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Student-School Leader Racial/Ethnic Match, Geography, and Student Disciplinary Outcomes

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Abstract

We continue to witness disparities in exclusionary disciplinary outcomes within K-12 public schools, leading to persistent concerns for educational equity. In-school suspensions represent one of the most frequently employed components of school exclusionary discipline systems, and they are also largely left up to the discretion of principals and assistant principals. We investigate in-school suspension patterns for multiple student racial/ethnic groups with a focus on how such patterns vary across school geographic locales. We also examine the extent to which student to leader racial/ethnic matching is associated with the attenuation of in school suspension outcomes for historically marginalized groups. Drawing on data from the entire state of Texas and representing over 24 million unique student-year observations, we leverage the demographic and geographic diversity of our sample to present new evidence of persistent exclusionary discipline outcomes, specifically for Black students in non-urban school contexts. Our results help to better understand the geographic complexity related to student-leader racial/ethnic matching and in school suspension patterns. Our findings offer key implications for school, district, and state level leaders in the areas of school leader hiring practices, supporting culturally relevant school leadership, and the structuring of school disciplinary policies towards more equitable student outcomes.

Introduction

School disciplinary systems are designed to maintain a safe and productive learning environment for students by limiting the time teachers and leaders spend on behavioral disruptions. Yet, certain components of these systems, such as exclusionary discipline practices, may negatively influence students in terms of their achievement, engagement, social-emotional growth, and even workforce outcomes (Anderson, 2020; Bacher-Hicks et al., 2019; Pearman et al., 2019; Skiba et al., 2014; Sorenson et al., 2021). A large body of research also demonstrates disparities in exclusionary disciplinary outcomes across race, ethnicity, gender, and disability status (Curran, 2016; Fabelo et al., 2011; Losen & Gillespie, 2012; Skiba et al., 2002; Skiba et al., 2011; Wallace et al., 2008), raising concerns about equitable



educational experiences. Despite this prior work demonstrating inequitable exclusionary discipline practices, only a small set of quantitative studies have used the intersection of student race/ethnicity and school geography explore important variation in outcomes (e.g., Noltemeyer & Mcloghlin, 2010; Peguero et al., 2021; Varela et al., 2018). And most of the extant work in this area centralizes outcomes for students in urban environments, while less is known about systematic disciplinary outcomes for students in suburban, town, and rural schools.

This article is motivated by empirical research demonstrating that school geographic setting and leadership play important roles in student success (Green et al., 2017; Reardon et al., 2019; Pendola & Fuller, 2018), and that these factors can be essential towards providing educational equity for students of Color and students from historically marginalized groups (Khalifa et al., 2016). The policy structure of many of the most frequently used exclusionary disciplinary practices (e.g., suspensions) requires that school leaders use their own judgement and discretion of the severity of a behavioral incident prior to making a final decision about a disciplinary outcome. Thus, leaders play a key role in disciplinary decisions (Skiba et al., 2014; Sorenson et al., 2021)—and there is increasing evidence that historically underrepresented groups of students are less likely to experience educational disparities when the race/ethnicity of their teachers and leaders matches their own racial/ethnic identity (Bartanen & Grissom, 2021; Gershenson et al., 2016; Gottfried et al., 2021). Despite calls for more research in this area (e.g., Davis et al., 2016) there is a need for an investigation into whether having a same race/ethnic school leader can reduce the likelihood that a student is unfairly disciplined, and the degree to which school geographic context explains patterns in such outcomes.

Prompted by this gap in the research, and drawing on longitudinal administrative records at the student level from the 2014-2018 school years across all Texas public schools, we use the following research questions to guide our investigation:

- (1) What are the characteristics of in-school suspension patterns across student racial/ethnic groups and geographic locales?
- (2) Are there racial/ethnic disparities in in-school suspension outcomes for students and if so, what is the magnitude of such disparities and how do they vary across school geographic locales?
- (3) To what extent does racial/ethnic match between students and their school leader attenuate students' probability of in-school suspension and how does this relationship vary across student racial/ethnic groups and school geographic locales?

