

4B – How to Use Discipline Data to Assess Disproportionality

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Acknowledgements

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Learning Objectives

1. *Introduce a guide with a four-step problem-solving model for understanding disproportionality in school discipline*
2. *Select and calculate recommended metrics for identifying and progress monitoring disproportionality in school discipline*
3. *Use data to identify “vulnerable decision points” and other root causes of disproportionality*



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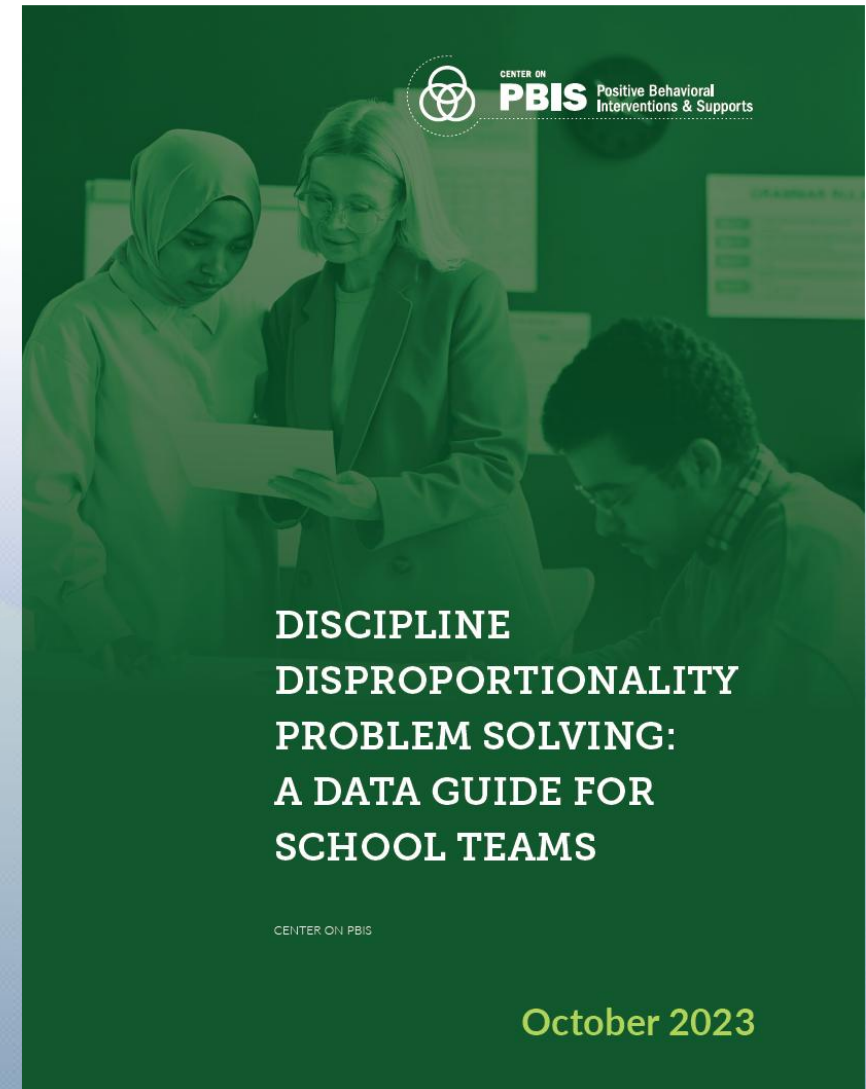
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A Guide for Using Discipline Data to Assess and Address Disproportionality

This guide is available at the following URL:

<https://www.pbis.org/resource/discipline-disproportionality-problem-solving-a-data-guide-for-school-teams>



Discipline Data Systems Needs

■ ***Required*** features:

- Consistent entry of ODR data and student race/ethnicity
- School enrollment by race/ethnicity
- Instantaneous access for school teams (not just district teams)
- Capability to disaggregate ODRs and patterns by race/ethnicity

Discipline Data Systems Recommendations

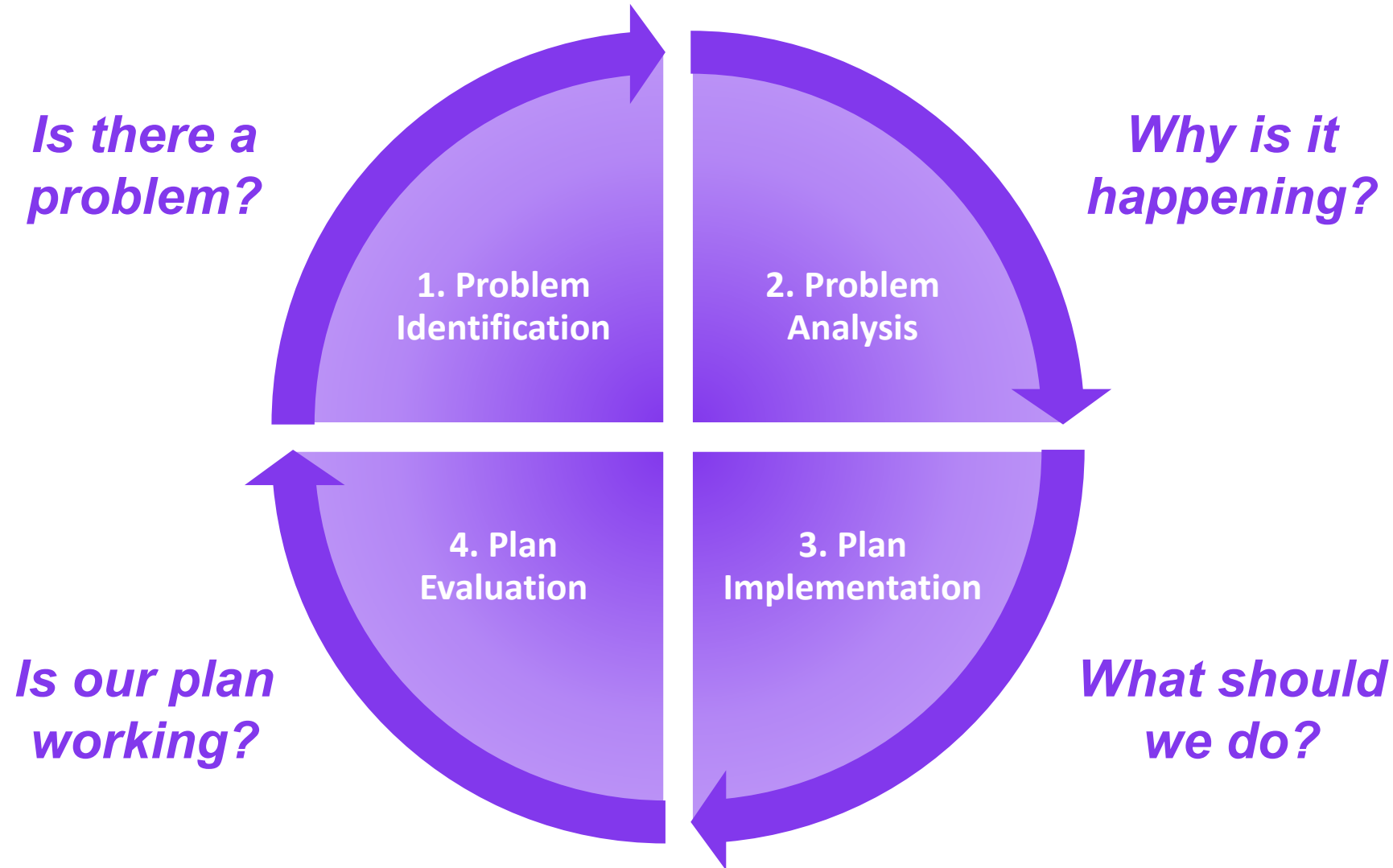
■ ***Recommended*** features:

- Standardized ODR forms with a range of fields
 - Location, time of day, action taken
- Clear definitions of problem behaviors
- Clear guidance in discipline procedures
 - Administrator-managed vs. staff-managed
- Instantaneous graphing capability
- Capability to show graphs by race/ethnicity, IEP status, etc.
- Automatic calculation of disproportionality data

Finding a Discipline Data System

- The School-Wide Information System (SWIS) meets these criteria
 - Available at <http://www.pbisapps.org/SWIS>

4 Step Problem-Solving Model



Selecting and Calculating Disproportionality Metrics



Disproportionality Metrics

- Select and calculate key discipline outcomes
 - ODRs, suspensions, etc...
 - Multiple metrics are recommended (IDEA Data Center, 2014)

