Variation and Disparities in Exclusionary Discipline Rates in North Carolina Elementary Schools

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Executive Summary

This project reinforces prior research demonstrating inequitable suspension rates in North Carolina public elementary schools. Using school-level data from publicly available sources, I found most elementary schools use suspensions as a mechanism to discipline inappropriate student behavior, but there is considerable variation in rates at the school and county level. I also found that Black students had higher rates of both in-school and out-of-school suspension rates compared to white students and rates for all students.

However, some schools across the state prove that there are potential policies and procedures that schools can use to reduce their suspension rates and subsequently improve student outcomes. This project compared actual suspension rates to predicted rates based on school-level observable characteristics, and found that a majority of schools with both lower than expected in-school and out-of-school suspension rates are located in 3 counites: Guilford, Cumberland, and Mecklenburg. This group of schools had considerably lower average rates for all students and for Black students, though the gap between white and Black student rates persisted.

Policy Question

Which elementary schools in North Carolina have lower than expected levels of in-school and out-of-school suspension rates, and what policies do these schools use to improve disciplinary outcomes for their students?

Background

Defining exclusionary school discipline

Teachers and school administrators must manage school safety, student behaviors, and classroom effectiveness to promote positive outcomes for students. To curb undesirable student behaviors, school personnel often employ exclusionary discipline practices, which remove students from their learning environment through in-school suspensions, out-of-school suspensions, or expulsions.

Historically, school administrators used exclusionary discipline primarily for more extreme undesirable behaviors, such as bringing a weapon to school, fighting, or other forms of violence.[1] However, in the 1990s, concerns about increasing violence in schools resulted in the increased use of "zero tolerance" policies, which mandate specific consequences for behavior, and often include suspensions or expulsions as punishments. Over time, schools began using zero-tolerance policies more frequently to regulate less serious, less violent, and more subjective behavior, including disrespect, skipping school or tardiness, dress code violations, and disruptive behavior.[2]

Types of Suspensions

In-School Suspensions

Student is removed from the classroom but not from school. They are reassigned to an area outside of their classroom, usually with assignments from the teacher.

ISS may be for **any number** of days, including part or half days.

Out-of-School Suspensions

Short-term Suspensions (STS)

Student is removed from the classroom and from school for a period of **10 or less** school days.

Long-term Suspensions (LTS)

Student is removed from the classroom and from school for a period of **11 or more** schools days.

Exclusionary discipline is associated with adverse student outcomes

A school's discipline policy is one of the many factors that influences student achievement.[3] Research demonstrates that students who are suspended experience lower academic achievement, increased grade repetition, and increased likelihood of dropping out and involvement with the juvenile justice system.[4, 5] Furthermore, research indicates that exclusionary discipline practices may not only be ineffective at reducing adverse student behavior, but lead to an **increase** in antisocial behavior and school violence.[6]

Suspensions are unequally experienced across student populations

Suspensions are relatively common across the U.S. According to the nonprofit Child Trends, during the 2015-2016 school year, almost 5 percent of students experienced at least one suspension.[7] The most recent Civil Rights Data Collection estimates show that during the 2015-2016 school year, over 2.7 million students experienced an in-school suspension (ISS), and over 2.5 million students experienced at least one out-of-school (OSS) suspension.

Not all students experience the consequences of school discipline equally. Decades of research demonstrates that exclusionary discipline disproportionately affects, boys, students with disabilities, and students of color,[8, 9] despite no evidence showing students from different races exhibit different levels of misbehavior.[10, 11] The Office of Civil Rights data for the 2015-2016 school year shows that while overall rates of exclusionary discipline decreased, racial, gender, and disability gaps persisted. **Table 1** shows that Black students, males, and students with disabilities experienced higher rates of suspension compared to the portion of enrolled students who belong to their respective demographic group, while white students experienced lower rates of suspensions compared to the white student enrollment rate.[1]

[1] A more extensive table showing disparities in discipline rates can be found in **Appendix A**.

Table 1: Black students and Males experienced **disproportionately higher suspension rates**

Demographic Group	Percent of public school students receiving 1+ ISS	Percent of public school students receiving 1+ OSS	Takeaway
Black Students	**33%** (15% of enrolled students)	**41%** (15% of enrolled students)	Disproportionately **high** rates
White Students	39% (49% of enrolled students)	32% (49% of enrolled students)	Lower suspension rates than enrollment percentage
Students with Disabilities	**23%** (15% of enrolled students)	11% (15% of enrolled students)	Disproportionately **high** rates for ISS, low for OSS
Males	**69%** (51% of enrolled students)	**70%** (51% of enrolled students)	Disproportionately **high** rates
Black Males	**30%** (8% of enrolled students)	**38%** (8% of enrolled students)	Disproportionately **high** rates

Source: Author's Analysis of Office of Civil Rights Data Collection, Discipline 2015-2016

Along with being more likely to experience at least one suspension, Black students are more likely to receive more punitive forms of discipline (OSS rather than ISS) and receive longer suspensions on average compared to their non-Black peers.[12] Black students are also more likely to be suspended for subjective behaviors such as disrespect or disruptive behavior, whereas white students are more likely to be suspended for objective offenses, including leaving the classroom or fighting.[13] The extensive disparities in discipline rates results in more Black students missing instructional time and experiencing adverse outcomes compared to their peers.

Exclusionary discipline in North Carolina

The most recent data for North Carolina shows that suspensions are also relatively common in public schools across the state. In the 2018-2019 school year, schools reported over 203,000 short term OSS to almost 11,000 students, with an average rate of 1.8 suspensions per student.[14] Additionally, North Carolina students spent over 355,100 full days and 28,300 partial days in ISS.

Suspension rates in North Carolina also show disparate outcomes for certain demographic groups. Triplett and Ford (2019) found that American Indian, Black, and Multiracial students were disproportionately "exposed to the negative effects of school discipline", with Black and Multiracial students overrepresented for both OSS and ISS rates.[15] Notably, Black students and males were more likely to experience both in-school and out-of-school suspensions, with Black and American Indian males experiencing the highest rates of short-term suspensions. Triplett and Ford also identified suspensions as a "powerful predictor" for lower student achievement across a variety of assessments.

Elementary students are not exempt from suspensions within public schools across the state. While overall suspension rates decreased, the short-term OSS rate for students in 3rd through 6th grade increased.[16] This is particularly problematic because exclusionary discipline may be developmentally inappropriate for students at such young ages, as elementary-aged children as still adapting and socializing to social norms.[17] Additionally, exclusionary discipline also forces students to miss instructional time, which, at this age, includes lessons on how to read and other basic skills they need to master to be successful throughout the rest of their academic career.

Exclusionary discipline may be most inappropriate at the **elementary level**, as it is **developmentally inappropriate** and requires students to miss instruction on **basic skills** they will need for the **rest of their lives**.

