

The Impact of Positive Behavior Intervention Support (PBIS) on Suspensions by Race and Ethnicity in an Urban School District

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Abstract

Recent federal data shows disparities among school discipline by race. This has been a long running concern in many arenas. Positive Behavioral Interventions and Supports (PBIS) provides a positive aspirational approach to student discipline instead of taking a more penal-based approach. This paper reviews the implementation of PBIS and queries the impact on middle school and high school suspensions in a mid-sized Midwest urban school district in Muncie, Indiana. The implementation had a significant impact on reducing inappropriate student behavior as measured by suspensions. Although a significant racial disparity continued between black, multiracial, and white students, the disparity was decreased. The secondary schools involved in the implementation saw a reduction in student suspensions which did lead to increased student achievement and better student attendance.

Key Words

K-12 public schools, discipline and suspensions, PBIS, race and ethnicity

Introduction

Discipline in American schools is often disparate and too often based upon the skin color of the student. The US Department of Education's Office of Civil Rights (2018) recently released data showing that the disparity between school-based arrests for white students and students of color is continuing to grow.

Although Black students represent 31% of school arrests or referrals to law enforcement, they represent only 15% of the student population. American Indian, Pacific Islander, and multiracial populations are similarly over represented in law enforcement referrals and arrests. McIntosh and Bastable (2018) articulated that 5% of students are suspended annually through the US.

Data from the 2011-2012 school year from the US Department of Education reported a suspension rate including both in- and out-of-school suspensions of 13.1%. The US Department of Education reported only on out-of-school suspensions for the 2015-2016 School Year, stating 5% to 6% of students were given out-of-school suspensions (US Department of Education, 2012 & 2018). Marchbanks, et al. (2016) reported that 8% of urban students receive a juvenile justice referral compared to only 4% of rural or suburban students even though urban schools tend to have more diverse teaching staffs.

During the 2014-2015 school year, a Midwestern urban school district hereafter identified as Independent School District A suspended more than 31% of its students and nearly 48% of its Black secondary students. At the beginning of the 2015-2016 school year, the Independent School District A's administrative team met with local law enforcement and other juvenile justice officials to address the school's discipline issues. Several school board

members identified the need to address student discipline as an immediate priority. Even though Marchbanks, et al. (2016) concluded that urban schools, whether using lenient or strict discipline practices, evidenced a higher level of minority referrals to the juvenile justice system, it was clear the Independent School District A needed to make changes to its disciplinary approach.

PBIS

One of the decisions that came from the meeting was the system-wide implementation of Positive Behavioral Interventions and Supports (PBIS) According to many educators, PBIS is an excellent choice to address the need for a more fair and equitable discipline program in schools. PBIS is currently in place in nearly 20% of school districts nationally and has at its primary focus improving academic achievement which aligns with national goals (Barrett, Eber, & Weist, 2013).

Recently, the Office of Special Education Programs' (OSEP) Technical Assistance Center on PBIS announced their own review of disproportionality and found that there were still substantial disproportionalities in schools utilizing PBIS among Black and multiracial students, but it was lower than the national average.

Mowen, Mowen, and Brent (2017) studied the discipline disparities at a Department of Defense High School. Overall, they found 17% of students were subjected to a suspension of some type. However, due to the impact of a more stable and homogenized background of military families, they found no significant difference in likelihood of a student to be disciplined based upon their racial background. Mowen, Mowen, and Brent (2017) explain this to some extent to the impact of the military culture and the fact parents of the students studied all have steady employment, stable housing, and adequate

access to health care, childcare, and counseling services.

Bottiani, Bradshaw, and Mendelson (2017) identified poverty and zero-tolerance policies as potential facets aggravating the disparity in school discipline. They found that Black students are disciplined with greater frequency where they feel the school is less equitable in its disciplinary approach.

In general, schools utilizing a school-wide approach to PBIS suspend only about 4% of their students, which is below the national average of 5% (McIntosh & Bastable, 2018). Gregory, Skiba, and Mediratt (2017) showed that PBIS alone doesn't address the racial disparity without conscious effort to explicitly address racial inequalities. Likewise, Carter, Skiba, Arredondo, and Pollock (2017) also found that PBIS alone didn't reduce the racial disparity in school discipline issues.