**Equity data can
be confusing...**

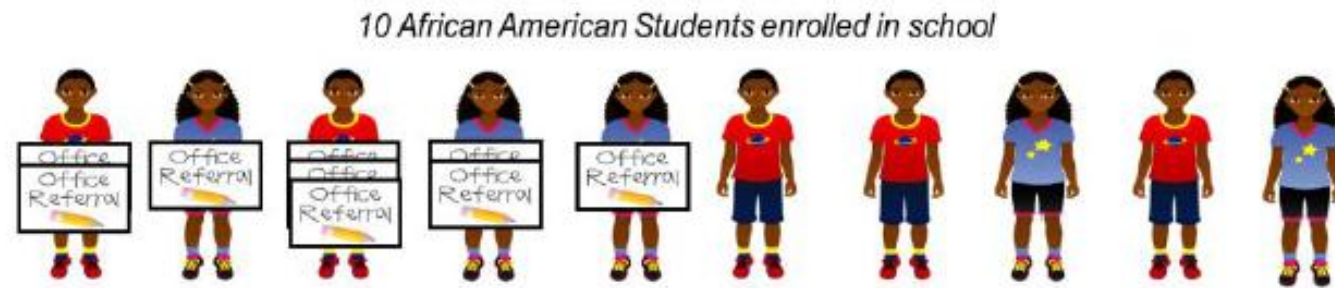


Common Disproportionality Metrics

- Three recommended ways to measure disproportionality in school discipline:
 - Risk Index
 - Risk Ratio
 - Rates by Group

Disproportionality Metric #1: Risk Index

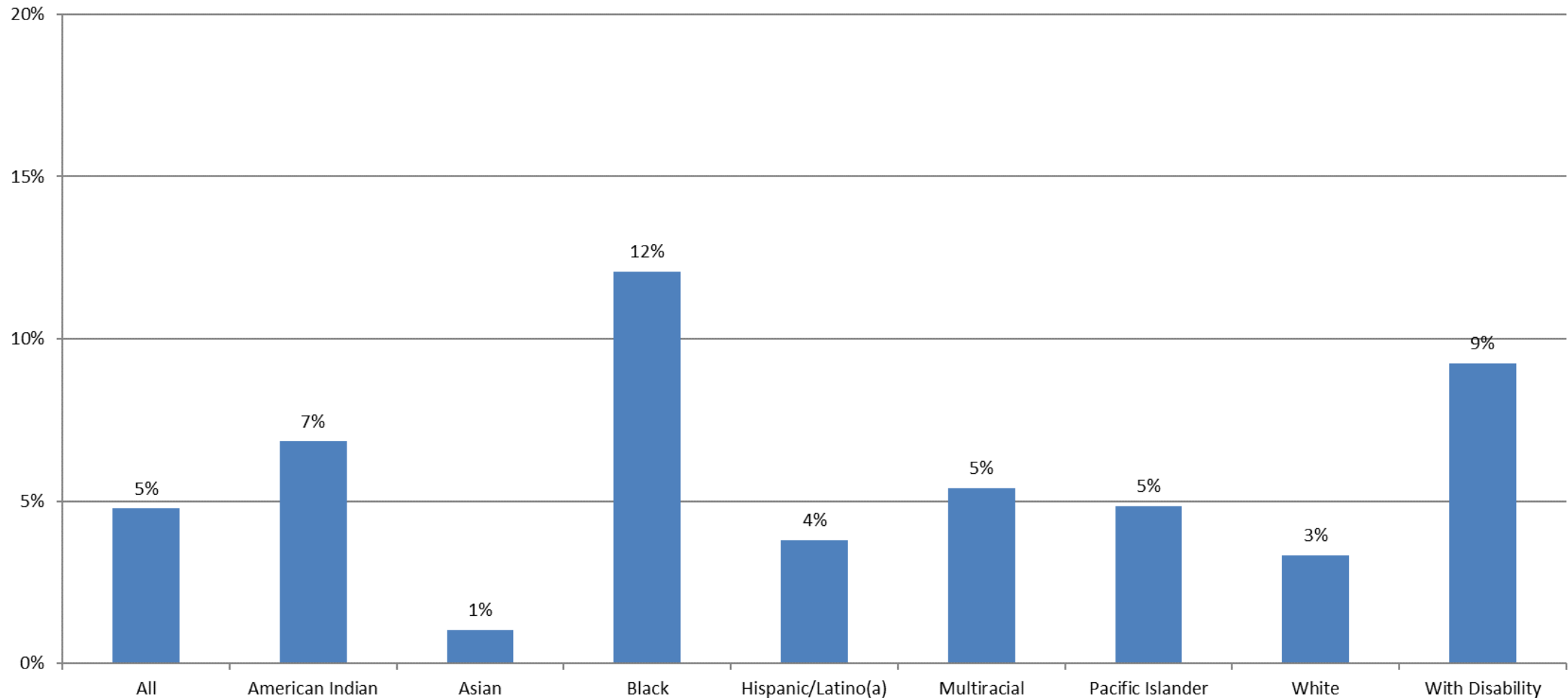
- Percent of a group that receives an ODR (i.e., risk for that outcome)



$$\frac{\text{Black Students with 1+ ODRs}}{\text{Enrollment of Black Students}} = \frac{5}{10} = .50$$

Disproportionality Metric #1: Risk Index Example

Out of School Suspension Risk Index
2017-18 US Schools (n = 97,632)



Disproportionality Metric #2: Risk Ratio

10 African American Students, 5 with at least 1 referral



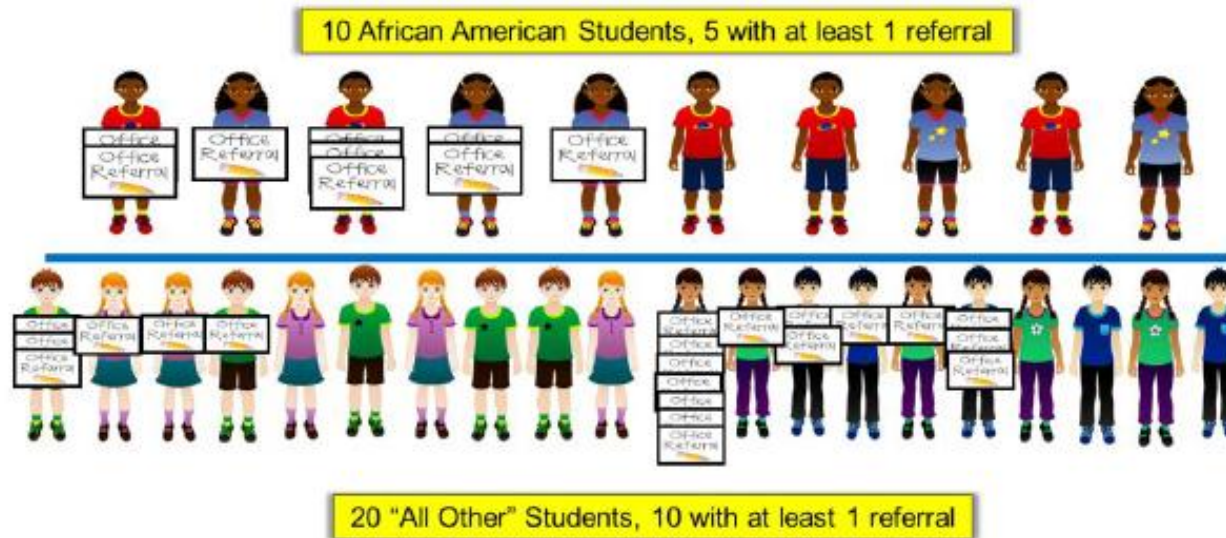
Disproportionality Metric #2: Risk Ratio, continued

10 African American Students, 5 with at least 1 referral



20 "All Other" Students, 10 with at least 1 referral

Disproportionality Metric #2: Risk Ratio Calculation



$$\frac{\text{Risk Index of Group Most Excluded}}{\text{Risk Index of Comparison Group}} = \frac{\text{Risk Index of Black Students} \quad .50}{\text{Risk Index of All Other Students} \quad .50} = 1.00$$