The adverse outcomes and disparate rates based on gender and racial demographics has led to a movement to abandon exclusionary discipline policies in favor of more effective, less punitive behavior management systems, including restorative justice, positive behavior interventions, and emphasis on socioemotional learning. However, not all administrators and schools have made this transition, and many students – including elementary-aged children – across the North Carolina and the nation are still subject to suspensions and their adverse outcomes.

Data

Quantitative Analysis: Publicly available data sources

This project analyzed school-level suspension rates from the latest publicly available data from the 2018-2019 school year. By focusing on schools as the level of analysis, I was able to identify differences in rates among schools within the same county. Additionally, I was also able to identify specific school personnel at schools with lower than expected discipline rates. **Appendix B** contains information on the sources utilized for this project.

To analyze differences across rural and urban counties, I created a "rural/urban" classification based on the county the school is located in and the county's classification on the 2010 Decennial Census. The goal of this classification was to account for potential different student needs or available resources and subsequent disciplinary rates across urban and rural schools. Based on the census, the 100 counties in North Carolina have the following rural/urban classifications:

14 counties have **100%** of the population living in **Rural areas**
50 counties have between **50-99.9%** of the population living in **Rural areas**
36 counties have over **50.1%** of the population living in **Urban areas**

For this project, counties with between 50 to 100 percent of the population living in rural areas are classified as "rural", and those with 50.1 percent or more living in urban areas as "urban".

Population of schools

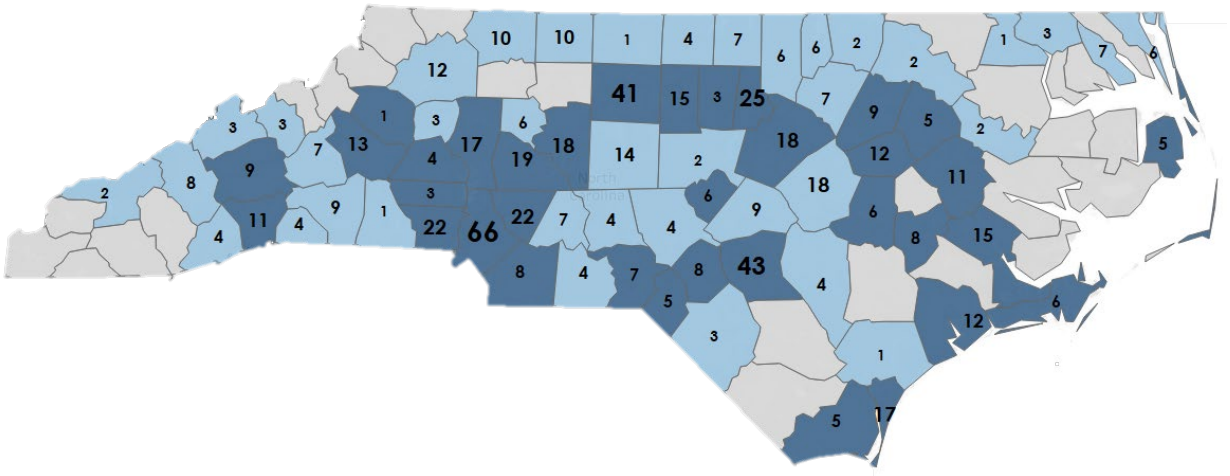
This study analyzed public elementary schools that follow the "traditional" school calendar (not year-round) and are qualified as a "regular" school (not alternative). Additionally, I only analyzed schools that provide pre-k or kindergarten through 5th grade, not schools that offer 6th grade or only a few of the elementary school grades. These restrictions minimized the differences in

school structure between the school units. With these restrictions, the population of interest included 701 elementary schools, which is about 54 percent of all elementary schools in the state.

School characteristics

This project analyzed ISS and short-term OSS suspension (STS) rates at 701 elementary schools located in 73 counties across North Carolina. Of these counties, 38 were rural and contained 206 schools, while the 35 urban counties included 492 schools (see **Figure 1**). Only 10 (4.8 percent) of the rural schools are located in "very rural" counties based on the Census Bureau's classification.

Figure 1: Number of schools per county included in research
Of the 73 counties included in this project, 38 classified as **Rural** and 35 as **Urban**



The 701 schools had a total population of 364,539 students, with about 52 percent identifying as male. The majority of the student population was white (47 percent), followed by Black (25 percent) and Hispanic (19 percent). About 81 percent (566 schools) classified as Title 1.[2]

This project confirms that suspensions are not uncommon at the elementary-age level in North Carolina. Of all 701 schools included in this project, 73 percent of the schools had ISS rates above zero. STS rates were on average higher, and about 98 percent of the schools had an STS rate above zero. Long-term out-of-school suspension (LTS) rates were rare within this population of

[2] According to the U.S. Department of Education, Title 1 Schools serve high numbers or high percentages of children from low-income families.

schools – almost 99 percent of schools reported an LTS rate of zero. It is important to note that this project analyzed rates, not absolute numbers of suspensions per school, meaning that schools with a rate of zero could still have given students ISS, STS, or LTS.

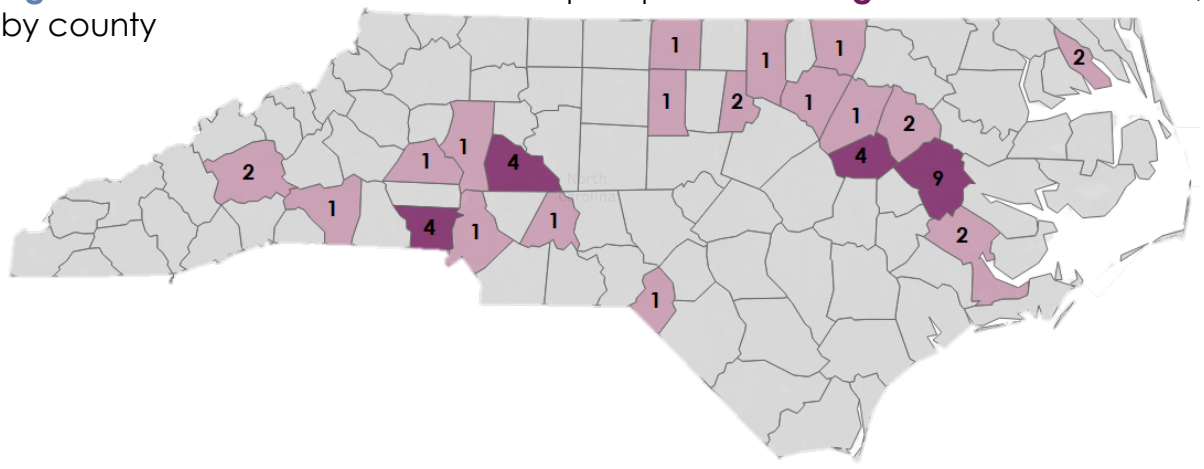
LTS Rates

In the 701 schools used for this analysis, only 10 schools had a long-term suspension rate above zero (1.4 percent). Given this low rate, this project only utilized ISS and STS rates for subsequent analyses. However, it is worth nothing that a few of the schools with the highest ISS and STS rates also had LTS rates above zero, including schools in Granville and Pitt County.

