COMPARING A RESTORATIVE JUSTICE SCHOOL AND A NON-RESTORATIVE JUSTICE SCHOOL INVOLVED IN CONSOLIDATION: IMPLICATIONS FOR PERCEPTIONS OF SCHOOL CLIMATE

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Abstract

The current study compared student and staff perceptions of engagement of student voice, sense of community, and adult support within a Restorative Justice (RJ) school relative to a non-RJ school that did not have a restorative initiative. The study also considered the concept of “frame of reference” as it relates to perceived school climate. Specifically, the RJ and the non-RJ schools consolidated into a single high school. It was anticipated that the merged students and staff would draw on an RJ frame of reference, based on their prior school, as they rated their current non-RJ school climate. The study’s participants include 103 students and 28 staff from the RJ school, and 263 students and 25 staff from the non-RJ school. Students and staff completed 20-minute surveys. As expected, the regression analyses showed that students in the 2017 RJ school reported significantly higher engagement of student voice and adult support when compared to the students in the 2018 non-RJ school. Contrary to expectations, there were no significant differences in student-perceived sense of community. Also, there were no significant differences in staff-reported engagement of student voice, sense of community among students and adult support. Also, unexpectedly, the cohort of students in the 2018 non-RJ school who previously attended the 2017 RJ school did not experience engagement of student voice, sense of community and adult support differently than their peers that had only attended the non-RJ school. At the same time, responses to the open-ended survey questions suggest that, in the non-RJ school, there were few opportunities for expressing student voice.
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Introduction

Much of the literature that addresses high poverty urban school districts focuses on the many unique challenges that students, teachers, and administrators face in this educational environment. As Hudley (2013) explains, the high poverty urban school setting often provides public school students with insufficient tools to “make them competitive with their more advantaged, middle and upper-class peers” (Hudley, 2013, p. 1). Restorative Justice (RJ) aims to mitigate the negative effects of the unique challenges of the high poverty urban school setting and increase the sense of community, the engagement of student voice and the adult support provided to the students (Gregory & Evans, 2019). There are, however, difficulties in high quality and effective implementation due to the nature of the high poverty urban school setting. More specifically, rarely considered is how structural and organizational change can affect student and staff experience of RJ and the school climate, given teacher mobility, student mobility, and school consolidations. The current study leveraged data gathered before and after the merging of an RJ and a non-RJ high poverty urban school. The study aims to advance an understanding of student and staff experiences of school climate in these differing schools and the degree to which frame of reference (prior attendance in an RJ school) is linked to perceptions of school climate in a non-RJ school that differed in programing from the prior school.

Defining High Poverty Urban Schools

As per the National Center for Educational Statistics (NCES), individuals living in urban settings are more than twice as likely to be living in poverty than those in suburban and rural locations (Aud et al., 2010). The Census Bureau (last updated in
2006) defines urbanized areas and urban clusters as “densely settled cores of Census-defined blocks with adjacent densely settled surrounding areas” (Census Bureau, 2006, p.1). To determine if a school is high poverty, the Free and Reduced-Price Lunch (FRPL) program is often used as a proxy for poverty. In NCES research and other educational research organizations, high poverty schools are those where 75% to 100% of students are enrolled in FRPL (Aud et al., 2010). Furthermore, there has been a steady increase in the percentage of students who are enrolled in FRPL through the years (McFarland et al., 2018).

School organizational characteristics. Although not intended to minimize the heterogeneity of individuals living within a high poverty urban community and attending their respective schools, many national surveys and reports have identified similarities among individuals living in and attending schools in such settings. As identified by Aud et al. (2010) and McFarland et al. (2018), the government recognizes that high poverty schools are often overcrowded and lack resources, therefore a majority of these schools are labeled Title 1 and receive extra supports and funding. Less focus is placed on the impact of instability due to teacher and student mobility and the constant system-driven restructuring that occurs within these particular school districts. To better understand high poverty educational settings, what follows is a description of student, teacher, and administrator characteristics in these schools.

Student characteristics. As previously stated, students who attend urban schools are twice as likely as students in other settings to be living in poverty (Aud et al., 2010; McFarland et al., 2018). In the United States, 86% of students in high poverty elementary schools and 93% of students in high poverty secondary schools identified as African-
American, Hispanic/Latinx, and/or Asian (Aud et al., 2010). On average, in 2010, 12% and 15% of students in high poverty elementary and secondary schools, respectively, have an Individualized Education Plan (Aud et al., 2010). Finally, in 2010 between 16% and 25% of students in high poverty elementary and secondary schools were Limited-English Proficient or emergent bilinguals (Aud et al., 2010).

In a seminal report for the NCES that is referenced in many contemporary studies, Lippman, Burns and McArthur (1996) described typical student background characteristics in urban schools. These students were more likely to live in one-parent households, more likely to engage in risk-taking behavior, to be absent from school, to experience violence, and to have lower academic achievement scores than students living in non-urban settings (Lipman, Burns, & McArthur 1996). The authors also describe student mobility. They point out that students in urban schools are more likely to move schools during and between school years relative to their peers living in suburban or rural school districts (Lipman et al., 1996).

**Teacher and administration characteristics.** Much like students, teachers and administrators working in high poverty urban schools share some common characteristics. Most reports and scholarship focus on the shared demographics of the staff in high poverty urban schools (e.g., Aud et al., 2010; Kena et al., 2015; McFarland et al., 2018). In the United States, high poverty and urban elementary and secondary schools employed largely female teachers (84%). Yet, this trend does not differ significantly from the gender composition of teachers in low poverty schools (Aud et al., 2010). High poverty elementary and secondary schools, however, employ a larger percentage of Black and Hispanic/Latinx teachers than seen in low poverty schools (Aud
et al., 2010). A striking difference from that of low poverty schools pertains to the level of education and experience of teachers working in high poverty urban settings. Fewer teachers in high poverty schools have earned at least a master’s degree and a regular professional certification, and more teachers have three years or fewer of teaching experience (Aud et al., 2010).

As is the case with teachers in high poverty urban schools, there are some significant differences in administrators, namely principals, when compared to those working in low poverty settings. Compared to low poverty schools, high poverty urban elementary and secondary schools employed a greater percentage of female and Black and Hispanic/Latinx principals (Aud et al., 2010). Despite this difference, principals across high and low poverty schools tend to have similar educational attainment (Aud et al., 2010).

**Organizational Mobility and Structural Change**

A prevalent characteristic of high poverty urban schools is that of continual change. Change may include students moving schools, teachers transferring schools in the same district, teachers leaving a district or the teaching profession, or district re-structuring initiatives. The constant presence of change may not lend to the ideal stability for an educational, growth-promoting, and program implementation-ready environment.

**Student mobility.** Simply put, student mobility, which is also referred to as school mobility, is the movement of students from one school to another (Welsh, 2017). The United States has a rate of student mobility that is near the highest in the world (U.S. Government Accountability Office, 2010). As Welsh (2017) explains, there is both structural mobility and non-structural mobility. As the name implies, structural mobility
pertains to students moving schools due to the structure of the educational system they attend. This may be traditional and expected grade level promotion, school changes due to disciplinary policies, or school changes due to district restructuring (i.e., school closures, consolidations). Non-structural mobility involves school moves that are the choice of the student and his or her family, and although will not be the focus of this study, have their own set of implications for students (Welsh, 2017). Rumberger, Larson, Ream, and Palardy (1999) further categorized school moves as being reactive or unplanned, or strategic or planned.

Rumberger (2015) ties together the reasons for and types of student mobility with their impact, and finds that involuntary, within academic year moves, have the most negative impact on students and their schools. Some of the effects of student mobility include lower student achievement (Mehana & Reynolds, 2004; Reynolds, Chen, & Herbers, 2009), and grade retention and increased dropout rates (Rumberger 2003; U.S. Government Accountability Office, 2010). Schools with higher rates of student mobility face curriculum planning and implementation challenges, as often classroom teachers are required to slow and disrupt their pacing to best accommodate the incoming students (Audette & Algozzine, 2000; Kerbow, Azcoitia, & Buell, 2003). The discontinuity in content delivery produces a gap in acquired knowledge for students in highly mobile environments when compared to less mobile schools, which is significantly evident as early as second grade (Kerbow et al., 2003). According to a United States Government Accountability Office report (2007), a majority of principals who were surveyed stated that student mobility was a significant reason for an increase in schools qualifying for
corrective action status, which typically means schools go under the oversite of an external body given their low performance.

Student mobility appears to be most prevalent within the high poverty community, specifically impacting ethnic minorities in large school districts. Several studies have found that students who are from lower income or disadvantaged families experience school moves more frequently (e.g., Burkam, Lee, & Dwyer, 2009; Gasper, DeLuca, & Estacion, 2012; Hanushek, Kain, & Rivkin, 2004; Reynolds et. al., 2009; Rumberger, 2003; Schwartz, Steifel, & Chalico, 2009; Xu, Hannaway, & D’Souza 2009). Students who experienced several moves are more likely to be racial/ethnic minorities, specifically Black or Hispanic/Latinx (Burkam et. al., 2009; Gasper et.al. 2012; Hanuseck et. al. 2004; Schwartz et. al., 2009). As well as being more likely in the low-income Black and Hispanic/Latinx community, school mobility has also been shown to be most damaging to students who are from those subgroups, impacting their academic achievement, dropout rates, and sense of connectedness to school, staff and peers (Hanushek et al., 2004; Reynolds et al., 2009; Schwartz et al., 2009; Xu et al., 2009).

**Teacher mobility.** Teacher mobility is also significant in the United States. Teacher mobility is defined as a teacher moving from his or her position, due to promotion, transfer within district, resignation, or employment termination. In a longitudinal study released by the Institute of Education Sciences (Kena et al., 2015), beginning teachers (defined as teachers in their first three years of employment) in the United States were tracked for five years to assess the prevalence of teacher mobility. In the five-year analysis starting in 1990, Kena et al. (2015) reported that no less than 10% of teachers in every year of their sample would leave their previous year teaching
position for one of the aforementioned reasons. Of note was the high percentage of teachers who involuntarily moved within their current school district (Kena et al., 2015). Some intriguing correlations found in the Kena et al., (2015) five-year report were that teachers who initially made more than 40,000 dollars in salary were more likely to stay at the same school, teachers in a mentor program were less likely to move schools under their own volition, and teachers in high poverty schools (as determined by FRPL) were more likely to move, either of their own choice or due to school district restructuring. The latter finding is corroborated by an earlier study conducted by Scafidi, Sjoquist and Stinebrickner (2007). They found that teachers were more likely to change schools within and across districts if they began their teaching careers in low-income and high poverty schools. Scafidi et al. (2007) further showed that the mobility rate increased when teachers began their careers in high poverty schools that serve mostly minority students.

In an already unstable environment, teacher mobility is thought to have a great impact on student development as well as the development of culture in schools (Scafidi et al., 2007).

**Traditional school transitions.** Although much of the focus of this study is on the effects of abrupt, often unexpected school mobility such as consolidation (as described below), one can ponder as to the potential effects, positive or negative, of traditional school transitions. Traditional transitions are structural forms of mobility that are expected through the process of public education in the United States. These transitions include the promotion from elementary school to middle school, and middle school to high school. Such transitions are considered to be a part of the major events of
children and adolescents’ lives posing stress related to change and opportunities to experience positive growth (Anfara, 2007).

A substantial volume of research has been conducted on the impact of traditional school transitions on students. It is no surprise that the change in schools, such as new teachers, differing sets of rules, new routines, and programs, may cause significant change in students’ level of academic achievement, motivation, self-esteem, and connectedness to the school environment (Anfara, 2007). In a review of nearly three decades of literature on the impact of school transitions for students on the aforementioned domains, Anfara (2007) identified students who engage in traditional school transitions generally experience the following: decreased number of highly supportive relationships due to the shorter periods engaging with different teachers; lowered self-esteem initially, returning to pre-transition levels as the school year progresses; declines in motivation; initial decreases in academic achievement with some regression to the mean in the year following transitions. With regards to the latter finding, it has been corroborated in more recent studies focusing on particular subject areas. Specifically, researchers have found that after a school transition to high school, students experience a decrease in science self-efficacy, science achievement (Lofgran, Smith, & Whiting, 2015), and mathematics achievement (Brown & Seeley, 2010). Of interest, as noted by Lofgran et al. (2015), decrements in academic achievement occurred to a greater degree in Latinx and female students when compared to White and male students. Furthermore, as noted by Brown and Seeley (2010), the greater levels of independence and self-regulation, required as students progress through grade levels, may also factor in periods of adjustment contributing to the noted decreased academic achievement. More
specifically, as students progress through school, they are required to maintain their own academic schedules (i.e., due dates with less reminders), develop their own study habits with less guidance, all while the curricula becomes more rigorous. In a longitudinal study following students from 6th through 12th grade, Dishman et al. (2017) found that motivation and physical activity decreased as students progressed through grade levels.