To that end, we investigate evidence of racial disparities in disciplinary outcomes, specifically those under the purview of school leaders. Our analysis defines school leaders as either principals or assistant principals because both are highly influential in student-level disciplinary decisions (Skiba et al., 2011). We first look at descriptive disparities in the occurrence of in-school suspensions (ISS) at the student level, disaggregated by student racial/ethnic groups and four categories of school geographic locale (urban, suburban, town, rural). We then estimate the extent to which student racial/ethnic identity predicts ISS outcomes—net of student and school characteristics—with a specific focus on disparities for students of Color at the intersection of school geographic context. And finally, we explore how student-leader racial/ethnic matching is associated with in-school suspension patterns for historically marginalized groups and across geographic contexts. Our results have implications for school, district, and state level leaders in the areas of school leader hiring practices, supporting culturally relevant school leadership, and the structuring of school disciplinary policies towards more equitable student outcomes.

Literature Review

Racial/Ethnic Discipline Disparities

We draw on three strands of literature to guide our analysis: *racial/ethnic discipline disparities*, *school leadership and discipline outcomes*, and *geographic variation in disciplinary outcomes*. Research demonstrates that students of Color are more likely to be referred, suspended, expelled, or arrested in school compared to white students. (Fabelo et al.,



2011; Losen & Gillespie, 2012; Skiba et al., 2011; Skiba et al., 2002; Wallace et al., 2008). Specifically, school discipline disparities are greatest for Black students. During the 2017-18 school year, nationally, Black students accounted for 38.8% of expulsions, 38.2% of out of school suspensions, and 31.4% of in-school suspensions, while Black students' share of national student enrollment was 15.1% (Civil Rights Data Collection, 2021). In addition to higher rates of discipline infractions, Black students also receive longer suspensions than their white peers for the same infractions (Anderson & Ritter, 2020; Bradshaw et al., 2010; Gopalan & Nelson, 2019). It is important to note that these disparities in suspension and expulsion rates are not caused by poverty alone or higher rates of offenses (Skiba et al., 2016). Though poverty contributes to the likelihood of discipline (Hinojosa, 2008), disparities remain even when comparing Black and white students of similar socio-economic status (Anyon et al., 2014; Balfanz et al., 2015; Skiba et al., 2011; Wallace et al., 2008). Moreover, Black students tend to receive more referrals even when controlling for prior student behavior (Bradshaw et al., 2010). Some scholars suggest that discipline disparities could be driven by the school environments students experience (Gopalan & Nelson, 2019), which are consistently linked to school leadership (Skiba & Edl, 2004), and to the way that leaders work within a larger disciplinary system to equitably support students.

School Leadership and Student Discipline Outcomes

School leadership, specifically principals and assistant principals, play a critical role in creating a school's disciplinary climate. They are responsible for enforcing student code of conduct expectations expressed through a variety of actions including conversations about student misbehavior with parents, and decisions about suspending or expelling students from school (DeMatthews et al., 2017; Gottfredson & Gottfredson, 2001; Skiba et al., 2014; Sorenson et al., 2021). School leaders' attitudes on student misbehavior can also influence their response to misbehavior (DeMatthews et al., 2017). Additionally, a school leader's approach to disciplinary systems also affects teacher attitudes and instructional behaviors, which are linked to how teachers respond to student behavior (Mukuria, 2002). School discipline disparities typically begin in the classroom (Gregory et al., 2010) and can be influenced by teacher experience and student-teacher relationships. Leaders have the authority to hire teachers that are better equipped to manage student behavior and to provide professional development to help teachers foster positive student relationships. To summarize, research suggests that school leaders drive discipline policies (Anderson, 2018; Bacher-Hicks et al., 2019; Steinberg & Lacoe, 2018), therefore collectively, their decisions and discretion related to exclusionary disciplinary outcomes are important for student success.

Geographic Variation in Student Disciplinary Outcomes

Along with leadership, school geography is a relevant factor when considering patterns of student discipline disparities. Across prior literature, findings indicate that disparate disciplinary practices are more likely to be employed in urban school communities serving higher concentrations of students of Color (Noltemeyer & Mcloughlin, 2010; Peguero et al., 2021; Shedd, 2015). There is evidence that teachers in urban schools allocate more time to disciplinary measures compared with teachers in suburban, rural, and town schools (Noltemeyer & Mcloughlin, 2010) and urban schools have higher average suspension rates for Black students compared with all other racial/ethnic groups (Welsh & Little, 2018). Welsh and Little (2018) posit that teachers' and leaders' preconceptions of schools in urban districts—as large in size and lacking in community connectedness compared to small rural districts—could influence the way disciplinary systems are structured to the detriment of students of Color. Key to the leadership driven disciplinary context relevant to this study, research also indicates that the relative stringency or leniency of school discipline policy is related to patterns in disciplinary outcomes, especially for students of Color in urban schools, compared to rural and suburban schools (Varela et al., 2018). A consistent theme across this area of research is that little is known about disparities in exclusionary disciplinary outcomes for students in suburban, town, and rural school contexts compared to existing trends within urban geographic locales. Towards addressing this gap in the literature, in this study we investigate evidence of such disparities, specifically those under the purview of school leaders. We make an important contribution to prior empirical work in that we include an exploration of how the intersection of school geography and student/leader race/ethnicity is tied to systematic patterns disciplinary outcomes for students.