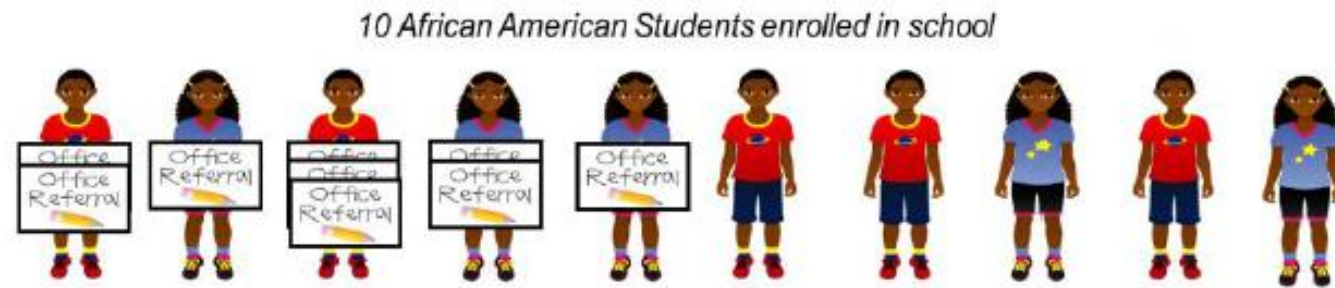
1.00 is equal risk

> 1.00 is overrepresentation

< 1.00 is underrepresentation

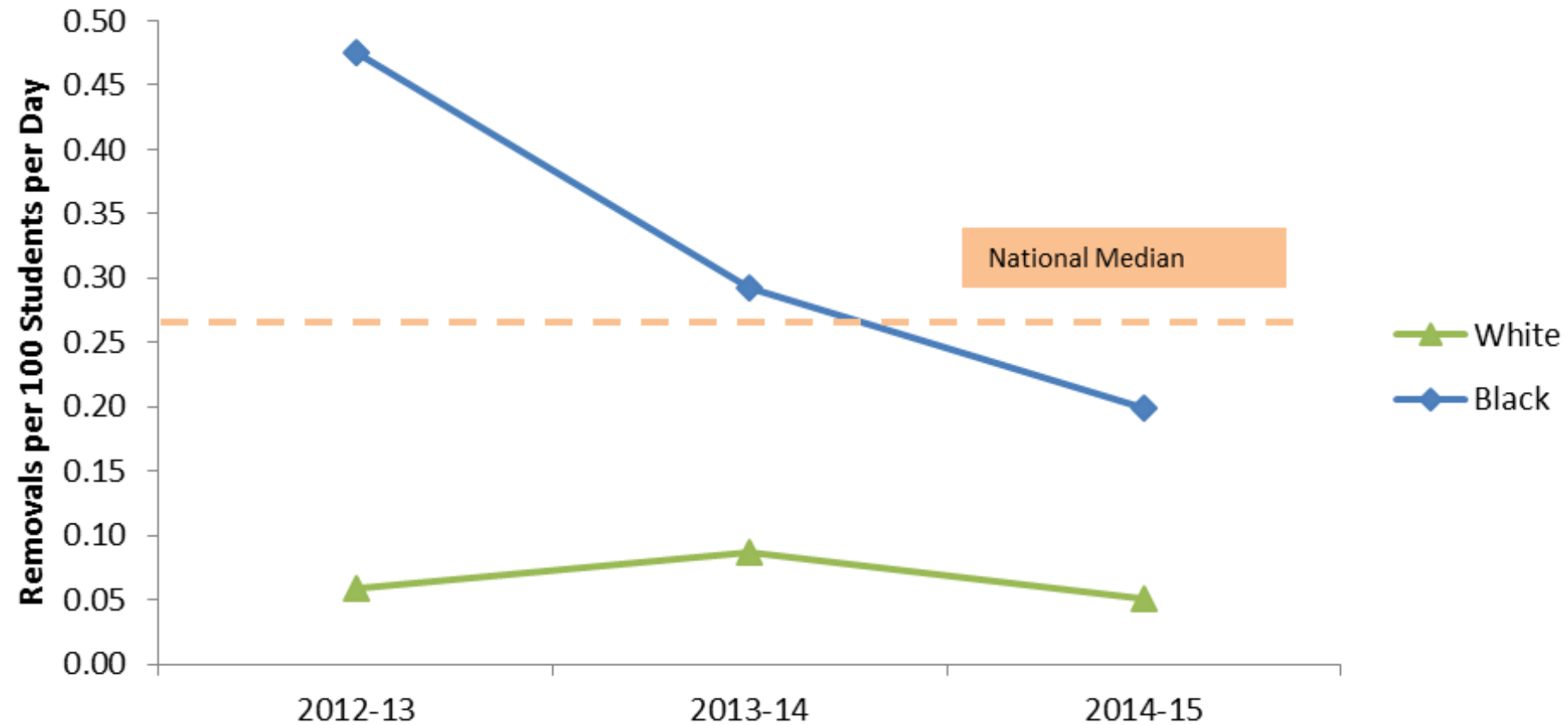
Disproportionality Metric #3: Rates by Group

- Average number of ODRs or suspensions per student in this group



$$\frac{\text{ODRs for Black Students}}{\text{Enrollment of Black Students}} = \frac{9}{10} = .90$$

Disproportionality Metric #3: Rates by Group Example



(McIntosh et al., 2018)