Schools with highest rates of ISS and STS

Forty-three schools (37 percent) were in the highest 15 percent for both ISS and STS rates, indicating that a considerable portion of schools have high rates of both ISS and STS. This mitigates concerns that ISS and STS rates are substitutes, or that schools with lower ISS rates manage to do so by utilizing STS at higher rates, or vice versa. The schools within the highest 15 percent for both ISS and STS rates are located in 21 counties, of which 80 percent were urban. While most counties only had one or two schools within this subset of schools with high rates, Pitt County had 9 schools, and Gaston, Rowan, and Wilson counties each had 4 schools (see **Figure 2**). Notably, Pitt County is among the counties with highest STS rates for grades 9-13 as well.[18]

Figure 2: Number of Schools in the top 15 percent for **highest** ISS and STS rates, by county



Schools in the top 15 percent of highest rates had higher average percentages of Black students and economically disadvantaged students (EDS) at 51 percent and 65 percent, respectively. All 43 schools are classified as Title 1. Average ISS and STS rates for Black students were higher than respective rates for all students and for only white students.

Urban-Rural variation

Schools in urban counties had a higher average rate for both ISS and STS compared to rural counties. Pitt County was among the top three urban counties for highest ISS and STS rates, while Orange County was among the lowest five counties for both. There was considerable variation among the rural counties with the lowest and highest ISS and STS rates. In both the rural and urban subset population of schools, the vast majority (about 70 percent) of schools had higher STS rates compared to ISS, meaning schools often rely on removing students form schools rather than simply from the classroom. See **Appendix C** for a full list of county-level average ISS and STS rates.

Urban schools had higher rates per 1,000 students

	Urban	Rural
ISS	**55**	**47**
STS	**92**	**75**

Methods

This project sought to understand what policies elementary school administrations in North Carolina utilize to enforce appropriate student conduct in an equitable, effective manner. To facilitate this process, this project used a mixed method approach to 1) identify schools with lower than expected exclusionary discipline rates in both rural and urban areas, and 2) attempt to interview personnel at these schools to learn about policies they employ to address student discipline.

Step 1: Quantitative analysis

To identify schools with lower than expected ISS and STS rates, I ran regression and prediction models in the free, open-sourced coding platform R Studio. First, I ran regression models for ISS and STS rates individually. Both models regressed school-level rates per 1,000 students on

the percentage of Black students, percent of White students, percent of EDS students, and total number of students (a proxy variable for school size).

Next, I ran predictive models for ISS and STS rates by using the regression model to predict each school's expected level of ISS and STS rates based on all observable characteristics included in the model (percent of Black and white students, percent of economically disadvantaged students, and school size). This model is based on existing literature demonstrating disparate suspension rates for Black students living in North Carolina.

Finally, I compared the predictive model suspension rates to the actual suspension rates for each school for both ISS and STS. Using this comparison, I identified schools with the greatest difference between predicted and actual rates, which provided schools that had lower than expected rates based on observable characteristics accounted for within the model. To avoid analyzing schools with low ISS rates but high STS rates or vice versa, I identified schools with lower than expected rates for both ISS and STS. The threshold for schools included in the qualitative analysis was 15 percent, which resulted in 47 schools with both lower than expected ISS and STS rates.

Step 2: Qualitative Analysis

The goal of the qualitative analysis was to understand policies that school administrators employ to reduce rates of student suspensions and attain more equitable student outcomes. To accomplish this goal, I planned to interview principals and potentially teachers at the schools identified in the quantitative analysis.

To prepare for the interviews, I created a list of questions (found in **Appendix D**) targeting specific school-level policies related to discipline and preventative structures schools have in place to regulate student behavior. These questions were created with support from Sanford School of Public

Policy Professor Christina Gibson-Davis. I also conducted three practice interviews – two with current elementary school teachers from North Carolina, and one with a former 3rd grade teacher.

Interview protocol

After identifying the schools with lower than expected discipline rates, I emailed the principal at each of the schools. Given the uncertainty and challenges schools were facing due to the COVID-19 pandemic, I used a tiered system to contact schools. My initial contact to schools went in two separate waves and provided a brief introduction about me, my connection with EducationNC, and a short description of this project. The email requested a 30-minute interview with staff to discuss their school discipline policies. If I did not receive a response from schools after two business days, I sent each principal a follow-up email. The follow-up email requested administrators to provide me their availability for a 30-minute interview with me if they are able to help me with this project.

After the first round of email requests and follow-ups, I received only one response, and was ultimately unable to schedule an interview with this principal. At this time, I expanded my analysis from the original 10 percent benchmark to include all schools within the top 15 percent lower than expected rates for ISS and STS. Including this additional 5 percent of the 701 schools resulted in an additional 22 schools to contact. I used the same system to email these schools. Expanding my population of interest resulted in 2 additional principals agreeing to participate in the study.

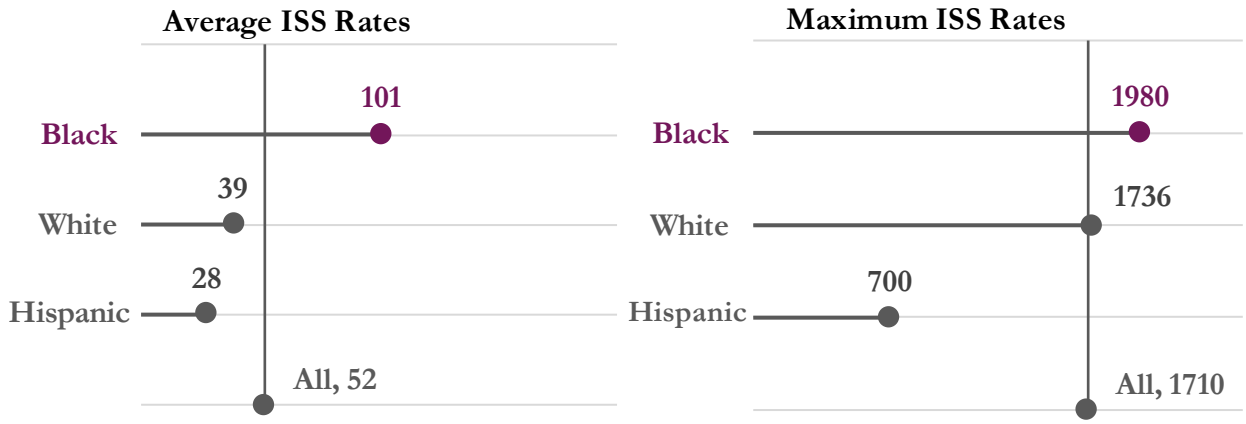
Results

Analysis of the 701 schools shows considerable disparities along racial and gender demographics, with both males and Black students having higher suspension rates. While schools with lower than expected rates had considerably lower rates, disparities along racial lines persisted. **Appendix E** contains the school names and locations for the population of schools with lower than expected rates.

