower ORs (.66, p < .01; .40, p < .01; .62, p < .01; .23, p = .00) compared to peers on the chance that a student would receive any form of exclusionary discipline.

To ascertain if the findings were simply due to shifts in policy discouraging use of suspension, I re-ran analyses with the suspension item only; findings were similar given that RP did not moderate the link between being suspended and identifying as Black/African American.

Post-hoc Analyses

The current study did not account for the nesting of children in schools. Meaning, students shared membership in schools. Thus, the standard errors were underestimated. All regression models were re-run separately with the four schools. Three of the schools had similar results to the combined sample models. However, School 2 (sample size of n = 92), stood out as distinct. For student reported self-awareness (Model 3) and emotional and behavioral regulation (Model 5), School 2 trended similarly to the other 3 schools

Table 10
School 2 Multiple Regression Academic Outcome Analyses

		odel 1	Model 2			
		l Expectancies		rades		
	β	Adjusted R ²	β	Adjusted R ²		
Step 1		.101*		028		
Female	0.58**		0.19			
Non-binary	0.68		0.65			
Heterosexual	0.29		0.22			
Parental Ed Attainment	0.18*		0.07			
Other	0.04		-0.67			
2 or more races	0.29		-0.54			
Asian/Pacific Islander	0.54		-0.09			
Hispanic/Latinx	-0.09		0.83			
Step 2		.090		041		
Female	0.57**		0.19			
Non-binary	0.71		0.61			
Heterosexual	0.29		0.21			
Parental Ed Attainment	0.19*		0.07			
Other	0.02		-0.69			
2 or more races	0.34		-0.56			
Asian/Pacific Islander	0.43		-0.12			
Hispanic/Latinx	-0.14		0.00			
Number of Circles	-0.03		0.82			
Step 3		.094		049		
Female	0.55**		0.20			
Non-binary	0.56		0.69			
Heterosexual	0.27		0.22			
Parental Ed Attainment	0.18*		0.08			
Other	0.17		-0.78			
2 or more races	0.31		-0.54			
Asian/Pacific Islander	0.49		-0.12			
Hispanic/Latinx	-0.14		0.00			
Number of Circles	-0.03		-0.09			
RP Exposure	0.17		0.79			

^{*} p < .05, ** p < .01, *** p = .00.

Note. No White students were present in School 2.

At each step of the regression, these are pooled, unstandardized estimates

(See Table 10). However, there were no RP related predictors of student-reported expectancies (Model 1), grades (Model 2; See Table 9), and empathy (Model 4; See Table 10). For emotional and behavioral regulation (Model 5), there were no significant predictors in Steps 1 and 2. However, when RP exposure was added to the model, it was significant ($\beta = 0.32$, p < .05), paralleling the models run with the sample of combined schools. Meaning, students from School 2 with more RP exposure tended to self-report more emotional and behavioral regulation and self-awareness but not more empathy. Moreover, different from the combined dataset, there were no significant results of RP or student demographics on exclusionary discipline measures.

Table 11
School 2 Multiple Regression SEL Competencies Analyses

		odel 3 wareness		Model 4 Empathy	Model 5 Emotional & Behavioral Regulation		
	β	Adjusted R ²	β	Adjusted R ²	β	Adjusted R ²	
Step 1		.041		.055		032	
Female	0.51**		0.36		0.03		
Non-binary	0.72		0.77		0.54		
Heterosexual	0.02		0.06		-0.23		
Parental Ed Attainment	0.07		-0.09		0.03		
Other	-0.01		-0.09		-0.18		
2 or more races	-0.14		0.71		0.28		
Asian/Pacific Islander	-0.22		0.19		0.16		
Hispanic/Latinx	-0.18		0.05		0.01		
Step 2		.039		.049		038	
Female	0.52**		0.36		0.04		
Non-binary	0.68		0.73		0.51		
Heterosexual	0.02		0.06		-0.23		
Parental Ed Attainment	0.07		-0.09		0.03		
Other	0.01		-0.08		-0.17		
2 or more races	-0.17		0.69		0.26		
Asian/Pacific Islander	-0.15		0.25		0.21		
Hispanic/Latinx	-0.16		0.06		0.03		
Number of Circles	0.02*		0.01		0.01		
Step 3		.123*		.092		.064	
Female	0.48**		0.33		-0.01		
Non-binary	0.43		0.54		0.24		
Heterosexual	-0.01		0.03		-0.27		
Parental Ed Attainment	0.06		-0.11		0.02		
Other	0.26		0.11		0.10		
2 or more races	-0.24		0.64		0.19		
Asian/Pacific Islander	-0.03		0.33		0.33		
Hispanic/Latinx	-0.16		0.05		0.02		
Number of Circles	0.01		0.01		0.01		
RP Exposure	0.29*		0.22		0.32**		

^{*} p < .05, ** p < .01, *** p = .00.

Note. No White students were present in School 2.

At each step of the regression, these are pooled, unstandardized estimates

Discussion

This study examined the association between RP and self-reported positive (i.e., social-emotional competencies, grades, and educational attainment expectancies) and negative (i.e., exclusionary discipline) outcomes in schools. Additionally, it examined whether students' perception of the use of RP was associated with greater equity in exclusionary discipline across racial groups. This study showed that the Black student disproportionality in exclusionary discipline can be found across four schools in a northeastern U.S. city; Black students were more likely to self-report being asked to leave the classroom or being suspended than their peers from other racial and ethnic groups.

While RP programming aims to close these gaps, it did not moderate the link between being Black and receipt of exclusionary discipline. It did, however, yield various positive correlates with a range of other student outcomes. Students that reported greater exposure to RP also expected to go further in school, reported higher grades, higher social emotional competencies (e.g., self-awareness, empathy, emotional and behavioral regulation) and these students received fewer exclusionary discipline practices (e.g., suspended, escorted out of class, or asked to leave the classroom for behavioral reasons) than their peers that reported less exposure to RP.

Despite the limitation that all measures come from student self-report, the convergence of findings across behavioral, social emotional, and academic domains increases confidence in the findings that RP exposure likely has positive correlates. Said differently, triangulating across domains of functioning (e.g., behavioral, social-emotional, academic) increases the credibility of the results. However, findings related to student participation in community building circles were not as straightforward as RP

exposure (e.g., my teachers take students' thoughts and ideas into account when making decisions). Students that recalled attending more circles reported obtaining higher grades, levels of empathy and emotional and behavioral regulation than peers who recalled attending fewer circles. However, circle participation was no longer a significant predictor of those positive outcomes once RP exposure was taken into account.

Additionally, circle participation was not related to a student's odds of receiving exclusionary discipline.