Demonstration

Disproportionality Metrics

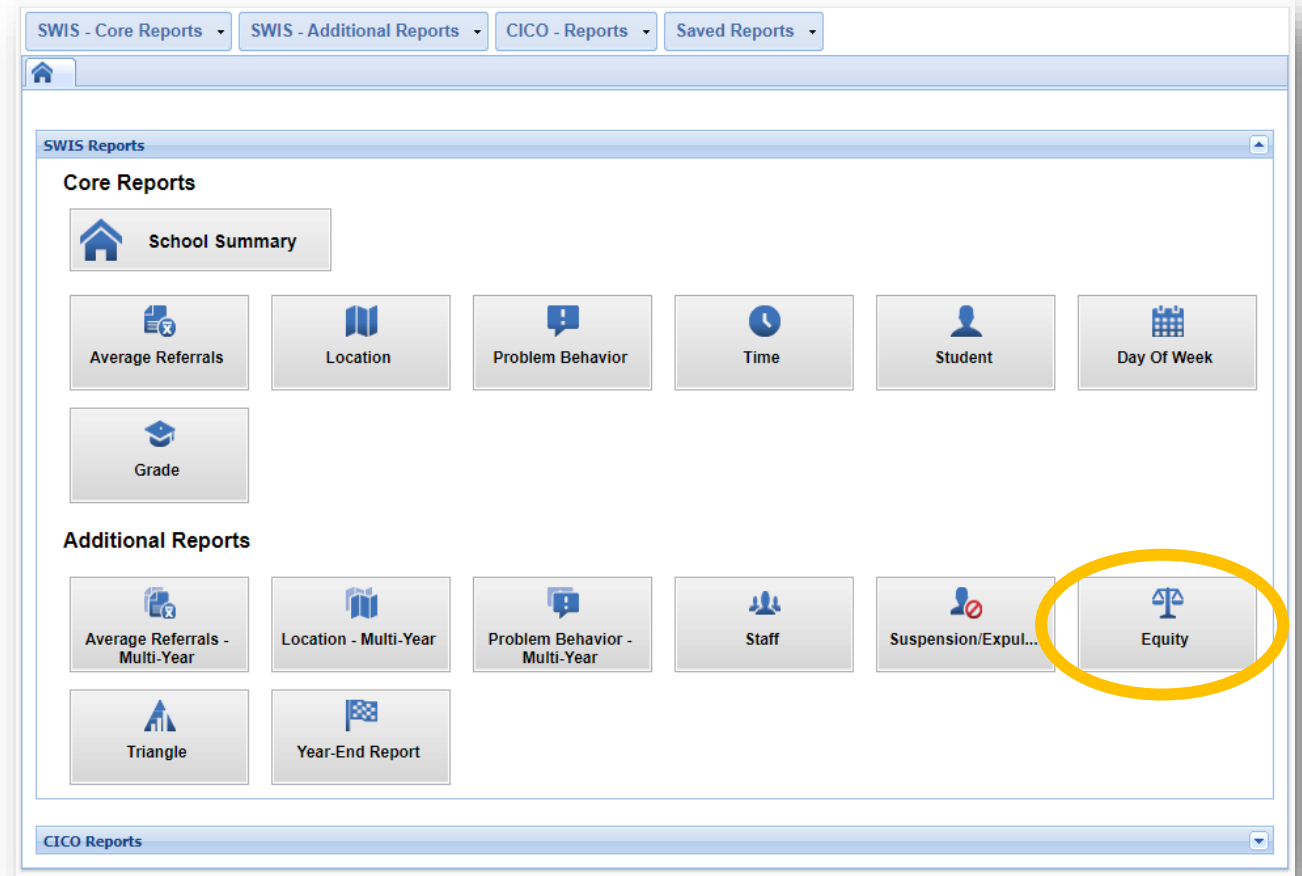


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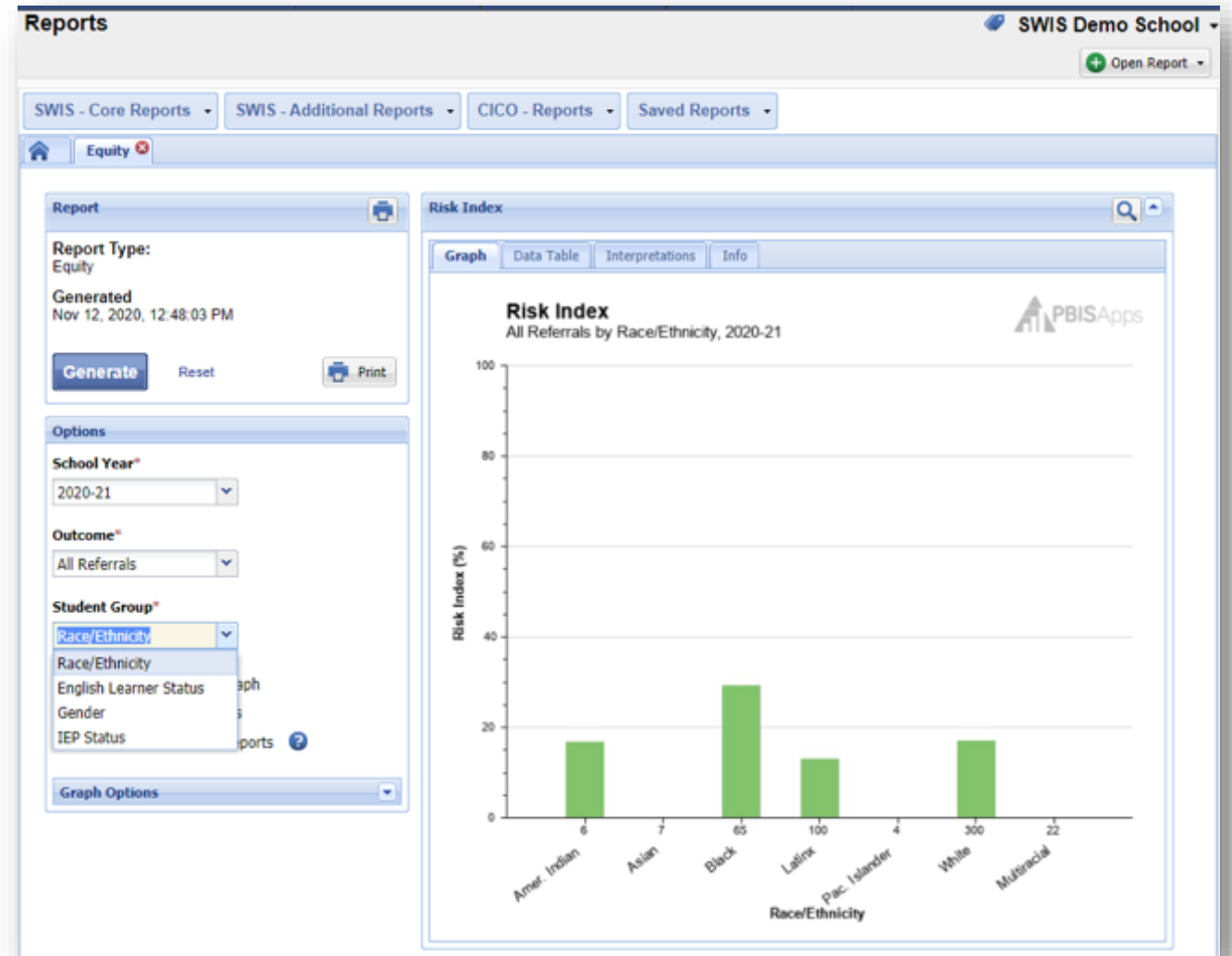
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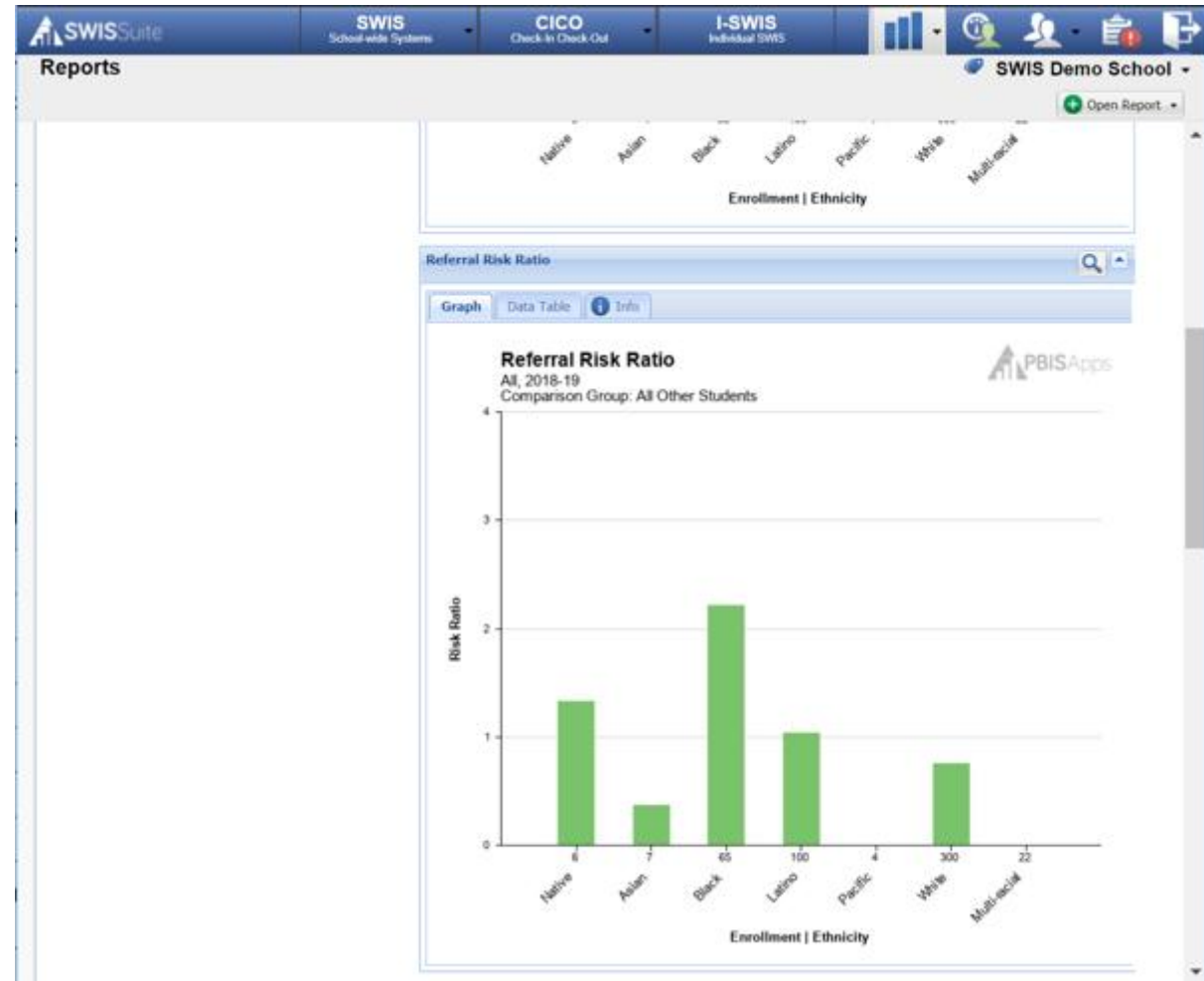
1. Log in to www.swis.org
2. Click on “View Reports”
3. Click on “Equity”



- ODR risk index
- ODR risk ratio



4. Scroll down to the second (Risk Ratio) chart.



5. Click the “Data Table” tab to get the numbers for the ODR risk index and risk ratio columns.

The screenshot displays the SWIS Suite Reports interface. At the top, there are navigation tabs for SWIS (School-wide Systems), CICO (Check-In Check-Out), and I-SWIS (Individual SWIS). The current report is titled "Referral Risk Ratio" and is filtered by "Enrollment | Ethnicity". The "Data Table" tab is selected, showing a table with the following data:

Ethnicity	# of Enrolled Stud.	Risk Index	Comparison	Comp. Risk I.	Risk Ratio
Native	6	0.50	All Other	0.38	1.33
Asian	7	0.14	All Other	0.38	0.37
Black	65	0.72	All Other	0.33	2.21
Latino	100	0.39	All Other	0.37	1.04
Pacific	4	0.00	All Other	0.38	0.00
White	300	0.33	All Other	0.44	0.75
Multi-racial	22	0.00	All Other	0.39	0.00

Below the table, there is a section titled "Students With Referrals By Ethnicity" which includes a graph and a legend. The legend indicates that the green line represents "% of Enrolled Students" and the blue line represents "% of Students With Referrals".

Is There a Disproportionality Problem?