Methods

Data

The data for this study come from the Texas Education Research Center (ERC) at the University of Texas at Austin. The ERC houses Texas' longitudinal student data system, which integrates K–12 data from the Texas Education Agency (TEA). Each student who enrolls in an educational institution in Texas is assigned a unique identification number, allowing researchers to follow individual students from the time they enter prekindergarten through their postsecondary enrollment and into the workforce, provided the student remains in Texas. The files include student academic and demographic characteristics (e.g., disciplinary records, enrollment/attendance, GPA, test scores, and graduation statistics). In addition to student information, these data include teacher and school leader demographic and employment variables providing annual information about experience, race/ethnicity, degrees earned, salary, as well as other employee-level characteristics.

To produce our analytic file, we first identified every student who ever received an in-school suspension (ISS) between the 2014-2018 school year and then merged this information with student demographic characteristics. We began our analytic file in 2014 because prior to that year the state-wide pattern of disciplinary outcome was less consistent and reliable. Our data ends in 2018 because this was the most recent year that geographic information from the National Center for Education Statistics (NCES) was available. Next, using unique school identifiers, we matched each student to their school leader(s) by year. If a student attended a school with more than one school leader, we created multiple student-year observations in our analytic file to capture each student-leader-year observation. We made this decision

based on prior literature suggesting that both principals and assistant principals are involved in discretionary disciplinary decisions such as ISS (Skiba et al., 2011; Williams et al., 2020). Therefore, by only including student-principal pairs we would omit important variation at the assistant principal level that could predict ISS patterns. Finally, at the school-year level, we brought in geographic locale information from NCES public use data files. Table 1 summarizes student characteristics across all years of data and includes the distribution of students across the four geographic locales (urban, suburban, town, rural). Figure 1 represents the racial/ethnic distribution of student enrollments across geographic locales (see Appendix 1).

Table 1. Student Characteristics (2014-2018)		
Variable	Mean	SD
Avg ISS	0.21	0.98
Any ISS	0.09	0.28
Sex	0.49	0.50
Age	10.73	3.98
Economically Disadvantaged	0.58	0.49
Special Education	0.09	0.29
Gifted	0.08	0.27
LEP	0.18	0.39
Immigrant	0.02	0.13
Asian	0.04	0.20
Black	0.12	0.33
Latinx	0.52	0.50
Native American/Indigenous	0.00	0.06
Two or more races	0.02	0.14
White	0.29	0.45
Urban	0.40	0.49
Suburban	0.33	0.47
Town	0.10	0.29
Rural	0.18	0.38
Elementary school	0.50	0.50
Middle school	0.22	0.41
High school	0.28	0.45
N	24,650,81	2

Note. This table reports the mean and standard deviation of select student characteristics and includes all student-year observations. Avg. ISS represent the average number of in school suspensions received while Any ISS represents whether a student ever received an in-school suspension each year. LEP is an indicator of whether a student is labeled as having limited English proficiency.



Outcome Variable

Our main outcome of interest, *any_iss*, is a variable indicating whether a student was ever in-school suspended each year. To capture this information, we created a binary outcome for ISS (0=no ISS, 1=at least one ISS). We also created a separate continuous measure representing total in-school suspensions at the student-year level which we used in models estimating robustness of our main results.

Predictor Variables and Covariates

Our key predictor variables are categorical race/ethnicity measures available for both students and the leaders of their school. We coded these categorical variables so that white students and leaders represent the reference category (0), thus making it easier to interpret coefficients in our regression models as relative estimates of racial/ethnic disparities in ISS outcomes for both Black, Latinx, and Asian students. To investigate racial/ethnic matching between teachers and leaders, we created interactions in our main analytic models, allowing us to avoid creating separate and additional binary measures of race/ethnicity matching and providing more flexible modelling. We also investigate the extent to which and racial/ethnic disparities and variation in ISS outcomes is related to the geographic locale of schools. To do so, we include a measure of school geography, which includes four separate categories (urban, suburban, town, rural). The locale variable is categorical with urban set as the reference category. We link a variety of discipline-related student and school demographic measures to each student-year observation (Welsh & Little, 2018), and we add covariates of school leaders associated with student outcomes across prior research (Knoeppel & Rinehart, 2008)—in an attempt to control for factors that might bias our student-level results.

