OUTSTANDING GRADUATE STUDENT RESEARCH PAPER AWARD

Disrupting the Pipeline: An Investigation into Suspension in South Louisiana's Rural Public Schools

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Abstract

Previous research indicates that exclusionary discipline practices such as suspension lead to negative outcomes for students and disproportionately impact Black students, even though there is no evidence that Black students misbehave at rates greater than their peers. This study was conducted to examine suspension rates in rural public schools in Louisiana by comparing elementary and secondary schools and analyzing the relationship between the proportion of Black teachers and suspension rates. The data showed that suspension rates were higher in secondary schools than elementary schools and that a higher proportion of Black teachers was associated with lower suspension rates. These results indicate that more research is necessary into the factors impacting secondary suspension rates and that increasing a school's rate of Black teachers may be one tool for reducing suspension rates.

Keywords: suspension, Black teachers, rural schools

Overview of Subject

There is growing evidence that instead of correcting antisocial behavior, improving school climate, or improving long-term outcomes for students, school leaders' use of exclusionary discipline practices like suspension leads to negative outcomes like student dropout and increasing student interactions with the juvenile and adult criminal justice systems, especially and disproportionately for Black youth. In a study of public school students in Texas, students who experienced suspension or expulsion, especially those who experienced this repeatedly, were more likely to be held back a grade or drop out of school (Fabelo et al., 2011). In a study of a sample of counties in Missouri, researchers found that racially disproportionate out-of-school suspension rates were strongly linked to similarly racially disproportionate juvenile court referrals (Nicholson-Crotty, Birchmeier, & Valentine, 2009). Additionally, researchers found that students in Washington state who were suspended from or arrested at school were more likely to demonstrate antisocial behavior twelve months later (Hemphill, Toumbourou, Herrenkohl, McMorris, & Catalano, 2006). As society grapples with this school-to-prison pipeline, school leaders must be increasingly cognizant of disciplinary trends within their schools that may exacerbate this issue.

Researchers have suggested that Black students bear a disproportionate weight of this disciplinary burden, even as there is no compelling evidence that their behavior relative to their White peers merits it (Fabelo et al., 2011; Skiba et al., 2011; Skiba, Michael, Nardo, & Peterson, 2002). Skiba et al. (2002) studied middle-grade students in a large Midwestern city and found that Black students were more likely to be suspended than their White peers, even though there was no evidence that Black students engaged more frequently in disruptive behavior. In fact, Black students in this same study were more likely to receive office referrals for more subjective behaviors like disrespect and threat, while White students were more likely to receive office referrals for more objective events like smoking and vandalism (Skiba et al., 2002). Researchers studying a nationally representative sample of elementary and middle grade students found that Black students were 2.19 (elementary) to 3.78 (middle) times more likely to be referred to the office for problem behavior than their White peers. Once in the office, Black students were more likely than White students to be suspended out of school or expelled for similar offenses (Skiba et al., 2011). Researchers in Texas also found evidence that

this racially disproportionate use of exclusionary discipline may be driven more by teacher and administrator discretion than by any disproportionate rate of misbehavior or rule violations by Black students. Controlling for 83 different variables, these researchers found that a Black ninth grader had a 31 percent higher likelihood of experiencing a discretionary school disciplinary action than a similarly situated White peer. However, that same Black student was 24 percent less likely than a similarly situated White peer to experience a mandatory school disciplinary action required under state law for more objective violations such as weapons possession and arson (Fabelo et al., 2011).

These trends are only exacerbated when students move from the elementary to secondary level. A study of national data from the 2011-12 school year indicated that out of school suspension rates for all students grew from 2.6% in elementary schools to 10.1% in secondary schools, and out of school suspension rates for Black students grew from 7.6% in elementary schools to 23.2% in secondary schools (Losen, Hodson, Keith, Morrison, & Belway, 2015). Arcia (2007) found that sixth and seventh grade students in one district were significantly more likely to experience suspension if they attended a middle school than if they attended a K-8 school. This suggests that increases in school suspension rates in secondary schools may not be fully explained by students' ages alone, but rather may be influenced by school level configurations and practices generally utilized within those configurations.