■ Risk Ratio

□ National median

- 2018-2019 U.S. public schools using SWIS with at least 10 Black and 10 White students

- 25th percentile of Black-All Other ODR risk ratio = **1.49**

□ Federal criteria

- U.S. Equal Employment Opportunity Commission (EEOC)
Disparate Impact Criterion

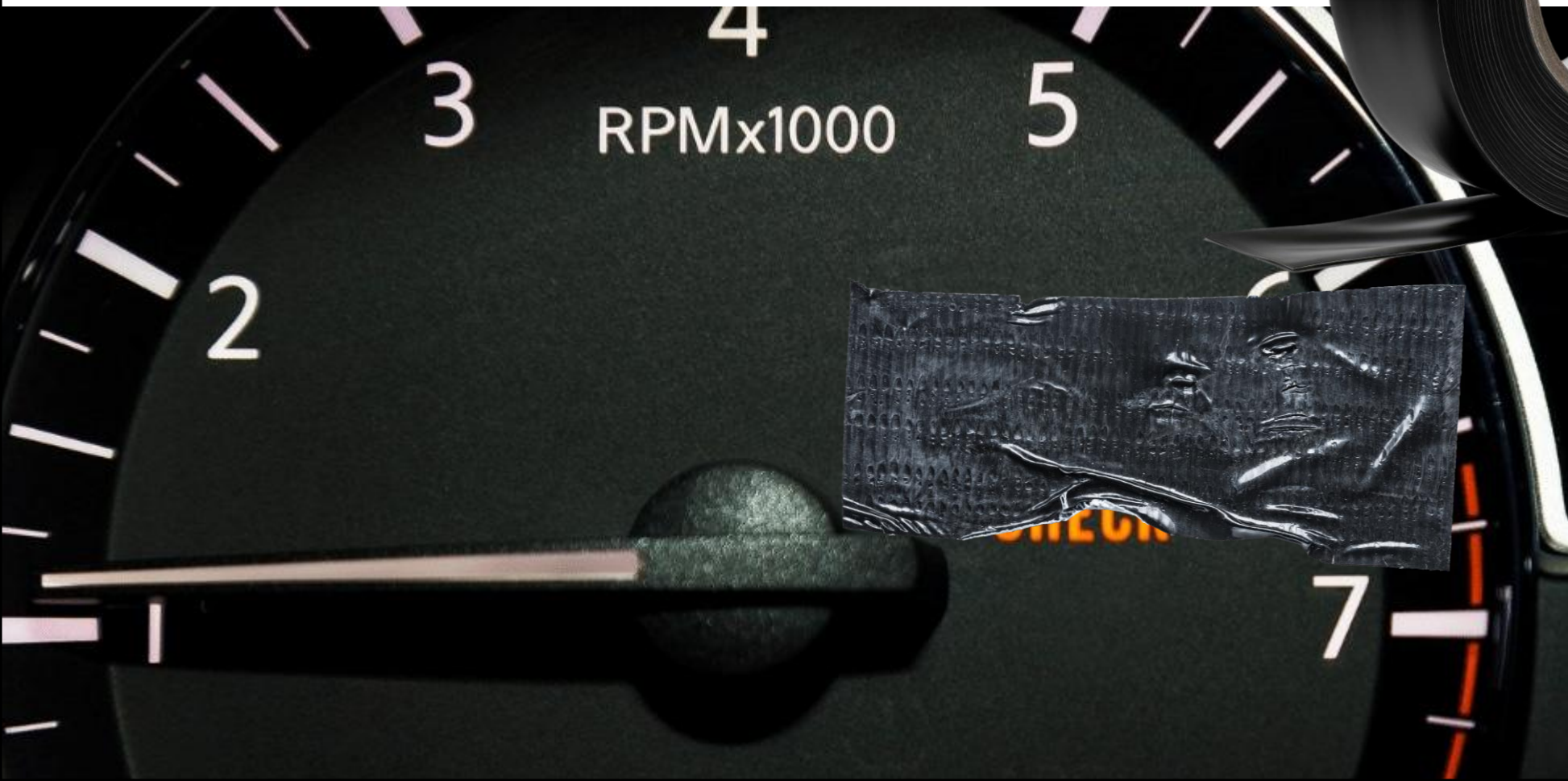
- Goal: Risk Ratio no more than **1.25**

Disproportionality Metrics: Common Questions

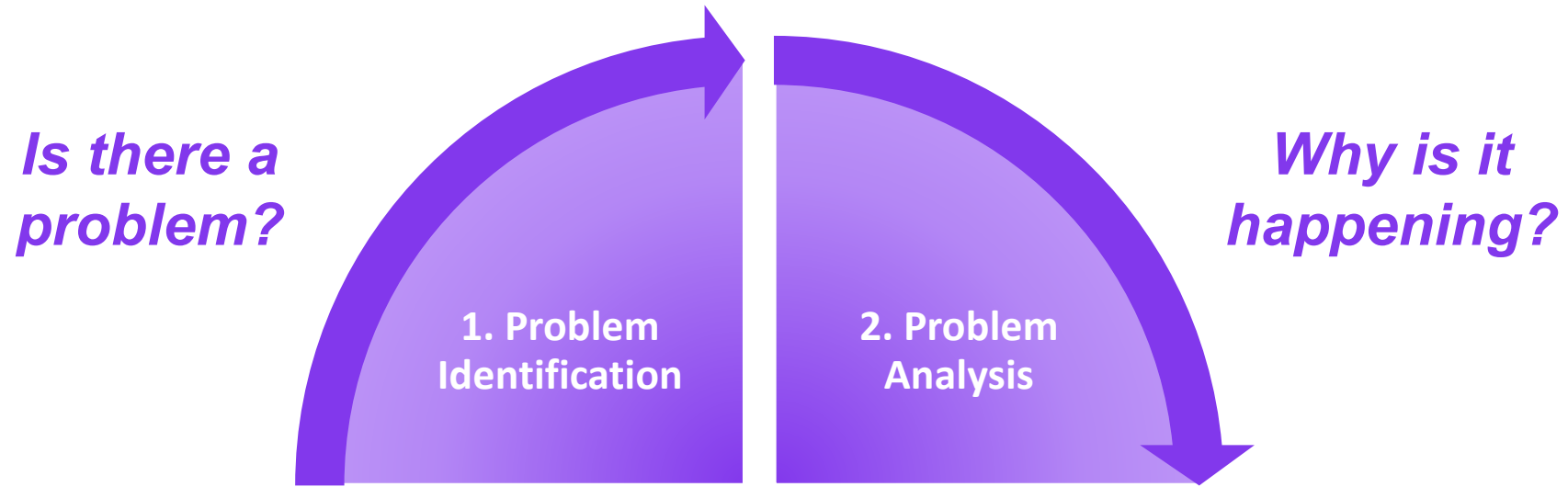
What if my school is 98% Black, Indigenous, or Latino/a/e?

- In schools where the students are predominantly (e.g., 90% or more) a single race or ethnicity, it may not be as useful to compare the majority of students to a very small group of all other students. If so, we recommend calculating the school's overall rate of exclusions (e.g., ODRs per student) and comparing it to the overall exclusion rate of the district or state. That comparison will identify the extent to which the school's use of exclusions is disproportionate in relation to neighboring schools. If the school is almost exclusively one non-White race, any difference would represent disproportionate discipline.

What would you do?



Step 2: Problem Analysis



Root Cause Analysis in School Discipline

Identifying Vulnerable Decision Points



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What is a Vulnerable Decision Point (VDP)?

- A specific decision that is more susceptible to effects of implicit bias
- Two parts:
 - Elements of the situation
 - The person's decision state (internal state)



What is an Equitable Decision Point (EDP)?

- A specific decision situation that school data shows is not influenced by bias

Identifying Vulnerable Decision Points

1. All ODR/suspension decisions (general self-instruction routine)
2. Identify specific VDPs
 - a) Through national data
 - b) Your own school or district data
 - c) Your own personal VDPs

Demonstration 2

Vulnerable Decision Points



SWIS Drill Down (www.swis.org)

The screenshot displays the SWIS Drill Down application interface. The top navigation bar includes 'SWIS School-wide Systems', 'CICO Check-In Check-Out', and 'ISIS Individual Students'. The main content area is titled 'Drill Down' and features a 'Report Filters' sidebar on the left. The 'Include in Dataset' section is active, showing 'School Year - 2012-13' and 'Race / Ethnicity - Hispanic / Latino'. Below this, there are 'Generate' and 'Save Report Template' buttons. The main display area shows a 'Drill Down Report - Generated 8/28/13 5:03 PM' with a bar chart titled 'Referrals by Problem Behavior Drill Down'. The chart shows the number of referrals for various problem behaviors, with 'PAgg' and 'Deliance' having the highest counts. A 'Graph Type' dropdown menu is visible on the right, currently set to 'Problem Behavior'. Below the chart is a table of referral data.