For many outcomes, the number of monthly circles was not predictive of outcomes once you accounted for RP exposure (empathy, emotional and behavioral regulation, and grades). This means that for many of the outcomes, it appears that perspectives on adult engagement of student perspectives and feelings are a stronger predictor of SEL, academic and behavioral outcomes than whether the students participated in many circles. Thus, perceptions of adult treatment, support, and respect seem more predictive of positive outcomes than participation in a particular RP process—the circle process in particular.

RP exposure's link to positive outcomes may have less to do with the measure and more to do with the integration of student voice. Student expression, feelings, and voice are measured in the RP exposure scale; student opportunity for sharing their perspective may simply be more important for positive outcomes than the process of sitting in a circle for discussions during advisory. However, it is similarly probable that the advisory circles are simply not being run with fidelity. So, the development of skills and other positive outcomes may be lacking.

Academic Outcomes

Sociodemographic characteristics of students were related to their self-reported academic outcomes; students whose parents went further in school, female students, and LGBQ students reported they would go further in school than students with parents of less formal education, male students, and straight-identified students, respectively. Black/African American students had higher expectations for educational attainment than Latinx students. White and Asian students reported higher grades compared to their Black/African American peers. These demographic findings suggest that even in predominantly low-income schools, subgroup differences in achievement based on demographics exist. Thus, gaps in achievement need to be considered along with numerous student characteristics.

As hypothesized, the more circles a student reported attending, the higher their reported grades. While RP may be the driving force behind positive academic outcomes, other possibilities remain. Given that circles are generally conducted in an advisory period, it may be possible that students who just attend advisory frequently achieve higher grades. It is possible that these students are attending school more regularly or that their advisor assists them in a way that facilitates their academics. The mechanisms of actions remain difficult to pinpoint. It may be that if a student has better relationships with peers and teachers, they may ask more questions, thus, receive help when needed. These stronger relationships may lead to more effective help seeking behavior.

Additionally, the more a student reported being exposed to RP, the further they expected to go in school and the higher their reported grades. While previous evidence for positive correlates of RP and academic outcomes is only just accruing (Jain et al., 2014;

McMorris et al., 2013), the results of this study corroborate and further build upon these prior findings.

The RP exposure scale asked students about their teachers (i.e., My teachers ask students to express their feelings, ideas, and experiences; My teachers take students' thoughts and ideas into account when making decisions). These questions may have evoked more feelings regarding positive school climate, student voice, positive teacher relationships, or student empowerment than purely RP exposure. Said differently, the RP exposure scale may reflect positive perceptions of relationships in schools, which may have been fostered through various relationship-building efforts, not limited to activities instituted through RP programming. If students feel more positively about school or believe that their voices are solicited by teachers and administrators (See Appendix A: RP Exposure scale), they may be more inclined to remain in school and achieve high grades. Additionally, I might speculate that these students have developed better relationships with adults; they may see adults in their school as supportive role models from whom they can get help, therefore achieving higher grades or expecting to remain in school longer than their peers without such connections.

Social-Emotional Outcomes

Sociodemographic characteristics of students were related to their self-reported SEL outcomes. Female, Asian/Pacific Islander, and White students reported being more empathic than their male and Black/African American peers. Hispanic/Latinx, Asian/Pacific Islander, and White students reported more emotional and behavioral regulation relative to Black/African American students. It has been argued that a vicious cycle of bias and apprehension about bias in school settings may exacerbate inequality

(Okonofua, Walton, & Eberhardt, 2016). I might speculate that there is a feedback loop; Black students may get into more disciplinary interactions, which inadvertently reinforces their view of themselves as emotionally or behaviorally dysregulated. A self-fulfilling prophecy may begin, which is further fueled by implicit biases on both ends. Okonofua et al. (2016) argue that this problem arises not solely from either teachers or students but from both acting together and perceiving and misperceiving one another.

Students that reported attending more circles were more empathetic and reported higher emotional and behavioral regulation. Similarly, those that had more exposure to RP were more self-aware, empathetic, and emotionally and behaviorally regulated. Theoretically, RP provide a shift from an authoritarian or punitive approach to discipline because these approaches may breed resentment and shame. Instead, RP aims to move to an egalitarian approach to discipline. In RP, a teacher or administrator may be seen as a convener and facilitator. The process of restorative questions, affirmative statements, and restorative conferencing, among other principles, is theorized to build empathy, responsibility, and restore relationships (see: Zehr, 2002; Watchel, 2016). Therefore, it is theoretically logical that students who attend more circles have higher SEL competencies and possibly stronger adult relationships. RP and SEL maintain similar components. RP aim to give students an opportunity to develop skills such as active listening, problemsolving, and social perspective taking (Gregory et al., 2014). These core RP tenets may hone student SEL competencies such as self-awareness, self-management, social awareness, relationship skills, and relationship decision-making. It may be *speculated* that RP fosters SEL skills, however, this is only a speculation given that the correlational model does not allow for causal claims.

Students that identified as heterosexual reported higher self-awareness than their LGBQ peers, however, students that identified as gender non-binary reported lower self-awareness than their male and female peers. Non-binary students in our study included students that identified as: transgender, queer, questioning, and other. It is plausible that students who identify as non-binary are in the process of developing their sense of self (i.e., questioning), thus, are less inclined to view themselves as self-aware. Self-awareness remains a difficult construct to measure. More insight oriented, self-aware students may be hypercritical of themselves on self-report measures, therefore ironically, reporting lower levels of self-awareness. Additionally, self-awareness is largely modified by culture and developmental mechanisms (Morin, 2011), meaning, student age and demographics may greatly impact responses. Future research would need to unpack this study's complex findings that gender non-binary students reported lower self-awareness than their male and female identified peers.

Exclusionary Discipline Outcomes

Similar to national trends (Scott & Nadler, 2018), group-based disparities were seen for exclusionary discipline. Students identifying as female, Asian/Pacific Islander, Hispanic/Latinx, or White had less chance of reporting that they received any form of exclusionary discipline than their male and Black/African American peers.

Encouragingly, students with greater exposure to RP were less likely to report receiving exclusionary discipline. Since RP exposure encompasses student voice (e.g., my teachers take students' thoughts and ideas into account when making decisions) and positive adult relationships (e.g., when someone misbehaves, my teachers ask students questions about their side of the story), it may be possible that students who are receiving less disciplinary

action also have more positive feelings toward their school. Therefore, if students believe that their opinion and feelings matter and they build strong relationships with adults in the building, they may subsequently receive less punitive treatment by staff or vice versa.

While RP exposure and participation proved beneficial for reducing the odds of exclusionary discipline, these practices did not moderate the link between race and receipt of exclusionary discipline. Thus, RP may have benefits across the demographic board but not greater benefits to "nudge the gap" (Bottiani, Bradshaw & Gregory, 2018, p. 115). Again, the findings are correlational and claims of causation cannot be supported; with that in mind, the findings do corroborate previous results (Anyon et al., 2014; Gregory et al., 2018) and offer promise that school districts implementing RP may reduce their use of exclusionary discipline for students from diverse racial groups. Again, this may result in only marginal narrowing of disparities between the suspension rates of Black and White students, which suggests the need for prevention-oriented, race-conscious and culturally adapted approaches (Gregory et al., 2018).