In sum, a vast literature addressing traditional transitions in schools suggests that as students traverse school levels they face numerous challenges including adjusting to new school climates. Students entering a new school may have more negative perceptions of their climate, simply due to the change (i.e., risky transition). The transition literature supports this possibility given a change in school level (i.e., middle to high school) is linked with declines in motivation, achievement, and feelings of connectedness with other staff and students within the school building (Anfara, 2007; Brown & Steeley, 2010; Dishman et al., 2017).

Consolidation and disruption. Although there is extensive student mobility literature, much of it focuses on the moves that students make due to personal or family decisions (e.g., Cordes, Schwartz, Stiefel, & Zabel, 2015). Some of the mobility literature also focuses on school closings and district restructurings (e.g., Bulkley, Henig, & Levin, 2010; Levin, Daschbach, & Perry, 2010). Few studies, however, focus on school consolidation and its impact on student academic and social-emotional development as well as the high-quality implementation of initiatives that intend to improve school climate. As defined by the New York City Department of Education, and largely adhered to the scholarly literature, school consolidation occurs when “two or more existing school organizations are combined into one school to operate and serve the students more
effectively” (NYDOE, 2017 p.1) Not to be confused with district consolidation, where smaller school districts combine to operate under one district, school consolidation has been prevalent in the United States for several decades (Andrews, Duncombe & Yinger, 2002).

Often the main reason for school consolidations is to increase budgetary savings and resource delegation. However, as Malhoit and Black (2003) note, large consolidations have shown to be costly due to increases in discipline referrals and absenteeism. Further substantiated by Cox and Cox (2010), who explore consolidation in urban districts, it was demonstrated to be unsuccessful in reducing budgets. Much of the scholarship on consolidation is written from an economics perspective and focuses on the impact to budgetary outcomes rather than the impact on students, teachers, and administrators. Nevertheless, consolidation is a form of structural mobility, therefore many of the impacts of school mobility on school members may apply. As Sunderman and Payne (2009) note, students transferring schools due to consolidation tend to risk losing important relationships that support them in being academically successful.

Schools are individual entities with unique sets of norms, cultures, and practices. When schools consolidate, the school climates of the two schools may differ prior to the merge, potentially subjecting the staff and students to a radical change in environments. In addition, when schools consolidate, groundbreaking initiatives may be discontinued in the new school. As Rogers (2003) explains through the theory of innovation, when the values and norms of an innovation do not match those of the social setting, it is difficult to implement a new program. School consolidation may hinder the diffusion of innovations (Rogers, 2003) aimed at improving school climate, such as RJ. In the current
study, two schools serving students between the grades of 6 and 12 were consolidated, and the 6th grade was terminated. The lower academic performing school, with higher levels of truancy, was essentially merged into a school within the same building. Many of the rules, norms, and initiatives, that did not purportedly align with the higher academic performing school’s already existing protocols, were removed, or dismissed (Gregory, personal communication, 2017). One such initiative that did not survive the consolidation process was RJ.

Restorative Justice

RJ is often seen as a set of practices and a philosophy guided by a series of central tenets that aim to increase the sense of community, engage the student voice, and improve adult support within schools. RJ has its origins in indigenous populations’ orientation to community-building focused on interconnection, fairness, and joint decision making within the community (Gregory & Evans, 2020). RJ arose as an alternative to the current justice system in an effort to bring offenders and victims together to repair the harm due to a crime (McCluskey et al., 2008). RJ encompasses many practices and is implemented in schools, religious institutions, and workspaces (Zehr, 2002). In the schools, RJ aims to resolve conflict, repair relationships, promote accountability and an equitable process, and create system or class wide opportunities to reflect and change (McCluskey et al. 2008). In essence, RJ provides schools with a system to replace (or reduce) punitive disciplinary actions, and in turn potentially increase the engagement of student voice, the perceptions of community and the support students feel from adults (Zehr, 2002).
Restorative justice programming. The RJ practices that are commonly used in schools include: the use of affirmative statements, community-building circles, and restorative conferences (Guckenburg et al., 2016). The use of affective statements in RJ allows for students and teachers to engage in a common language of expressing emotions in reaction to different events (Wachtel, Costello, & Wachtel, 2009). This in turn may allow for students to express thoughts in a more authentic manner, promoting active engagement of student voice. Community-building circles occur when a teacher and students in a class sit in a circle (unobstructed by tables or desks) and discuss topics that are important to them, one at a time using a talking piece, which offers each person a chance to communicate (Guckenburg et al., 2016). Such circles are often held during advisory periods in middle and high schools. Community-building circles may allow for a safe space for students to express themselves and connect with one another and their teachers in efforts to increase the sense of community (Costello, Wachtel & Wachtel, 2010). Finally, restorative conferences are held when there has been some form of harm done between students. Restorative conferences allow for the victim or harmed party and the disputant or responsible party to share a space and communicate the two sides of the story, while providing a setting for an authentic apology or actions to make amends. Restorative conferences intend to hold students accountable, however they also may reintegrate students who broke rules or committed harm back into their school community (Gregory et al., 2014; Gregory et al., 2018).

Implementation barriers. Implementing an initiative such as RJ within a school can be a challenging undertaking (Gregory & Evans, 2020). The implementation gap is a phenomenon that is widely researched and it is well documented that schools will often
have difficulty in high quality implementation of a program that was previously
developed and tested in controlled research settings such as universities (e.g., Goldberg,
2003). School characteristics may explain the presence of the implementation gap. For
example, administrator support is cited as one of the most important factors to increase
successful program implementation in schools (Forman et al., 2009). Many schools are
high-stakes testing environments, where funding is largely dependent on students’
standardized test scores. This often leaves administrators with priorities other than
implementing new programs, such as RJ, that are not seen as directly affecting scores
(Oberle, Domitrovich, Meyers & Weissberg, 2016). One other factor that may influence
program implementation, specifically those in high poverty urban districts, is that of
inadequate resources to conduct initial and continued staff training and support.

According to Stormont, Thomas, and Van Garden (2012), staff often report feelings of
unpreparedness and lack of confidence in the ability that they have to act as implementers
of a new program in their school. Even if a school attains high quality initial trainings to
implement a program such as RJ, it is often found that they do not receive these
continued supports in order to promote the longevity of program implementation
(Forman et al., 2013).

**Restorative Justice and School Climate**

RJ shares goals with many social-emotional learning programs and antibullying
programs that aim to improve school climate, safety and learning (Evans & Vaandering,
2016). Some early studies and reports indicate that RJ may produce some improvements
in school climate (e.g., Jain et al., 2014; McMorris et al. 2013; Mirsky, 2007; Mirsky &
Watchel, 2007). School climate in schools where RJ is well-implemented may be seen as
having three positive characteristics related to (1) shared sense of community, (2) engagement of student voice, and (3) high adult support for students. RJ further aims to shift schools towards a social discipline window, which is characterized by a balance of high levels of discipline, and high levels of support, also recognized as authoritative discipline (Wachtel, 2016)

Although as previously reported there are single group pre and post studies that appear to identify positive correlates of RJ on school climate (Wachtel, 2016), the field lacks rigorous experimental designs, specifically comparing the impact of RJ on a school to a control school that did not implement RJ programming. In fact, only two studies by researchers at RAND currently exists engaging in a two-year cluster-randomized trial of RJ. In the Acosta et al. (2019) study in Maine, they evaluated restorative practice programming in 7 schools for 2 years and had a 7 school wait-list comparison group. Acosta et al. (2019) gathered several measures, among them school climate perceptions. The results indicate that there were no significant differences in school climate perceptions between the RJ schools and control schools (Acosta et al., 2019). Acosta et al. (2019) note the varying levels of implementation of RJ (i.e., fidelity of implementation and dosage of implementation) as the potential cause of non-significant differences.

In the Augustine et al. (2018) study in Pittsburgh, they evaluated restorative practice programing in twenty-two schools for 2 years, and had a twenty-two school control comparison group. Augustine et al. (2018) gathered measures on school and classroom climate, suspension rates, and academic outcomes. The results indicated improvements in school climate as rated by teachers, decreases in overall suspension
rates, decreases in disparities of suspension rates by race and income, and decreases in recurrent suspensions. Interestingly, despite the reductions in suspension rates, the positive climate ratings by teachers and increases in use of affective statements by staff, the yearly school climate measures assessed in Pittsburgh found lower levels of positive classroom climate as perceived by students in the twenty-two schools implementing RJ. Augustine et al. (2018), also found significant decreases in academic achievement, specifically in middle-school grades and school with greater proportions of black students. Furthermore, Augustine et al. (2018) noted that suspension rates did not change for those with individualized education plans, and students with a history of violent behaviors or arrests, questioning whether restorative justice practices could contribute towards decrease in the most difficult and violent behaviors in schools. Augustine et al. (2018) noted limitations in implementation fidelity, as well as the short length of the study (pointing out that most programs require anywhere from 2 to 5 years of implementation) as contributing factors to the mixed results. Taken together, these studies suggest RJ may not lead to improved school climate. At the same time, the fidelity findings and length of study suggest that schools may need much greater implementation supports to integrate such comprehensive shifts in approaches to community-building and student misconduct. The very few rigorous studies with mixed results and positive results from the numerous case studies indicate that further research should be conducted. The following are components of school climate in which RJ may play a role:

**Sense of community.** Sense of community can be defined as the level of respect students display towards one another and the extent of connectedness amongst students
RJ aims to improve school climate, and one such way is by building a positive sense of community (Fallot & Harris, 2009). In order to do so, the RJ activities previously described allow for students to sit in a circle with their peers and teacher and, potentially, increase a sense of belonging (Costello, Wachtel & Wachtel, 2010). Furthermore, the RJ community-building circles aim to facilitate students and teachers learning more about one another, a practice that may not always be readily available in a traditional school setting (Sprague & Tobin, 2017).

Sense of community can also be viewed as sense of connectedness to an organization of individuals within it, which may meet many basic needs of students in a school (Rosenbloom & Rovine, 2009). Although much of the research is preliminary, an increase in sense of connectedness has been shown to increase autonomy, relatedness and competence, which may impact academic achievement in students (Osterman, 2000; Ryan & Deci, 2000). Students who feel connected and belong to a community may also be less likely to engage in bullying and delinquent behaviors, potentially increasing the perceived sense of safety in a school (Rosenbloom & Rovine, 2009). The findings from these studies demonstrate that initiatives such as RJ which attempt to improve on the sense of community in a school may, in theory, increase desired outcomes and decrease undesired behaviors in schools.

**Student voice.** The very activities associated with RJ rely on the engagement of student voice. Engaging student voice through an RJ perspective is defined as using affective statements, affective questions, community-building circles, and formal restorative conferences (Wachtel, 2016). Engaging or honoring student voice provides students with the “ability to make a difference through what one says, and to have a say
in key decisions” (Sprague & Tobin, 2017, p.11). The three tenets of RJ being explored likely do not operate in isolation from one another and may impact the development of one another. The informal engagement of student voice (i.e., affective statements and questions) has been demonstrated to have a cumulative effect on everyday life and improvement of relationship building and sense of community (McCold & Wachtel, 2001). Furthermore, the continued everyday use of informal RJ language (e.g., “I feel [emotion] when you…”) may provide students in the classroom with insight into the impact of their actions, potentially affecting future reactions and behavior (Harrison, 2007). As Wachtel (2013) points out, the continued use of RJ may develop an environment that promotes authentic empathy and awareness and may be more effective in achieving social discipline than punitive discipline. In theory, the use of formal restorative conferences to repair harm may allow for an opportunity to hold offenders accountable, rid them of the “offender” label, and better integrate them into the school community (Morris & Maxwell, 2001).

**Adult support.** Adult support in school has been conceptualized as the extent to which students perceive that the school adults can be confided in, are willing to help them, and want them to succeed (Gregory et al., 2010). In scholarship, adult support is often described as an integral characteristic of an authoritative school discipline climate. An authoritative discipline climate is characterized as having structured, consistent rule-enforcement and as having supportive and fair relationships between adults and students in a school (Cornell & Huang, 2016).

Adult support is widely researched and has demonstrated numerous positive correlates. The combination of structure and support associated with authoritative
approaches to teaching have been shown to have a positive association with achievement, specifically for students from low-income families (Gregory & Weinstein, 2004). Adult support is also linked to students being more engaged in schools (Midgley, Maehr, Hruda, Anderman & Freeman, 2000). When students feel more engaged in school, and feel as though their teachers are supportive, they are more likely to seek help, which may help explain why adult support is linked to higher achievement (Unnever & Cornell, 2004; Wilson & Deanne, 2001). The willingness to seek help may also promote safety in a school environment (Smith, Talamelli & Cowie, 2004). In fact, authoritative school climate is associated with lower levels of student-reported risk behaviors such as substance use, bullying, gang affiliation, carrying a weapon to school (Cornell & Huang, 2016), and dropout rates (Jia, Konold & Conell, 2015).

In sum, school climate is a multidimensional construct. Three characteristics of a positive school climate include engagement of student voice, adult support, and sense of community. As described earlier, RJ practices, in theory, may help schools develop school climates with these characteristics.