Date / Time	Student	Grade	Staff	Location	Behavior	Motivation	Others In	Action Ta
12/5/12 12:00	Isaac Spilman	4	Rik Dranen	Cafe	Lyng	Ob itm	Staff	Office
12/6/12 11:15	Isaac Spilman	4	Sally Post	Bus 2n	Snapp Len	Ob p arth	Peers	Office
1/2/13 10:30 AM	Isaac Spilman	4	Bette Davidson	Gym	Defiance	Avoid a	Teacher	Office
2/2/13 12:45 PM	Isaac Spilman	4	Anne Harrison	Class	Defiance	Unknown	Unknown	Detent
1/21/13 1:45 PM	Isaac Spilman	4	Debbie Calhoun	Library	PAgg	DK	Peers	Detent
11/1/12 9:00 AM	Isaac Spilman	4	Sean Taylor	Plygd	PAgg	Unknown	Unknown	None

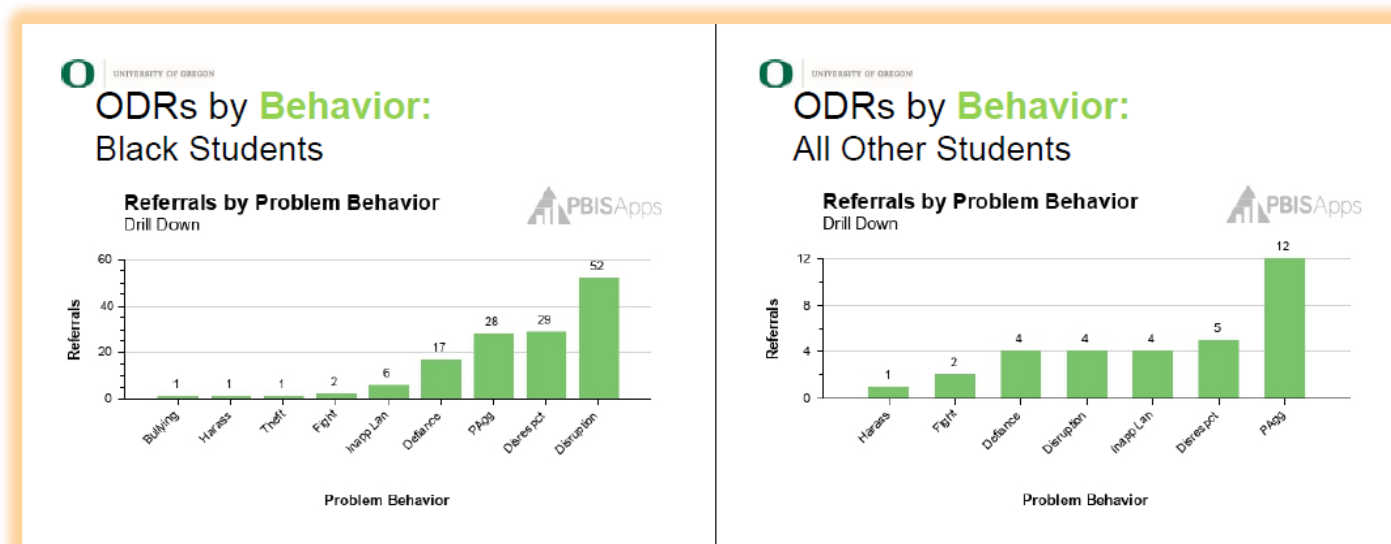
Add group of concern as a filter (click to “Include in Dataset”).

Click each graph and compare to overall patterns.

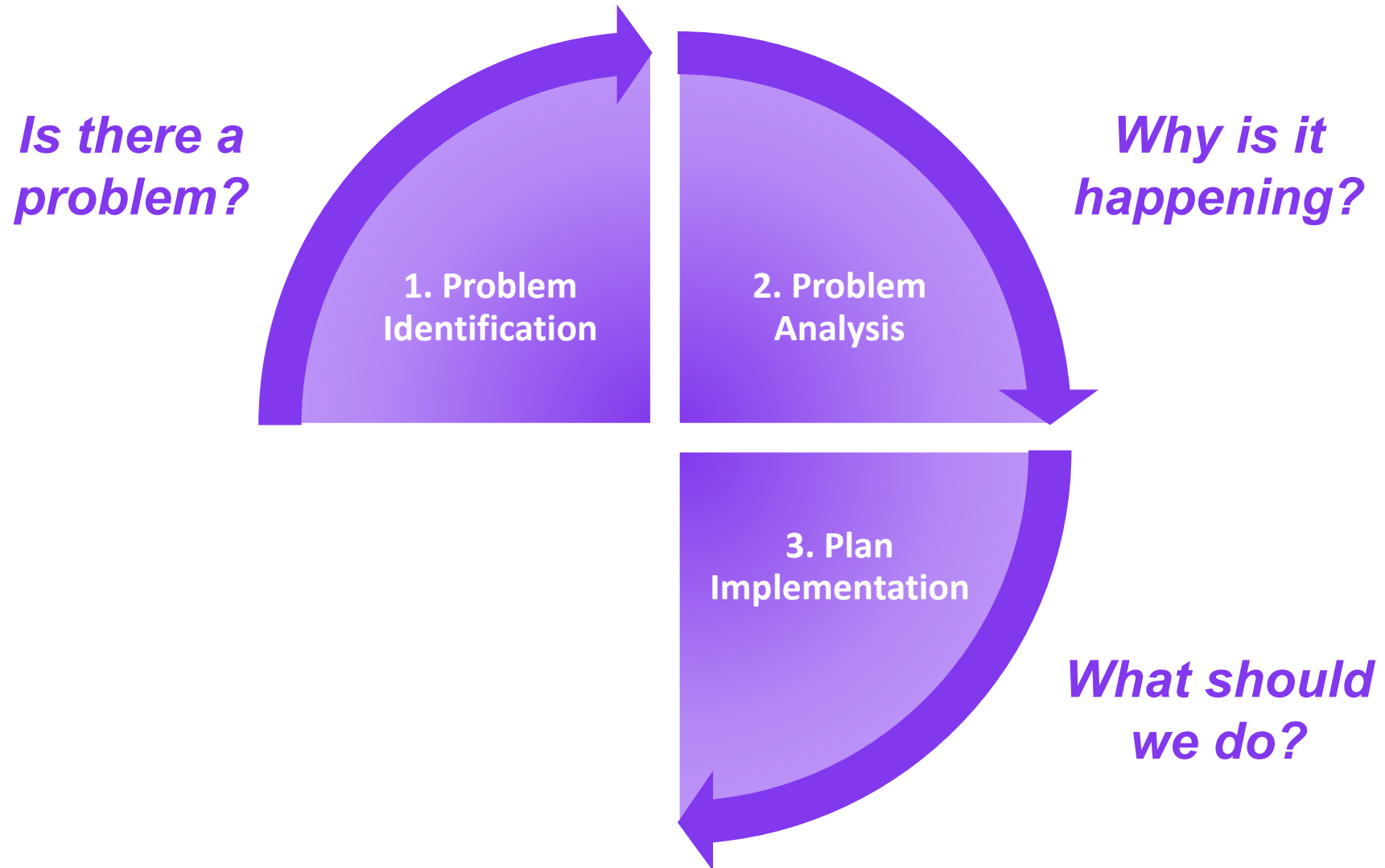
The Most Common VDPs in Schools

(Austin et al., 2024)

1. Defiance in the classroom in the afternoon
2. Defiance in the classroom in the morning
3. Physical aggression on the playground in the middle of the day



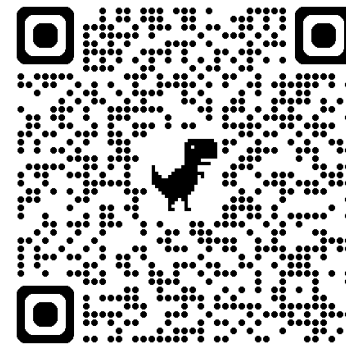
Step 3: Plan Implementation



Implementing Equitable Supports in PBIS



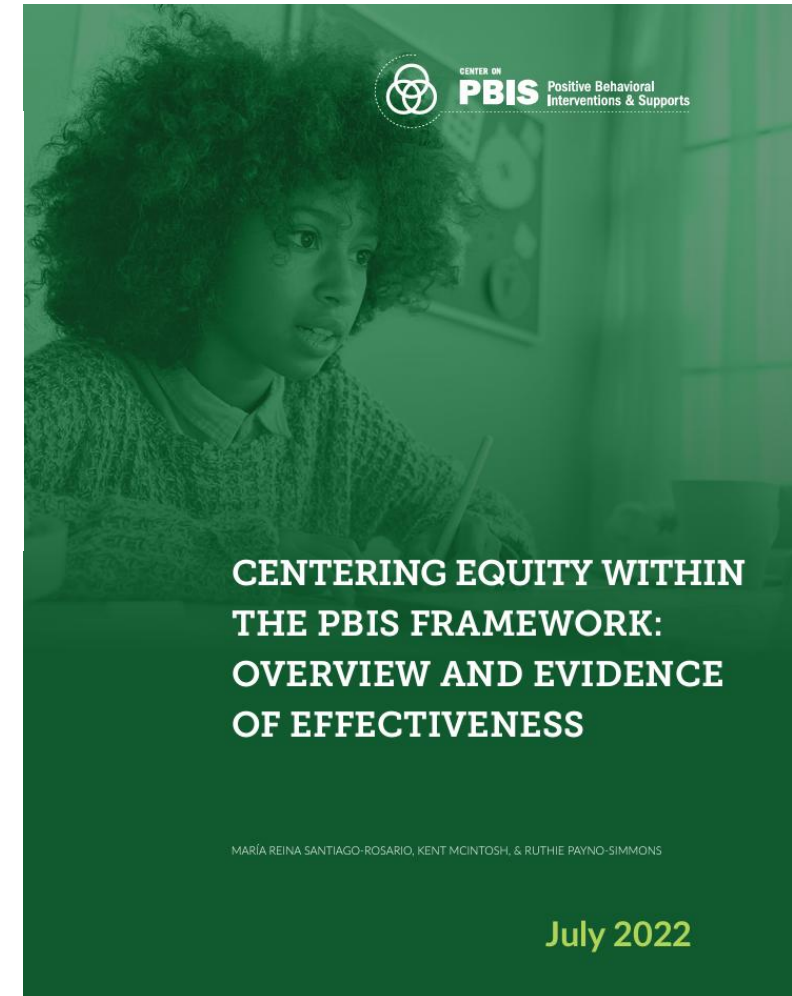
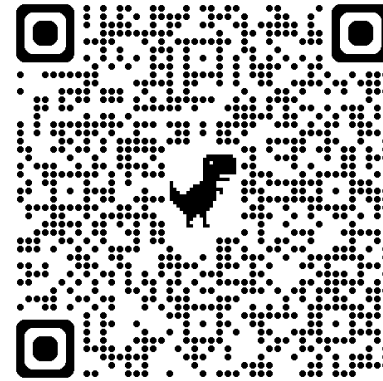
5-point Intervention Approach



