Using Discipline Data to Enhance Equity in School Discipline

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Abstract
There is a longstanding and pressing challenge regarding overuse of exclusionary discipline (e.g., office discipline referrals, suspensions) for students of color and students with disabilities. Moreover, many common efforts to address the problem have not been shown to enhance equity in school discipline. This article describes a promising four-step approach, described in the freely available PBIS Disproportionality Data Guide, for using school discipline data to identify specific interactions that are more susceptible to the effects of implicit bias on decision making and change the environment to meet the needs of all students. A case study is included that identified disproportionality for physical aggression on the playground as a primary source of overall disproportionality and implemented a plan that included elements of explicit instruction and cultural responsiveness. Results showed a consistent decrease in discipline disproportionality over time.

Keywords
equity, disproportionality, school discipline, cultural responsiveness

Disproportionality in school discipline (i.e., disparities in exclusionary discipline for certain subgroups) represents one of the most significant problems in education today (Losen, Hodson, Keith, Morrison, & Belway, 2015; U.S. Government Accountability Office, 2013). The results of decades of research consistently show that students of color, particularly African American males, are at significantly increased risk for exposure to exclusionary discipline, including office discipline referrals (ODR) and suspensions (Losen & Gillespie, 2012). Studies also show slight to moderate disproportionality in school discipline for other racial/ethnic groups, such as Latino/a students and Native American students (Krezmien, Leone, & Achilles, 2006). This racial discipline gap has been growing since the 1970s, especially in the past decade. From 2002 to 2006, suspension rates for White students dropped but increased for African American males and females (Losen & Skiba, 2010).

Disproportionality is a greater concern for students with disabilities. From national data collected by the Office of Civil Rights in 2011–2012 (Losen, Hodson, et al., 2015), students with disabilities had the second highest rates of suspension after African American students. When combined, the increase in risk is staggering. For example, White students had a 4.8% suspension rate, and White males with disabilities had a 9.2% suspension rate, whereas African American males with disabilities had a 26.8% suspension rate. Across the nation, nearly one in five school districts suspended over 50% of their African American male secondary students with disabilities (Losen & Martinez, 2013).

There is also evidence that racial bias plays a role in special education placement rates. Although contrary evidence from a recent study conducted on a limited sample exists (Morgan et al., 2015), the vast majority of research using national data sets consistently shows overrepresentation of African American students in more subjective categories (e.g., serious emotional disturbance [SED]) and underrepresentation in others (e.g., autism spectrum disorder [ASD];

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Harry & Klingner, 2014). Other work connects special education and discipline disproportionality to lack of teacher experience. In examining national data from the Office of Civil Rights in the 2009–2010 school year, Losen, Ee, Hodson, and Martinez (2015) found that a 1-point increase in the SED placement rates for African American students corresponded to a 2.3% increase in the suspension rate for all African American students in the school. Their research also showed that schools with more novice teachers (i.e., those with only 1 to 2 years of teaching experience) were significantly more likely to suspend both African American students and African American students with disabilities. These findings point to teacher inexperience as a contributor to disproportionality in discipline and special education referrals that could shape minor misbehavior into chronic challenges requiring special education. They also indicate that training educators in specific skills has promise for achieving equity.

After controlling for alternative explanations for disproportionality (e.g., poverty, different base rates), African American students are still suspended and referred for special education at significantly higher rates (Anyon et al., 2014). In addition, there is no published research showing higher base rates of problem behavior for students of color that would warrant more school discipline (Skiba et al., 2015). To the contrary, research by Bradshaw, Mitchell, O’Brennan, and Leaf (2010) found that statistically, African American students were significantly more likely to be sent to the office for disruptive behavior (e.g., sustained loud talk, yelling, roughhousing) even when controlling for teacher ratings of their behavior. Other research has shown that White students were more likely to be issued ODRs for more objective problem behaviors (e.g., smoking, vandalism), and African American students were more likely to be issued ODRs for more subjectively defined behaviors, which require a value judgment from the educator (e.g., disruption; Fabelo et al., 2011; Girvan, Gion, McIntosh, & Smolkowski, 2017).

Racial and special education discipline gaps are troubling because of the negative effects of repeated suspensions on both school and life outcomes, such as achievement, dropout, and adult incarceration (American Academy of Pediatrics Council on School Health, 2013). For example, high rates of suspension are associated with decreased student achievement and perceived school safety for the student body as a whole (Perry & Morris, 2014). Moreover, recent research indicates that 40% of the variance in the racial achievement gap is attributable to racial differences in suspension rates (Morris & Perry, 2016). Given this finding, decreasing disparities in exclusionary discipline may also help decrease the achievement gap.