One of the issues the authors address is the need to impact discipline by engaging in conversations about race in the school environment. For the better part of a decade, Independent School District A had used a system called Cultural Competencies to initiate monthly conversations at the faculty level to address issues of race along with other factors of bias.

Some earlier studies showed a marked decrease in investing in PBIS's proactive discipline approach. Netzel and Eber (2003) reported a 22% reduction in elementary suspension rates in an Illinois district after the implementation of PBIS. Muscott, Mann, and LeBrun (2008) reported a decrease in

suspensions in most types of schools, but not in all schools in their study of New Hampshire Schools using PBIS. They only included two high schools in their study and the results were a 14% reduction to a 97% reduction in suspensions.

The school district Independent School District A believed that implementing PBIS within schools would assist in reducing student discipline issues. The null hypotheses were:

H-1₀: The implementation of school-wide PBIS across the district did not have an impact on the rate of student suspensions?

H-2₀: The implementation of PBIS did not reduce the racial disparities in student suspensions.

Methods

The study was conducted in an urban Indiana school corporation. The community had an estimated population of approximately 70,000 at the beginning of the study. The majority of the population was white (83%) with 10% African American (Suburban Stats, 2018). The school district saw a 14% decline in population from 6,568 students in 2014 to 5,690 students in 2017. While enrollment had declined, the poverty increased to approximately 80% over the past several years. Sixty percent of students were White while 39.5% identified as a minority. The largest minority group was Black students who account for 21.1% of the total population. Yearly changes in demographics and socio-economics experienced by Independent School District A are outlined in Table 1.

Table 1.

Secondary School Demographics

	School Year 2014	School Year 2015	School Year 2016	School Year 2017
Percent of students receiving free or reduced lunch	75.5%	75.8%	75.1%	74.6%
American Indian	0.3%	0.4%	0.5%	0.4%
Asian	0.8%	0.7%	0.6%	0.6%
Black / Non-Hispanic	20.9%	20.6%	21.6%	21.6%
Hispanic	2.8%	2.4%	2.9%	3.5%
Multiracial	9.6%	10.2%	10%	10.4%
Pacific Islander	0%	0%	0.0% ¹	0.0% ¹
White / Non-Hispanic	65.4%	65.6%	64.4%	63.3%

¹ In School Years 2016 and 2017, the district enrolled a single student who identified as a Pacific Islander. That student was never suspended and is not included in subsequent data.

During the study, the district initially operated one high school and two middle schools. At the beginning of the 2014-2015

School Year, the district consolidated to a single high school. The district also operated nine elementary schools and two specialty

schools which were not included within the scope of the study.

In January 2015, the middle school on the south side of town was deemed to be in such crisis that a wholesale leadership change was made. The new leadership team was extremely supportive of implementing PBIS, so to meet the goal of improving student discipline, Independent School District A implemented a district-wide approach to PBIS. Overall, from the beginning of the 2015-2016 School Year through the end of the 2016-2017 School Year, the number of critical discipline incidents went down by two-thirds.

Traditionally, Independent School District A accounted for discipline problems or “critical discipline incidents” by building ethnicity and gender. The incidents were tallied in 26 categories from accidents through weapon violations. This did not include class tardies or other minor violations. These criteria included events where students were arrested or reported to other state agencies. The reporting criteria for critical incidents were not modified during the two school years of the study; so the

data can be used for accurate comparisons. The critical incident data from 2014-2015 were used as a benchmark prior to the implementation of PBIS in any of the district schools. In 2015-2016, Independent School District A began a systemic implementation of PBIS.

Results

Independent School District A saw a reduction in serious discipline incidents from the 2014-2015 school year through the 2016-2017 school year (See Table 2).

Serious discipline incidents were measured against four criteria. The first was the gross number of incidents, followed by the number of incidents that required staff to make a report to Child Protective Services. The third was the number of referrals to juvenile probation. The last was whether a custodial arrest was made.

Table 3 shows the number of suspensions and the total number of days suspended. Table 3 shows the percentage of students suspended by ethnicity or race as well.

Table 2.