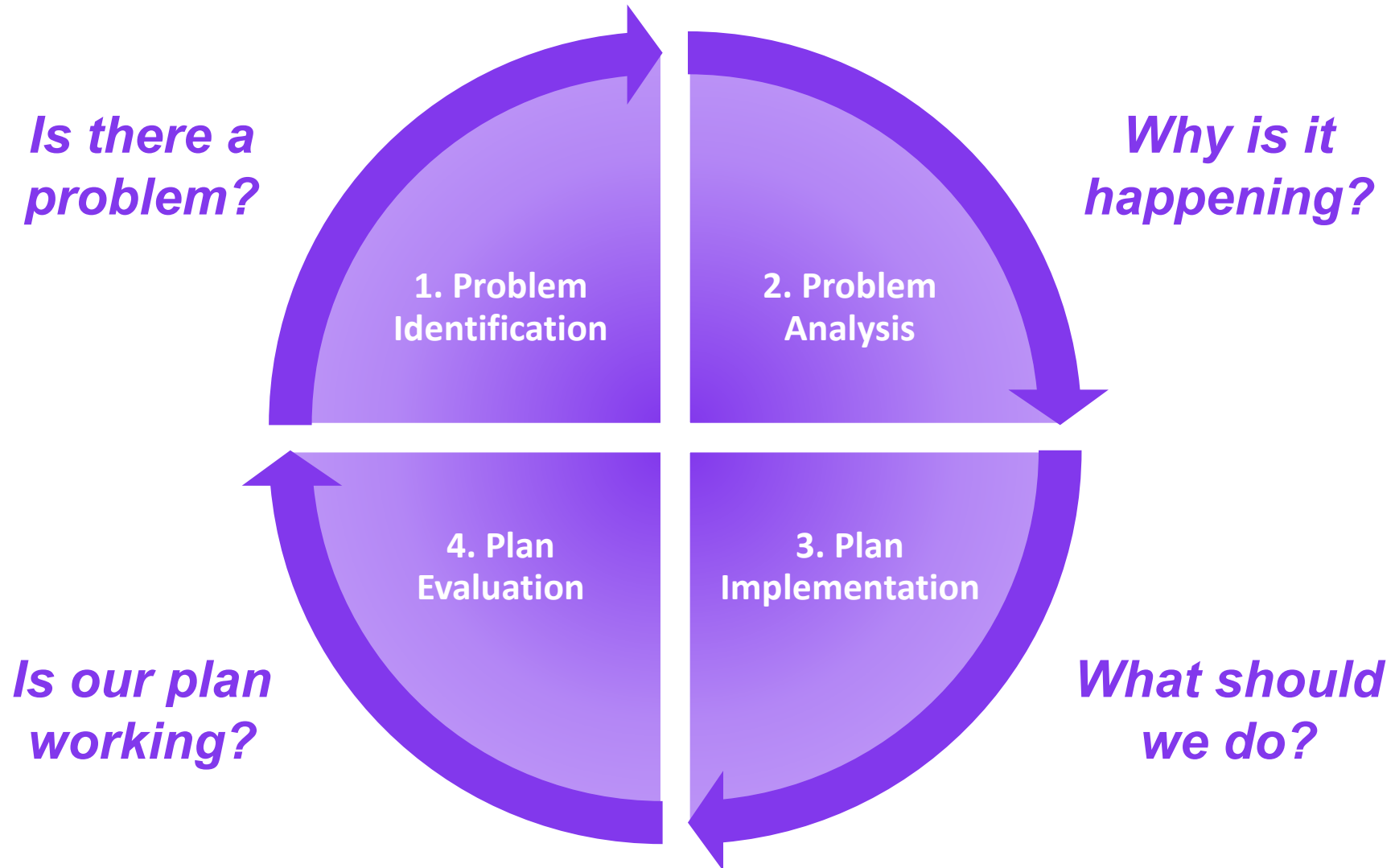
1. Collect, use, and report **disaggregated** discipline data
2. Implement a **behavior framework** that is preventive, multi-tiered, and culturally responsive
3. Use engaging **academic instruction** to reduce the opportunity (achievement) gap
4. Develop **policies** with accountability for discipline disparities
5. Teach strategies to **neutralize implicit bias**

Effects of Equitable Supports in PBIS on Racial Equity in School Discipline

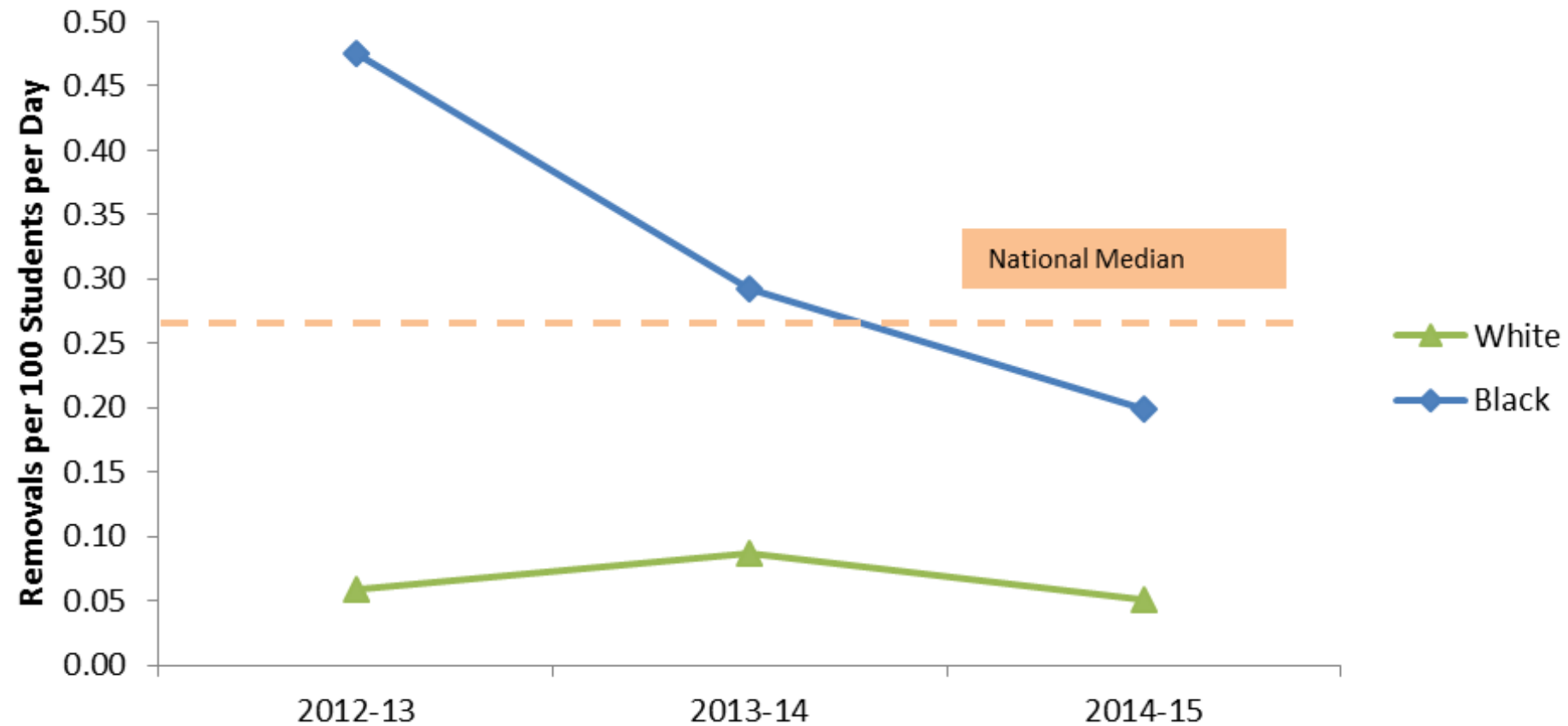
- Fox et al., 2021
- Gion et al., 2022
- McIntosh et al., 2018
- McIntosh et al., 2021a
- McIntosh et al., 2021b
- Muldrew & Miller, 2021
- Payno-Simmons, 2021
- Swain-Bradway et al., 2019