Findings in the middle school versus the high schools

Schools 1, 3, and 4 had similar results to the combined sample models, however, School 2 stood out as distinct. School 2 was the only middle school in a sample of predominately high school grade levels. Self-awareness and emotional and behavioral regulation trended similarly to the other three schools, however, at this school, greater RP exposure had no significant effect on student grades, how far students expected to go in formal education, empathy, and exclusionary discipline.

It may be possible that the integration of student voice in the disciplinary process becomes more important with age. Meaning, older adolescents may be more demonstrative or need more opportunities to be express their ideas and perspectives than their mid-adolescent counterparts. However, the RP exposure and SEL findings were not straightforward across the high schools and middle school. RP exposure was linked to two SEL scales (e.g., self-awareness and emotional and behavioral regulation) across varying grade level configurations of schools (including the middle school), but not empathy. It is possible that middle schoolers may need a greater dosage of empathy programming than high schoolers for the intervention to resonate with them. It is possible that programming for middle schoolers needs to more explicitly teach empathetic perspective taking. While Morningside Center for Teaching Social Responsibility includes an SEL skills building curricula in their community-building circles, many RP training agencies do not do so. In general, RP programming may need to be coupled with explicit SEL skill building activities that are sequenced and encourage behavioral rehearsal, or the chance to practice a particular skill.

Limitations

The evidence has implications for the impact of RP exposure in schools on student well-being, which could provide school administrators with important evidence to inform best disciplinary practices for increasing students' well-being. The results are, however, entirely based on student self-report and a single method (e.g., surveys). Thus, the problem of rater bias and mono-method bias are limitations of the study. While it is not uncommon for school-based research to use students' self-reported grades (e.g., Huang, Eklund, & Cornell, 2016; O'Malley, Voight, Renshaw, & Eklund, 2014) or self-reported educational attainment expectancies (Gregory & Huang, 2013), all self-report measures rely on subject honesty, image management, introspective ability, and response

bias. However, it has been argued that self-report questionnaires may be better suited for assessing internal psychological states than any other measure (Duckworth & Yeager, 2015). Additionally, research has shown that those psychological states can powerfully influence important educational outcomes such as grades and high school graduation rates (Pekel, Roehlkepartain, & Syvertsen, 2018). Finally, youth self-report surveys are an important tool for capturing and understanding students' perspectives of their lived experiences.

The current study did not account for nesting of children in schools. A nested analytic strategy could not be used given the small number of higher order units (n = 4 schools). Students in the same schools are systematically more similar to each other than to students in different schools. This violates the assumption of independence of measurement. However, the post-hoc school by school analyses suggest that, with the exception of one school, there were common patterns in the findings across three of the schools. That said, future research with a larger sample of schools should ascertain if the findings hold when accounting for school-level nesting.

Another important limitation resides in the fact that the study included no school level measure of fidelity of implementation of RP. Thus, we do not know the quality of the circles or the integration of student voice into disciplinary interactions. Furthermore, this study examined correlational relationships between measures of school climate and exclusionary discipline practices that cannot establish the existence or direction of causal effects (Mertens, 2015). Bidirectional causal effects may occur such that school discipline practices affect school structure and support and vice versa. In other words, we cannot be certain whether exclusionary discipline practices stem from negative school

environments or whether students perceive a negative environment as a reaction to the exclusionary discipline practices. Experimental interventions designed to manipulate school climate and/or disciplinary practices are needed to demonstrate the directionality of effects.

Additionally, RP exposure may be linked to more positive outcomes than RP participation because RP participation, or number of reported monthly circles, may be a more objective measure than the RP exposure scale. Said differently, recalling the number of times a student participated in a circle may leave less margin for rater bias (e.g., students who report higher RP exposure may similarly report higher SEL competencies) than the RP exposure scale. Self-reported exposure to RP is difficult to measure due to its subjectivity. Said differently, just because one is exposed to RP, does not mean that they are highly engaged or an active participant. A report of "Sometimes" may vary greatly by the respondent; students may need more or less exposure to report an item as occurring "Sometimes" (e.g., at least once versus more than four times may both be reported as "sometimes" based on the respondent).

As the U.S Department of Education states, "If practitioners have the tools to identify evidence-based interventions, they may be able to [create] improvements in their schools and, collectively, in American education" (US Dept of Education, 2003, pp. iii). While randomized-controlled trials are the "gold-standard" in establishing what works, they are not always possible. In the current study, a control group was not utilized for this evaluation. Thus, there are no comparison schools that were not implementing RP. It is possible that support within the schools, but not necessarily the technology of RP, may be driving the findings.

One hundred and ninety students were excluded from analyses. Many students were excluded from analyses because they did not complete the SEL measure, located on the final page of the 20-minute survey. Demographically, those excluded from analyses were less likely to be White, Latinx, and more likely to be female relative to those students included in the analyses. Missing students were more likely to report having been escorted out of class and asked to leave class than those included in the study's sample. Additionally, students' excluded from analyses did not expect to go as far in school and reported participating in more community-building circles than their peers included in our sample. Potentially, the findings are affected by selection bias due to students with greater academic and behavioral risk not being not included in the analyses. Moreover, students who failed to complete the survey may have poorer literacy skills, emotion/behavior regulation, attention, or SEL competencies than completers. It is unknown whether the findings are, therefore, over or underestimated given the nature of the sample.

While the researchers aimed to hear all students' feedback, there is no way to know how the respondents compare to other individuals who participated in the programming but did not complete the survey. Perhaps students who completed surveys had a particular interest in the program. That is, students who completed the surveys may not represent the total participant population. Additionally, results will need to be corroborated with multi-informant, multi-method research in the future. Treatment fidelity and an analysis of program implementation may be helpful for understanding the effects of the program. Interviews with school staff, Restorative Justice Coordinators,

observations in groups, and fidelity checklists may be helpful in collecting this type of data.

Implications for practice and future directions

The study provides new insights into the relationship between RP, SEL competencies, academic outcomes, and exclusionary discipline. This study showed that, similar to national disciplinary trends, Black students were more likely to self-report being asked to leave the classroom or being suspended than their peers from other racial and ethnic groups. While RP programming aims to close these gaps, it did not moderate the link between being Black and receipt of exclusionary discipline. In other words, the RP participation and exposure did not demonstrate promise for reducing the racial disparities in exclusionary discipline, as based on measures from the current study. It did, however, yield various positive correlational student outcomes. Students that reported greater exposure to RP also expected to go further in school, reported higher grades, higher social emotional competencies, and these students received fewer exclusionary discipline practices than their peers that reported less exposure to RP.

