Racial and ethnic disproportionality in school discipline is an enduring and wide-scale problem facing schools in the United States (Skiba et al., 2011). Students of color, particularly Black/African American, Hispanic/Latinx, and Native American students, have been shown to be up to 4 times more likely to be suspended than White students (Balfanz, Byrnes, & Fox, 2015; Losen et al., 2015). These findings are especially concerning because receipt of suspensions is associated with negative student outcomes (American Academy of Pediatrics Council on School Health, 2013), including lower academic achievement (Davis & Jordan, 1994), future disciplinary action (Arcia, 2006; Mendez & Knoff, 2003), and future juvenile justice involvement (Fabelo et al., 2011). In response to these disparities, educators are seeking effective approaches to reduce racial disproportionality in school disciplinary outcomes (Skiba & Losen, 2016).

One common approach to reduce the overall use of exclusionary discipline is school-wide positive behavioral interventions and supports (SWPBIS). SWPBIS is a multi-tiered framework implemented in over 25,000 schools for supporting the implementation of evidence-based practices within schools to improve social and learning environments for students (Center on Positive Behavioral Interventions and Supports, 2018; Horner & Sugai, 2015). SWPBIS focuses on improving behavior by teaching students prosocial skills and redesigning school environments to discourage problem behaviors (Sugai & Horner, 2006). Multiple trials have shown that SWPBIS significantly reduces both antisocial behavior of students and the use of exclusionary discipline by school personnel.
Due to this overall effectiveness, the SWPBIS framework has been viewed as a potentially effective approach for not only reducing overall disciplinary exclusions but also reducing racial and ethnic disparities in exclusions (Gregory, Skiba, & Mediratta, 2017; Tobin & Vincent, 2011). However, others have stated concerns that SWPBIS might increase—rather than decrease—disciplinary disparities (Carter, Skiba, Arredondo, & Pollock, 2017).

To assess whether implementing SWPBIS can reduce the discipline gap, a few small-scale studies have been conducted, with mixed findings. A study of 46 schools (Tobin & Vincent, 2011) showed decreased disproportionality for schools with higher levels of SWPBIS implementation. Another study of 153 schools (Vincent, Swain-Bradway, Tobin, & May, 2011) showed a significantly lower Black-White suspension gap for schools implementing SWPBIS to criterion. Both of these studies indicate SWPBIS significantly decreased but did not completely eliminate the discipline gap.

However, other studies have not shown that SWPBIS significantly decreases the discipline gap. Unpublished studies of 83 schools (Sandomierski, 2011) and 40 schools (Barclay, 2015) implementing SWPBIS at varying levels of fidelity did not show significantly decreased discipline disproportionality with higher SWPBIS implementation. Finally, a trial of 35 schools (Vincent, Sprague, Pavel, Tobin, & Gau, 2015) did not show decreased disproportionality after SWPBIS implementation. Overall, the results of these studies do not indicate that SWPBIS increases the discipline gap, but rather that decreases in exclusionary discipline are relatively consistent across racial and ethnic groups, which would maintain existing discipline disparities. Yet in all three of these studies, the proportion of schools implementing SWPBIS below the fidelity criterion was small, and many of those schools below the criterion were implementing SWPBIS with moderate fidelity. Given these mixed outcomes, a study with a much larger sample of schools, especially those not implementing SWPBIS, could further examine the effects of SWPBIS on disproportionality.

**Purpose of the Study**

Given the inconclusive findings to date and interest in understanding the potential of SWPBIS to increase or decrease disciplinary equity, it was worthwhile to investigate patterns of discipline in a large sample of schools. The purpose of this study was to examine discipline disproportionality among schools implementing SWPBIS compared to the entire population of schools in the U.S. Examining patterns in a large-scale evaluation of schools implementing and not implementing SWPBIS could help determine the extent to which implementation of SWPBIS is related to lower, higher, or unchanged discipline disparities.

**Research Question:** To what extent do rates of out of school suspensions issued to different racial/ethnic groups differ among (a) the population of U.S. schools, and (b) schools implementing Tier 1 SWPBIS with adequate fidelity of implementation?

**Method**

**Samples**

**U.S. Schools.** Data on all schools from the U.S. came from the Civil Rights Data Collection database maintained by the U.S. Department of Education’s Office of Civil Rights (https://ocrdata.ed.gov) for the 2013-14 school year, the most recent year available. This dataset included all public schools reporting suspension data in the U.S.

**Schools Implementing SWPBIS.** Schools implementing SWPBIS in this sample came from a dataset extracted from the PBIS Assessment database (available at https://www.pbisapps.org) of schools using the School-Wide Information System (SWIS; May et al., 2013; https://www.
swis.org), a web-based discipline data entry and analysis application. To be included in this evaluation, schools had to meet the following criteria to ensure accurate data: (a) schools had to have been using SWIS for the year before, during, and after the 2013-14 school year (i.e., 2012-13 to 2014-15), (b) school personnel entered student enrollment disaggregated by race/ethnicity for the 2013-14 school year, (c) there had to be at least 10 students from each racial/ethnic category in each school, and (d) over 80% of office discipline referrals (ODRs) included student race/ethnicity.