Analytic Approach

In this study we utilized descriptive, summary, and correlational statistics to understand the relationship between student race/ethnicity and in-school suspension outcomes. Loeb et al. (2017) suggest that high-quality descriptive research is characterized by low-inference and low-assumption methods dependent on minimal statistical adjustments. In this way, we leverage the size and existing variation that exists in our large data set to provide clear and practically significant summaries racial/ethnic disparities in ISS outcomes and leader characteristics associated with ISS outcomes. To answer RQ1, we first provide mean statistics about our main outcome variable, *any_iss*, and we tabulate these results across each student racial/ethnic group. We then provide a separate tabulation of *any_iss* across both race/ethnic and our geographic locale variable.

Next, to answer RQ2, we observe the distribution of student race/ethnicity across observations of students who received at least one ISS and compare this distribution to student/racial ethnic representation within the full sample. To more systematically assess patterns of racial/ethnic disparities, we use an ordinary least squares (OLS) regression model where *any_iss* is our main outcome of interest and student race/ethnicity is our main predictor of interest. In model 1 shown below, we estimate the probability that student i in school j in year t is ever in-school suspended as a function of time-varying student (X), school (S), and school leader characteristics (L), as well as fixed characteristics of the school (\alphaj), a school year indicator (y), and an error term. The key variable of interest is stu_race/eth, where b1 represents the coefficient on a categorical indicator of students' racial/ethnic identity, with white students coded as the reference group. As an example, a positive estimate of b1 for a Black student would indicate increased likelihood of ever receiving an ISS relative to the probability a white student ever receiving an ISS. Finally, uijt represents our error term and in this model standard errors are clustered at the school level.

(1)
$$Pr(any_issijt = 1) = b1stu_race/ethijt + Xij + Sij + Lij + \alpha j + \gamma t + uijt$$

In our first model we estimate systematic differences in ISS outcomes dependent on students' racial/ethnic identity. However, in addressing RQ3, we set out to estimate the extent to which there exists variation in ISS outcomes for separate student racial/ethnic groups dependent on student-school leader race/ethnicity match. To do so, we employed a series of OLS regression models where *any_iss* is still our main outcome of interest but our predictors of interest are a set of student-leader race/ethnicity interaction terms. Race/ethnicity is coded as a categorical variable for both



students and leaders, meaning that the coefficients on each measure of our interaction can be interpreted as the likelihood that a student will receive any ISS, relative to a white student matched with a white leader. Next, in order to capture variation in the relationship between racial/ethnic matching and geography, we fit the same model with interactions on four subsets of our sample, restricted by school geography (urban, suburban, town, rural). Similar to the baseline model we applied in RQ2, in each of our models with interactions we include fixed effects at the school-year level, and our full set of student/school controls. This series of models takes the form:

(2) $Pr(any_issijt = 1) = b1(stu_race/ethi x l_race/ethj) + Xij + Sij + Lij + \alpha j + \gamma t + uijt$

Results

RQ1. ISS Patterns Across Race, Ethnicity, and Geography

We first set out to describe trends in ISS pattern across student racial/ethnic groups and geographic contexts. Table 2 displays mean statistics for our key outcome variable of interest, *any_iss*, across racial/ethnic groups. Each row represents the within-group ISS-rate. Figure 2 provides a visual representation of this distribution (see Appendix 1). The last row indicates that the any ISS rate was roughly nine percent across all student-year observations. Within student racial-ethnic groups, our results suggest notable variation—Black students received at least one ISS at around twice the rate as white and Latinx students. For example, 16% of all observations of Black students included at least one ISS, compared to seven percent of all observations of white students. Our findings here also indicate that as a group, Asian students were in-school suspended at the lowest rate (2%).

Table 2. Rate of Any ISS by Student Racial/Ethnic Groups

Student Race/Ethnicity	Mean	SD	Freq.
White	0.07	0.26	7,175,867
Black	0.16	0.37	3,033,062
Latinx	0.08	0.28	12,789,422
Asian	0.02	0.15	1,038,465
Native American/Indigenous	0.08	0.28	98,293
Two or More	0.09	0.29	515,703
Full Sample	0.09	0.28	24,650,812

Note. This table reports the mean and standard deviation of the outcome of interest-whether a student every received an ISS each year. The statistics displayed here summarize any ISS rates disaggregated by student racial/ethnic groups across all years of data.