Demographic findings suggest that even in predominantly low-income schools, subgroup differences in achievement based on demographics exist. Thus, gaps in achievement need to be considered along with numerous student characteristics.

Moreover, continued work is needed to address achievement gaps given its persistence for the last decades (National Center for Education Statistics, 2013, 2017). Similar to national trends (Scott & Nadler, 2018), group-based disparities were seen for exclusionary discipline. While RP proved beneficial for reducing odds of exclusionary discipline, these practices did not moderate the link between race and receipt of

exclusionary discipline. Thus, it seems as if RP may have benefits across the demographic board but not greater benefits for Black students to "nudge the gap." This marginal narrowing of disparities between the suspension rates of Black and White students suggests the need for prevention-oriented, race-conscious and culturally adapted approaches (Gregory et al., 2018). It is imperative to identify which components in programs may have the extra boost for disrupting the vicious cycle (Okonofua et al., 2016).

As hypothesized, the more circles a student reported attending, the higher their reported grades. Additionally, the more a student reported being exposed to RP, the further they expected to go in school and the higher their reported grades. Students that reported attending more circles were more empathetic and reported higher emotional and behavioral regulation. Similarly, those that had greater exposure to RP were more selfaware, empathetic, and emotionally and behaviorally regulated. The evidence has implications for the impact of RP exposure in schools on student well-being, which may provide school administrators with important evidence to inform best disciplinary practices for increasing students' social emotional competencies. This is one of the first studies linking RP with a range of positive student outcomes. While the results are promising, they are, however, entirely based on student self-report, a single method (e.g., surveys), and inconsistent across the RP indicators, (i.e., exposure, participation). Thus, the problem of rater bias and mono-method bias are limitations of the study. Despite its limitations given the research design, it may hint at the promise of RP in improving school climate and student skill sets. Results will need to be corroborated with multiinformant, multi-method research in the future. Future experimental interventions should

be designed to manipulate RP and/or disciplinary practices to demonstrate the directionality of effects. If successful, these interventions might reduce the use of school exclusion as a disciplinary consequence.

Implications specific to school psychology

RP exposure may be associated with social-emotional learning and be beneficial across racial and ethnic groups. Engaging student voice and problem-solving skills around conflict may help students develop essential skills. Thus, the current findings suggest that school psychologists should advocate for ways to integrate student voice in conflict resolution.

The study showed racial disparities remained in exclusionary discipline despite RP exposure and participation in community building circle. School psychologists should aim to deepen restorative approaches and address a range of instructional issues that may be outside of the traditional scope of RP. There has been a call for school psychologists to engage in everyday actions that advocate for equity and to support race conscious implementation processes by examining and challenging practices, policies, and institutional structures that contribute to inequity (Proctor et al., 2017).

First and foremost, schools should use a tiered framework of supports to match increasing levels of intensity of support to students' differentiated needs. From a preventative level, repairing and gaining relational trust is paramount; this can be achieved through supportive relationships, opportunities for learning and nonpunitive behavioral correction, culturally relevant and responsive teaching, academic rigor for all students, and inclusive, positive classroom and school environments (Gregory, Skiba, & Mediratta, 2017). Further, this may be achieved through educator consultation and

modeling around topics of cultural bias and fluency for both staff and students in schools. Finally, it is imperative that educators effectively engage in deep interracial dialogue to address persistent racial disparities intentionally, explicitly, and comprehensively. These courageous conversations (Singleton, 2017) may allow educators to address racial issues in order to uncover personal and institutional biases that prevent students, especially those of color, from reaching their fullest potential.

From an intervention level, data-based inquiry for equity and substantive action plans after data analysis may be an immediate first step in sparking change. Schools can collect, disaggregate, and share discipline data to acknowledge the importance of identifying and addressing discipline disparities. Increasing transparency and public access will allow the data to be used in a process of goal setting and continuous improvement. Identifying patterns in the data may help educators strategically direct their intervention efforts to address issues that are causing disparities in disciplinary referrals (Scott, Hirn, & Barber, 2012). Additionally, student and family voice on conflicts' causes and solutions may be integrated into policies, procedures, and practices concerning school discipline. Finally, students should be supported in reentering the community of learners after conflict or long-term absence has occurred (Gregory et al., 2017).

References

- Adams, C. (2008). Safer saner urban schools: The story of West Philadelphia high. Scholastic Administrator, (36), 6-8.
- Aladjem, D.K., LeFloch, K.C., Zhang, Y., Kurki, A., Boyle, A., Taylor, J.E., Herrman, S., Uekawa, K., Thomsen, K., & Fashola, O. (2006). Models Matter—The final report of the national longitudinal evaluation of comprehensive school reform. Washington, D.C.: *American Institutes for Research*. Available from: http://www.air.org/publications/documents/NLECSR_2006.pdf.
- American Psychological Association. (2008). "Are zero tolerance policies effective in the schools? An evidentiary review and recommendations." *American Psychologist*, (63), 852–62.
- American Psychological Association, Presidential Task Force on Educational Disparities.

 (2012). Ethnic and racial disparities in education: Psychology's contributions to understanding and reducing disparities. Retrieved from http://www.apa.org/ed/resources/racial-disparities.asp
- Amstutz, L., & Mullet, J. H. (2005). *The little book of restorative discipline for schools*. Intercourse, PA: Good Books.
- Anyon, Y., Gregory, A., Stone, S., Farrar, J., Henson, J., McQueen, J., Downing, B., Greer, E., & Simmons, J. (2016). Restorative interventions and school discipline sanctions in a large urban school district. *American Educational Research Journal*.
- Anyon, Y., Jenson, J. M., Altschul, I., Farrar, J., McQueen, J., Greer, E., Downing, B., & Simmons, J. (2014). The persistent effect of race and the promise of alternatives

- to suspension in school discipline outcomes. *Children and Youth Services Review*, 44, 379-386. doi:10.1016/j.childyouth.2014.06.025
- Balfanz, J., Byrnes, V., & Fox, J. (2015). Sent home and put off track: The Antecedents, disproportionalities, and consequences of being suspended in the 9th grade. In D. J. Losen (Ed.), *Closing the School Discipline Gap: Equitable Remedies for Excessive Exclusion* (17-30). New York, NY: Teacher's College Press.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman
- Bickel, F., & Qualls, R. (1980). The impact of school climate on suspension rates in the Jefferson County Public Schools. *Urban Review*, 12, 79-86.
- Blood, P., & Thorsborne, M. (2005). The challenges of culture change: Embedding restorative practice in schools. Paper presented at the Sixth International Conference on Conferencing, Circles and other Restorative Practices: Building a Global Alliance for Restorative Practices and Family Empowerment, Sydney, Australia.
- Borman G.D., Hewes G.M., Overman L.T., & Brown S. (2003) Comprehensive school reform and achievement: A meta-analysis. *Review of Educational Research*. 73,125–230.
- Bottiani, J. H., Bradshaw, C. P., & Mendelson, T. (2014). Promoting an equitable and supportive school climate in high schools: The role of school organizational health and staff burnout. *Journal of School Psychology*, *52*, 567–582.
- Bottiani, J.H., Bradshaw, C.P., & Mendelson, T. (2017). A multilevel examination of racial disparities in high school discipline: Black and white adolescents' perceived