ISS rate disparities by race and gender

Within the entire population of schools, only 26 percent (187 schools) had an ISS rate of zero. ISS rates were considerably higher for Black students compared to white and Hispanic students and to the rates for all student groups (see **Figure 3**). Male students also had higher average suspension rate at 78.0 suspensions per 1,000 students, compared to 23.9 for female students.

Figure 3: Average and Maximum ISS rates per 1,000 students were considerably higher for **Black** students compared to **white** and **Hispanic** students



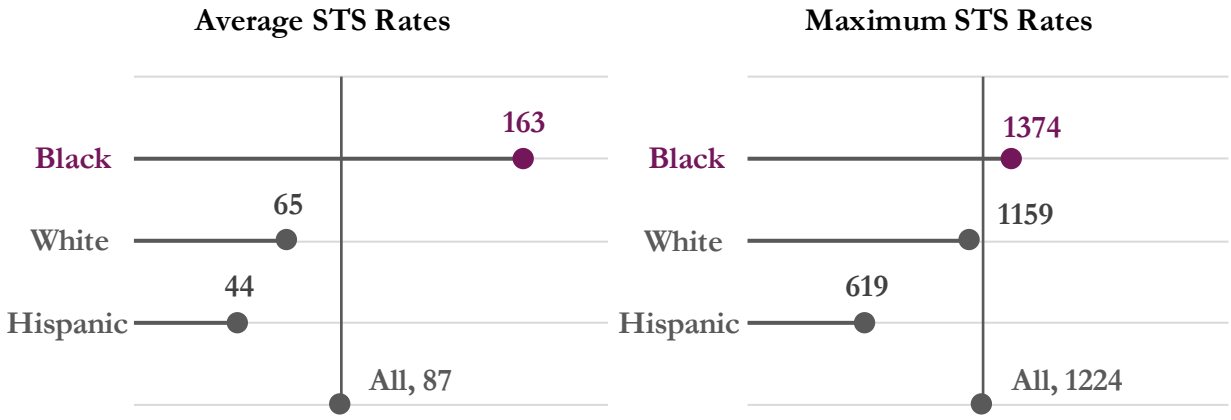
The regression model for ISS rates found that schools with higher percentages of black students enrolled have significantly higher rates of ISS – one percentage point increase in the percent of Black students at a school is associated with a 170.3 increase in suspensions per 1,000 students. Notably, school size is not a significant predictor of ISS rates within this model. **Table 2** in **Appendix F** shows the regression outputs for ISS rates.

STS rate disparities by race and gender

STS rates were considerably higher than ISS rates, with an average of 87 suspensions per 1,000 students compared to 52 suspensions for ISS. However, as with ISS rates, the average STS rate for male students is considerably higher compared to female students, with respective rates of 130.0 and 36.8 suspensions per 1,000 students. Additionally, the STS rates show similar racial disparities,

with Black students having a higher average STS rate compared to rates for white, Hispanic, and all students (see Figure 4). Only 2.3 percent (16 schools) had an STS rate of zero.

Figure 4: STS rates per 1,000 students displayed similar disparities to ISS rates, with higher average and maximum STS rates for **Black** students



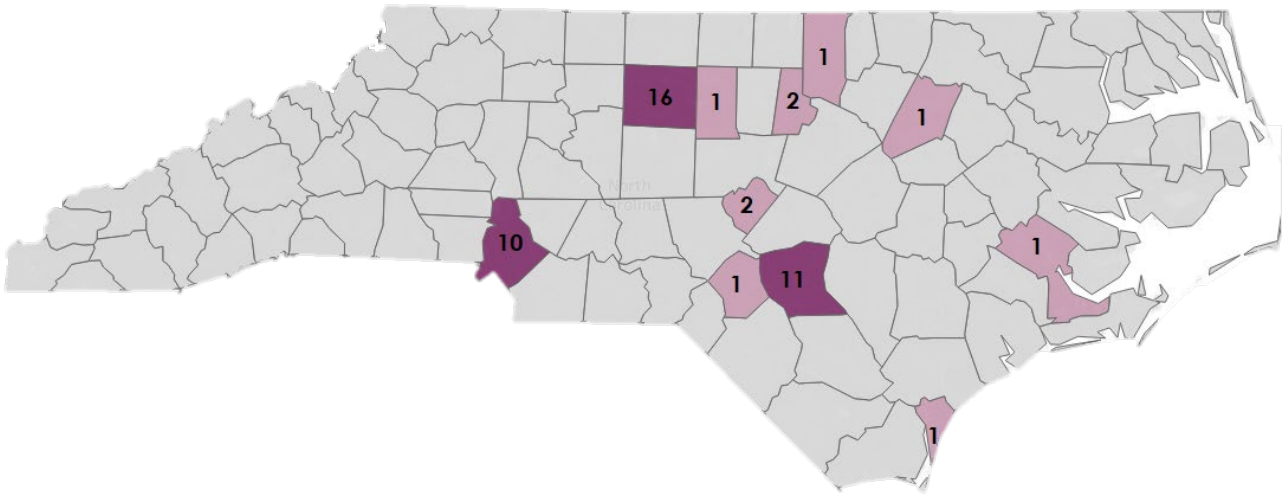
The STS regression model also shows that the variables used in the regression model significantly predict higher rates of suspension. As with ISS, a 1 percentage point increase in Black students is significantly associated with an increase of STS rates by 290.3 suspensions per 1,000 students. Unlike the ISS model, a higher percentage of economically disadvantaged students is associated with an increase in suspensions, and this variable is highly significant.. The STS model shows that an additional student is associated with a decrease in STS rates, though at a very small level. **Table 3** in **Appendix F** shows the regression output for the STS model.

Schools with lower than expected rates

To identify schools to interview for the second phase of my study, I compared the predicted coefficient with the actual observed rate of suspensions for each school for ISS and STS. The population of interest included the top 15 percent of schools with lower than expected rates of suspension for both ISS and STS rates. This analysis identified 47 schools whose actual rates were lower than their predicted rates for both ISS and STS rates. Notably, these schools are only located

in 11 counties across the state, with the majority in Guilford, Cumberland, and Mecklenburg counties (see Figure 5). Notably, all schools in Cumberland County had an ISS rate of zero.