Table 3. Rate of Any ISS by Student Racial/Ethnic Groups and School Geographic Locale

	Urban	Suburban	Town	Rural
White	0.06	0.06	0.10	0.08
Black	0.14	0.17	0.21	0.18
Latinx	0.07	0.09	0.10	0.10
Asian	0.02	0.02	0.05	0.03
Native Indigenous	0.07	0.08	0.11	0.10
Two or More	0.08	0.08	0.13	0.10
All Students	0.08	0.09	0.11	0.09
N	9,903,180	8.077.635	2,352,493	4.317.504



We then analyzed any ISS-rate patterns across student/racial ethnic groups but within separate geographic locales. As our results in Table 3 demonstrate, the any ISS rate was largest within town, followed by rural and suburban school contexts. And on average, students in urban schools received at least one ISS less frequently than students in all other contexts (7.8%). Our results comparing outcomes across racial/ethnic groups demonstrates that Black students had the highest rate of in-school suspensions regardless of geographic school locale—yet we found meaningful variation across locales. For example, any ISS rate for Black students was greater in town (21%), rural (18%), and suburban (17%) schools compared to urban schools (14%). On average, one out of every five Black students who attended a town school received at least one in-school suspension. Taken together, our results in this section denote a pattern of greater average ISS rates for Black students across geographic school locales compared with all other student racial/ethnic groups. Our results also signal important variation between geographic locales where the largest disparities were observed for Black students, for whom the rate of any ISS was largest in town and rural schools.

RQ2. Exploring the Magnitude of ISS Disparities

Towards answering our second research question, we first made a simple comparison of the share of ISS by student race/ethnicity to the share of all students by race/ethnicity. Shown in Table 4, our results suggest a consistent disparity—the proportion of Black students who received at least one ISS was nearly twice as large as the proportion of Black students in our sample. Black students represent 12% of all student-year observations, yet they represent 22% of all ISS observations. We also find a pattern of underrepresentation amongst ISS rates for white and Asian students. White students represent 29% of all student-year observations and only 24% of ISS observations. And Asian students represent just over four percent of all student-year observations and slightly greater than one percent of the any ISS observations.

Table 4. Magnitude of ISS Disparities by Student Race/Ethnicity

	ISS	All Students
White	0.24	0.29
Black	0.22	0.12
Latinx	0.50	0.52
Asian	0.01	0.04
N	2,156,050	24,650,812

Next, we disaggregated our investigation of racial/ethnic disparities by geographic locale. As shown in Table 5, again our findings indicate a pattern of overrepresentation in ISS rates amongst Black students, however this pattern is most acute in town and suburban school contexts. For example, while Black students represented around eight percent of all students in town schools, they accounted for 16% of all student ISS records. Black students in urban school contexts were still disproportionally represented in terms of any ISS records, however the magnitude of this disparity was the smallest compared with town, suburban, and rural schools. We also found some evidence of small proportional overrepresentation of Latinx students in suburban and rural school locales, yet the magnitude of overrepresentation in each case was small.

Table 5. Magnitude of ISS Disparities Race/Ethnicity and Geography

	Urban Suburban		burban	Town		Rural		
	ISS	All Students	ISS	All Students	ISS	All Students	ISS	All Students
White	0.13	0.18	0.22	0.31	0.32	0.35	0.41	0.48
Black	0.25	0.14	0.27	0.14	0.16	0.08	0.14	0.07
Latinx	0.59	0.62	0.47	0.46	0.49	0.53	0.42	0.40
Asian	0.01	0.04	0.02	0.06	0.00	0.01	0.01	0.02
N	770,048	9,903,180	721,879	8,077,635	254,439	2,352,493	409,684	4,317,504



Finally, to assess patterns of racial/ethnic disparities more systematically, we implemented five separate OLS models with *any_iss* as our main outcome of interest and student race/ethnicity as our main predictor of interest. Table 6 displays our coefficient estimates, standard errors, and significance levels for this set of results. Column 1 reports estimates from our full sample, while columns 2-5 display subset model estimates from each geographic locale separately. All estimates presented here represent relative differences in the likelihood of ever receiving an ISS between student racial/ethnic groups, controlling a rich set of student background and school characteristics. In column 1, results from our model with students from all locales indicate that compared to a white student in our sample, a Black student is more likely to ever receive any ISS by about 6.3 percentage points. For Asian students, we observe an opposite relationship, where an Asian student in our data has a lower probability of ever receiving an ISS by about 2.9 percentage points. Similarly, our results indicate that compared to white students, Latinx students are 0.4 percentage points less likely to receive an ISS.