- equity, school belonging, and adjustment problems. *Journal of Educational Psychology*, 109(4): 532-545.
- Boyes-Watson C. & Kay Pranis, K. (2010). Heart of hope: A guide for using peacemaking circles to develop emotional literacy, promote healing & build healthy relationships. St. Paul, MN: Living justice press.
- Bradshaw, C., Mitchell, M., O'Brennan, L., & Leaf, P. (2010). Multilevel exploration of factors contributing to the overrepresentation of black students in office disciplinary referrals. *Journal of Educational Psychology*, 102, 508-520.
- Cameron, L., & Thorsborne, M. (2000). Restorative justice and school discipline:

 Mutually exclusive? In H. Strang & J. Braithwaite (Eds.), *Restorative justice and civil society* (pp. 180-194). Cambridge, UK: Cambridge University Press.
- Catalano, R. F., Berglund, L. M., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention and Treatment*, 5, 15a. https://doi.org/10. 1037/1522-3736.5.1.515a
- Center for the Advancement of Social Emotional Learning (CASEL, 2012). Description of Social and Emotional Competencies available at: http://www.casel.org/collaborating-districts.
- Christle, C. A., Jolivette, K., & Nelson, C. M. (2005). Breaking the school to prison Pipeline: Identifying school risk and protective factors for youth delinquency. *Exceptionality*, *13*(2), 69-88. doi:10.1207/s15327035ex1302 2

- Cohen, J. (2006). Social, emotional, ethical and academic education: Creating a climate for learning, participation in democracy and well-being. *Harvard Educational Review*, 76(2), 201-237.
- Cornell, D., Shukla, K., & Konold, T. (2016). Authoritative school climate and student academic engagement, grades, and aspirations in middle and high schools. *AERA Open, 2*, 1-18, doi: 10.1177/2332858416633184.
- Davis, J. E., & Jordan, W. J. (1994). The effects of school context, structure, and experiences on African American males in middle and high schools. *Journal of Negro Education*, 63, 570-587.
- De Blasio Administration Announces New School Climate Initiatives to Make NYC Schools Safer. (2016, July 21). Retrieved from http://www1.nyc.gov/office-of-the-mayor/news/628-16/de-blasio-administration-new-school-climate-initiatives-make-nyc-schools-safer-fairer
- Dowdy, E. & Furlong, M. J., et al. (in press). Enhancing school-based mental health services with a preventive and promotive approach to universal screening for complete mental health, *Journal of Educational and Psychological Consultation*.
- Duckworth, A. L., & Yeager, D. S. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. *Educational Researcher (Washington, D.C.: 1972), 44*(4), 237–251. http://doi.org/10.3102/0013189X15584327
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R.D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-

- analysis of school-based universal interventions. *Child Development*, 82(1): 405–432.
- Edwards, L. (2016). Inequality and the role of racial composition. *Social Forces*.

 Advanced online publication. doi: 10.1093/sf/sow038
- Elias, M. J. (1997). *Promoting social and emotional learning: Guidelines for educators*.

 Alexandria, VA: ASCD, Association for Supervision and Curriculum Development.
- Elias, M. J., Leverett, L., Duffell, J. C., Humphrey, N., Stepney, C., & Ferrito, J. (2015).
 Integrating SEL with related prevention and youth development approaches. In J.
 A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook for social and emotional learning: Research and practice* (pp. 33–49). New York, NY: Guilford.
- Forman, S. G. (2015). *Implementation of mental health programs in schools: A change agent's guide*. Washington, DC: American Psychological Association.
- Fronius, T., Persson, H., Guckenburg, S., Hurley, N., & Petrosino, A. (2016). *Restorative Justice in U.S. Schools: A research review* (Rep.). San Francisco, CA: WestEd.

 Available at: http://jprc.wested.org/wp-content/uploads/2016/12/RJ_Literature-Review-updated-Dec-2016.pdf
- Furlong, M. J., You, S., Renshaw, T. L., O'Malley, M. D., & Rebelez, J. (2013).

 Preliminary development of the positive experiences at school scale for elementary school children. *Child Indicators Research*. Advanced online publication.
- Furlong, M. J., You, S., Renshaw, T. L., Smith, D. C., & O'Malley, M. D. (2013).

 Preliminary development and validation of the Social and Emotional Health

- Survey for secondary school students. *Social Indicators Research*. First published online, June 17, 2013.
- Gehlbach, H., Young, L. V., & Roan, L. K. (2012). Teaching social perspective taking: how educators might learn from the Army. *Educational Psychology*, 32(3), 295-309.
- Greene, M. (2006). Bullying in schools: A please for a measure of human rights. *Journal* of Social Issues, 62(1), 63-79.
- Greene, M. (2008). School violence, human rights, dignity and humiliation. *Experiments* in Education, 36(3), 53-60.
- Gregory A. & Huang F. (2013). It takes a village: The effects of 10th grade college-going expectations of students, parents, and teachers four years later. *American Journal of Community Psychology*, 52, 41–55.
- Gregory, A., Huang, F., Anyon, Y., Greer, E., & Downing, B. (2018). An examination of restorative interventions and racial equity in out-of-school suspensions. *School Psychology Review*, 47(2), 167. doi:10.17105/SPR-2017-0073.V47-2
- Gregory, A. (2016). African American and Latino students' sense of community in restorative classrooms. Unpublished manuscript. Rutgers University. New Brunswick, NJ.
- Gregory, A., Skiba, R. J., & Mediratta, K. (2017). Eliminating disparities in school discipline: A framework for intervention. Special issue on equity in school.
 Review of Research in Education, 41, 253-278. doi:10.3102/0091732X17690499

- Gregory, A., Skiba, R. J., & Noguera, P. A. (2010). The achievement gap and the discipline gap: Two sides of the same coin? *Educational Researcher*, *39*(1), 59-68. doi:10.3102/0013189x09357621
- Guckenburg, S., Hurley, N., Persson, H., Fronius, T., & Petrosino, A. (2015). *Restorative justice in U.S. schools: Summary findings from interviews with experts*. San Francisco: WestEd. Available from http://jprc.wested.org/new-report-restorative-justice-in-u-s-schools-summary-findings.
- Hawkins, J. D., Catalano, R. F., Kosterman, R., Abbott, R., & Hill, K. G. (1999).
 Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics and Adolescent Medicine*, 153, 226–234.
 https://doi.org/10.1001/archpedi.153.3.226
- Hawkins, J. D., Kosterman, R., Catalano, R. F., Hill, K. G., & Abbott, R. D. (2008).
 Effects of social development intervention in childhood 15 years later. *Archives of Pediatrics and Adolescent Medicine*, 162, 1133–1141.
 https://doi.org/10.1001/archpedi.162.12. 1133
- Hedges, L. V. & Nowell, A. (1999). Changes in the black-white gap in achievement test scores. *Sociology of Education*, 72(2), 111-135.
- Huang, F. L., Eklund, K., & Cornell, D. G. (2016). Authoritative school climate, number of parents at home, and academic achievement. *School Psychology Quarterly*.
 Advance online publication. http://dx.doi.org/10.1037/spq0000182
- Jain, S., Bassey, H., Brown, M., & Kalra, P. (2014). *Restorative justice implementation* and impacts in Oakland schools (prepared for the Office of Civil Rights, U.S.