Number of Critical Discipline Incidents and Suspensions by School Year

	School Year	School Year	School Year	School Year
	2014	2015	2016	2017
Student Population	6568	6106	5883	5690
Total Number of Suspensions	4543	5032	3769	3143
Total Critical Incidents	1162	1169	969	786
CPS Complaints	937	1010	517	589
Probation Referrals	133	201	118	115
Custodial Arrests	93	59	62	66

Abbreviations: CPS = Child Protective Services

Table 3

Total of Days Suspended by Ethnicity

Race / Ethnicity	School Year 2014			School Year 2015			School Year 2016			School Year 2017		
	% of Students Suspended	Total # of Suspension	Total Days of Suspension	% of Students Suspended	Total # of Suspension	Total Days of Suspension	% of Students Suspended	Total # of Suspension	Total Days of Suspension	% of Students Suspended	Total # of Suspension	Total Days of Suspension
Am. Indian	26.67	24	26	35.71	18	19	31.25	23	41	30.77	16	22
Asian	6.25	5	12	15.38	9	13	10	5	11	15	5	7
Black/ Non-H	47.86	1516	1962	46.38	1648	2293	42.62	1190	1782	40.46	1061	1751
Hispanic	19.09	58	80	23.33	51	74	23.71	66	86	16.81	59	91
Multi-racial	40.75	638	806	36.66	663	925	35.12	463	625	33.14	382	519
White / Non-H	25.82	2302	2877	25.85	2643	3697	24.14	2022	2887	20.68	1620	2271
Grand Total	31.52	4543	5763	31.08	5032	7021	29.16	3769	5432	26.12	3143	4661

Independent School District A saw a reduction of suspensions in both—the total number and the percentage of the student body that experienced one or more suspensions. The number of students who were suspended at least once was reduced from 1,228 in the 2014 School Year to 843 in the 2017 School Year. This was a reduction from 31% of secondary students to 26% of secondary students or a reduction of 17% in the two years since the decision to implement PBIS.

This number is less than that experienced by Netzel and Eber (2003) who saw a 22% reduction in elementary suspensions. However, the differing nature of elementary and secondary students may account for some of the difference. Harper (2018) found a reduction in suspensions led to better attendance and test scores. Independent School District A realized similar results with one of the middle schools no longer being labeled as a failing school by the state's department of education. As part of the study, a total of over 24,040 annual discipline records of Independent School District A were

reviewed. The least amount of suspensions any student experienced was zero.

The most received was a single student, a White male, who was suspended 30 times in 2016. Among those students who were suspended, on average, they were suspended 3.7 times per year (see Tables 4 & 6). A p -value of less than 0.05 was required for significance. When the individual suspension data was analyzed using ANOVA, the resulting p value was $p = 1.6205E-12$. Since the p value was < 0.01 , the next step was to conduct a Tukey HSD which showed $p = 0.002$ between the School Year 2014 and School Year 2017 data sets. This allowed the null hypothesis H_0 to be discarded.

This study showed that the impact of implementing PBIS had a positive impact on the students served. Those impacted were not necessarily suspended less often, but not at all. As the average number of suspensions among students suspended remained constant (see Table 4), the impact was simply to allow students to remove themselves from the negative discipline consequences completely.

Table 4: Suspensions per student

School Year	Total Number of Suspensions	Total Number of Individual Students Suspended	Average Number of Times Suspended	Highest Number of Suspensions for a Student
2014	4543	1229	3.699	26
2015	5032	1126	4.47	24
2016	3769	982	3.85	30
2017	3143	842	3.72	22
Percentage Reduction	31.48%			

Regarding the second hypothesis H_2 regarding racial disparities among secondary student suspensions, in the 2013-2014 School Year, more than 31% of secondary students were suspended at least once. Among the four largest racial or ethnic groups represented in the school district's student body, Hispanics were the least likely to be suspended being suspended only 19% of those students being suspended, 26% of White students were suspended, nearly 41% of multiracial students were suspended and almost 48% of Black students were suspended at least once. Over the next three years, both the total number of suspensions and the number of students suspended were reduced (See Tables 5 & 6). However, the average number of times a student was suspended among those students who were suspended at least once remained somewhat stable.

Table 5.