### Implicit Bias in Discipline Disproportionality

These disparities may be at least partially the result of implicit bias (Girvan et al., 2017; Staats, 2014) related to student race (Goff, Jackson, DiLeone, Culotta, & DiTomasso, 2014), disability (Kelly & Barnes-Holmes, 2013; Wilson & Scior, 2014), or the intersection of the two. As opposed to explicit bias, implicit bias affects decision making automatically, or without conscious thought (Greenwald & Banaji, 1995). Implicit biases can be considered to be cognitive shortcuts for making an array of quick decisions in a complex society (Fiske & Taylor, 2008). Research from social psychology shows that implicit bias is more likely to influence specific decisions, such as those that are ambiguous or require snap judgments, or when individuals are physically or mentally fatigued (Kouchaki & Smith, 2014).

Specific to school discipline, evidence implicating implicit bias comes from research showing increased disproportionality for behaviors in which violations are more subjective and therefore require more teacher judgment (e.g., disruption, as opposed to theft; Skiba et al., 2011). Recent research of student discipline records from over 1,800 schools serving over 1 million students (Girvan et al., 2017) found that discipline disproportionality is largely attributable to racial disparities in ODRs for subjectively defined behaviors, which accounted for 68% of the total variance and 46% of the unique variance in total disproportionality in elementary schools.

Because implicit biases are unconscious, simply making people accountable for making unbiased decisions, without more support, has been shown to be ineffective in reducing disproportionality (Girvan, Deason, & Borgida, 2015). Yet providing specific guidance in making unbiased decisions in these situations allows motivated people to act more equitably (Girvan, 2016; Lai, Hoffman, Nosek, & Greenwald, 2013).

### Use of Data to Identify Precise Challenges

In place of ineffective approaches, such as policies mandating equity in school discipline or brief professional development in cultural sensitivity (Lai et al., 2013), a more promising approach is to use data to identify specific situations in which inequities are strongest as well as situations with equity in decision making and implement interventions that are tailored to enhance equity in those situations. Such an approach is also useful because it avoids blanket labels of "racism or ableism." Such labels may be accurate but tend to decrease motivation to enhance equity. Instead, it focuses educators on how they can change the school environment and their discipline decision-making processes to enhance equity.

A potential intervention for reducing the effects of implicit bias on disproportionality is to provide specific guidance in making unbiased discipline decisions in ambiguous or snap-judgment situations. However, such an intervention requires a set of empirically derived situations to target. The term vulnerable decision point (VDP) means contextual events or elements of the immediate situation...
(e.g., teacher decision to refer to the office, administrator decision to suspend) that increase the likelihood of implicit bias affecting discipline decision making (McIntosh, Barnes, Morris, & Eliason, 2014). There are two elements of decision points that make them vulnerable: (a) the situation itself (e.g., the inherent subjectivity in classifying defiance vs. smoking) and (b) the teacher’s decision state in that moment (e.g., fatigued as opposed to focused). These elements can be combined to identify precise school-level VDPs (e.g., substantial African American–White ODR disproportionality in defiance during independent reading at the start of the day) as a common situation where school-wide data indicate a challenge across classrooms. The same process can be used to identify personal VDPs (e.g., substantial African American–White ODR disproportionality in defiance during teacher-led instruction on days I had to miss lunch for a meeting).

In absence of school or district data, national patterns in ODR can provide educators with general guidance. In a national sample of 483,686 ODRs issued in 1,666 elementary schools (Smolkowski, Girvan, McIntosh, Nese, & Horner, 2016), there was stronger African American–White discipline disproportionality for subjective problem behaviors (e.g., defiance, disrespect, disruption) and incidents deemed as major, especially in the classroom at the school day. In contrast, school discipline was more equitable for objective problem behaviors (e.g., smoking, truancy).

**The PBIS Disproportionality Data Guide**

Data-based decision making is a key component of interventions to improve student outcomes (Hattie, 2009; Newton, Horner, Algozzine, Todd, & Algozzine, 2012), but school teams lack guidance in data-based decision making for disproportionality (U.S. Government Accountability Office, 2013). To enhance the use of data-based decision making in enhancing disciplinary equity, the Office of Special Education Programs (OSEP) National Technical Assistance Center on Positive Behavioral Interventions and Supports (PBIS) released a PBIS Disproportionality Data Guide (http://www.pbis.org/school/equity-pbis; McIntosh et al., 2014). This free resource provides a detailed, four-step process for school and district leadership teams, regardless of whether they are implementing PBIS, to use their discipline data in the following ways:

- Identify the extent of the problem (Problem Identification).
- Identify their school-level VDPs (Problem Analysis).
- Develop a comprehensive intervention plan that is tailored to the specific problem (Plan Implementation).
- Monitor progress toward achieving equity (Plan Evaluation).