**Frame of Reference**

Students who have attended a school with high levels of RJ implementation have, in theory, been exposed to a school climate promoting the development of relationships, community, and the use of their voice to express ideas and feelings. As stated above, school mobility is a significant challenge in urban schools. Students may be traversing schools with divergent programming and school climates. Specifically, when a RJ-school consolidates with a non-RJ school and the program is phased out, a cohort of students become exposed to an entirely different school climate. As far as the author is aware, no
school climate research has focused on the experience of school climate in consolidated schools. Of particular interest, is how students experience a school climate in the non-RJ school when their prior year point of reference is their school climate in an RJ school. In their new school, they may perceive the environment using what might be called “frame of reference.” In other words, students who have never been exposed to RJ, or any other similar programming and are accustomed to traditional school power dynamics, may rate their school climate more positively than students with experience in a prior RJ-school. Alternatively, students in a prior RJ-school may interpret a non-RJ school as less supportive, or more restricted than their peers due to their learned expectations form their prior school.

In terms of school implementation science, and school climate literature, there appears to be little empirical examination of the concept of “frame of reference” as it is linked to perceptions of organizations or contexts. The most relevant theories are (a) Bowlby’s (1982) attachment theory and (b) Bronfenbrenner’s (1979) ecological model of human development. As per Bowlby (1982), a child learns through initial attachments, the rules and expectations to relationship development. Therefore, a child approaches new relationships with other adults with the expectations produced in previous attachments. This process of developing internal working models may be parallel for students. In theory, students create internal working models of school climates or, said differently, they may draw on frames of reference. A child moving from one school to another may interpret the new climate, rules, adults, and peers through the lens of the previous school’s experiences.
As per Bronfenbrenner’s (1979), theories of ecological development, an environment produces expected processes, social relationships and interactions. School mobility introduces an entirely new ecology and in turn a new set of processes, social relationships and interactions. A student in a new environment may use previous experiences in developing new processes, relationships and interactions, and find that previous expectations no longer apply to the new environment.

“Frame of reference” produces unique challenges in assessing school climate, especially in school consolidations whereby cohorts of students may experience school entirely different than their peers. Challenges to measurement would theoretically hold true especially if cohorts of students with previous experiences and prior expectations comprise a substantial portion of the new or consolidated school enrollment. Typically, researchers ignore how prior settings may impact current perceptions of school climate.

Beyond being a methodological issue for those doing program evaluation, “frame of reference” may have significant ramifications for schools in the future. Schools are often described as high-stakes testing environments, which is how they are assessed for overall performance. With the introduction of the Every Student Succeeds Act, non-cognitive measures of school progress are being used. Schools using climate measures as their non-cognitive indicator of progress are then turning school climate into a high stakes assessment, similar to standardized academic tests. Yet, so often, schools will not account for the substantial student and teacher mobility in high poverty urban schools, and “frame of reference” as a potential contributor to perceived school climate. Without accounting for these issues, measures of school climate may not reflect complex underlying contributors.
Current study

High poverty urban schools share many characteristics that offer challenges in academic achievement and program implementation. Already well-documented is that students attending high poverty urban schools are more likely to experience violence, engage in risky behavior, and experience lower academic achievement (Lippman, McArthur, & Burns, 1999). Student and staff mobility due to structural change, specifically as a result of school consolidation, is a characteristic of high poverty urban schools that is underexamined in educational literature. In theory, with what is known of the effects of mobility (i.e., difficulties in curriculum implementation, decreased connectedness to school and peers, lower academic achievement), one can posit that the negative correlates are likely to extend to school consolidation, which reflects a form of mobility and change in enrollment and staffing.

Initiatives such as RJ aim to incorporate student voice, increase adult support, and sense of community in an effort to mitigate negative characteristics of high poverty urban schools and improve school climate. The process of consolidation compels students to integrate into a new school. With them, they bring a “frame of reference.” Students merging from a RJ school to a non-RJ school may view their new school climate from an entirely different perspective than their peers.

The current study, although exploratory, offers the opportunity to examine two primary aims. The first aim is to compare two similar high poverty urban schools on aspects of school climate such as engagement of student voice, perceived adult support, and sense of community from student and staff perspectives. The key difference in both schools being that one school implemented RJ for three years, and the other did not
implement RJ nor any program like it. Any differences that are found may inform future research into the correlates of RJ on school climate among students faced with the many challenges of high poverty urban neighborhoods.

The study’s second aim is to advance knowledge about how different cohorts of students perceive the school climate within a recently consolidated school. Said differently, this study has the unique opportunity to explore differences amongst student and staff perspectives within a consolidated school. An RJ school was consolidated into a non-RJ school. Integrated into a new school with a reduced focus on the three RJ tenets described (i.e., engagement of student voice, sense of community, and adult support), students and staff from the prior RJ school may perceive a harsher, more disconnected environment. Akin to a corporate takeover, when the RJ school was consolidated into the non-RJ school, staff with seniority according to union rules, remained employed at the non-RJ school while those not meeting union rule cutoffs for seniority were relieved of their positions. Furthermore, according to informal interviews with staff and students (2018) programing and initiatives within the RJ school that did not match the goals and objectives of the non-RJ school appeared to be discarded. Results from this exploratory study may offer future directions for research on program implementation in consolidated schools, and the potential bearing the process of consolidation has on the students and staff in the school.

Two student characteristics were covaried in the statistical models. Specifically, student race and gender were covaried. Prior research has suggested that the extent to which students of varying race or gender feel the level of community is in their school, feel as though their voice is heard, and feel supported by adults may differ. Specifically,
previous studies have explored the concept of equitable school climate, and the school climate perception gap that appears to exist between white and minority students (Bottiani, Bradshaw & Mendelson, 2015; Voight, Thomas, O’Malley & Adekanye, 2015). Voight and colleagues (2015) examined the results of student and staff survey data from 400 middle schools in California to determine that Black and Hispanic/Latinx students experienced lower levels of school safety and connectedness, relationships with adults, and opportunities for participation than their White peers. Bottiani, Bradshaw and Mendelson (2015) corroborate the previous study finding that Black students experienced lower levels of caring, equity, and engagement than their White peers. Although not nearly as much has been written about with regards to a potential gender school climate gap, it is within reason to hypothesize the capacity for different school experiences in students and staff of different genders. In a longitudinal study conducted in Australia, Yates (2003) explored the effects of school reform through schoolwide survey data and determined that female students experienced greater levels of connectedness and satisfaction with school climate than their male peers. Furthermore, McGuire, Anderson, Toomey, and Russel (2010) explored the results of two separate studies on the school climate experiences of transgender students. The results of both studies pointed to transgender students often rating their schools as less safe. Additionally, transgender students report feeling less connected to staff and peers within their school. What follows is a list of research questions and when appropriate their accompanying a priori hypotheses.

**Aim 1: Between-school comparison of a RJ and a non-RJ school**

R1a: Do students enrolled in a school implementing RJ perceive a higher sense of community, adult support, and engagement of student voice relative to students enrolled
in a similar, low income urban school without RJ? In other words, are there between-school differences in student-perceived community, support, and voice across an RJ and a non-RJ school?

**H1a.** Given RJ focuses on having a higher sense of community, adult support, and the engagement of student voice through its core activities, it was anticipated that students in the RJ school would rate higher on these three constructs than the students in the non-RJ school.

**R1b.** Do staff working in a school implementing RJ perceive that their students experience a higher sense of community, adult support, and engagement of student voice relative to staff working in a similar, low income urban school without RJ? In other words, are there between-school differences in staff perceptions about student community, support, and voice across an RJ and a non-RJ school?

**H1b.** Given RJ focuses on having a higher sense of community, adult support, and the engagement of student voice through its core activities, it was anticipated that staff in the RJ school would rate their students higher on these three constructs than the staff in the non-RJ school.

**Aim 2: Within-school comparison in a non-RJ school**

**R2a.** Is past exposure to RJ with its focus on building community, strengthening adult-student relationships, and centering student voice associated with how students experience their current traditional, non-RJ school relative to their peers without this past exposure? In other words, comparing students within-the same school, does past experience with RJ differentiate how students perceive sense of community, adult support, and voice?

**H2a.** With prior enrollment and experience in a school focused on developing sense of community, adult support, and engaging student voice through RJ, it was anticipated that this cohort of students would draw on a frame of reference and view their new non-RJ high poverty urban school as having lower levels of these tenets than their peers who never experienced RJ.

**R2b.** Is past exposure to RJ with its focus on building community, strengthening adult-student relationships, and centering student voice associated with how staff experience their current traditional, non-RJ school relative to their colleagues without this past exposure? In other words, comparing staff within-the same school, does past experience with RJ differentiate how staff perceive sense of community, adult support, and voice?

**H2b.** With prior employment and experience in a school focused on developing sense of community, adult support, and engaging student voice through RJ, it was anticipated that staff would draw on a frame of reference and view their new non-RJ school students as perceiving lower levels of these tenets than their peers who never experienced RJ.
Aim 3: Student ideas about community and voice in a non-RJ school

R3. What strategies for building community and engaging student voice do students consider in a non-RJ high poverty urban school where administrators have not prioritized such change?

No a priori hypothesis was posited. Themes emerged through open coding student responses to two open-ended questions on the student survey.

Method

Participants

Adolescents in the current study were enrolled in two similar high-poverty urban schools in different school years (See Table 1). In the 2016-2017 academic year, the RJ school adolescents in grades 6 through 12 were enrolled in a combined RJ public middle and high school of approximately 246 students, located in a Northeastern city in the United States. In the middle school (grades 6 through 8), 50% of students were male, and 50% of students were female, while in the high school (grades 9 through 12) 58% of the students were male and 42% of students were female. According to district records, the middle school’s racial and ethnic composition was 91% Black, with the remaining percentage not reported. The high school’s racial and ethnic composition was 92% Black, 5% White, and 3% Hispanic/Latinx. In addition, 71% of students were identified as being eligible for Free and Reduced-Price Lunch.

We collected surveys from 42% of the approximately 246 students (N = 103; See Table 2). Based on self-reports, the RJ school was comprised of 1% grade 6 students, 4% grade 7 students, 5% grade 8 students, 14% grade 9 students, 26% grade 10 students, 33% grade 11 students, and 17% grade 12 students. Student self-reported race for the RJ school was, 81% Black/African American, 5% Hispanic/Latinx, 1% Asian, 1% American
Indian or Alaska Native, 1% Native Hawaiian or Pacific Islander, 3% selected two or more races, and 6% selected Other with an option to write in. Also, 2% of students in the RJ school did not report their race. Student self-reported gender identity for the RJ school was, 51% female, 45% male, and 2% Other with a write in option. Further, 2% of students in the RJ school did not report their gender identity.

In the 2017-2018 academic year, the non-RJ school adolescents in grades 7 through 12 were enrolled in a combined non-RJ middle and high school of approximately 357 students. In the middle school (grades 7 through 8), 49% of the students were male, and 51% of students were female, while in the high school (grades 9 through 12) 55% of the students were male and 45% of students were female. The middle school’s racial and ethnic composition was 95% Black, with the remaining percentage not reported. The high school’s racial and ethnic composition was 87% Black, 8% Hispanic/Latinx, and 5% White. In addition, 84% of students were identified as eligible for Free and Reduced-Price Lunch. Of note, is the consolidation process that saw the RJ school combine with the non-RJ school, beginning in the 2017-2018 school year, and dropping grade 6. Also of note, a small cohort of students (n = 52) from the RJ-school in 2016-2017 who joined the non-RJ school in 2017-2018 completed the survey.
Table 1

*RJ School and Non-RJ School comparison based on district records from two school years*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance Rate</td>
<td>77%</td>
<td>90%</td>
</tr>
<tr>
<td>Achievement*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>61.3%**</td>
<td>72.3%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>60%**</td>
<td>59.9%**</td>
</tr>
<tr>
<td>Suspension Rate</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Graduation Rate</td>
<td>47.4%***</td>
<td>82.4%</td>
</tr>
<tr>
<td>Program Implementation</td>
<td>Restorative Justice</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Based on Regents Exam passing percentage
**Below city average
*** RJ school tended to intentionally keep students enrolled who were “over-aged and under-credited” as part of their philosophy of inclusion which may offer some explanation for this low graduation rate

We collected surveys from 74% of the approximately 357 students in the non-RJ school (N = 263; See Table 2). Based on self-reports, the non-RJ school was comprised of 7% grade 7 students, 8% grade 8 students, 18% grade 9 students, 15% grade 10 students, 32% grade 11 students, 18% grade 12 students, and 2% of the non-RJ school students did not self-report the grade level they were in at the time of survey completion. Student self-reported race for the non-RJ school was, 80% Black/African American, 5% Hispanic/Latinx, 3% Asian, 1% American Indian or Alaska Native, 6% selected two or more races, 2% selected Other with an option to write in, and 3% of students in the non-RJ school did not report their race. Student self-reported gender identity for the non-RJ school was 44% female, 51% male, 1% Transgender/Gender Non-
Conforming/Questioning, 1% Other with a write in option, and 3% of students in the non-RJ school did not report their gender identity.