Measures

**SWPBIS Fidelity of Implementation.** For the schools implementing SWPBIS, research-validated Tier 1 fidelity of implementation measures (e.g., School-wide Evaluation Tool, Schoolwide Benchmarks of Quality, PBIS Self Assessment Survey, Team Implementation Checklist) were used to identify schools implementing Tier 1 SWPBIS with adequate fidelity. When schools completed multiple measures, the measure with the strongest research evidence was used (McIntosh et al., 2013).

**Out of School Suspension risk index.** The rate of out of school suspensions (OSS), the percent of students with at least one OSS during the school year, was calculated separately for the following federally-recognized racial/ethnic subgroups: (a) American Indian/Alaska Native, (b) Asian, (c) Black/African American, (d) Hispanic/Latinx, (e) Multiracial, (f) Pacific Islander/Native Hawaiian, and (g) White.

**Black/White risk ratio.** The discipline gap between Black and White students was calculated by dividing the OSS risk index for Black students by the OSS risk index for White students. Risk indices at 1.0 show equal risk, and indices above 1.0 indicate overrepresentation.

Analysis

We compared descriptive statistics between two groups of schools (U.S. schools and schools implementing Tier 1 SWPBIS with fidelity). We examined both OSS risk indices and Black/White OSS ratios.

Results

**OSS Risk Indices**

OSS risk indices across the groups of schools (U.S. schools, schools implementing Tier 1 SWPBIS with fidelity) are provided in Figure 1. As seen in the All column, a total of 5% of students nationwide were suspended out of school at least once during the year.

For schools implementing SWPBIS with fidelity, 4% of students were suspended, 20% lower than the national average, indicating decreased exclusionary discipline that is consistent with previous research. The risk indices for individual student groups in SWPBIS schools was the same or lower for each group, with notably lower OSS rates for Black, Multiracial, and Pacific Islander students.

![Figure 1: Out of School Suspension Risk Indices by School Type (2013-2014 School Year)](image-url)
Black/White OSS Risk Ratios

The Black/White OSS risk ratio for U.S. schools was 4.33, indicating substantial disproportionality. The risk ratio for SWPBIS schools was 3.67, still indicating substantial disproportionality, but lower than the national average.

Discussion

Practitioners and policymakers are interested in identifying school practices that are effective in achieving disciplinary equity. Given the widespread implementation of SWPBIS, it is worthwhile to study its effects on reducing disciplinary disproportionality. Small-scale studies have shown mixed results, and so a large-scale study such as the one completed here helps to answer these important questions.

Results showed that overall OSS rates were 20% lower for schools implementing Tier 1 SWPBIS with fidelity. Moreover, contrary to some concerns expressed by researchers, implementation of SWPBIS with fidelity was related to lower—rather than higher—discipline disproportionality, especially for Black, Multiracial, and Pacific Islander students. However, even with these lower disparities, substantial discipline disproportionality remained.

The results of this study indicate that adequate implementation of Tier 1 SWPBIS is related to somewhat lower disproportionality, and at the very least, not increased racial/ethnic discipline disparities. However, SWPBIS as implemented did not eliminate disproportionality entirely, and discipline remained inequitable. Hence, SWPBIS appears to be a promising framework for implementing additional strategies to further enhance equity in school discipline. Additional studies have examined whether specific components of SWPBIS are more strongly related to discipline disproportionality. Both studies (Barclay, 2017; Tobin & Vincent, 2011) showed that implementation of SWPBIS acknowledgment systems was significantly related to lower discipline disproportionality.

To enhance disciplinary equity even further within a SWPBIS framework, there are a number of resources available, all at no cost from http://www.pbis.org/school/equity-pbis. For example, school and district teams can use data to identify the extent of disparities, assess root causes, and implement strategies using the PBIS Discipline Data Guide (McIntosh, Barnes, Morris, & Eliason, 2014). In addition, trainers and coaches can use the PBIS Cultural Responsiveness Field Guide (Leverson, Smith, McIntosh, Rose, & Pinkelman, 2016) to adapt their existing SWPBIS systems to meet the needs of students, their families, and the community. A disciplinary equity policy guide (Green et al., 2015) can assist school and district teams in implementing discipline policies and procedures to enhance equity in school discipline.

In closing, it is important to note the limitations of cross-sectional evaluation studies, such as the one described here. For example, many schools adopt SWPBIS in response to high rates of exclusions, as well as high rates of discipline disproportionality. Hence, it is possible that some of these schools implemented SWPBIS in response to extreme disproportionality, which would underestimate the positive effects of SWPBIS. Conversely, schools adopting SWIS and entering race/ethnicity data consistently might have lower disproportionality simply based on consistent measurement of the problem and ready access to data. Comparing data from pre-implementation to post-implementation or in the context of a randomized controlled trial would provide stronger evidence regarding the effectiveness of SWPBIS on disciplinary equity. These types of research studies are necessary to provide more information regarding the best ways to achieve racial equity in school discipline.
References


References (continued)


This project is supported by the U.S. Department of Education, Office of Special Education Programs (OSEP). Opinions expressed herein are those of the authors and do not necessarily represent the position of the U.S. Department of Education.