These steps, based on a common educational problem-solving model (Tilly, 2008), follow, along with a vignette detailing their use.

**Problem Identification**

The first step in the process is to calculate disproportionality metrics to (a) determine the extent of the problem and (b) establish a baseline to quantify progress. Because problem identification with a single metric can mask disproportionality (IDEA Data Center, 2014), two disproportionality metrics are recommended: (a) risk ratios and (b) absolute rates by subgroup. Risk ratios are the percentage of students from one group receiving an outcome divided by the percentage of students from a comparison group, often the percentage of all other students (IDEA Data Center, 2014). Absolute rates are the rates of discipline per subgroup divided by the number of students in that group. Separate metrics are calculated for each group of concern (e.g., African American students, Latino/a/x students, Native American students, students with disabilities) and type of disproportionality (i.e., for ODRs, suspensions, and special education referrals and rates). Once these metrics are calculated, they can be compared to district or national norms (e.g., median national African American–White ODR risk ratio = 1.84; McIntosh et al., 2014) to set goals for reducing disparities.

**Problem Analysis**

The second step is to identify the possible reasons for the disproportionality, including determining school-level VDPs. To do so, teams need a discipline data system that allows them to examine patterns of ODRs and suspensions specifically by race/ethnicity or special education status. One such system, the School-Wide Information System (SWIS; May et al., 2013; used by 9,219 schools in 2015–2016 and available at http://www.pbisapps.org), includes automatic graphing of disproportionality metrics and a drill-down function that allows examination of patterns of discipline (e.g., type of behavior, location, time of day, grade) by subgroup. Other discipline data systems may have similar functionality. Figures 1 and 2 show a matched pair of examples of these graphs, which can be used to determine VDPs for subgroups (i.e., in this case, special education status). Examining the data shows stronger disproportionality by special education status for defiance. Graphs for location or time of day may show places or times with increased disproportionality. Individual educators can also examine the specific discipline referrals they issue or reflect on their own experiences to identify individual-level VDPs.

**Plan Implementation**

Once school-level VDPs are identified, the next step in the process is to modify the school’s existing behavior support
systems to prevent VDPs from arising. Disproportionality in school discipline and special education may arise from differences in expectations between school and home, which can lead to misunderstandings of what behavior is acceptable and increased rates of behavior viewed as problematic by adults (Anyon et al., 2014; Harry & Klingner, 2014). Teams can examine their VDPs to assess whether the systems in place for that area or routine could be revised to better fit the needs of students and prevent behavior issues, such as adding active supervision in the area to interact with students more proactively.

A general equity recommendation is to implement a proactive, instructional, multitiered behavior approach that makes hidden expectations explicit and is flexible enough to be adapted to meet the needs of students, families, and the community. One example is school-wide positive behavioral interventions and supports (Sugai & Horner, 2009), a systems-level framework for implementing evidence-based behavior support practices. In terms of equity, PBIS has been shown to reduce discipline disparities for students of color (Vincent, Swain-Bradway, Tobin, & May, 2011) and students with disabilities (Tobin, Horner, Vincent, & Swain-Bradway, 2012).

In addition to defining, teaching, and acknowledging expectations, the PBIS focus on objective discipline procedures (e.g., definitions of problem behaviors, distinctions between what should be handled in the classroom vs. the office) can reduce ambiguity in discipline decisions,
reducing the influence of implicit bias (Girvan, 2016; Lai et al., 2013). Providing training regarding these ODR processes, especially for the VDPs identified in problem analysis, can reduce variability in use, thereby increasing consistency in discipline. For example, teams may find that their definition of disrespect varies by staff or that teacher tolerance for certain behaviors leads to inappropriate ODRs for some students. As such, the process of identifying and teaching clear expectations can reduce ambiguity for both students (e.g., not assuming that all students know what respect “looks like” at school) and adults (e.g., expectations and violations are clearer, reducing ambiguity).

**Plan Evaluation**

The final step in the process is to use data to assess the extent to which the plan is (a) being implemented as intended and (b) decreasing disproportionality in school discipline. In this step, teams collect data on fidelity of plan implementation (e.g., PBIS Tiered Fidelity Inventory, Team Implementation Checklist), calculate the same disproportionality metrics from problem identification, and compare to the equity goals identified. Evaluation meetings and decisions should take place regularly (e.g., at least quarterly) to assess whether the plan is working or if modifications are needed to achieve disciplinary equity.