Step 4: Plan Evaluation



Disproportionality Metric #3: Rates by Group



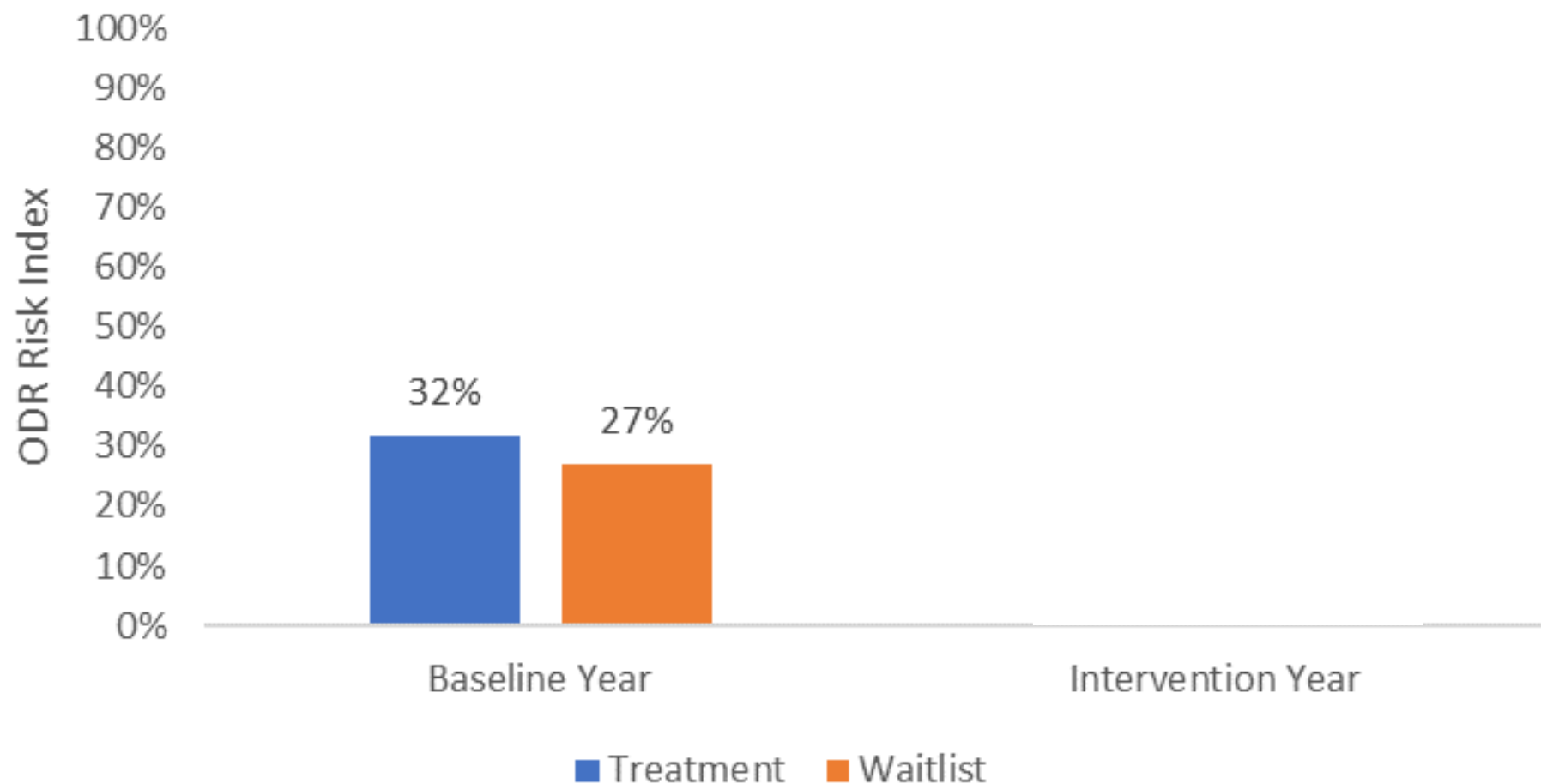
(McIntosh et al., 2018)

Equitable Supports in PBIS

RCT Outcomes for Black Students

(McInte

ODR Risk Index: Black Students

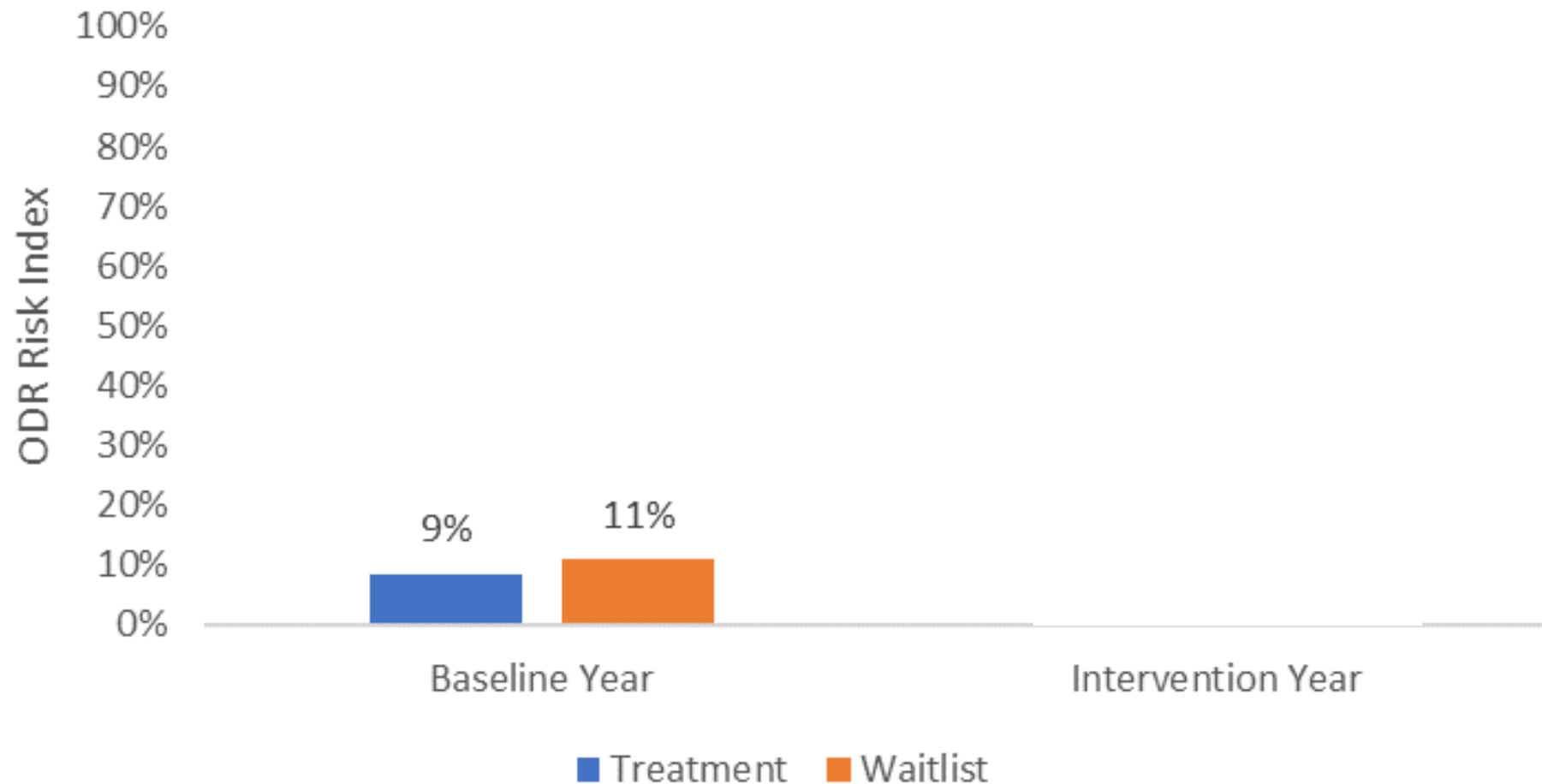


Equitable Supports in PBIS

RCT Outcomes for Non-Black Students

(McIntyre)

ODR Risk Index: Non-Black Students



Big Ideas

- Disproportionality in school discipline is one of the biggest challenges in education today
- We can use data to assess and monitor how we are doing
 - If you don't have the data you need at hand, advocate for it
- The same steps we have for solving discipline problems work for disproportionality

Q&A



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