As previously noted, 52 students in the non-RJ school (2018) who previously attended the RJ school in 2017 completed the survey. The demographic breakdown of the group can be found in Table 3. As can be observed in Table 2 and Table 3, the demographic makeup of the small cohort of students that previously attended the RJ school is similar to that of the overall non-RJ school participants. Of note, is that there were 23 students in the non-RJ school (2018) who identified having attended a school other than the RJ school and the non-RJ school that implemented RJ. Given we were unable to identify the RJ programming and the small sample of 23, it was decided to exclude these students from analyses.
Table 2

**RJ School and non-RJ school student participant gender, race, grade level comparison**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>103</td>
<td>263</td>
</tr>
<tr>
<td>Male</td>
<td>45%</td>
<td>51%</td>
</tr>
<tr>
<td>Female</td>
<td>51%</td>
<td>44%</td>
</tr>
<tr>
<td>Transgender/Gender non-conforming/Questioning</td>
<td>-</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Did not report</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>103</td>
<td>263</td>
</tr>
<tr>
<td>Black or African American</td>
<td>81%</td>
<td>80%</td>
</tr>
<tr>
<td>Hispanic/Latinx</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Asian</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>2 or more races</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>Did not report</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Grade level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>103</td>
<td>263</td>
</tr>
<tr>
<td>6th</td>
<td>1%</td>
<td>-</td>
</tr>
<tr>
<td>7th</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>8th</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>9th</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>10th</td>
<td>26%</td>
<td>15%</td>
</tr>
<tr>
<td>11th</td>
<td>33%</td>
<td>32%</td>
</tr>
<tr>
<td>12th</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Did not report</td>
<td>-</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Note:* Non-RJ school eliminated 6th grade after consolidation; Data displayed is prior to missing data procedure was implemented
Table 3

*Students who previously attended RJ school and attended the non-RJ school at the time of survey*

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Attended RJ School prior year (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>52</td>
</tr>
<tr>
<td>Male</td>
<td>62%</td>
</tr>
<tr>
<td>Female</td>
<td>38%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>52</td>
</tr>
<tr>
<td>Black or African American</td>
<td>75%</td>
</tr>
<tr>
<td>Hispanic/Latinx</td>
<td>2%</td>
</tr>
<tr>
<td>Asian</td>
<td>2%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>2%</td>
</tr>
<tr>
<td>2 or more races</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
<tr>
<td>Did not report</td>
<td>11%</td>
</tr>
<tr>
<td>Grade level</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>52</td>
</tr>
<tr>
<td>7th</td>
<td>4%</td>
</tr>
<tr>
<td>8th</td>
<td>15%</td>
</tr>
<tr>
<td>9th</td>
<td>2%</td>
</tr>
<tr>
<td>10th</td>
<td>13%</td>
</tr>
<tr>
<td>11th</td>
<td>37%</td>
</tr>
<tr>
<td>12th</td>
<td>21%</td>
</tr>
<tr>
<td>Did not report</td>
<td>8%</td>
</tr>
</tbody>
</table>

Note: Data displayed is prior to missing data procedure was implemented.

Staff in both schools (i.e., the non-RJ school and the RJ school) were also surveyed, generating two corresponding staff samples for each school. In the RJ school, there were a total of 39 staff members while in the non-RJ school there were a total of 45 staff members including teachers, paraprofessionals, and counselors. The racial and gender identity composition of the staff was not available in district records; however
staff were provided with the opportunity to self-report in the demographics portion of the survey.

We collected surveys from 72% of the approximately 39 staff members in the RJ school ($N = 28$). Staff self-reported race for the RJ school was 32% Black/African American, 39% White, 7% Hispanic/Latinx, 11% selected two or more races, and 11% selected Other with an option to write in. Staff self-reported gender identity for the RJ school was 57% female, 36% male, and 7% selected Other with a write in option.

We collected surveys from 56% of the approximately 45 staff members in the non-RJ school ($N = 25$). Staff self-reported race for the non-RJ school was 40% Black/African American, 32% White, 12% Hispanic/Latinx, 12% selected two or more races, and 4% selected Other with a write in option. Staff self-reported gender identity for the non-RJ school was 56% female, 40% male, and 4% selected Other with a write in option. Due to the consolidation process that saw the RJ school combine with the non-RJ school, beginning in the 2017-2018 school year, only a small cohort of surveyed staff ($n = 8$) from the RJ school in 2016-2017 were also a part of the surveyed staff in the non-RJ school in 2017-2018.

**Procedures**

Rutgers University Institutional Review Board (IRB) and the district’s IRB approved the study. Student data were collected via a 20-minute, paper or scantron/pencil self-reported school climate survey, which was developed for a larger evaluation of the school discipline reform initiatives. The surveys were administered for the RJ school in one day of Spring 2017, while the non-RJ school data were collected in one day during the Spring 2018. The RJ school students completed the survey by circling the answer
options that best fit them, while the non-RJ school students completed the survey by selecting it on a scantron sheet. Staff in both samples completed a 20-minute computer based self-report school climate survey on two separate days. There were no identifying codes linking participants across years. In fact, the surveys were completely anonymous.

A letter was sent home to parents informing them of the study. Parents were given the option to opt their student out of the study. No parents opted out. The participants received further information about the study through an assent page at the beginning of the survey. The assent page explained participation as voluntary and survey data as anonymous and confidential.

Measures

**Student and staff self-reported demographic variables.** Students were asked to identify which grade level they were in at the time of the survey, with answers ranging from grade 6 through grade 12. Participants were asked to self-report on their race. Participants selected the best description of their race from the following five categories: American Indian or Alaska Native, Asian, Black/African American, White, Hispanic/Latinx. Participants were also given the option to choose 2 or more races or Other, and were prompted to write in their racial identities. Moreover, participants were asked to self-report their gender from a list of four categories: Female, Male, Transgender/Gender Non-Conforming/Questioning, and a write in category for Other.

In addition to the described demographics, participants in the non-RJ school were asked to identify which school they attended in the 2016-2017 school year. The options for this included the school from the RJ school, the non-RJ school, or Other. If a student
selected Other, they were then prompted to answer if they had previously experienced RJ in their prior school.

**Open-ended responses about community and student voice.** Students in the non-RJ school were provided with the opportunity to answer two open-ended questions assessing their perceptions of the opportunities to help build community and have their voice heard. The questions included, “What else can adults and students do to help build community in your school (helping students get along better and adults and students get along better)?” and “What opportunities do you have in your school to have your voice as a student heard?” The aim of the two questions being to better understand how students perceive their community-building opportunities, and opportunities to have their voice engaged when initiatives specially aimed at achieving such goals are reportedly not instituted.

**Survey scale of student voice.** Student and staff perceptions of the engagement of student voice in the school were assessed through the RP Use scale. The scale was adapted from the International Institute for Restorative Practices self-assessment survey (Gregory et al., 2014). Items on the staff and students RP Use scales are parallel. The RP Use scale is a seven-item, self-reported scale designed to measure the frequency of exposure to RJ practices such as the opportunity to express feelings, ideas and experiences. Three items in the student scale include: “My teachers ask students to express their feelings, ideas and experiences,” “My teacher uses circles as a time for students to share feelings, ideas and experiences,” and “My teachers take students’ thoughts and ideas into account when making decisions.” Items in the staff scale include: “I ask my students to express their feelings, ideas, and experiences,” “I use circles as a
time for students to share feelings, ideas, and experiences,” and “I take the thoughts and ideas of students into account when making decisions.”

The RJ practices represented in the scale include: affective statements, restorative questions, community-building circles, and fair process. Each item was rated as not at all, rarely, sometimes, often, or always. In the current study, the Cronbach’s alpha coefficient for this student scale was .85 and staff scale was .86 demonstrating high internal consistency. The student-reported RP Use scale demonstrated concurrent validity in one prior sample; students, who indicated frequent use of RJ by their teachers on the RP Use scale, reported having a greater sense of community compared to students who self-reported less RJ being used in their classrooms (Gregory, 2016).

**Survey scale of sense of community.** Student and staff perceptions of community in the school were assessed through the sense of community scale. The sense of community scale is a five-item, self-reported scale. The scale assesses for feelings of connectedness, general support, respect, and caring among students. Three items in the student scale include: “Students treat one another with respect,” “I feel connected to others,” and “Students feel that their classes are like family.” The staff version of the scale was similar to the student version—staff reflected on the sense of community among the students. Items in the staff scale include: “Students treat one another with respect,” “I feel that students care about each other,” and “Students feel that their classes are like a family.” Items in the sense of community scale were rated as strongly agree, agree, disagree, or strongly disagree. Items in the scale were derived from Classroom Community Scale (Rovai, 2002). In the current study, the Cronbach’s alpha coefficient
for the student scale was .77 and staff scale was .89 demonstrating high internal consistency. No prior research has examined the validity of the scale.

**Survey scale of adult support.** Student and staff perceptions of adult support were measured on a six-item student willingness to seek help scale. The scale is designed to measure the perceived adult-student support in the form of student’s willingness to seek help from adults from a range of issues such as schoolwork, bullying, reported self-harm by a student, or school safety related problems. Two items in the student scale include: “I am comfortable asking my teacher for help with my schoolwork,” and “There is at least one teacher or other adult at this school who really wants me to do well.” Items on the teacher version of the scale parallel the student items. Staff reflect on the degree to which students perceive adult support. Two items in the staff scale include: “My students feel comfortable asking me for help with their schoolwork,” and “Students feel that there is at least one teacher or other adult at this school who really wants them to do well.” Each item was answered with either strongly agree, agree, disagree, strongly disagree.

The items in the willingness to seek help scale are derived partially from the Learning Environment Scale (Austin & Duerr, 2005). In the current study, the Cronbach’s alpha coefficient for the student scale was .75 and staff scale was .83 demonstrating high internal consistency. In a prior sample, the scale demonstrated concurrent validity (Gregory, 2010).

**Data Analytic Plan**

Before analyses were conducted, the data was cleaned. Due to the high percentage of participants identifying as Black/African American, and the low percentages of participants identifying in the other race categories, the race variable was dichotomized
into Black and non-Black. The means on the three aforementioned scales were computed, and were used in analyzing each of the three different RJ tenets (i.e., engagement of student voice, sense of community, and adult support).

Person Mean Imputation was used for each case in which the participant was missing 1 to 2 responses, averages were hand calculated and imputed. If a case was missing 3 to 4 data points, it was handled through the multiple imputations function. If a case was missing all three scales, then it was considered to be missing and was deleted. Across student and staff data over ninety percent of participants completed at least 2 of 3 scales. Chi-Square statistics were conducted to determine if the race/gender of those missing all scales differed from those with some or all scale data. Missingness on the RP Use Scale was deemed to be independent of race and gender ($p > .05$). Little’s Missing Completely at Random was then conducted using the mean score variable for each scale, and the race and gender variable. Little’s MCAR was non-significant suggesting that data was likely missing at random. The remaining missing data was then imputed using multiple imputation, generating five new datasets that were used to analyze the data. All pooled results were reported.

It was hypothesized that, accounting for student race and gender, prior enrolment in a school with initiatives focused on community development and engagement of student voice (i.e., RJ), would be negatively associated with perceptions of school climate in a school without such initiatives (i.e., frame reference). In order to account for frame of reference and its potential negative impact on school climate, students and staff in the non-RJ school who identified as previously being a part of the RJ school were removed during data analysis for R1 and R2. The data analytic plan for each research question
follows.

**Aim 1: Between-school comparison of a RJ and a non-RJ school**

**R1a.** Do students enrolled in a school implementing RJ perceive a higher sense of community, adult support, and engagement of student voice relative to students enrolled in a similar, low income urban school without RJ? In other words, are there between-school differences in student-perceived community, support, and voice across an RJ and a non-RJ school?

**R1a analyses.** Three independent sample t-tests were performed to assess for significant differences between the RJ school and the non-RJ school’s student-perceived engagement of student voice, sense of community, and adult support. Student race, and gender served as covariates for three multiple regression models. The covariates were entered in block 1 and the school enrolment variable in block 2 (i.e., RJ versus non-RJ school).

**R1b.** Do staff working in a school implementing RJ perceive that their students experience a higher sense of community, adult support, and engagement of student voice relative to staff working in a similar, low income urban school without RJ? In other words, are there between-school differences in staff perceptions about student community, support, and voice across an RJ and a non-RJ school?

**R1b analyses.** Three independent sample T-tests were performed to assess for significant differences between the RJ school and the non-RJ school’s staff-perceived engagement of student voice, sense of community, and adult support. Student race, and gender served as covariates for three multiple regression models. The covariates were entered in block 1 and the school variable in block 2 (i.e., RJ versus non-RJ school).