Table 6. Predicted ISS Outcomes by Student Racial/Ethnic Groups and School Geography

	Full Sample	Urban	Suburban	Town	Rural
	(1)	(2)	(3)	(4)	(5)
Black	0.063*** (0.000)	0.062*** (0.000)	0.066*** (0.000)	0.080*** (0.001)	0.059*** (0.001)
Latinx	-0.004*** (0.000)	0.001***(0.000)	-0.006*** (0.000)	-0.010*** (0.001)	-0.010*** (0.000)
Asian	-0.029*** (0.000)	-0.023*** (0.001)	-0.028*** (0.000)	-0.048*** (0.002)	-0.029*** (0.001)
Student controls	X	X	X	X	X
School fixed effects	X	X	X	X	X
Year fixed effects	X	X	X	X	X
N	24,650,812	9,903,180	8,077,635	2,352,493	4,317,504

Note. Coefficients represent the relative probability of ever receiving an ISS compared to white students. Observations span all school years of data (2014-2018). Standard errors are clustered at the school level and are shown here in parentheses. *p < .05. **p < .01. ***p < .001.

Our estimates from column 2-5 help to parse these patterns across various school geographic contexts. Compared to white students in the same school locale, Black students across all locales are more likely to receive an ISS—yet the magnitude of this relationship became larger in town and suburban schools. For example, relative to white students in town schools, our results suggest that Black students in town schools are eight percentage points more likely to receive any ISS. Across estimates for Asian and Latinx students, there are few noteworthy patterns other than a slightly lower probability of any ISS for Latinx students—compared to white students—in rural and town schools. Asian students appear to be roughly two to four percentage points less likely to receive any ISS, compared to white students, across all school geographic contexts.

RQ3. Student-leader Racial/Ethnic, Geography, and the Likelihood of ISS

Finally, towards answering RQ3, we executed a series of OLS models to estimate variation in our ISS outcome dependent on the existence of student-leader race/ethnicity matching. In Table 7, column 1 displays coefficient estimates for our full sample with student-leader race/ethnicity match interactions. We prioritize our results associated with outcomes for Black students in this section because within this group of students we observed the clearest and most consistent disparities in our any ISS outcome. In our first model with student-leader interactions, we did not observe evidence of meaningful variation in the likelihood of any ISS for Black students. Relative to a white student in a school with a white leader, a Black student paired with a Black leader is 6.3 percentage points more likely to receive any ISS.

In our final set of estimates, also shown in Table 7, we ran the same set of models except we restricted our sample by school geographic locale. Column 2 displays estimates for our model with student-leader race/ethnicity interactions in urban schools. These results indicate that a Black student with a Black school leader in an urban school is still more likely than a white student with a white principal to receive any ISS. However, we did observe a slight decrease in the likelihood of Black student receiving any ISS under these conditions (6.0, 6.3). These point estimates provide evidence of an approximately five-percent decrease in the probability of ISS for Black students paired with a Black leader in



urban schools. Curiously, we observe the opposite pattern for Black students paired with a Black leader in suburban, town, and rural schools. Columns 3-5 in Table 7 show models restricted to schools within each of these geographic locales, and indicate that the likelihood of a Black student receiving any ISS is greater in magnitude compared to results from our models without interactions that include specifications for the race/ethnicity of students' leaders. In fact, relative to a white student with a white school leader, a Black student with a Black school leader in a town school was 8.4 percentage points more likely to receive any ISS. For Latinx and Asian students, we did not observe any meaningful heterogeneity in predicted any ISS outcomes associated with the existence of student-leader racial/ethnic match. We also did not observe any variation in the relationship between student-leader racial/ethnic match and any ISS outcomes for Latinx or Asian students across geographic locales.