- Department of Education). Oakland, CA: Oakland Unified School District, Data in Action.
- Jencks, C. & Phillips, M. (1998). *The black-white test score gap*. Washington, DC: Brookings Institution Press.
- Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *American Journal of Public Health* 105(11), 2283–2290.
- Kang, D. (2017). Suspensions are down. What does this mean for school safety?

 Retrieved from
 - https://steinhardt.nyu.edu/site/research_alliance/2017/01/31/suspensions-are-down-what-does-this-mean-for-school-safety/
- LaRocca, B. (2017). *Measuring MESH: Student and teacher surveys curated for the CORE districts*. Transforming Education.
- Lee, T., Cornell, D., Gregory, A., & Fan, X. (2011). High suspension schools and dropout rates for black and white students. *Education and Treatment of Children, 34*(2), 167-192. doi:10.1353/etc.2011.0014
- Lewis, S. (2009). *Improving school climate: Findings from schools implementing*restorative practices. Bethlehem, PA: IIRP Graduate School: International
 Institute for Restorative Practices.
- Losen D. J., Martinez, T., & Gillespie, J. (2012) Suspended education in California.

 UCLA: The Civil Rights Project.

- Losen, D. J. & Martinez, T. E. (2013). *Out of school and off track: The overuse of suspensions in middle and high schools*. Los Angeles: The Center for Civil Rights Remedies. University of California. Available at: http://civilrightsproject.ucla.edu/
- Losen, D. J. & Gillespie, J. (2012). *Opportunities suspended: The disparate impact of disciplinary exclusion from school.* Los Angeles, CA: The Civil Rights Project.
- Macready, T. (2009). Learning social responsibility in schools: A restorative practice. *Educational Psychology in Practice*, 25(3), 211-220.
- Magnuson, K. & Waldfogel, J. (2008). Steady gains and stalled progress: Inequality and the black-white test score gap. New York: Russell Sage Foundation.
- McClusky, G. (2018). Restorative approaches in schools: Current practices, future direction In *The Palgrave international handbook of school discipline, surveillance, and social control* (pp. 573-593). Edinburgh, Scotland: University of Edinburgh.
- McClusky, G., Lloyd, G., Kane, J., Stead, J., Riddell, S., & Weedon, E. (2008). Can restorative practices in schools make a difference? *Educational Review*, *60*, 405–417.
- McMorris, B.J., Beckman, K.J., Shea, G., Baumgartner, J., & Eggert, R.C. (2013).

 Applying restorative justice practices to Minneapolis public schools students recommended for possible expulsion: A pilot program. Evaluation of the Family and Youth Restorative Conference Program. *School of Nursing and the Healthy Youth Development*. Prevention Research Center, Department of Pediatrics, University of Minnesota, Minneapolis, MN.
- Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., Houts, R., Poulton, R., Roberts, B.W., Ross, S., Sears, M.R., Thomson, W.M., & Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and

- public safety. *Proceedings of the National Academy of Sciences, 108*(7), 2693-2698. doi:10.1073/pnas.1010076108
- Morin, A. (2011). Self-Awareness Part 1: Definition, measures, effects, functions, and antecedents. *Social and Personality Psychology Compass*. *5*, 807 823. 10.1111/j.1751-9004.2011.00387.x.
- Morris, E. W. & Perry, B. L. (2016). The punishment gap: School suspension and racial disparities in achievement. *Social Problems*, *63*(1), 68-86. doi:10.1093/socpro/spv026
- Musu-Gillette, L., de Brey, C., McFarland, J., McFarland, J., Hussar, W., & Sonnenberg,
 W. (2017). Status and trends in the education of racial and ethnic groups 2017
 (NCES 2017-051). U.S. Department of Education, National Center for Education
 Statistics. Washington, DC. Available at:
 https://nces.ed.gov/pubs2017/2017051.pdf
- National Center for Education Statistics (2013). *The nations report card: Trends in academic progress 2012*, (pp. 3-58).
- O'Malley, M., Voight, A., Renshaw, T.L., & Eklund, K. (2014). School climate, family structure, and academic achievement: A study of moderation effects. *School Psychology Quarterly*. http://dx.doi.org/10.1037/spq0000076
- Okonofua, J. A., Walton, G. M., & Eberhardt, J. L. (2016). A vicious cycle. *Perspectives on Psychological Science*, 11(3), 381-398. doi:10.1177/1745691616635592
- Ortega, L., Lyubansky, M., Nettles, S., & Espelage, D.L. (2016). Outcomes of a Restorative Circles program in a High School setting. *Psychology of Violence*, 6(3), 459-468.

- Payne A.A. & Welch K. (2015). Restorative justice in schools: The influence of race on restorative discipline. *Youth & Society*, 47, 539–564 doi:10.1177/0044118X12473125.
- Pekel, K., Roehlkepartain, E., & Syvertsen, A. (2018). In defense of self-report surveys.

 Retrieved from http://measuringsel.casel.org/defense-self-report-surveys/
- Perry, B. L., Morris, E. W. (2014). Suspending progress: Collateral consequences of exclusionary punishment in public schools. *American Sociological Review*, 79(6), 1067-1087.
- Proctor, S. L., Williams, B., Scherr, T., & Li, K. (2017). Intersectionality and school psychology: Implications for practice. *National Association of School Psychologists*. Retrieved from https://www.nasponline.org/resources-and-publications/resources/diversity/social-justice/intersectionality-and-school-psychology-implications-for-practice.
- Renshaw, T. L., Furlong, M. J., Dowdy, E., Rebelez, J., Smith, D. C., O'Malley, I., & Strom, I. F. (2014). Covitality: A synergistic conception of adolescents' mental health, In M. J. Furlong, R. Gilman, & E. S. Huebner (Eds.), *Handbook of positive psychology in the schools* (2nd ed.). New York, NY: Routledge/Taylor & Francis.
- Richards, C., Bouman, W. P., Seal, L., Barker, M. J., Nieder T. O., & T'Sjoen, G. (2016).