**Aim 2: Within-school comparison in a non-RJ school**

**R2a.** Is past exposure to RJ with its focus on building community, strengthening adult-student relationships, and centering student voice associated with how students experience their current traditional, non-RJ school relative to their peers without this past exposure? In other words, comparing students within-in the same school, does past experience with RJ differentiate how students perceive sense of community, adult support, and voice?
**R2a analyses.** The independent variable (prior enrolment in an RJ school) was dichotomized using 1 to represent prior enrolment in an RJ school and 0 to represent no prior enrolment in an RJ school. Three independent sample T-tests were conducted to assess for significant differences between the two dichotomized variables on reports of perceptions of engagement of student voice, sense of community, and adult support. Then student race, and gender served as covariates for three multiple regression models. The covariates were entered in block 1 and the 0/1 prior RJ school attendance variable was entered in block 2.

**R2b.** Is past exposure to RJ with its focus on building community, strengthening adult-student relationships, and centering student voice associated with how staff experience their current traditional, non-RJ school relative to their colleagues without this past exposure? In other words, comparing staff within-in the same school, does past experience with RJ differentiate how staff perceive sense of community, adult support, and voice?

Due to the very small sample sizes of staff for research question 4 (n = 7 previously employed at RJ school; n = 14 only employed at the non-RJ school during years of survey), the data was not analyzed, and the research question was not explored.

**Aim 3: Student ideas about community and voice in a non-RJ school**

**R3.** What strategies for building community and engaging student voice do students consider in a non-RJ high poverty urban school where administrators have not prioritized such change?

**R3 analysis.** Due to the exploratory nature of the current study open coding was used to investigate the opportunities that students perceive to have in building community and sharing student voice. Described by Patton (2002), open coding aims to draw on inductive analysis of qualitative data to discover patterns and themes that can later be categorized. To analyze the student open-ended responses, data was open coded by
generating clusters of similar wording, leading to the identification of themes connecting similar open ended responses (Patton, 2002). Similar themes were then diagramed in order to identify similar grouping and distinct categories, allowing for the generation of a coding manual (Patton, 2002).

Specifically, with this qualitative data, a typology for the categories of community-building strategies and engagement of student voice opportunities was created. A coding manual was generated, and two graduate students were trained for an hour in order to have a total of three coders of the open-ended responses. I then calculated Cohen’s kappa for each of the codes. As the lead investigator, I relied on myself to resolve any disagreements.

**Results**

**Aim 1: Between-school comparison of a RJ and a non-RJ school**

Below are the descriptive statistics, t-tests, correlations, and multiple regressions for the between-school comparison questions (R1a and R1b), exploring student and staff perceptions of student-perceived student voice, sense of community and adult support.

**Descriptive statistics.** Descriptive statistics were run for the student voice, sense of community, and adult support scales. As seen in Tables 4 and 5 below, the full-scale range was used by students and staff. Students in the RJ School reported an overall positive perception of student voice engagement, sense of community in their school, and adult support (See Table 4). More specifically, with a high mean rating of 3.69, students in the RJ school “often” felt their voice was engaged. The mean score of 2.62 for the sense of community scale, and a mean of 3.16 for the adult support scale, indicates students in the RJ school “sometimes” felt a positive sense of community and felt
supported by adults.

With mean scores for all three scales in the “sometimes” range, students in the non-RJ school appeared to have a less consistent perception of their school climate (See Table 4). Staff in the non-RJ had an overall more positive view of the school climate when compared to students in the same school. A mean of 3.65 on the student voice scale, indicates staff felt they “often” engaged their student’s voice. Perceptions of sense of community and adult support fell in the “sometimes” category with respective means of 3.02 and 3.38 on both scales.

Table 4

**Descriptive statistics of students in between-school comparison (RJ and non-RJ School)**

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<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Student Voice</td>
<td>3.69</td>
<td>0.72</td>
</tr>
<tr>
<td>Sense of Community</td>
<td>2.62</td>
<td>0.65</td>
</tr>
<tr>
<td>Adult Support</td>
<td>3.16</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Table 5

**Descriptive statistics of staff in between-school comparison (RJ and non-RJ School)**

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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Student Voice</td>
<td>3.97</td>
<td>0.75</td>
</tr>
<tr>
<td>Sense of Community</td>
<td>2.74</td>
<td>0.58</td>
</tr>
<tr>
<td>Adult Support</td>
<td>3.34</td>
<td>0.55</td>
</tr>
</tbody>
</table>

**Correlations.** Pearson’s correlations were computed to ascertain the nature of the association between the independent, dependent, and control variables. Table 6 and 7 show the intercorrelations among variables for the student and staff data sets respectively. Significant correlations between various variables were observed and the relationships were in the expected direction. For example, enrollment in the RJ school in 2017 was
associated with higher engagement of student voice according to the RP use scale \( r = .52, p < .01 \), and higher perceived levels of adult support \( r = .13, p < .05 \), relative to enrollment in the non-RJ school in 2018 (See Table 6). This indicates that students in the RJ school in 2017 perceived higher student voice and adult support than students who never experienced RJ in the non-RJ school in 2018.

The three scales also positively correlated with one another, which is to be expected given that they are hypothesized to be intertwined components of school climate. More specifically, higher perceived engagement of student voice was associated with higher levels of adult support \( r = .30, p < .01 \), and sense of community \( r = .32, p < .01 \). Higher perceived adult support was also correlated with higher sense of community \( r = .43, p < .01 \).

Similar significant correlations in the three scales were evident for the staff dataset with higher perceived engagement of student voice being associated with higher levels of adult support \( r = .38, p < .05 \) and sense of community \( r = .50, p < .05 \); Table 7). Higher perceived adult support was also correlated with higher sense of community \( r = .63, p < .01 \). Unlike in the student dataset and contrary to hypotheses, no correlations were noted between school membership and the scales. Thus, contrary to expectations staff in the RJ school in 2017 did not perceive higher levels of engagement of student voice, more positive sense of community, and higher levels of adult support when compared to staff in the non-RJ school in 2018.
Table 6

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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. School Membership</td>
<td></td>
<td>-.01</td>
<td>-.05</td>
<td>.52**</td>
<td>.13*</td>
<td>.06</td>
</tr>
<tr>
<td>2. AA/Black (1)</td>
<td></td>
<td></td>
<td>.06</td>
<td>.04</td>
<td>-.02</td>
<td>.09</td>
</tr>
<tr>
<td>3. Male (1)</td>
<td></td>
<td></td>
<td></td>
<td>-.06</td>
<td>-.09</td>
<td>.08</td>
</tr>
<tr>
<td>4. Student Voice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.30**</td>
<td>.32**</td>
</tr>
<tr>
<td>5. Adult Support</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Sense of Community</td>
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<td></td>
</tr>
</tbody>
</table>

Note. *p < .05; **p < .01; School membership is 2018 non-RJ School (0) and 2017 Prior RJ school (1) Student race is African American/Black (1) and nonblack (0), Student gender is Male (1) and Female (0).

Table 7

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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. School Membership</td>
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<td>-.15</td>
<td>-.08</td>
<td>.21</td>
<td>-.04</td>
<td>-.24</td>
</tr>
<tr>
<td>2. AA/Black (1)</td>
<td></td>
<td></td>
<td></td>
<td>.34*</td>
<td>.12</td>
<td>-.15</td>
</tr>
<tr>
<td>3. Male (1)</td>
<td></td>
<td></td>
<td></td>
<td>.04</td>
<td>.26</td>
<td>.13</td>
</tr>
<tr>
<td>4. Student Voice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.38*</td>
<td>.50*</td>
</tr>
<tr>
<td>5. Adult Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.63**</td>
</tr>
<tr>
<td>6. Sense of Community</td>
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</tbody>
</table>

Note. *p < .05; **p < .01; School membership is 2018 non-RJ School (0) and 2017 RJ school (1) Staff race is African American/Black (1) and nonblack (0), Staff gender is Male (1) and Female (0).

Between-school mean comparisons of student surveys in RJ school and non-RJ school. Independent-samples t-tests were used to test the mean differences on school climate between the students who attended a RJ school in 2017 and students who attended a non-RJ school in 2018 (See Table 8). There was a significant difference in the scores for perceived engagement of student voice in the RJ school ($M = 3.69$) relative to the students in the non-RJ school ($M = 2.62$), $t(899.40) = -11.00$, $p < .01$, and for
perceived adult support in the RJ school \((M = 3.16)\) relative to those in the non-RJ school \((M = 2.99)\), \(t(993.83) = -2.29, p < .05\).

Table 8

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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>Student Voice</td>
<td>3.69</td>
<td>0.72</td>
<td>96</td>
</tr>
<tr>
<td>Sense of Community</td>
<td>2.62</td>
<td>0.65</td>
<td>96</td>
</tr>
<tr>
<td>Adult Support</td>
<td>3.16</td>
<td>0.59</td>
<td>96</td>
</tr>
</tbody>
</table>

Note. * \(p < .05\); ** \(p < .01\)

**Between-school mean comparisons of staff surveys in RJ school and non-RJ**

School Independent-samples t-tests were used to test the mean differences on student school climate perceptions as rated by staff employed at a RJ school in 2017 and staff employed a non-RJ school in 2018 (See Table 9). There was no significant difference in the self-reported ratings of engagement of student voice, sense of community, and adult support between the staff in the different schools.

Table 9

<table>
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<tr>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>Student Voice</td>
<td>3.97</td>
<td>0.75</td>
<td>27</td>
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<tr>
<td>Sense of Community</td>
<td>2.74</td>
<td>0.58</td>
<td>27</td>
</tr>
<tr>
<td>Adult Support</td>
<td>3.34</td>
<td>0.55</td>
<td>27</td>
</tr>
</tbody>
</table>
**Between-school multiple regression results using student surveys.** Model 1 shows the sociodemographic variables in Step 1 accounted for 0.5% of the variability in student-perceived student voice (See Table 10). School membership in Step 2 of Model 1 accounted for a rather large 27% of the variability in student-perceived engagement of student voice (See Table 10). Accounting for student race and gender, attendance in the RJ school (2017) significantly predicted a positive perception of the engagement of student voice ($\beta = 1.07, p < .01$). Said differently, students who attended the RJ school reported more engagement of student voice in their school in 2017 than students in the non-RJ school in 2018. Model 2 shows the sociodemographic variables in Step 1 accounted for 1.5% of the variability in student-perceived sense of community. School membership in Step 2 of Model 2 accounted for 0.4% of the variability in student perceptions of sense of community. Model 3 shows the sociodemographic variables in Step 1 accounted for 1% of the variability in student-perceived adult support. School membership in Step 2 of Model 3 accounted for 1.4% of the variability in student-perceived adult support. Accounting for student race and gender, attendance in the RJ school (2017) significantly predicted a positive perception of adult support ($\beta = .167, p < .05$). Said differently, students who attended the RJ school reported more adult support in their school in 2017 than students in the non-RJ school in 2018, regardless of student race and gender.
Table 10

Between-school multiple regression of student surveys (RJ and non-RJ school)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student Voice</td>
<td>Sense of Community</td>
<td>Adult Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>β</td>
<td>R² Change</td>
<td>β</td>
<td>R² Change</td>
<td>β</td>
<td>R² Change</td>
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</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AA/Black (1)</td>
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<td>.015</td>
<td>-</td>
<td>-.022</td>
<td>0.01</td>
<td></td>
</tr>
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<td>.156</td>
<td>-.112</td>
<td></td>
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<tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>School Membership</td>
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<td>.004</td>
<td>-</td>
<td>.014*</td>
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</tbody>
</table>

Note. * p < .05, ** p < .01; School membership is non-RJ School (0) and Prior RJ school (1) Student race is African American/Black (1) nonblack (0), Student gender is Male (1) and Female (0); Pooled, unstandardized estimates at each step of the regression.

**Between-school multiple regression results using staff surveys.** Model 1 shows the staff sociodemographic variables in Step 1 accounted for 2.5% of the variability in staff perceptions of student-perceived student voice (See Table 11). School membership in Step 2 of Model 1 accounted for 6.3% of the variability in staff perceptions of student-perceived student voice. Staff race, gender, and employment in either the RJ and non-RJ schools did not predict the staff perceptions of student-perceived student voice.

Model 2 shows the sociodemographic variables in Step 1 accounted for 10% of the variability in staff-perceived sense of community among students (See Table 11). Controlling for school membership, staff race predicted significant positive perceptions of sense of community among students. Specifically, African-American/Black staff perceived greater student community (β = .379, p < .05). School membership in Step 2 of Model 2 accounted for 3% of the variability in staff-perceived sense of community among students. Model 3 shows the sociodemographic variables in Step 1 accounted for 8% of the variability in staff perceptions of student experiences of adult support. School membership in Step 2 of Model 3 accounted for .3% of the variability in staff perceptions of student experiences adult support. Staff race, gender, and employment in either the RJ
and non-RJ school did not predict the staff perceptions of student experiences of adult support.

### Aim 2: Within-school comparison in a non-RJ school

Below are the descriptive statistics, t-tests, correlations, and multiple regressions for the within-school comparison questions (R2a), exploring potential frame of reference in student-perceived student voice, sense of community and adult support.