Receiving instruction from a Black teacher may be one way to mitigate the disproportionate impact of exclusionary discipline practices on Black students. A national study of kindergarten and eighth grade students found that Black students at both age levels were rated by their teachers as poorer classroom citizens than their White peers. However, this trend did not continue when the teacher's race was considered. In fact, controlling for the race of the teacher, there was some indication that Black students' behavior was rated more favorably than their similarly situated White peers (Downey & Pribesh, 2004). In North Carolina, researchers found that exposure to same-race teachers was associated with reduced suspension rates for Black students, regardless of their age, gender, or socioeconomic status (Lindsay & Hart, 2017).

Despite these positive impacts, the rate of Black teachers continues to lag the rate of Black students in public schools in the United States. While 15.6 percent of children enrolled in public schools in the fall of 2013 were Black (U.S. Department of Education, 2015), only eight percent of teachers in those same schools in 2014 were Black (U.S. Department of Education, 2016). The issue is even more acute in rural communities and metro areas outside of inner cities and large suburbs. In these communities, only six percent of public school teachers are Black (U.S. Department of Education, 2016). Moreover, public schools are less likely to retain Black teachers when compared to their White counterparts. 78 percent of Black public school teachers remained in the same school from the 2011-12 school year to the 2012-13 school year, compared to 85% of their White peers (U.S. Department of Education, 2016). Deficits in hiring and retaining Black teachers in public schools in Louisiana are particularly evident, where the rate of Black teachers has decreased from 30 percent to 22 percent from 2002 to 2017 even as Black students account for 43 percent of public school enrollment in that state (Jones, 2018).

Rural public school administrators in Louisiana should consider this evidence with both grave concern and a spirit of inquiry. Considering the deleterious long-term impacts of exclusionary discipline practices (Fabelo et al., 2011; Hemphill et al., 2006; Nicholson-Crotty et al., 2009) and their disproportionate impact on Black students (Fabelo et al., 2011; Skiba et al., 2002, 2011), leaders seeking to disrupt the school-to-prison pipeline should consider reasonable, evidence-based approaches to reducing such practices in their schools. Even as hiring and retaining Black teachers has been a challenge both nationally (U.S. Department of Education, 2015, 2016) and in Louisiana (Jones, 2018), researchers (Downey & Pribesh, 2004; Lindsay & Hart, 2017) have suggested this may be an effective strategy for reducing school suspension rates. As such, school administrators should be interested in discovering if such an approach may be similarly effective in rural public schools in Louisiana. Considering the differences in suspension rates that have been observed nationally between elementary and secondary schools (Losen et al., 2015) and the suggestion of Arcia (2007) that this difference cannot necessarily be attributed to the age of students, rural public school administrators in Louisiana

should also be interested in determining if suspension rates at these two levels of schools differ in a significant way in their specific context.

Purpose of the Study

The purpose of this study was to further investigate how a school's level and rate of Black teachers impacts suspension rates in all 20 public elementary schools and 14 public secondary schools in six rural parishes within the Baton Rouge, Louisiana metropolitan statistical area. First, the researcher sought to determine if elementary and secondary schools in the area had different rates of suspension. Next, the researcher sought to determine what, if any, influence the rate of Black teachers had on suspension rates in schools, holding school level and rate of Black students constant. Specifically, the researcher sought to answer the following research questions:

1. Is there a statistically significant difference in suspension rates in rural secondary schools compared to rural elementary schools in the Baton Rouge area?
2. Holding school level and rate of Black students constant, to what degree is a school's rate of Black teachers related to school suspension rates in rural schools in the Baton Rouge area?

Research Procedures

The sample contained all 34 public school schools in six predominantly rural parishes in the Baton Rouge metropolitan statistical area. Publicly available data from the Louisiana Department of Education (LDOE) from the 2016-17 school year were utilized. Data were drawn from both the Data Center on the LDOE website and the Louisiana School Finder app (LDOE, 2017a, 2017b, 2017c). The variables for each school included in this study were school type (a categorical variable indicating elementary or secondary), the rate of Black students for the 2016-17 school year (a continuous variable measured as percentages), and the rate of Black teachers for the 2016-17 school year (a continuous variable measured as percentages). The dependent variable for each question was suspension rate, a continuous variable that indicated the percentage of the student body that experienced suspension as a disciplinary action during the 2016-17 school year. LDOE reports this rate for three different types of suspension: in-school, out-of-school, and alternative site. Because the schools in this study utilized these different types of suspension in decidedly different proportions, the highest of these three rates regardless of type was used to determine each school's suspension rate. Although this does not precisely identify the percentage of a given school's student body that experienced suspension, it is the most accurate measure available based on the data from LDOE.