Table 7. Predicted ISS Rates, Student-leader Racial/Ethnic Match, and School Geography

	Full Sample	Urban	Suburban	Town	Rural	
	(1)	(2)	(3)	(4)	(5)	
Black#Black	0.063*** (0.000)	0.060*** (0.001)	0.070*** (0.001)	0.084*** (0.002)	0.067*** (0.001)	
Latinx#Latinx	-0.003*** (0.000)	0.003*** (0.000)	-0.007*** (0.001)	-0.008*** (0.001)	-0.008*** (0.001)	
Asian#Asian	-0.021*** (0.002)	-0.019*** (0.003)	-0.020*** (0.003)	-0.028 (0.032)	-0.033*** (0.007)	
Student controls	X	X	X	X	X	
School fixed effects	X	X	X	X	X	
Year fixed effects	X	X	X	X	X	
N	24,650,812	9,903,180	8,077,635	2,352,493	4,317,504	

Note. Coefficients represent the relative probability of ever receiving an ISS compared to a white student matched with a white school leader. The (#) symbol indicates an interaction term. Observations span all school years of data (2014-2018). Standard errors are clustered at the school level and are shown here in parentheses. *p < .05. **p < .01. ***p < .001.

Discussion and Implications

In this investigation, we explored racial/ethnic disparities in ISS outcomes. In-school suspensions represent an area of school disciplinary systems largely dependent on the discretion of school leaders who determine whether and how long a student should be suspended (DeMatthews et al., 2017; Sorenson et al., 2021). Given that school leaders play a key role in ISS decisions, we investigated how such outcomes are potentially attenuated by student-leader racial/ethnic matching, and how this varies across school geographic contexts. The characteristics of our results lead to three main conclusions. First, ISS outcomes are disparately distributed to Black students, across all school geographic contexts and even in our models controlling for a rich set of student and school covariates. Secondly, ISS disparities for Black students appear most severe in town, suburban, and in some cases rural schools compared to urban schools. And finally, the existence of a student-leader racial/ethnic match reduces the likelihood that Black students in urban schools receive an ISS—whereas the opposite pattern exists within town and suburban schools. In the following paragraphs we discuss these results and elaborate on important implications for leadership policies and practices at the school, district, and state level.

Geographically Targeted Supports to Address Disparities

Taken together, our findings indicate that Black students experience sharp disparities in disciplinary outcomes, a conclusion that mostly aligns with a large body of previous literature (Anderson & Ritter, 2020; Bradshaw et al., 2010; Losen et al., 2015; Welsh & Little, 2018). We extend this prior work by demonstrating important variation in the magnitude of such outcomes across school geographic contexts. While some extant research provides results on outcomes in urban schools (e.g., Noltemeyer & Mcloughlin, 2010; Peguero et al., 2021; Shedd, 2015)—we explore systematic patterns in disciplinary outcomes for students in suburban, town, and rural schools. We find that Black students are systematically overrepresented in terms of out ISS outcomes, especially Black students learning in town, suburban, and rural school contexts. In fact, one in five observations of a Black student in a town school was linked with at least one in school suspension. Thus, our results signal the need for district-level educational leaders in non-urban geographic contexts to monitor the existence of racial/ethnic student disciplinary disparities. This responsibility



also lies at the state-level, where policy leaders have the time, data access, and macro-perspective needed to assess and act on disparities within specific geographic contexts (Anderson, 2020). As non-urban school locales become increasingly racially/ethnically diverse (Lacy, 2016), district-level leaders in these contexts might offer leaders professional development towards culturally responsive school leadership practices (Khalifa et al., 2016)—an effort that would likely improve the climate and culture for students and teachers in classrooms as well.

Within School Supports for Non-Urban Contexts

In town and suburban school contexts our results show a 2:1 ratio of Black students' representation in ISS outcomes compared to their share of school enrollments. For example, in town schools, Black students are linked with 16% of all ISS records, while they only represent eight percent of student enrollments. These results strongly imply that while disparities in ISS rates exist for Black students in all school geographic locales, there exist mechanisms—not explored in this current study—that may be exacerbating disciplinary disproportionality for Black students in town, suburban, and rural schools. Trends across prior research indicate that non-exclusionary leadership practices and policies such as restorative disciplinary systems are most often adopted and implemented in urban schools (e.g., Anyon et al., 2016). With this in mind, our findings highlight the need for increased funding and support for leaders who want to pursue non-exclusionary disciplinary systems in town, suburban, and rural schools. In terms of research, there is also a need for studies that include a geographic component to the investigation of more equitable student disciplinary systems (Cobb, 2020; Green, 2017). A recent systematic review of alternative approaches to disciplinary policies (Welsh & Little, 2018) found that such non-exclusionary systems have potential to reduce discipline disparities for students of Color (Gregory & Clawson, 2016)—yet none of the studies reviewed investigated such alternative approaches in non-urban school contexts.