**Descriptive statistics.** Research question 2a explores the possibility that students draw on a frame of reference when reporting on school climate. The analyses examined within-school comparisons of student-perceived student voice, sense of community, and adult support – comparing student perceptions of those who, in 2018, attended the non-RJ school, and the small cohort of students in the non-RJ school who attended the RJ school in 2017. As seen in Table 6 below, the full-scale range was used by students. Students who previously attended the RJ school had a mean in the “rarely” range for the student voice scale, and in the “sometimes” range for the sense of community, and adult support scales (See Table 6). According to scale means, students who attended the non-RJ school
only, perceived as “sometimes” having their voice heard, having a positive sense of community, and receiving adult support (See Table 12).

Table 12

*Descriptive statistics of students in within-school comparison (RJ and non-RJ School)*

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td><em>M</em></td>
<td><em>SD</em></td>
</tr>
<tr>
<td>Student Voice</td>
<td>2.69</td>
<td>0.79</td>
</tr>
<tr>
<td>Sense of Community</td>
<td>2.59</td>
<td>0.69</td>
</tr>
<tr>
<td>Adult Support</td>
<td>3.06</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Correlations. Pearson’s correlations were also computed to ascertain the nature of the association between the independent, dependent, and control variables in the dataset used for research question 3 (Table 13). More specifically the correlations were computed to ascertain the potential connection between previous attendance at a school with RJ and the impact it could have on perceptions of engagement of student voice, sense of community, and adult support. Said differently, as hypothesized through frame of reference, it was expected that students to previously (2017) attended the RJ school and were in the non-RJ school (2018) would have a more negative perception of engagement of student voice, sense of community, and adult support compared to their peers who only attended the non-RJ school. Similar to the prior associations in Table 8, significant positive correlations exist between the three scales assessing school climate (See Table 13). There were no other significant correlations among the independent, dependent, and control variables. Therefore, contrary to expectations previous exposure to RJ was not correlated to more negative school climate perceptions in a new setting that did not employ the RJ initiative.
Table 13

Student correlations among dependent, independent, and control variables in within-school comparison (RJ and non-RJ school)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. School Membership</td>
<td>____</td>
<td>.01</td>
<td>.08</td>
<td>-.13</td>
<td>-.09</td>
<td>.02</td>
</tr>
<tr>
<td>2. AA/Black (1)</td>
<td>____</td>
<td>.02</td>
<td>.01</td>
<td>-.06</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>3. Male (1)</td>
<td>____</td>
<td>-.09</td>
<td>-.13</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Student Voice</td>
<td>____</td>
<td>.32**</td>
<td>.34*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Adult Support</td>
<td>____</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Sense of Community</td>
<td>____</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * p < .05; ** p < .01; School membership is non-RJ School (0) and Prior RJ school (1) Student race is African American/Black (1) nonblack (0), Student gender is Male (1) and Female (0); School membership for this chart signifies membership in the non-RJ school only and those who previously attended the RJ school

Within-school mean comparisons of student surveys in RJ school and non-RJ school. Independent-samples t-tests were run using survey responses from students who had only attended the non-RJ school (2018), and those previously attending the RJ school in 2017 who at the time of the survey (2018) attended the non-RJ school, to test for significant differences between perceptions of student voice, sense of community, and adult support (See Table 14). There was no significant difference in the self-reported ratings of engagement of student voice, sense of community, and adult support between the two groups of students. Despite no statistically significant differences, it is noteworthy that responses of students who attended the non-RJ school, on average, trended in a higher direction on perceived adult support than the cohort of students that had previously attended the RJ school; while the contrary is true for ratings on student voice as measured by the RP Use scale.
Table 14

**Within-school mean comparison of student surveys (RJ and non-RJ school)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Voice</td>
<td>2.69 0.79 157</td>
<td>2.44 0.85 49</td>
<td>1.82</td>
</tr>
<tr>
<td>Sense of Community</td>
<td>2.59 0.69 157</td>
<td>2.63 0.68 49</td>
<td>1.20</td>
</tr>
<tr>
<td>Adult Support</td>
<td>3.06 0.71 157</td>
<td>2.93 0.59 49</td>
<td>-0.35</td>
</tr>
</tbody>
</table>

**Within-school multiple regression results using student surveys.** Model 1 shows the student sociodemographic variables in Step 1 accounted for 0.8% of the variability in student-perceived student voice (See Table 15). The previous year’s school membership in Step 2 of Model 1 accounted for 1.5% of the variability in student-perceived engagement of student voice (See Table 15). Student race, gender, previous attendance in an RJ-school in 2017, and no previous attendance in an RJ school did not significantly predict the student-perceived engagement of student voice. Model 2 shows the sociodemographic variables in Step 1 accounted for 2% of the variability in student-perceived sense of community (See Table 15). Previous year’s school membership in Step 2 of Model 2 accounted for 0.05% of the variability in student-perceived sense of community. Student race, gender, previous attendance in an RJ-school in 2017 versus no previous attendance in an RJ school did not significantly predict student-perceived sense of community. Model 3 shows the sociodemographic variables in Step 1 accounted for 2% of the variability in student-perceived adult support. Previous year’s school membership in Step 2 of Model 3 accounted for .8% of the variability in student-perceived adult support. Student race, gender, previous attendance in an RJ-school in 2017/no previous attendance in an RJ school did not significantly predict the student...
perception of adult support. Contrary to expectations, being enrolled in a school implementing an RJ initiative did not impact student-perceived school climate when those same students attended a new school with no such initiative in place. This result indicates that these students may not be calling upon their previous RJ experiences in rating their new school’s climate, effectively indicating that frame of reference may not be in effect.

Table 15

**Within-school multiple regression of student surveys (RJ and non-RJ school)**

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Voice</td>
<td>Sense of Community</td>
<td>Adult Support</td>
</tr>
<tr>
<td>β</td>
<td>$R^2$ Change</td>
<td>β</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AA/Black (1)</td>
<td>.023</td>
<td></td>
</tr>
<tr>
<td>Male (1)</td>
<td>-.156</td>
<td></td>
</tr>
<tr>
<td>School Membership</td>
<td>-.232</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AA/Black (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Membership</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * $p < .05$, ** $p < .01$; School membership is non-RJ School (0) and Prior RJ school (1) Student race is African American/Black (1) non-black (0), Student gender is Male (1) and Female (0); Pooled, unstandardized estimates at each step of the regression; School membership signifies non-RJ school only attended and RJ school attended previously

**Aim 3: Qualitative results about community and voice**

As previously noted, student open-ended responses collected during the 2018 non-RJ school survey, were coded by myself and two other graduate student coders. There was high interrater agreement as evidenced by high Cohen’s kappa statistics (See Table 16 and Table 17). A large percentage of student participants did not answer either open-ended question or their response was not applicable/usable (38.9% and 43.3% respectively). Students in the non-RJ school felt that the best opportunities to build community in their school derived from student involvement and activities (See Table 18 and 19). Many students answered with statements regarding student government and clubs as the best opportunities for community-building. Engaging student voice (i.e.,
including students in decision making), and respect and fairness (i.e., equal treatment of students) were reported by students as the second and third best opportunities to build community.

In response to opportunities for the engagement of student voice, the largest percentage of student responses deemed there to be no opportunities in the non-RJ school (See Table 20 and 21). Other opportunities for the engagement of student voice were evenly spread across student government, clubs, and informal communication with staff (See Table 20 and 21).
Table 16

*Cohen’s kappa of coded student-perceived opportunities to build community in their school (2018)*

<table>
<thead>
<tr>
<th>Code</th>
<th>Coder 2</th>
<th>Coder 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging Student Voice</td>
<td>.941</td>
<td>.922</td>
</tr>
<tr>
<td>Student Involvement/Activities</td>
<td>.925</td>
<td>.918</td>
</tr>
<tr>
<td>Respect and Fairness</td>
<td>1.00</td>
<td>.978</td>
</tr>
<tr>
<td>No/Nothing</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>No Response/Not Applicable</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>.927</td>
<td>.857</td>
</tr>
</tbody>
</table>

*Note: n = 263; All values significant at *p* < 0.001; Coder 1 is gold standard*

Table 17

*Cohen’s kappa of coded student-perceived opportunities for student voice (2018)*

<table>
<thead>
<tr>
<th>Code</th>
<th>Coder 2</th>
<th>Coder 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Government</td>
<td>.943</td>
<td>1.00</td>
</tr>
<tr>
<td>Clubs</td>
<td>.801</td>
<td>.847</td>
</tr>
<tr>
<td>Communication with Staff</td>
<td>.966</td>
<td>.966</td>
</tr>
<tr>
<td>No/None</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>.886</td>
<td>.917</td>
</tr>
<tr>
<td>No Response/Not Applicable</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*Note. n = 263; All values significant at *p* < 0.001; Coder 1 is gold standard*

Table 18

*Frequency of coded student-perceived opportunities to build community in their school (2018)*

<table>
<thead>
<tr>
<th>Code</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging Student Voice</td>
<td>30</td>
<td>11.2</td>
</tr>
<tr>
<td>Student Involvement/Activities</td>
<td>62</td>
<td>23.2</td>
</tr>
<tr>
<td>Respect and Fairness</td>
<td>26</td>
<td>9.7</td>
</tr>
<tr>
<td>No/Nothing</td>
<td>7</td>
<td>2.6</td>
</tr>
<tr>
<td>No Response/Not Applicable</td>
<td>104</td>
<td>38.9</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>38</td>
<td>14.2</td>
</tr>
<tr>
<td>Total</td>
<td>263</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note: n = 263; Percentages are rounded to nearest tenth*
Table 19

Sample responses of student-perceived opportunities to build community in their school (2018)

<table>
<thead>
<tr>
<th>Code</th>
<th>Sample response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging Student Voice</td>
<td>“Listen to the students more like their ideas for school.”</td>
</tr>
<tr>
<td></td>
<td>“By communicating with each other and students and share different opinions.”</td>
</tr>
<tr>
<td></td>
<td>“Have to get together students and adults where we can get to know each other and see what’s needed.”</td>
</tr>
<tr>
<td>Student Involvement/Activities</td>
<td>“By actually taking a day as a school and organizing a trip to a soup kitchen.”</td>
</tr>
<tr>
<td></td>
<td>“More activities for students”</td>
</tr>
<tr>
<td></td>
<td>“Have more programs and clubs”</td>
</tr>
<tr>
<td>Respect and Fairness</td>
<td>“Teachers need to learn to be respectful to students”</td>
</tr>
<tr>
<td></td>
<td>“Treat people the way you want to be treated”</td>
</tr>
<tr>
<td></td>
<td>“Be respectful treat everyone the same”</td>
</tr>
</tbody>
</table>

Table 20

Frequency of coded student-perceived opportunities for student voice (2018)

<table>
<thead>
<tr>
<th>Code</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Government</td>
<td>37</td>
<td>7.0</td>
</tr>
<tr>
<td>Clubs</td>
<td>36</td>
<td>6.8</td>
</tr>
<tr>
<td>Communication with Staff</td>
<td>30</td>
<td>5.7</td>
</tr>
<tr>
<td>No/None</td>
<td>130</td>
<td>24.7</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>65</td>
<td>12.4</td>
</tr>
<tr>
<td>No Response/Not Applicable</td>
<td>228</td>
<td>43.3</td>
</tr>
<tr>
<td>Total</td>
<td>263</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: n = 263; Percentages are rounded to nearest tenth
Table 21

Sample responses of student-perceived opportunities for student voice (2018)

<table>
<thead>
<tr>
<th>Code</th>
<th>Sample response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Government</td>
<td>“Students board, which we discuss anything about our school to make it better.”</td>
</tr>
<tr>
<td></td>
<td>“Student council.”</td>
</tr>
<tr>
<td></td>
<td>“Student body class president.”</td>
</tr>
<tr>
<td>Clubs</td>
<td>“Debate clubs.”</td>
</tr>
<tr>
<td></td>
<td>“Social clubs, soccer teams, and other teams.”</td>
</tr>
<tr>
<td></td>
<td>“Sign up for things like clubs to connect to others”</td>
</tr>
<tr>
<td>Communication with Staff</td>
<td>“I have the opportunity to speak to teacher or staff member”</td>
</tr>
<tr>
<td></td>
<td>“Speaking to teachers, principals, about your ideas.”</td>
</tr>
<tr>
<td></td>
<td>“I can talk to whatever staff I want.”</td>
</tr>
<tr>
<td>No/None</td>
<td>“None whatsoever”</td>
</tr>
<tr>
<td></td>
<td>“Nothing really”</td>
</tr>
<tr>
<td></td>
<td>“None at all”</td>
</tr>
</tbody>
</table>

Discussion

This study examined the association between RJ and student-perceived engagement of student voice, sense of community, and adult support as measured by student and staff surveys in two similar high poverty urban schools across two years. Additionally, the study explored the possibility of frame of reference, the hypothesis that a prior experience can impact how one perceives new experiences in a similar setting or situation. More specifically, in this study, when perceiving school climate, student self-reported perceptions of student voice, sense of community, and adult support were compared between students at a non-RJ school that had in their previous school year attended an RJ school, and their peers in the non-RJ school with no prior experience in a school with an RJ initiative.
It was hypothesized that students and staff in the RJ school would perceive more positive student-perceived engagement of student voice, sense of community, and adult support than students and staff in the non-RJ school. Furthermore, it was expected that students who previously experienced an initiative such as RJ that focuses on the development of community, and involvement of students, would negatively perceive the current engagement of student voice, sense of community, and adult support (compared to their non-RJ only peers) when in a new school employing no such initiative (frame of reference). Students in the non-RJ school were also offered a chance to voice their opinions on opportunities to have their voice heard and improve community in their school through two open-ended questions on the survey. This portion of the study was solely exploratory and presented students with an opportunity to act on the very tenets being explored within this study.