Figure 5: Schools in the top 15% of **lower than expected** rates for both ISS and STS were in **11 counties,** with the majority of schools in **Guilford, Cumberland, and Mecklenburg counties**

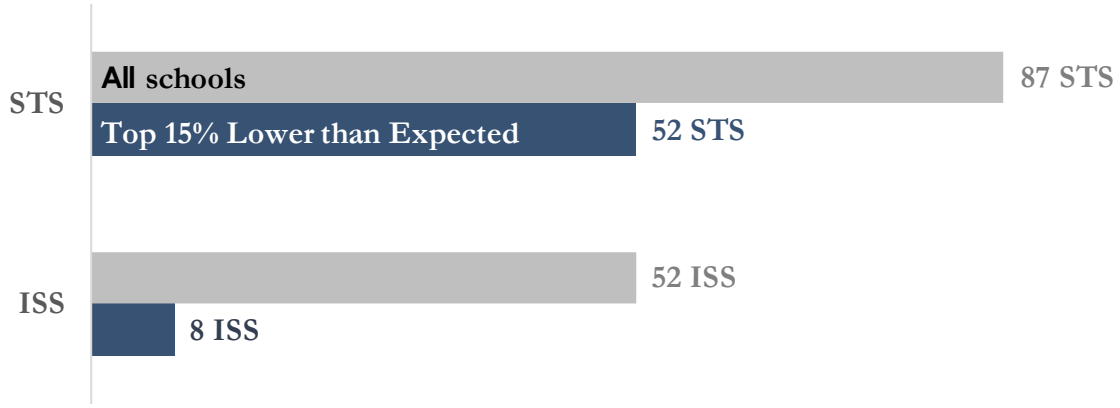


The 47 included schools have an average population of 477 students, and the average percentage of economically disadvantaged students is about 68 percent, which is higher than the average for all schools in the analysis. This population of schools also had a considerably higher average percent of Black students at 61 percent, compared to an average of 25 percent for the entire population. While the 701 schools had an average white student population of 48 percent, the schools with lower than expected rates had an average of about 13 percent white students.

Of these 47 schools, only one is located in a rural county – Joe Toler-Oak Hill Elementary in Granville County. This is particularly notable because as a whole, Granville county had the highest rural county-level ISS rate at 328.3 suspensions per 1,000 students. Comparably, Joe-Toler Oak Elementary had an ISS rate of zero suspensions, and had the lowest STS rate of the 6 schools included from Granville County. Despite having the second-highest percentage of Black students, the school's ISS rate for Black students only was one the lowest in the county at zero suspensions.

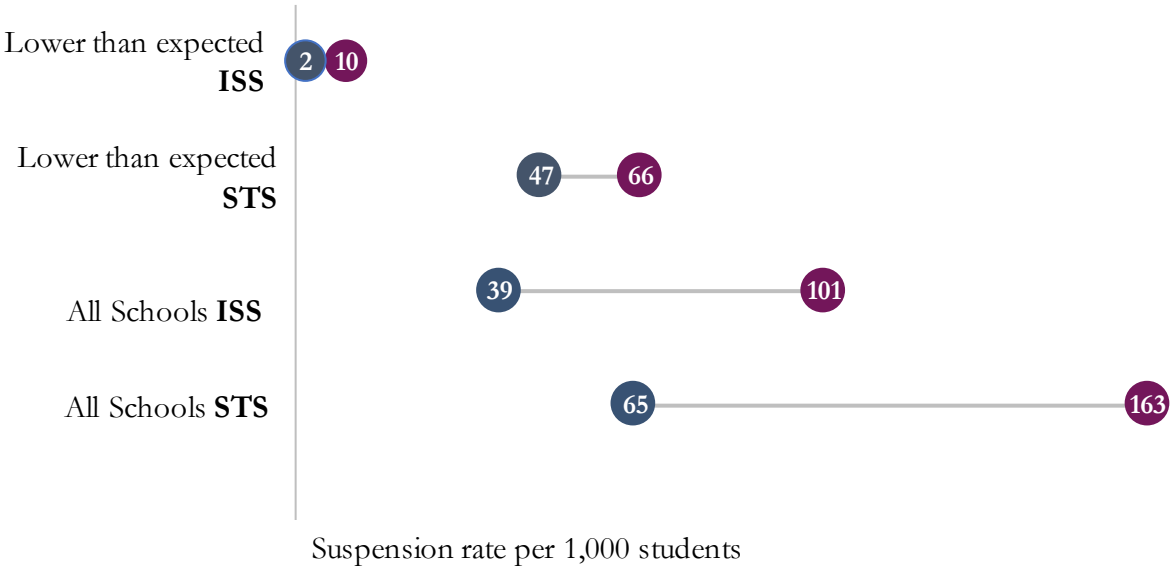
This subset of schools also had considerably lower average ISS and STS rates, at 7.45 and 52.4 suspensions per 1,000 students, respectively (see Figure 6).

Figure 6: The **schools with lower than expected rates** had lower average STS and ISS rates out of 1,00 students compared to the **entire population of schools**



However, even within the population of schools with lower than expected rates, the gap between white and Black students persisted. Black students had higher average ISS and STS rates, though the gap was smaller than in the population of 701 schools (see Figure 7).

Figure 7: The **gap** between average rates for **white** and **Black** students for both ISS and STS rates was smaller within the population of schools with lower than expected rates compared to average rates for all 701 schools



Significant county-level variation in ISS and STS rates

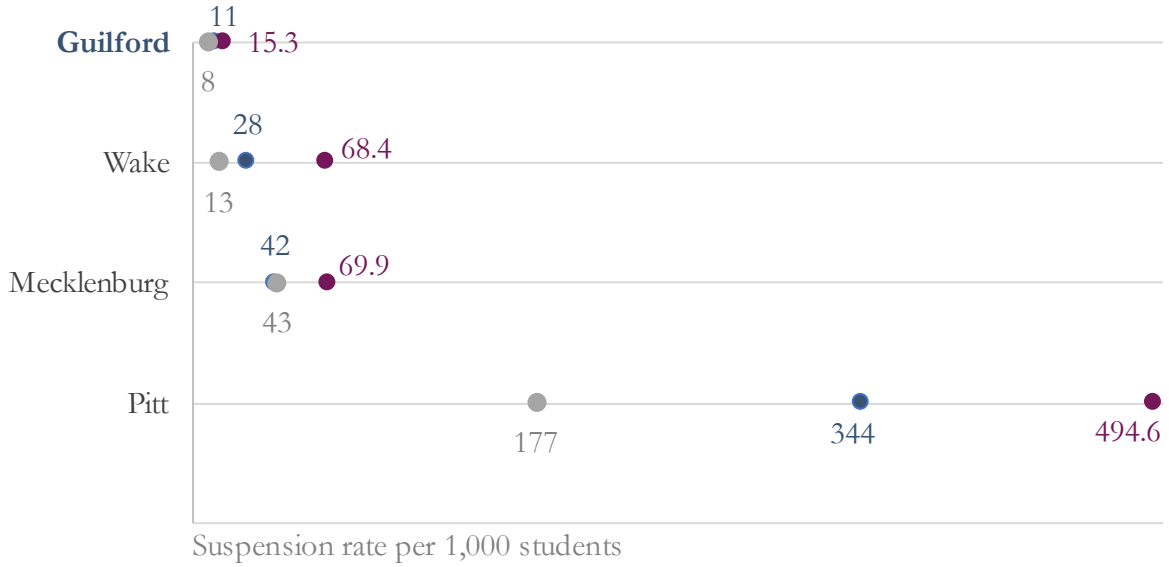
To understand what policies schools used to obtain lower than expected disciplinary rates, I contacted the principal at each of the 47 schools identified in the quantitative analysis. Unfortunately, given the uncertain and stressful timeframe during which this project was conducted due to the COVID-19 pandemic, the response rate was particularly low. I conducted two interviews with schools in Guilford County. To supplement the information learned from the two interviews, I compared county-level suspension rates within this county to the two largest counties, Wake and Mecklenburg, along with Pitt County, as this county had the highest number of schools within the population of schools with the highest rates of ISS and STS.