Percentage of Students Who Received One or More Suspension by Race and School Year

	2014	2015	2016	2017
American Indian	26.67%	35.71%	31.25%	30.77%
Asian	6.25%	15.38%	10.00%	15.00%
Black	47.86%	46.38%	42.62%	40.46%
Hispanic	19.09%	23.33%	23.71%	16.81%
Multiracial	40.75%	36.66%	35.12%	33.14%
White	25.82%	25.85%	24.14%	20.68%
All Students	31.52%	31.09%	29.16%	26.12%

Table 6.

Average Number of Suspensions Among Students Suspended by Race / Ethnicity

	2014	2015	2016	2017
American Indian	6.0	3.6	4.6	4.0
Asian	2.5	2.25	2.5	1.67
Black	3.88	4.76	3.85	3.76
Hispanic	2.76	2.42	2.87	3.11
Multiracial	4.19	4.88	3.92	3.41
White	3.49	4.30	3.87	3.83
All Students	3.69	4.47	3.85	3.73

A review of the data using Pearson's Chi-square to analyze to determine whether the expected numbers align with the observed number of suspensions by race, it appears that PBIS did have a mitigating impact on the racial disparities relating to the number of students suspended by race, but Independent School District A still showed a significant disparity among most groups.

The values returned showed significant deviance from the expected norms with the following for the 2014 School Year, $X^2(5, N=3,895) = 171.54, p < .01$. The trend was towards less but still significant deviance from what would be expected:

2014 School Year $X^2(5, N=3,895) = 171.54, p < .01$

2015 School Year $X^2(5, N=3,622) = 126.69, p < .01$

2016 School Year $X^2(5, N=3,357) = 169.11, p < .01$

2017 School Year $X^2(5, N=3,227) = 120.43, p < .01$

Although there was a general tendency towards reducing the disparities, they remained significant. Therefore, the null hypothesis H_0 could be discarded.

There was not a significant disparity at $p = .05$ between the number of Hispanic and white students suspended. The values returned by Pearson's Chi-square were $p = .1713$ in 2014, $p = .6439$ in 2015, $p = .9323$ in 2016, and $p = .3761$ in 2017.

Part of this may be due to the relatively small Hispanic population of the district which never rose above 3.5% well below the national average of 26% (US Department of Education, 2018).

Conclusion

The implementation of PBIS within Independent School District A appears to have had a positive impact on reducing the number and nature of discipline incidents across the board.

One key was the buy-in of the building leadership teams to ensure PBIS was implemented with fidelity in all schools. Both building level administrative buy-in and effective communications were mentioned as essential to the success of the Netzel and Eber (2003) study as well. Through a grant with a local mental health provider, Independent School District A was able to hire an administrator to coordinate PBIS efforts and training for staff across the district. This fulltime coordinator position was extremely helpful in the implementation of PBIS.

However, even though the number of minority students suspended has been greatly reduced, the disparity between the number of White students and minority students experiencing suspension is significant.

Limitations

Without having created a control group, it would not be responsible to identify a causal link between the PBIS program and the positive decline in discipline issues and suspensions that correlated with the implementation. Independent School District A did make some building level and district level leadership changes that could have impacted the overall culture of the district.

The consolidation of the two high schools into one along with the physical movement of the student body of one of the middle schools into the abandoned high school may have contributed to the increase of discipline issues during the 2014-2015 School Year. Independent School District A has a particularly high level of poverty.

The study should be replicated in districts with lower levels of poverty. The area is not as demographically diverse as most urban areas. In particular, the district has a low Hispanic population in comparison to many urban areas.

Recommendations

Further research into the impact of poverty on student discipline is essential. As minority

students are more likely to be in a situation involving poverty, what is the impact of poverty factors on the disparities in discipline? Mowen, Mowen, and Brent's (2017) research needs to be replicated to determine if much of the racial disparities in school discipline can be ameliorated when socio-economic differences are mitigated or are there other inherent racial biases at work.

Autobiography

Steven Baule is an assistant professor in the educational leadership department at the University of Wisconsin, Superior. He previously served as an educational administrator in the Midwest for nearly 30 years including more than a dozen as a superintendent. E-mail: Sbaule1@uwsuper.edu

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