 Non-binary or genderqueer genders. *International review of Psychiatry*, 28(1), 95102. doi: 10.3109/09540261.2015.1106446.
- Rockoff, J. E. & Lockwood, B. B. (2010). How and why middle schools harm student achievement. *International Journal of Learning and Media*, 68-75.

- Rubie-Davies, C. M., Weinstein, R. S. Huang, F. L., Gregory, A., Cowan. P., & Cowan,C. (2014). Successive teacher expectation effects across the early school years.Journal of Applied Developmental Psychology, 35, 181-191.
- Scott, T. M., & Barrett, S. B. (2004). Using staff and student time engaged in disciplinary procedures to evaluate the impact of school-wide PBS. *Journal of Positive Behavior Interventions*, 6, 21–27.
- Scott, T. M., Hirn, R. G., & Barber, H. (2012). Affecting disproportional outcomes by ethnicity and grade level: Using discipline data to guide practice in high school. Preventing School Failure: *Alternative Education for Children and Youth*, *56*, 110–120.
- Scott, R. C., & Nadler, J. (2018). Discipline disparities for Black students, boys, and students with disabilities. *United States Government Accountability Office*.
 Retrieved from https://www.gao.gov/assets/700/690828.pdf.
- Shaw, G. (2007). Restorative practices in Australian schools: Changing relationships, changing culture. *Conflict Resolution Quarterly*, *25*(1), 127-135.
- Singleton, G. (2017) About Courageous Conversation. Retrieved from https://courageousconversation.com/about/
- Skiba, R. & Peterson, R. (2000). School discipline at a crossroads: From zero tolerance to early response. *The Council for Exceptional Children*, 66(3), 335-347.
- Skiba, R. & Rausch, M. (2005). Zero tolerance, suspension and expulsion: questions of equity and effectiveness. In C.M. Everston & C.S.Weinstein (Eds.), Handbook of Classroom Management: Research, Practices, And Contemporary Issues (pp. 1063-1092). Mahwah, NJ, Lawrence Erlbaum Associates.

- Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury, CA: Sage.
- Tobin, T., Sugai, G., & Colvin, G. (1996). Patterns in middle school discipline records. *Journal of Emotional and Behavioral Disorders*, 4, 82–94.
- Voight, A., Hanson, T., O'Malley, M., & Adekanye, L. (2015). The racial school climate gap: Within-school disparities in students' experiences of safety, support, and connectedness, *American Justice Community Psychology*, 46(3-4), 252-267. doi: 10.1007/s10464-015-9751
- Voight, A., Hanson, T., O'Malley, M., & Adekanyel L. (2015). The racial school climate gap: Within-school disparities in students' experiences of safety, support, and connectedness. *American Journal of Community Psychology*, *56*, 252-267.
- Wachtel, T., Costello, B., & Wachtel, J. (2009). *The restorative practices handbook for teachers, disciplinarians and administrators*. Bethlehem, PA: International Institute of Restorative Practices.
- Watchel, T. (2016) Defining restorative. Retrieved August 13, 2017, from https://www.iirp.edu/what-we-do/what-is-restorative-practices/defining-restorative
- White, G. W., Stepney, C. T., Hatchimonji, D. R., Moceri, D. C., Linsky, A. V., Reyes-Portillo, J. A., & Elias, M. J. (2016). The increasing impact of socioeconomics and race on standardized academic test scores across elementary, middle, and high school. *American Journal of Orthopsychiatry*, 86(1), 10-23. doi:10.1037/ort0000122
- Wu, S.C., Pink, W.T., Crain, R.L., & Moles, O. (1982). Student suspension: A critical reappraisal. *The Urban Review, 14*, 245-303.

- You, S., Furlong, M. J., Dowdy, E., Renshaw, T. L., Smith, D. C., & O'Malley, M. D. (in press). Further validation of the Social and Emotional Health Survey for high school students, *Applied Research in Quality of Life*.
- Zehr, H. (2002). The little book of restorative justice. Intercourse, PA: Good Reads.
- Zehr, H., & Toews, B. (2004). *Critical issues in restorative justice*. Monsey, NY: Criminal Justice Press.
- Zimmerman, A. (2016). New York City school suspensions continue to plummet, but stark disparities persist. Retrieved from https://www.chalkbeat.org/posts/ny/2016/10/31/new-york-city-school-suspensions-continue-to-plummet-but-stark-disparities-persist/

Appendix A

Student Survey Items

RP Exposure Scale

Your school is now using **Restorative Justice**. It is a way to build community and resolve conflict. Some of your teachers have been trained in Restorative Justice.

<u>Please circle the best number for each statement:</u>	Not at all	Rarely	Sometimes	Often	Always
A) My teachers ask students to express their feelings, ideas, and experiences.	1	2	3	4	5
B) When someone misbehaves, my teachers ask students questions about their side of the story.	1	2	3	4	5
C) When someone misbehaves, my teachers has that person talk to who they hurt and asks them to make things right.	1	2	3	4	5
D) When someone misbehaves, my teachers has those who were hurt have a say in what needs to happen to make things right.	1	2	3	4	5
E) My teachers use circles as a time for students to share feelings, ideas, and experiences.	1	2	3	4	5
F) My teachers take students' thoughts and ideas into account when making decisions.	1	2	3	4	5
G) The administration (principal, vice principal) listens to my side of the story.	1	2	3	4	5

Other RP Exposure Measures

In the past month, how many community-building circles in your classrooms have you
participated in? (number here) During circles, you might pass a "talking piece" around and have a
chance to express your opinion.
This school year, how many restorative conferences have you participated in?
(number) During conferences, you get a chance to "tell your side of the story" to solve a problem or
conflict.

California Healthy Kids Survey- Social Emotional Health Module- Short

Please tell us how true each statement is of you...

	Not At All True of Me	A Little True of Me	Pretty Much True of Me	Very Much True of Me
I can work out my problems. (N/A)	1	2	3	4
I can do most things if I try. (N/A)	1	2	3	4
There are many things that I do well. (N/A)	1	2	3	4
There is purpose to my life. (SA)	1	2	3	4
I understand my moods and feelings. (SA)	1	2	3	4
I understand why I do what I do. (SA)	1	2	3	4
When I do not understand something, I ask the teacher again and again until I understand. (N/A)	1	2	3	4
I try to answer all the questions asked in class. (N/A)	1	2	3	4
When I try to solve a math problem, I will not stop until I find a final solution. (N/A)	1	2	3	4
I accept responsibility for my actions. (EBR)	1	2	3	4
When I make a mistake I admit it. (EBR)	1	2	3	4
I can deal with being told no. (EBR)	1	2	3	4
I feel bad when someone gets their feelings hurt. (E)	1	2	3	4
I try to understand what other people go through. (E)	1	2	3	4
I try to understand how other people feel and think. (E)	1	2	3	4
I can wait for what I want. (EBR)	1	2	3	4
I don't bother others when they are busy. (EBR)	1	2	3	4
I think before I act. (EBR)	1	2	3	4
Each day I look forward to having a lot of fun. (N/A)	1	2	3	4
I usually expect to have a good day. (N/A)	1	2	3	4
Overall, I expect more good things to happen to me than bad things. (N/A)	1	2	3	4