Guilford County has lower rates and smaller gaps between populations

Guilford is the 3rd largest school district in North Carolina and one of the top 50 largest districts across the county. The district generally serves over 72,000 students across 126 schools, 68 of which are elementary schools. Guilford School District also has more low-performing schools than any other district in the state, though they working to improve these schools along with eradicate achievement gaps across race, ethnicity, socioeconomic status, disability, gender, and ELS status. Superintendent Dr. Sharon L. Contreras has led the district since 2016. Dr. Contreras has a history of improving low-income schools and was one of the Biden administration's finalists for education secretary.[19] She was recognized as the Superintendent of the Year in 2019 by the North Carolina Parent Teacher Association and as the 2020 Piedmont Triad Superintendent of the Year.[20]

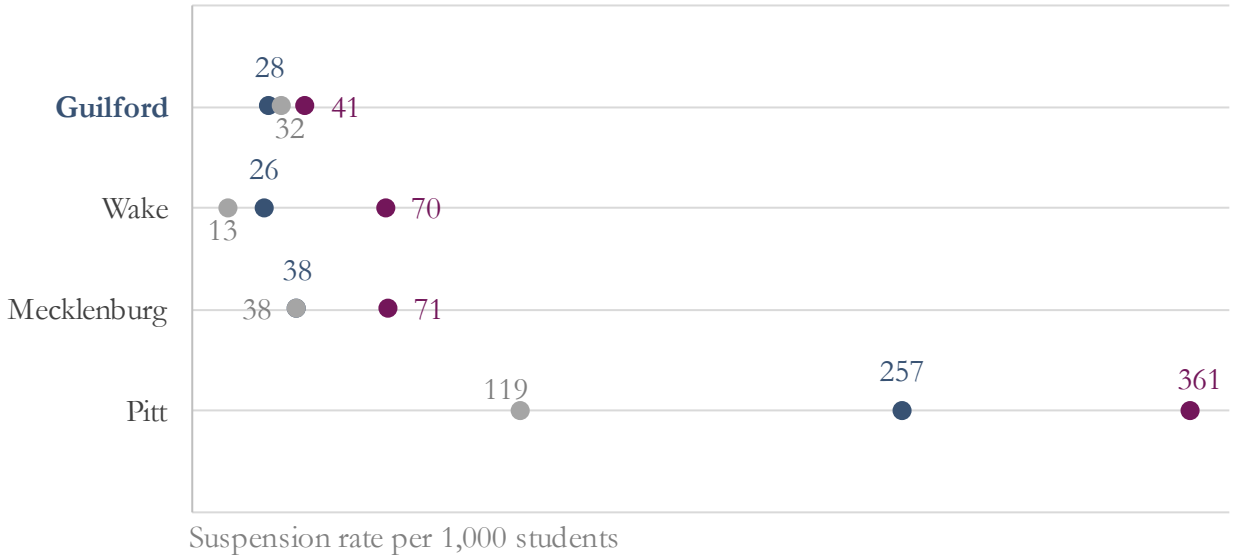
Of the three largest districts in the state, Guilford had the lowest ISS rates for all students, Black students, White students, and economically disadvantaged students, as is shown in **Figure 8**. Notably, the 41 schools included in this study from Guilford County had a higher average of students who were economically disadvantaged at 54 percent, compared to an average of about 41 percent for the 18 Wake County schools and 66 Mecklenburg County Schools.

Figure 8: Guilford County had the lowest average **ISS** rates for **all students**, **white students**, and for **Black students**, and the smallest gap between the 3 groups.



Guilford County also had the lowest STS rates for Black students, and the smallest gap between suspension rates for all students, Black students, and white students. Wake County had one of the lowest county-level STS rates for all students, and the lowest rates of suspension for white students compared to the other 3 counties (see Figure 9).

Figure 9: Guilford County had the lowest average **STS** rates for **Black students** and the smallest gaps between rates for **all students**, **Black students**, and **white students.**



Pitt County had considerably higher rates across both metrics compared to Guilford, Wake, and Mecklenburg counties. While the average ISS rate per 1,000 students for the three other counties was below 42, Pitt County's average ISS rate was over 8 times higher at 344.1 suspensions. Additionally, while all three other counties had at least two schools with an ISS rate of 0, Pitt County's lowest school-level ISS rate was 99 suspensions per 1,000 students. The three other counties all had STS rates below 40 suspensions, compared to Pitt's 6 times higher average of 256.9 suspensions. Notably, only 11 schools were included from Pitt (of the 16 total), and the county had an average percent of EDS at 69 percent, which was relatively higher than the other counties. However, the considerably higher rates in this country are still noteworthy and concerning.

Interviews with administrators in Guilford County

While I was unable to interview as many school personnel as initially planned, the two interviews conducted both demonstrate the importance of centering equity and student outcomes in school discipline policies.

Madison Elementary – McLeansville, Guilford County[21]

At Madison Elementary School, the motto "learning is paramount" sets the tone for everything, including discipline policies. Students start each day with a morning announcement from the principal that focuses on a specific character trait. In this announcement, students learn about a desirable character trait, why it is important, and how they can demonstrate it throughout the day. Rather than rely on exclusionary discipline, teachers and administrators build strong relationships with students as a preventative mechanism for student misconduct. The school's guidance counselor also provides additional support to students who need it. Teachers ensure that students understand expectations by teaching and modeling expected behaviors to students, and use Class Dojo to reward positive behavior. As a result, suspensions are rarely used at Madison Elementary.

Foust Elementary School – Greensboro, Guilford County[22]

At Foust Elementary School, students **SOAR**: **S**how Discipline, **O**vercome Obstacles, **A**ct Responsibly, and **R**espect Others. At the beginning of the year, teachers and students co-create contracts, where students are given the opportunity to communicate how they want to be treated at school. The also contracts contain behavior expectations for students and are posted in the classroom, which allows teachers refer back to them when needed and ensures students clearly understand what is expected of them. Each school day starts with a classroom morning meeting, where teachers discuss character traits and how that behavior looks. Before exclusionary discipline measures are taken, students experience a variety of interventions, including a warning, redirection, parent contact, and a private conversation between student and teacher. If needed, teaching assistants can watch a classroom of students so teachers can take a walk with students who are displaying undesirable behavior, which shows students that teachers are trying to work with them, not just give them a consequence. For more extreme behavior, Foust administrators bring parents into the school to have restorative conversations, and sometimes for a "reverse suspension" – rather than send the child home, parents spend the day with their child.