The first research question was answered with an independent samples *t*-test. The dependent variable was suspension rate. The independent variable was school level. An independent samples *t*-test is conducted to determine if there is a statistically significant difference in a continuous dependent variable between two independent categorical groups when there is no overlap in membership and no need to control for a covariate or pretest data (Christopher, 2017). Here, the researcher was trying to determine if there was a statistically significant difference in overall suspension rates between elementary schools and secondary schools.

The second research question was answered with a multiple linear regression. The continuous dependent variable was suspension rate. Several predictor variables were used. Because school level was a categorical variable, a dummy variable was used. The reference group for school level was elementary compared to secondary. The other predictor variables (rate of Black students and rate of Black teachers) were continuous. A multiple linear regression is used to create a model to predict a continuous dependent variable using several independent variables when at least one of those independent variables is continuous (Boslaugh, 2012). Here, the predictor variable of interest was the rate of Black teachers. School level and rate of Black students were used as controls because research (Fabelo et al., 2011; Losen et al., 2015; Skiba et al., 2002, 2011) indicates these variables often share a relationship with school suspension rates.

Descriptive Results

Twenty schools in the sample were classified as elementary schools. These schools had grade configurations including Birth-1st, PK-2nd, PK-4th, PK-5th, PK-6th, PK-8th, 2nd-5th, 3rd-5th, 3rd-6th, and 4th-8th. Fourteen schools were classified as secondary schools. These schools had grade configurations including PK-12th, 6th-8th, 7th-12th, and 9th-12th. The rate of Black students ranged from 21.75% to 97.42%, with a mean of 61.75% and a standard deviation of 23.12%. The rate of Black teachers ranged from 0% to 91%, with a mean of 33.29% and a standard deviation of 24.33%. This means the average school in this sample had a substantially higher rate of Black students than Black teachers. The rate of suspension, or the highest rate among in-school suspension, out-of-school suspension, and alternative site suspension, ranged from 0.8% to 35.3%, with a mean of 15.33% and a standard deviation of 9.65%.

Inferential Results

First, an independent samples *t*-test was conducted to determine if there was a statistically significant difference in suspension rates between elementary schools and secondary schools in the sample. There was a statistically significant difference in suspension rates between elementary schools (M = 11.48, SD = 9.48) and secondary schools (M = 20.82, SD = 7.03); $t(32) = -3.127$, $p = .004$. Cohen's d was calculated as 1.12, meaning there was a large estimated effect size in suspension rates based on school level. This suggests that overall suspension rates at rural elementary schools in the Baton Rouge area are lower than overall suspension rates at rural secondary schools in the same area. In practical terms, an average secondary school in this sample with an enrollment of 500 students suspended 104 of those students during the 2016-17 school year, compared to 57 students suspended at an average elementary school of the same size.

Next, a multiple linear regression was conducted to predict a school's overall suspension rate based on school level, rate of Black students, and rate of Black teachers. The results of the regression indicated that this model was a statistically significant predictor of overall suspension rates ($p < .001$) and that it explained a substantial level of the variance in overall suspension rates (R square = .401). This means that 40.1% of variance in a school's overall suspension rate can be accounted for by school level, rate of Black students, and rate of Black teachers. All of the predictors in the model were significant. The results showed that a one percent increase in the rate of Black teachers was associated with a .193 percent decrease in overall suspension rates, holding all other variables constant, p=.044, 95% CI = [-.381, -.005]. A one percent increase in the rate of Black students was associated with a .275 percent increase in overall suspension rate, holding all other variables constant, p=.007, 95% CI = [.080, .470]. Holding all other variables constant, secondary schools had an overall suspension rate that was 10.09 percent higher than elementary schools, p=.001, 95% CI = [4.390, 15.794]. These results suggest that higher rates of Black students and secondary schools are associated with higher suspension rates, while higher rates of Black teachers are associated with lower suspension rates. The standardized coefficients indicated that the rate of Black teachers (-.487) was slightly less powerfully predictive of overall suspension rates than the rate of Black students (.659) or the level of the school (.523). From a practical perspective, this means that at a middle school with 25 teachers and 400 students, three fewer students would experience suspension for every Black teacher that school employed. It also means that at that same school, nearly three more students would experience suspension for every 10 Black students that the school enrolled.