Note. N/A reflects items not used in analyses.
Subscales derived for the current study: SA, Self-Awareness subscale; EBR, Emotional and Behavioral Regulation subscale; E, Empathy subscales

Self-reported educational attainment expectations

How far do you expect to go in school?
☐ I expect to complete post-graduate studies (such as a master's degree or doctoral
degree) after graduating from a four-year college.
☐ I expect to graduate from a four-year college.
☐ I expect to graduate from a two-year college or technical school.
☐ I expect to graduate from high school.
☐ I might or might not graduate from high school.
☐ I do not expect to graduate from high school.
Self-reported grades
What grades did you make on your last report card?
□ Mostly A's
☐ Mostly A's and B's
□ Mostly B's
☐ Mostly B's and C's
□ Mostly C's
☐ Mostly C's and D's
☐ Mostly D's and F's
Self-reported behavioral referrals
In the past month, how many times have you been asked to leave a classroom for
discipline/behavioral reasons? (write a number here)
In the past month, how many times did security or a staff member escort you out of class
for discipline/behavior reasons? (write a number here)

How many times during this school year have you been suspended from school?

- o I have not been suspended from school this year.
- o I have been suspended for one day.
- o I have been suspended for two days.
- o I have been suspended for three days.
- o I have been suspended four or more days.

Appendix B

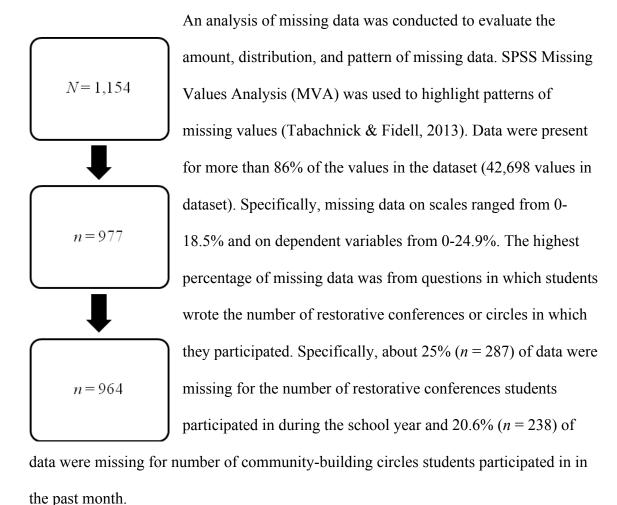
Eleven Essential Elements of RP

RP Elements	Definitions
1. Affective Statements	Statements that express personal feelings in response to specific behaviors of others
2. Restorative Questions	Questions that address inappropriate behavior and help to identify who is harmed
3. Small Impromptu Circles	Structured conversations used to resolve low-level conflict
4. Proactive Circles	Provide opportunities to share feelings and experiences to build trust and understanding
5. Responsive Circles	Engage students in conflict management by repairing harm and restoring relationships
6. Restorative	Structured conversations used to resolve high-level conflict
Conferences	· ·
7. Fair Process	Ensures that people are treated respectfully throughout any decision-making process
8. Reintegrative Management of Shame	Encourages acknowledgement of feelings of the shamed person
9. Restorative Staff Community	Modeling and consistent use of RP to build and maintain healthy staff relationships
10. Restorative Approach with Families	Consistent use of RP in interactions with students' families
11. Fundamental	Humans are happiest when those in authority do things with
Hypothesis	them rather than to them
Understandings	

Note: Adapted from the International Institute of Restorative Practices (IIRP): SaferSanerSchools Program.

Appendix C

Analysis of Missing Data



The social-emotional scale (CHKS SEHM) was included in the back of the survey and prefaced with, "IF YOU STILL HAVE TIME, please complete the following." Thus, perhaps not unexpectedly, 15.3% (n = 177) of the sample discontinued before completing the CHKS SEHM scale. I decided to exclude the 177 students with no CHKS SEHM data given the centrality of this dependent variable to the dissertation. Additionally, 13 students were excluded because their data was unusable (e.g., patterns in responses, all same number for scale with reverse scored items). There was a significant association

between being excluded from our sample and students' self-reported race, $X^2(7) = 38.3$, p < .001. Those excluded from our sample were *more* likely to be grouped as "Other" or "Black." Additionally, those excluded were *less* likely to be grouped as "Hispanic/Latinx" and "White." The excluded 177 students were also more different in terms of their gender composition relative to those included in the analyses, $X^2(1) = 8.99$, p = .003. Our analytic sample was comprised of significantly more males. Thus, from a demographic perspective, those less likely to complete the SEL scale were less likely to be White, Latinx, and more likely to be female relative to those with SEL scale data.

The 177 students removed given their missing SEL data also different on other characteristics relative to those in our analytic sample. They were more likely to be escorted out of class than those included in our sample, $X^2(1) = 7.55$, p = .006. As shown by independent-samples t-tests, there was also a significant difference in students' educational expectancies for our analytic sample (M = 5.1, SD = 1.1) relative to those students who did not complete the SEHM scale (M = 4.85, SD = 1.2); t (1148) = -2.95, p = 0.01. This showed that those students' excluded from analyses did not expect to go as far in school than those in our sample. There was a significant difference in students' self-reports of being asked to leave the classroom for disciplinary concerns for our sample (M = 0.78, SD = 5.4) and those students that did not complete the SEHM scale (M = 1.8, SD = 3.4); t (936) = 2.25, p < .001. This means that students excluded from our analyses were more likely to be asked to leave class than those in our sample. Finally, there was a significant difference in amount of community-building circles student participated in for our sample (M = 3.22, SD = 6.5) and those that did not

complete the SEHM scale (M = 5.01, SD = 8.3); t (914) = 2.59, p = .04. Meaning, those students' excluded from analyses reported participating in more community-building circles than their peers included in our sample. Additionally, 13 students were excluded because their data was unusable (e.g., patterns in responses, all same number for scale with reverse scored items).

After removing 190 students from the dataset using listwise deletion, additional analyses were conducted on the remaining 964 students. Data were present for almost 96% of the dataset. Specifically, missing data on scales ranged from 0-4% and on dependent variables from 0-20.4%. The highest percentage of missing data was from questions in which students wrote the number of restorative conferences or circles in which they participated. About 20% (n = 199) of data were missing for the number of restorative conferences students participated in during the school year and roughly 17% (n = 168) of data were missing for number of community-building circles students participated in in the past month. Next, multiple imputation was used to create five new datasets.