Discussion

This project found considerable variation in reported rates of exclusionary discipline across public elementary schools in North Carolina. While some schools rely very little on suspensions to manage student behavior, other schools have remarkably high rates of both in-school and out-of-school suspensions. As a result, some students are more likely to experience the adverse outcomes associated with exclusionary discipline, such as lower academic achievement and increased likelihood of antisocial, undesired behavior.

This project's analysis also reinforces evidence of disparate discipline rates by race in North Carolina at the elementary school level. Black students had higher average rates of both ISS and STS

rates compared to the respective rate for white students and for all students. Furthermore, the regression models show that schools with higher percentages of Black students are associated with higher suspension rates. Disparities between white and Black students persisted even within the population of schools with lower than expected rates of exclusionary discipline.

Within the top 15 percent of schools with lower than expected rates of ISS and STS, 47 schools had considerably lower discipline rates. This project shows that there are potential policies and procedures in place at elementary schools across the state that schools could use to reduce their suspension rates and subsequently improve student outcomes. The population of lower than expected schools was primarily composed of schools from 3 counties, all of which are urban and some of the largest districts in the state.

While a low response rate for principal interviews prevents me from drawing robust conclusions on what policies schools with lower than expected rates of suspensions utilize, both schools interviewed identified common practices utilized to enforce appropriate student conduct in an effective, equitable manner. Both schools prioritize forming strong relationships with students and utilizing several other interventions before suspending students. Both administrators also discussed starting each day, either through announcements or morning meetings, with a focus on character traits and demonstrating to students positive behavioral traits.

Future Work

Future research should continue to explore what policies and administrative characteristics are best suited to reduce suspension rates for all students, and particularly for those who are disproportionately affected. Through understanding what policies currently work across the state, we can provide guidance to other schools with higher rates of exclusionary discipline. Through utilizing more effective discipline practices, we can improve outcomes for all students across North Carolina.

Appendix A: Suspension rate disparities at the national level

Demographic Group	Percent of Students Enrolled	Percent of public school students receiving 1+ ISS	Percent of public school students receiving 1+OSS	Takeaways
Black Students	**15**	33	41	Disproportionately **high** rates
White Students	**49**	39	32	Lower suspension rates than enrollment percentage
Hispanic Students	**26**	23	21.3	Lower suspension rates than enrollment percentage
Students with Disabilities (IDEA and Section 504)	**15**	23	10.5	Disproportionately **high** rates for ISS, low for OSS
Males	**51**	69	70	Disproportionately **high** rates
Black Males	**8**	30	38	Disproportionately **high** rates
Females	**49**	31	30	Lower suspension rates than enrollment percentage

Source: Author's Analysis of Office of Civil Rights Data, 2015-2016

Appendix B: Publicly available sources used for this project

Data for this project came from two sources:

1. **The North Carolina Department of Public Instruction's** School Report Cards: suspension rates per 1,000 students for the entire school population and rates for demographic subgroups, including males, females, Black students, and white students.
2. **The National Center for Education Statistic**) Elementary/Secondary Information System: school demographic data, including number of students by race and gender.

Merging these datasets provided me with:

Student demographic information including the number (and percentage) of male and female students and students by race and ethnicity (American Indian, Hispanic, Black, white, Pacific Islander, and multiracial students) at each school.

Total number of students enrolled, and the number of students enrolled in each grade level.

ISS, short-term out-of-school suspensions (STS), and long-term out-of-school suspension (LTS) rates per 1,000 students for the entire school population and per each demographic group including for students with disabilities, economically disadvantaged students (EDS), and English Learners for each school.

Basic school information including grade range, school name, county, Title I status, and percent of EDS.

Appendix C: County-level ISS and STS rates, by rural/urban classification

County	Number of Schools	Average ISS Rate	Average STS Rate	Rural/Urban Classification
Alexander	3	60.8	27.1	Rural
Anson	4	0	197	Rural
Caswell	4	18.6	120	Rural
Chatham	2	31.5	19	Rural
Cleveland	1	66.7	89.7	Rural
Currituck	6	62.6	71.6	Rural
Davie	6	58	33.2	Rural
Franklin	7	93.3	125.4	Rural
Gates	3	28.5	114.1	Rural
Granville	6	328.3	129.6	Rural
Halifax	2	167.1	97.3	Rural
Harnett	9	20.6	47	Rural
Haywood	8	40.1	45.7	Rural
Hertford	1	56.3	222.5	Rural
Johnston	18	48.7	54.5	Rural
Madison	3	23.4	14.8	Rural
Martin	2	20.2	175.9	Rural
McDowell	7	29.3	1.9	Rural
Montgomery	4	43.5	128	Rural
Moore	4	11.8	23.4	Rural
Pasquotank	7	105.7	126.7	Rural
Pender	1	16.1	70.4	Rural
Person	7	64.6	119.9	Rural
Polk	4	12.3	16	Rural
Randolph	14	25.6	26.8	Rural
Robeson	3	0	98.1	Rural
Rockingham	1	130.3	84.3	Rural
Rutherford	9	41.3	72.2	Rural
Sampson	4	34.7	32.2	Rural
Stanly	7	60.2	93.9	Rural
Stokes	10	8.3	40	Rural
Surry	10	13.1	37.6	Rural
Swain	2	14.1	10	Rural
Transylvania	4	15.7	44	Rural
Vance	6	6.6	349.7	Rural
Warren	2	0	250	Rural
Wilkes	12	45.9	25.4	Rural
Yancey	3	26.5	26.5	Rural
Alamance	15	29.8	73	Urban

Brunswick	5	28.1	62.6	Urban
Buncombe	9	48.6	77	Urban
Burke	13	50.7	45.3	Urban
Cabarrus	22	38.7	72.9	Urban
Caldwell	1	75.5	13	Urban
Carteret County	6	81.4	70.4	Urban
Catawba	4	30.8	82.2	Urban
Craven	15	28.4	170	Urban
Cumberland	43	0	115.5	Urban
Dare	5	21.1	12.8	Urban
Davidson	18	29.5	38.6	Urban
Durham	25	90.47	71.3	Urban
Edgecombe	5	189.3	264.4	Urban
Gaston	22	112.1	204.1	Urban
Guilford	41	10.6	27.7	Urban
Henderson	11	1.4	38.7	Urban
Hoke	8	16.9	97.6	Urban
Iredell	17	139.4	66.5	Urban
Lee	6	249.7	97.1	Urban
Lenoir	8	34.5	115.7	Urban
Lincoln	3	9.4	105.8	Urban
Mecklenburg	66	41.6	38.2	Urban
Nash	9	38.3	141.5	Urban
New Hanover	17	14.8	68.3	Urban
Onslow County	12	34.8	60	Urban
Orange	3	8.4	26.5	Urban
Pitt	11	344.1	256.9	Urban
Richmond	7	0	183.5	Urban
Rowan	19	130.4	163.5	Urban
Scotland	5	129.5	232.9	Urban
Union	8	12.7	31.1	Urban
Wake County	18	27.8	26.3	Urban
Wayne	6	23.2	91.8	Urban
Wilson	12	55.1	319.5	Urban

Appendix D: Interview questions

Introduction

Thank you for agreeing to participate in my research study. As I stated in my email to you, I am interested in learning about the student behavior management policies and procedures at [school_name]. All questions are optional. Please answer the questions as it pertains to normal in-classroom instruction, not including changes due to the COVID-19 pandemic.