Grow and Sustain School Leaders of Color

Finally, our results related to influence of student-leader racial/ethnic on ISS outcomes were mixed—yet they provide some implications for future interventions. For example, we find that racial/ethnic match reduces the likelihood that Black students in urban schools receive an ISS. While the magnitude of this reduction is small (0.3%), Black students are more likely to be clustered in urban schools in Texas, thus the practical significance of this result is meaningful. This finding implies that state- and district-level leaders should invest more in preparing, recruiting, retaining, and supporting principals and assistant principals of Color—specifically Black school leaders in urban contexts (Bartanen & Grissom, 2021). Our results should also motivate efforts to support leaders of Color pipelines for town, suburban, and rural schools—despite our estimates showing that student-leader race/ethnicity matching slightly increase the likelihood of ever receiving an ISS for Black students in these non-urban contexts. Research indicates that Black students experience increased levels of isolation and lack of racial/ethnic representation in town, suburban, and rural contexts compared to urban school contexts (Mann & Rodgers, 2021). Representation matters, and there is evidence that students of Color experience overt and covert racism coupled with a lack cultural affirmation and support which can precede student-teacher and student-leader conflicts and exclusionary disciplinary outcomes (Cramer et al., 2014; Kholi et al., 2017). At the least, future research should attempt further explore school-level factors driving the increased probability of ISS for Black students matched with Black school leaders in non-urban schools. For example, Black school leaders in predominantly white town, suburban, and rural schools might be unfairly tasked with disciplinary duties or feel pressure from district leaders or school board members to over-discipline students of Color (Brockenbrough, 2015; Griffin & Tackie, 2016). Qualitative analyses that can disentangle the way that Black school leaders navigate non-urban school contexts would add important detail and nuance to the systematic patterns we observe here.

Conclusion

In-school suspensions remain a key disciplinary measure implemented largely at the discretion of school leaders. Beyond providing new evidence of persistence disciplinary disparities across student racial/ethnic groups—this study provides a clear understanding of how such disparities are distributed across geographic contexts and how student-



leader race/ethnicity matching might attenuate ISS disparities. There is ample prior work highlighting the existence (Gregory et al., 2010; Skiba, 2015) and causes (Skiba et al., 2014; Welsh & Little, 2018) of exclusionary discipline disparities, and even work that links student-teacher racial/ethnic matching to improved disciplinary outcomes for students of Color, yet our study adds an important leadership and geographic component to this growing body of literature. A better understanding of how disciplinary disparities are distributed across various school contexts can help school, district, and state leaders construct policies that reduce inequitable and unnecessary exclusionary practices. And our findings showing that student-leader race match is associated with a small reduction in ISS rates for Black students in urban schools provides important implications for the way that district leaders recruit, hire, and support school leaders of Color. As our work indicates, racial/ethnic disparities in exclusionary disciplinary practices persist. However, it is important for researchers, educational leaders, and policymakers to continue highlighting the existence of such disparities, particularly in state contexts like Texas where historically marginalized student groups represent the majority of K-12 public-school enrollments (Author, 2020)—thus where educators and leaders should be concerned with creating safe, inclusive, and welcoming school environments.

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Appendix 1

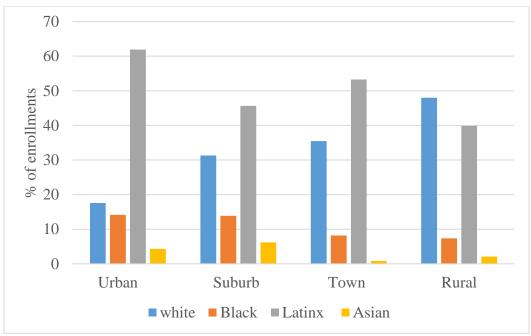


Figure 1. Student K-12 Enrollments by Race/Ethnicity and Geography

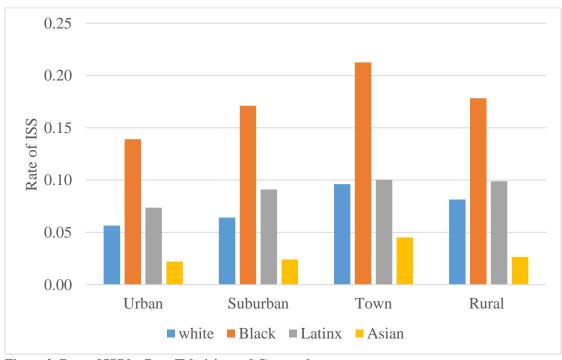


Figure 2. Rate of ISS by Race/Ethnicity and Geography