Discussion

Because it demonstrated that secondary schools have statistically significantly higher suspension rates than elementary schools, the independent samples *t*-test supported the concept that school level is a critical variable to include when trying to predict overall suspension rates. This is in line with previous research that indicated that suspension rates are significantly higher in secondary schools (Losen et al., 2015). Further

research to determine what factors and practices may be at play in secondary school suspension rates, especially as Arcia (2007) suggests that age may not be the predominant factor, is critical in any effort to dismantle the school-to-prison pipeline.

For school leaders in rural communities outside of Baton Rouge, especially those that serve high rates of Black students and those seeking to reduce rates of suspension, the implications for practice are clear: hiring and retaining more Black teachers is associated with lower rates of suspension. However, this clarity is tempered by a lack of high-quality, thorough data regarding exclusionary discipline practices in Louisiana. Although Lindsay and Hart (2017) were able to examine the relationship between specific students' discipline outcomes and their rate of Black teachers, this study only measures the relationship between aggregate teacher demographic composition and aggregate exclusionary discipline rates. Lindsay and Hart (2017) have suggested that such an approach may "risk confounding the effects of the teacher demographics with other aspects of the school that may be correlated with teacher demographics." Although this study controlled for school level and rate of Black students in order to limit such concerns, having student-specific data would more thoroughly address this.

To move in the direction of student-specific data, schools, districts, and the Louisiana Department of Education should collect and make more transparently available more data regarding exclusionary discipline practices. These include rates of student suspension by race and ethnicity, the rate of students who experienced a suspension of any type, and the number of days that students were excluded from the classroom environment. This would allow both researchers and practitioners to develop a richer understanding of how exclusionary discipline practices function in the state and how those practices specifically impact Black students.

Further research is warranted regarding whether and how the presence of Black teachers impacts rates of exclusionary discipline practices across the country. First, additional studies should be conducted to determine whether increased rates of Black teachers for individual students or at schools as a whole are associated with lower rates of exclusionary discipline practices in a wide variety of contexts and over a longer period of time. All schools in this sample were in rural communities, and only three schools in the sample had student enrollments of larger than 1,000; further research should investigate whether and to what degree these associations persist at suburban, urban, and large schools. Additionally, this study provided only a one-year snapshot of disciplinary practices in these districts. It would be valuable to examine what trends emerge in these disciplinary practices over a period of several years.

Next, this study only indicates that an association exists between higher rates of Black teachers and lower rates of exclusionary discipline practices. More research to develop a more complete understanding of why this association exists and how this association manifests itself in a variety of contexts is merited. Specifically, because this study measures the impact of Black teachers on school-wide suspension rates, the benefits of Black teachers may extend to non-Black students as well. In fact, Lindsay and Hart (2017) have suggested "non-Black students saw null effects to small advantages from being matched with Black teachers, in terms of discipline outcomes." Coupled with research indicating that students of all races generally perceive Black teachers more favorably than or equally favorably to White teachers on a wide range of instructional practices (Cherng & Halpin, 2016), further research should more deeply investigate the potential positive impact of Black and other minority teachers on students of all races.

Finally, the strong positive relationship between suspension rates and rate of Black students in this study is highly disturbing, especially considering research that suggests this is not the result of higher rates of disruption among Black students (Fabelo et al., 2011; Skiba et al., 2002, 2011). We must continue to investigate both why schools in Louisiana serving predominantly Black students have some of the widest pipes into our criminal justice system and how we might ameliorate this trend. However, we should guard against any accountability system related to exclusionary discipline that encourages school leaders to eliminate or obfuscate suspensions in their schools without materially changing discipline or instructional practices. Even as the results of this particular study suggest that hiring and retaining more Black teachers may help reduce suspension rates in schools, school leaders should not engage in this process decoupled from a richer qualitative analysis of their own context or a plan to better support both their Black and non-Black teachers. Considering the higher

rates of turnover among Black teachers relative to their White peers (U.S. Department of Education, 2016) and the material reality that Black schoolchildren will continue to learn in classrooms operated by White teachers and schools led by White administrators, school leaders must ensure all teachers and administrators are sustainably equipped with the culturally responsive skills and mindsets they need to engage in positive and productive discipline practices that reduce both disruptions and exclusionary methods. Qualitative research at schools from the sample used in this study that have lower rates of suspension even as they serve higher rates of Black students should be conducted to identify these culturally responsive practices that could be used in other Louisiana schools. The future of our Black students demands that these are the first steps in a long journey towards more racially just public schools.

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