As expected, students in the RJ school (2017) rated significantly higher engagement of student voice when compared to their peers in the non-RJ school. This finding held when accounting for student self-reported race and gender. The finding regarding student voice was to be expected being that this tenet was assessed through the RJ Use scale. The RJ Use scale assesses for the implementation of RJ principles that are inherently associated with engagement of student voice being applied by teachers and other staff in the school. Some items in the RJ Use scale include, “My teachers ask students to express feelings, ideas, and experiences,” “My teachers use circles as a time for students to share feelings, ideas, and experiences,” and “My teachers take students’ thoughts and ideas into account when making decisions.” The RJ school (2017) appeared to extensively implement RJ, training peer mediators and sending them to RJ conferences.
Therefore, it would be expected that engagement of student voice would occur at a higher rate compared to another non-RJ school. Additionally, the multiple regression analyses found that 27 percent of the variance in student-perceived engagement of student voice could be attributed to school membership, which is a substantial amount of variance explained. This finding could be important in guiding future research exploring the positive correlates of RJ initiatives and its promise for reducing the well-documented phenomenon that is the racial school climate gap (e.g., Voight, 2015). In addition, future research could explore the role of RJ in reducing the racial school climate gap to better determine its potential as a mechanism through which to engage students.

The student voice result supported the a priori hypothesis, however the strikingly large percentage of variance (27 percent) attributed to school membership warrants the exploration of this result’s future implications. The study aim was to explore the relationship that could exist between RJ and school climate, however, the prospect of having a large impact on engagement of student voice could lend to a more fundamental relationship with overall development of democratic citizenry. More specifically, prior research and theory suggests that when students experience greater autonomy (e.g., feeling their voice is engaged), they tend to have higher intrinsic motivation (Ryan & Deci, 2000). Increases in intrinsic motivation could lead to increased academic performance. In addition, students learning to offer their opinions in the school setting, and feeling empowered by the staff engagement of their perspectives may lead to later engagement in democratic processes (i.e., voting, community participation).
The finding linking RJ and student voice warrants future exploration on the specific concept of student voice engagement in RJ schools. Longitudinal studies would allow for students to be tracked over time, and those who are enrolled in RJ schools could be compared to students in schools with no RJ programming. More specifically, measures of engagement of student voice, democratic citizenry, and engagement in their community years later could be compared between the two groups. Use of in depth interviews could also be used to improve study depth and understanding. This study format would allow for better insight on how engaging student voice, specifically through RJ during schooling, could impact the development of democratic citizenry and engagement in community.

The regression results also showed that students in the RJ school in 2017 perceived significantly higher levels of adult support than their non-RJ school peers in 2018. A significant 1.4 percent of the differences in student-perceived adult support was attributed to school membership. Although smaller than the results found regarding engagement of student voice, there is still a significant positive correlate of being enrolled in the RJ school in 2017 than being enrolled in the non-RJ school in 2018. More specifically, the findings suggest that in the RJ school, students felt as though they can talk with staff about a personal problem, that staff would help with bullying and schoolwork, and that adults in the school building wanted them to do well, as indicated on the adult support scale. Implications are that RJ schools may be experienced by students as offering more emotionally available, warmer teachers, relative to non-RJ schools. This could be due to the focus the RJ initiative places on building relationships.
based on the core values of respect, dignity, and mutual concern (Evans & Vaandering, 2016).

Despite the speculation above, it is also important to be cautious in interpreting the findings. Specifically, it is important to note that a range of school level variables may help explain why students in the RJ school experienced higher levels of student voice and adult support compared to those in the non-RJ school. School variables such as suspension rates, attendance rates, and state testing scores, not controlled in the individual-level student analyses in the current study, may have contributed to the observed results. For example, sense of community could have been more difficult to develop in the RJ school with higher levels of suspension rates, and remarkably high levels of truancy, leading to non-significant sense of community results.

At the same time, it is also important to consider that despite the large differences in attendance and graduation rates across schools (See Table 1), the observed findings of student voice and adult support still occurred. Specifically, the non-RJ school had higher graduation rates and attendance, yet students in that school perceived lower student voice and adult support than in the RJ school with lower graduation rates and attendance. This is striking given it suggests RJ may have a role in mitigating risk factors such as academic difficulties and truancy through engaging the student body. This association between the RJ school and positive levels of student voice and adult support should inform future more rigorous studies accounting for a range of school level variables, allowing for the ability to rule out potential confounds.

Contrary to expectations, students in the RJ school did not perceive higher levels of sense of community when compared to their peers in the non-RJ school. This finding
is even more unexpected due to the significant correlation among the engagement of student voice, adult support, and sense of community scales. Therefore, when two of the tenets were significantly perceived as occurring to a greater extent in the RJ school than in the non-RJ school, it was expected that the third would follow a similar pattern. Future studies exploring the impact of RJ on school climate could focus on teasing the tenets apart, and further identifying which specific components of school climate RJ could potentially increase. In the case of sense of community, it is possible to speculate that RJ implementation may be occurring in the classroom, without generalizing to less structured settings in the school (i.e., before and after school, during daily transitions, lunchroom). This narrow use of RJ in classrooms may result in mitigating its ability to potentially impact a larger sense of community (Fields, King & Mace, 2016; Van Slyke, 1997).

Unlike the students in the RJ-school, and contrary to expectations, staff did not perceive higher levels of student-perceived student voice, sense of community and adult support. It would be beneficial to further explore this finding through future use of qualitative methods, such as interviews with staff in the non-RJ school. Without such an addition to this study, it is difficult to hypothesize as to the mechanisms contributing to positive staff perceptions on the aforementioned tenets. Furthermore, there could be organizational factors, such as other programs or principal leadership, that help to contribute to the staff findings.

Interestingly, African American/Black staff perceived significantly higher levels of student sense of community than their non-Black colleagues. A potential contributing factor to this unique finding is the racially diverse staff at both schools. In both schools
there was a high percentages of African American/Black staff members. It is possible that having a staff that has a similar racial make up to a majority Black enrolled student body could lead to higher levels of staff perceived student community for those self-identifying as African American/Black. In fact, this finding is corroborated by studies that have found that staff with a similar ethnic makeup to their students generally feel more comfortable teaching them (Dedeoglu & Lamme, 2011; Reininger, 2012; Whipp & Geronime, 2017). This finding and the current literature presents a future avenue to explore in studies examining school climate, and as previously noted, specifically the racial school climate gap that currently exists in some schools (Voight, 2015).

In the within-school analysis comparing the small cohort of students in the non-RJ school in 2018 that previously attended the RJ school in 2017 and their peers in the non-RJ school only, there were no significant differences in student-perceived student voice, sense of community, and adult support. This offers little empirical support for the notion of frame of reference, potentially indicating that students perceived the three tenets of school climate independently of their previous experiences in the RJ school. Said differently, it appears that the students with previous exposure to the community and student-centered approaches of RJ did not perceive the more traditional organizational values of the non-RJ school through a more negative lens. Of note is the mean value of student-perceived student voice trended in the direction of a significant difference ($p = .07$), with the students that previously attended the RJ school having a lower mean value for the tenet than their non-RJ only peers (as was anticipated). While there is no support for frame of reference in the current study, the small sample size being used to test for
frame of reference and a mean score trending in the expected direction suggests that a study with a larger sample size would detect the phenomenon.

Student open-ended responses helped to better understand students’ experience of community and student voice in the non-RJ school. Interestingly, the most widely coded response to the opportunities for student voice question was “No/None” (24.7%). Meaning this group of students in the non-RJ school felt they did not have an opportunity to have their voice heard. This finding expands on the previous student voice results that trended towards significance (students in the non-RJ school in 2018 with previous attendance in the RJ school in 2017, had a lower mean student voice than non-RJ only students). Additionally, as per students in the non-RJ school, 11 percent of coded responses identifying methods to build community noted engaging student voice as the best way to do so. Considering these open-ended responses together, it suggests that many students in the non-RJ school would likely endorse the need for more opportunities for student voice, which if instituted could potentially help build community. These exploratory qualitative results indicate that the non-RJ school may benefit from RJ given the large percentage of students indicating minimal opportunities for engagement of student voice. As previously discussed, the implementation of RJ lends to engagement of student voice (See Appendix D).

**Impact of organizational status on school climate perception.** Frame of reference is the concept that previous exposure to an environment or experience will affect perceptions of a new, yet, similar environment. Based on the results explored previously, frame of reference was not at play with the small sample of students in the non-RJ school who previously attended the RJ school in perceiving the engagement of
student voice, sense of community, and adult support in their new post-consolidated school. The following is speculation about why the study did not detect evidence of frame of reference.

One consideration is that students who previously attended the RJ school and were consolidated into the non-RJ school in 2018 acclimated to their new school environment. Said differently, the survey took place in the Spring of 2018, between 7 and 8 months into the new school year, and it is possible that students may have rated their school climate differently had it been assessed at different points in the year. After all, research has demonstrated numerous social processes and networks that aid in adjustment during traditional school transitions as the year progresses (i.e., peer relationships, teacher-student relationships; Kingrey, Erdley & Marshall, 2011; Pianta & Steinberg, 1992). Similarly, research has shown urban youth can display tremendous resiliency (Milner & Lomotey, 2014). The concept of resiliency is that students are able to succeed and adapt despite risk and adversity (Milner & Lomotey, 2014). Said differently, students are able to successfully adapt to a new community in the midst of the organizational change that is school consolidation. Therefore, it is possible that students in the non-RJ school in 2018 that previously attended the RJ school in 2017 may be demonstrating some form of student resiliency by not experiencing frame of reference in reporting on the different tenets of school climate.

Another factor that could mitigate the presence of frame of reference could be described as exposure to, or dosage of RJ programming. Due to the anonymity of the survey, it is impossible to track students between survey administrations, and determine exposure or dosage to RJ. For example, some students may have been at the RJ school for
a year or less, while some may have been there longer, and some were more involved than others in its daily implementation (i.e., peer mediators). It is well documented that for programs to take their full effect it requires 3 or more years of implementation (Forman, 2013). It is possible that frame of reference could be seen in students with multiple years of exposure to RJ or in students who were deeply involved in its day-to-day implementation. In conclusion, without more pervasive inquiry about the amount of RJ exposure, it is difficult to identify which students had significant exposure, and whether that is associated with their perception on school climate when placed in a new school with different organizational values.

There was a lack of information regarding RJ-like programming in the non-RJ school. That said, one final factor that could have mitigated the possibility of frame of reference, was programming in the non-RJ school that mirrored RJ. The organizational values in the non-RJ school may have also contributed to the building of teacher-student relationships, and in turn the perception of school climate. One known factor is that administration in the non-RJ school transferred out over-aged and under-accredited students from the RJ school during the consolidation (Personal communication, 2018). It is possible that they could have swayed the perceived school climate in the non-RJ school should they have been present.

**Implications for staff in school districts.** Research has shown that both planned and unplanned school transitions have a negative impact on the students involved (Anfara, 2007; Brown & Steeley, 2010; Dishman et al., 2017). With that being stated, initiatives such as RJ have the potential to foster positive student-staff, and student-student relationships, which in turn appear to be factors connected to resilience and
adaptation (Kingrey, Erdley, & Marshall, 2011). Although the specific results as they are related to RJ and its impact on school climate may be difficult to generalize as a whole, the study showed that the RJ initiative was linked to students reporting their voice is engaged and adults are supportive. With consolidations in large urban districts occurring with more frequency and for a variety of purposes (Aponte, 2020), schools have the important role of engaging students in dialogue regarding the transition in hopes of assisting with adaptation.