**Vignette: Macleod Community School**

The following vignette describes implementation of the PBIS Disproportionality Data Guide approach with all staff in a real school (i.e., only the name has been changed to preserve anonymity). Macleod Community School is a neighborhood K–8 school in a large, diverse urban school district in the U.S. Pacific Northwest (see Note 1). Over the course of the years in this vignette, the school served approximately 475 students per year, who were approximately 20% African American, 12% Latino/a, and 55% White. Approximately 15% of students were receiving special education services. To address longstanding concerns regarding overuse of exclusionary discipline with color and students with disabilities, the school had implemented PBIS and began using their discipline data to identify potential causes and solutions. The steps they completed are described based on the data guide’s components, as detailed previously.

**Problem Identification.** First, the school leadership team calculated disproportionality metrics to assess the extent of the problem. In the first year, the African American–White ODR risk ratio was 3.93 (i.e., African American students were nearly four times more likely to receive an ODR than White students). The rate of ODRs per school day per 100 students for African American students was 0.48, whereas the same rate for White students was 0.06, and the national median for K–8 schools was 0.32. Both metrics showed significant African American–White ODR disproportionality. As such, the team confirmed that there was a problem with disciplinary equity and moved to Problem Analysis to understand why it was happening.

**Problem Analysis.** Once the team had identified and quantified a problem, the team examined their ODR data to identify VDPs, which they undertook to identify root causes and details on how best to address them. Using SWIS, they identified that their most common school-level VDP was “physical aggression on the playground,” where the African American–White ODR risk ratio was 4.5, compared to 2.67 overall. A further analysis of the ODRs indicated that the vast majority of ODRs for physical aggression occurred on the basketball court during lunch recess. After reflecting on their data and talking with recess supervisors, the team hypothesized that the ODRs came not from any innate deficits in African American students (e.g., poverty, family circumstances) but rather different perceptions of basketball rules. Put simply, the African American students were more likely to follow “street ball” rules (i.e., more body contact, more aggressive defending, more animated “trash talk”), whereas the White students and recess supervisors were more likely to follow National Basketball Association (NBA) rules (i.e., less body contact).

**Plan Implementation.** With this information, the team could design a plan with specific steps, as opposed to trying to address broad societal issues that were outside of the control of the school. Instead of blaming African American students, the team made a decision that the school basketball court should follow NBA rules. Although the team could have just as easily determined that the court was to follow street ball rules, their conclusion was that the aggressive play and additional physical contact made it difficult for large groups of students who did not know each other well to shrug off aggressive play and trash talk. The team shared this expectation with staff and students, then the PE teacher taught the rules to students through explicit lesson plans and monitored student behavior, with attention to reteaching with small groups (Tier 2 supports) and individuals (Tier 3 supports) as needed after the initial lesson.

**Plan Evaluation.** Evaluation consisted of assessing teacher perceptions of the data guide process and using the same disproportionality metrics from Step 1, Problem Analysis. From training evaluations, the teachers rated the process to be feasible, effective, and engaging. In a self-efficacy survey, teachers reported statistically significant increases in their ability to improve disciplinary equity in six of seven items, with the largest gains for “I have effective strategies to reduce racial disparities in school discipline” and “I know how to replace biased responses with responses more consistent with my values.” Regarding student outcomes, the overall African American–White ODR risk ratio dropped from 2.67 to 2.0,
and ODRs for physical aggression on the playground dropped to one incident that fall, making a risk ratio impossible to calculate. Over 3 years, ODR rates for African American students dropped to 0.2, below the national median for schools using SWIS (see Figure 3). The overall evaluation was that the plan was effective in reducing exposure to exclusionary discipline for African American students.

Conclusion
Although disparities were not completely eliminated through use of the Data Guide process, they were substantially reduced, to the point that ODR rates for all racial/ethnic groups were below the national median. Through continued use of this process, the school can continue to monitor progress and make further data-driven changes to achieve equity in school discipline. No single solution has been shown to be completely effective to achieve disciplinary equity for students of color or those with disabilities, but using data to identify challenges, select interventions, and monitor effectiveness appears to be a promising component of a comprehensive approach.

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Note
1. The vignette described in this article is an authentic account of an actual school’s data and use of the data guide described herein. Only the school name has been changed to preserve anonymity.

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