Is it okay if I record this call? The recording will only be used to help me write my analysis and will not be shared with anyone.

Do you have any questions before we begin?

Personnel Questions

1. How long have you been the principal at [school_name]?

2. [*If not found in bio*:] Is this the first school for which you have been the principal? Before you became a principal, were you a teacher?
3. On a scale from 1 to 10, with 1 being the lowest and 10 being the highest, how much of a priority do think you student behavior management is at [school_name]? To you personally? Why do you say that?

4. How many school counselors or additional student support personnel does [school_name] have? (e.g., behavior specialist, social worker)

Discipline Policies

1. What policies does [school_name] have related to school discipline?
    a. If PBIS, what does that look like at your school?
    b. Do you have school-wide expectations at your school?
    c. Does [school_name] have a universal behavior management system, or do teachers have discretion about what policies they implement in their classrooms?
2. What is your policy for in-school suspensions? What behaviors might lead to a student receiving an in-school suspension?
3. What is your policy for out-of-school suspensions? What behaviors might lead to OSS?
4. How effective do you think these policies have been at curbing student misbehavior?
5. What led you to implement the student management policies at [school_name]?

Final Question

1. Is there anything else about your school's student behavior management that you think I missed, or I did not ask about?
2. Are there any teachers at your school who you think would be able to provide me with more context about your school's policies?

Conclusion/Thank you:

That is all the questions I have for you today. Thank you for taking the time to talk with me today, I really appreciate it. I hope you have a good rest of the school year, and please feel free to reach out if you have any questions or concerns. Thank you again!

Possible follow-up questions:

1. Do you have any socioemotional curriculum for students at [school_name]?
2. Are there any trainings that you or your teachers attend related to student behavior management? If so, how frequently?
3. Has your school tried other policies that were less effective?
4. Do you believe teachers support this policy?

Appendix E: Schools in top 15% of lower than expected ISS and STS rates (alphabetic order)

School Name	City	County
Bluford Elementary	Greensboro	Guilford
Brentwood Elementary	Fayetteville	Cumberland
Brightwood Elementary	Greensboro	Guilford
Cliffdale Elementary	Fayetteville	Cumberland
College Lakes Elementary	Fayetteville	Cumberland
Cumberland Road Elementary	Fayetteville	Cumberland
David Cox Road Elementary	Charlotte	Mecklenburg
Elizabeth M Cashwell Elementary	Fayetteville	Cumberland
Elizabeth Traditional Elementary	Charlotte	Mecklenburg
Erwin Montessori	Greensboro	Guilford
First Ward Creative Arts Academy	Charlotte	Mecklenburg
Forest Hills Global Elementary	Wilmington	New Hanover
Gillespie Park Elementary	Greensboro	Guilford
Harvey R Newlin	Burlington	Alamance
Highland Renaissance Academy	Charlotte	Mecklenburg
Irving Park Elementary	Greensboro	Guilford
James W Smith Elementary	Cove City	Graven
Jamestown Elementary	Jamestown	Guilford
Joe Toler-Oak Hill Elementary	Oxford	Granville
Julies I Foust Elementary	Greensboro	Guilford
Kirman Park Elementary	High Point	Guilford
Lake Rim Elementary	Fayetteville	Cumberland
Lucile Sounders Elementary	Fayetteville	Cumberland
M H Hubbard Elementary	Battleboro	Nash
Madison Elementary	McLeansville	Guilford
Mallard Creek Elementary	Charlotte	Mecklenburg
Margaret Willis Elementary	Fayetteville	Cumberland
Mary MacArthur Elementary	Fayetteville	Cumberland
Montlieu Academy of Technology	High Point	Guilford
New Century International Elementary	Fayetteville	Cumberland
Northwest Elementary	Kinston	Lenoir
Oak Grove Elementary	Durham	Durham
Oakdale Elementary	Charlotte	Mecklenburg
Peeler Open Elementary	Greensboro	Guilford
Rankin Elementary	Greensboro	Guilford

Reedy Fork Elementary	Greensboro	Guilford
Reid Park Academy	Charlotte	Mecklenburg
Ronald E. McNair Elementary	Browns Sun	Guilford
Southeast Elementary	Kinston	Lenoir
Spring Valley Elementary	Durham	Durham
Statesville Road Elementary	Charlotte	Mecklenburg
Union Hill Elementary	High Point	Guilford
University Meadows Elementary	Charlotte	Mecklenburg
Upchurch Elementary	Raeford	Hoke
Villa Heights Elementary	Charlotte	Mecklenburg
Wiley Elementary	Greensboro	Guilford
William H Owen Elementary	Fayetteville	Cumberland

Appendix F: Regression outputs for ISS and STS rates

Table 2: Schools with higher percentages of Black students were **significantly** more likely to have higher ISS rates, along with higher percentages of EDS.

	Estimate	**Standard Error**	**t-value**	**p-value**
Intercept	-102.1	41.58	-2.5	0.01429 *
Percent Black students	170.2	39.71	4.3	**2.06e-05 *****
Percent White Students	75.6	34.72	2.1	0.02979 *
Percent EDS	1.03	0.32	3.3	.00118 **
Total # of students	0.04	0.02	1.5	0.12201

NOTE: Significance codes: 0: ***; 0.001: **; 0.01: *

Table 3: The STS regression model found an increase of the percentage of Black students, percent of EDS, and school size are all **significantly** associated with an increase in STS rates.

	Estimate	Standard Error	T value	p-value
Intercept	-47.40	37.71	-1.45	0.14773
Percent Black students	290.30	31.24	9.29	**< 2e-16 *****
Percent White students	67.68	27.31	2.48	0.01345 *
Percent EDS	1.05	0.25	4.22	**2.82e-05 *****
Total # of students	-0.06	0.02	-2.81	**0.00509 ** **

NOTE: Significance codes: 0: ***; 0.001: **; 0.01: *

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