It is possible that through community-building circles, and the regular use of affective language (two restorative practices), students and staff could discuss fears and concerns about merging two schools, including the development of “us” versus “them” antagonist group processes. To that end, it leaves administrators, the primary stakeholders and change agents, in the position of supporting the implementation of initiatives such as RJ to assist in community building through a possibly fractious transition process (Forman & Oliveira, 2018). School psychologists too serve a crucial role as primary stakeholders, implementers, and change agents in the school (Forman & Oliveira, 2018) in maintaining the implementation of initiatives such as RJ through organizational change such as consolidation. As the frontline consumers of literature and research within school systems (Burns, 2016), it falls on the school psychologists within consolidated schools to recognize the risks in abrupt school transitions, and explore programs to help mitigate the effects. School psychologists should then learn, seek the proper guidance, advocate for, and eventually train other staff on how to engage in these initiatives (Forman & Oliveira, 2018). Although the results of this study are not conclusive and causation cannot be implied, the positive trend implies that there is a place for RJ in the school system that
needs further exploration. The current study has also briefly explored the consolidation’s effect on students who transition and may feel disgruntled (as evident by the open-ended responses), a phenomenon that if explored in more rigorous studies, could become apparent in other consolidations. The findings also offer implications in support of the development of student voice in non-RJ schools, thereby aiding the school environment undergoing drastic organizational change.

**Limitations and Future Directions**

The results are entirely based on student and staff self-report and a single method design (e.g., surveys), which is a limitation of the current study. Self-report bias using a single method likely affected the correlations among the school climate scales. Specifically, the engagement of student voice, sense of community, and adult support ratings may have been highly correlated due to the tendency for students and staff to score items according to a particular response style. Future research should include a multi-method approach to understanding student and staff perceptions of school climate. One way in which this can be achieved is through interviews with both students and staff in order to gain a more nuanced understanding of experiences in schools. Given the complexities of a consolidation, interviews with students and staff would help to better understand the perceptions of the consolidation procedure through the perspective of different stakeholders within the organization. Furthermore, this may allow for better understanding of frame of reference, and whether adjustment may occur in other domains (e.g., adult-student relationships, classroom culture, belief in the legitimacy of school rules). This will be especially urgent as school consolidation appears to be occurring with more regularity (Aponte, 2020).
Due to the mainly short nature of the open-ended responses, it was difficult to make inferences that would further explain the quantitative findings. Another limitation of the open-ended response pool was the large number of blank or inappropriate responses. The open-ended responses reflect a small and selective sample of the non-RJ school enrolled students (i.e., those who previously attended the RJ school, higher achieving students)

Another limitation of the current study was the below average response rate for the students in the RJ school (42%) in 2017. A minimum acceptable response rate in studies similar to the current one is between 65% and 70%. The low response rate can be attributed to the large truancy rates within the RJ school. According to the New York Department of Education, the RJ school attendance rate was around 77%, which is significantly below the nationally accepted rate (between 90% and 95%). The low response rate requires cautious interpretation of the current results as they may not be representative of the overall RJ school population. The anonymity of the study required the administration of the survey to occur in one sitting. Future studies in high truancy settings would benefit from research ID’s allowing for tracking which students have completed the survey, which would also allow for multiple days of administration increasing the overall response rate in the study.

Finally, as with any dataset there were varying levels of missing data across the cases. The student dataset had greater percentages of missing data (between 1.7% and 11.8%) than the staff dataset (under 5% across all scales). More specifically in the two scales that were presented further into the student survey (sense of community scale and adult support scale) there were larger percentages of missing data, with 8% of student
cases missing the two scales entirely. As previously noted, this level of missing data was accounted for through the use of multiple imputations. This level of imputation of missing data (imputing for entirely missing scales) increases the level of bias and limits the conclusions and generalizations that may be drawn from results. In an attempt to account for this limitation, the student dataset was re-analyzed using listwise deletion for cases missing two whole scales. The results across the student dataset remained the same with significant differences in student voice and adult support still existing between the RJ and non-RJ schools.

While the aim of the study was to hear all students’ feedback, there is no way to know how the respondents compare to other individuals who participated in the RJ initiative as well as the consolidation but did not complete the survey and open-ended responses. Perhaps students who completed the surveys had a particular interest in the initiative. That is, students who completed the surveys may not represent the total participant population.

Conclusion

The current study contributes to the knowledge about RJ initiatives as they relate to school climate. Furthermore, the unique circumstances of consolidation allowed for the exploration of such an event’s role on perceived school climate in conjunction with previous experiences in RJ. The study compared a RJ school’s (2017) and a non-RJ school’s (2018) student-perceived engagement of student voice, sense of community, and adult support as rated by student and staff surveys. Moreover, the consolidation process granted the opportunity to explore the concept of frame of reference, by comparing a small group of students in the non-RJ school (2018) that previously attended the RJ
school in 2017 and their peers with no previous exposure to RJ initiatives. Open ended responses on opportunities to build community and engage student voice added further depth to the exploration of the RJ initiative and consolidation. It was hypothesized that students and staff in the RJ school (2017) would rate higher engagement of student voice, sense of community, and adult support. It was also hypothesized that students in the non-RJ school, that previously attended the RJ school, would rate lower on the aforementioned tenets when compared to their non-RJ only peers due to frame of reference.

As was hypothesized, students in the RJ school rated significantly higher engagement of student voice and adult support compared to the students in the non-RJ school, while there was no significant difference in sense of community ratings. Contrary to expectations, staff in the RJ school (2017), and students with previous RJ experience did not rate significantly higher on the three tenets when compared to non-RJ school staff, and students with no previous RJ initiative exposure. Several hypotheses were offered for the latter, from time of survey administration, amount of RJ exposure, and other mitigating programing in the non-RJ school. A conclusion drawn from the study is the RJ initiative may have the potential to increase engagement of student voice and adult support, both of which may help students adapt to organizational transitions in the form of school consolidation. Future research should focus on teasing apart which of the RJ tenets impacts school climate through experimental trials, in order to garner a better understanding of the impact of RJ initiatives on school climate, and its ability to assist students in school transitions such as consolidation.
References


https://doi.org/10.1080/00940771.2007.11461616

Aud, S., Hussar, W., Planty, M., Snyder, T., Bianco, K., Fox, M., Frohlich, L., Kemp, J.,
Center for Education Statistics, Institute of Education Sciences, U.S. Department
of Education. Washington, DC.

Audette, R., & Algozzine, R. (2000). Within district transfers and student achievement:
Ahead by staying in one place. *Special Services in the Schools, 16*(2), 73-81.

Auerbach, S. (2007). From moral supporters to struggling advocates: Reconceptualizing
parent roles in education through the experience of working-class families of
https://doi.org/10.1177/0042085907300433

III*. School Climate Survey for teachers and other staff. San Francisco, CA.
(2005–2006 ed.).

Bottiani, J., Bradshaw, C., & 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*(6), 567–582.
https://doi.org/10.1016/j.jsp.2014.09.003


and nature*. Cambridge, MA: Harvard University Press.


Forman, S.G. & Oliveira, P. (2018) Intervention planning and implementation. In S. Grapin, & J. Kranzler (Eds.), *School psychology professional issues and practices* (pp. 115-129)


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


https://eric.ed.gov/?id=ED543514


Appendix A

Student Self-Reported Demographics

We would like to understand more about the diversity of students in your school:

1. What grade are you in?
   
   6\textsuperscript{th}, 7\textsuperscript{th}, 8\textsuperscript{th}, 9\textsuperscript{th}, 10\textsuperscript{th}, 11\textsuperscript{th}, 12\textsuperscript{th}

2. What is the best description of your race?
   
   American Indian or Alaska Native, Asian, Black or African American, White, Hispanic/Latino, 2 or more races: (Please write in), Other

3. If you feel comfortable sharing, what is your gender identity? (Check all that apply)
   
   Female, Male, Transgender/Gender Non-Conforming/Questioning, Other
Appendix B

Open-Ended Questions Assessing Opportunities for Community-Building and Engagement of Student Voice

1. What else can adults and students to help build sense of community in your school (helping students get along better with adults and students get along better)?

2. What opportunities do you have in your school to have your voice as a student heard?
Appendix C

Student Sense of Community Scale

In my school…

Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

1. Students treat one another with respect.
2. I feel that students in the school care about each other.
3. I feel connected to others.
4. There is at least one teacher or other adult at this school who really wants me to do well.
5. I feel this school is like a family.
6. I feel confident that others will support me.

(Rovai, 2002)

Staff Sense of Community Scale

In my school…

Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4

1. Students treat one another with respect.
2. I feel that students in the school care about each other.
3. Students connected to others.
4. Students feel their classes are like a family.
5. Students confident that others will support them.

Student RJ Use Scale - Assessing Perceptions of Engagement of Student Voice

Not at all = 1, Rarely = 2, Sometimes = 3, Often = 4, Always = 5

1. My teachers ask students to express feelings, ideas, and experiences.
2. When someone misbehaves, my teachers ask students questions about their side of the story.
3. When someone misbehaves, my teachers have that person talk to who they hurt and asks them to make things right.
4. When someone misbehaves, my teachers has those who were hurt have a say in what needs to happen to make things right.
5. My teachers use circles as a time for students to share feelings, ideas, and experiences.
6. My teachers take students’ thoughts and ideas into account when making decisions.
7. The administration (principal, vice principal) listens to my side of the story.
**Staff RJ Use Scale - Assessing Perceptions of Engagement of Student Voice**

Not at all = 1, Rarely = 2, Sometimes = 3, Often = 4, Always = 5

1. I ask my students to express their feelings, ideas, and experiences.
2. When a student misbehaves, I ask them questions about their side of the story.
3. When someone misbehaves, my teachers have that person talk to who they hurt and asks them to make things right.
4. When someone misbehaves, I have that person talk to who they hurt and ask them to make things right.
5. I use circles as a time for students to share feelings, ideas, and experiences.
6. I take the thoughts and ideas of students into account when making decisions.
7. The administration (principal, vice principal) listens to the student’s side of the story.

**Student Adult Support Scale**

We are interested in learning more about your experience with teachers and adults:

Strongly Agree = 1, Agree = 2, Disagree = 3, Strongly Disagree = 4

1. There are adults at this school I could talk with if I had a personal problem.
2. If I tell a teacher that someone is bullying me, the teacher will do something to help.
3. I am comfortable asking my teachers for help with my schoolwork.
4. There is at least one teacher or other adult at this school who really wants me to do well.
5. If another student talked about killing someone, I would tell one of the teachers or staff at school.
6. If another student brought a gun to school, I would tell one of the teachers or staff at school.

(Austin & Duerr, 2005)

**Staff Adult Support Scale**

We are interested in learning more about your experience with teachers and adults:

Strongly Agree = 1, Agree = 2, Disagree = 3, Strongly Disagree = 4

1. There are adults at this school that students could talk with if they have a personal problem.
2. If a student tells a teacher that someone is bullying them, the teacher will do something to help.
3. My students feel comfortable asking me for help with their schoolwork.
4. Students feel that there is at least one teacher or other adult at this school who really wants them to do well.
5. If another student talked about killing someone, a student would tell one of the teachers or staff at school.
6. If another student brought a gun to school, a student would tell one of the teachers or staff at school.
Appendix D

Open-Ended Coding Scheme
What else can adults and students do to help build community in your school (helping students get along better and adults and students get along better)?

A. Engaging student voice
Response reflects student belief that community can be built through the inclusion of student voice in and out of the classroom by staff in considering and making different decisions.

Ex:
“Listen to students and what they ask for”
“By talking to everyone to see how they live and how you can help.”

B. Increased student involvement/activities
Response reflects student belief that community can be built in their school through the addition of more programs both during the school day and after school that generate student involvement with each other in the school and in the community.

Ex:
“make more clubs”
“create more community clubs”

C. Respect/Fairness
Response reflects student belief that community can be built through equal and respectful treatment of individuals within the school building.

Ex:
“Treat everyone the same”
“The teachers can show a little more respect to the students, and also the students can show more respect.”

D. No/Nothing
Response reflects student belief that there is currently nothing adults and students can do to help build community in their school.

Ex:
“Nothing”

E. No Response/Not applicable
There is no response from the student, or response reflects unusable data.

Ex:
“Adults should give students $20 everyday”
F. Miscellaneous
Response reflects an answer that does not fit into a category, however is an attempt at answering the survey question.

Ex:
“Restorative justice and circles”
“Fixing the garden outside”

What opportunities do you have in your school to have your voice as a student heard?
A. Extra-Curricular Activities

A1. Student Government
Response reflects student involvement in the student government; an activity that is directed at discussing current issues and driving student led change.

Ex:
“Student government”

A2. Clubs
Response reflects student involvement in activities geared for socialization and engagement in similar interest activities.

Ex:
“Social groups, soccer team”
“Talent shows”

B. Communication with staff
Response reflects student belief that their voice may be heard through communicating with different staff within the school building.

Ex:
“speaking to teachers, principals, about your ideas.”
“Talk to the principal about your issue”

C. No/None
Response reflects student belief that there are currently no opportunities in his/her school to have his/her voice heard.

Ex:
“None”
“None whatsoever”

D. Miscellaneous
Response reflects an activity that does not fit into a category and is not linked directly to the school
Response reflects a student attempt to answer the survey question in a manner that does not necessarily provide appropriate content for the question being asked.

Ex:

“Surveys”
“Speaking up together”
“A lot of opportunities”

E. **No Response/Not Applicable**
There is no response from the student, or response reflects unusable data.

Ex:

“Scream in the lunchroom”