The Effect of School-Wide Positive Behavior Supports on Disciplinary Exclusions

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Goals

• We will:
  • Provide an overview of School-wide Positive Behavior Interventions and Supports
  • Discuss the evidence-base supporting the implementation of SWPBIS
  • Describe a series of state-level quasi-experimental design studies evaluating the effect of SWPBIS on disciplinary exclusions

• We will:
  • Be moderately entertaining
  • Not talk too fast
  • Not hop too much

What are School-Wide Positive Behavior Interventions and Supports?

Primary Prevention:
School-/Classroom-Wide Systems for All Students, Staff, & Settings

Secondary Prevention:
Specialized Group Systems for Students with At-Risk Behavior

Tertiary Prevention:
Specialized Individualized Systems for Students with High-Risk Behavior

~80% of Students
~15%
~5%

CONTINUUM OF SCHOOL-WIDE INSTRUCTIONAL & POSITIVE BEHAVIOR SUPPORT

Universal
Targeted
Intensive
Few
Some
All

Swpbis Emphasis

Supporting Important Culturally Equitable Academic & Social Behavior Competence
Supporting Culturally Relevant Evidence-based Interventions
Supporting Important Culturally Knowledgeable Staff Behavior
Supporting Culturally Valid Decision Making
School-Wide

1. Leadership team
2. Behavior purpose statement
3. Set of positive expectations & behaviors
4. Procedures for teaching SWI & classroom-wide expected behavior
5. Continuum of procedures for encouraging expected behavior
6. Continuum of procedures for discouraging rule violations
7. Procedures for on-going data-based monitoring & evaluation

Evidence Supporting the Effectiveness of SWPBS

- Horner, Sugai, & Anderson (2010)
  - Narrative review found positive effect on school organizational health, student perceptions of school safety, and problem behavior
  - Problem: not systematic and unclear how large an effect
- Solomon et al., (2012)
  - Meta-analysis of 20 single-case design studies that found small effects on ODR and problem behavior
  - Problem: combined school and student outcomes

The Relationship Between School-Wide Implementation of Positive Behavior Intervention and Supports and Student Discipline Outcomes

- Childs, K., & Kincaid, D. (in press). Average treatment effect of school-wide positive behavioral interventions and supports (SWPBS) on school-level academic achievement in Florida.
  - SWPBS and student discipline outcomes
  - Average treatment effect
  - Comparison of SWPBS schools vs. non-SWPBS schools

Evidence Supporting SWPBS in FL

- Evidence Supporting SWPBS in Florida
  - Meta-analysis of 20 single-case design studies
  - Small effects on ODR and problem behavior

Average Treatment Effect of School-Wide Positive Behavioral Interventions and Supports on School-Level Academic Achievement in Florida

  - Comparison of SWPBS schools vs. non-SWPBS schools
  - Average treatment effect
  - Meta-analysis of 20 single-case design studies

School-Wide Practices

- SWPBS Practices
  - School-wide, Classroom, Non-classroom, Family
  - Student, Family, Community, School
Evidence Supporting SWPBS

- Gage, Whitford, & Katsiyannis (in press)
- Conducted a What Works Clearinghouse Review of SWPBS effects on disciplinary exclusion

<table>
<thead>
<tr>
<th>Disciplinary Exclusion Type</th>
<th>Study #1: Kentucky</th>
<th>Study #2: New York</th>
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</thead>
<tbody>
<tr>
<td>ODR</td>
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<tr>
<td>53</td>
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<tr>
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<tr>
<td>Suspension</td>
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<tr>
<td>WWC Standards</td>
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<tr>
<td>Meets Without Reservations</td>
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</tr>
<tr>
<td>43</td>
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<td>Does Not Meet Standards</td>
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<td>0.10</td>
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</table>

Table 2. Fixed-Effect Meta-Analysis Results for SWPBS Effect on Disciplinary Exclusion

Limits of the Literature

- Only four experimental studies with a treatment group and control group conducted to date at the school-level
- Those studies have only included 90 schools
- Limited data on outcomes directly related to problem behavior

Solution!

State-level analyses comparing schools implementing SWPBS (with fidelity) to schools that have never received training

Sample and Measures

- Data from all public schools in the state of Kentucky (n = 1,171 schools)
- 29 received ABRi training between the fall of 2013 and spring of 2016, including two high schools, five middle schools, and 22 elementary schools
- School demographics and disciplinary exclusions (i.e., behavioral incidents and suspensions)

Research Design

- We took two approaches in the analysis:
  - an intent-to-treat model treating all schools ever receiving ABRi training, and
  - a treatment-on-the-treated focusing on fidelity of implementation of the ABRi model.
- Missing data: < 10% missingness, thus used multiple imputation
- Propensity Score matched Treatment schools to Control schools
- Treatment Effect: Poisson Regression
- Effect Sizes: WWC procedures for dichotomous outcomes by calculating the Cox index based on the log odds ratio
Results

<table>
<thead>
<tr>
<th></th>
<th>Equivalence</th>
<th>Treatment Effect</th>
<th>T(0.05)</th>
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</thead>
<tbody>
<tr>
<td>A total 119 schools implemented SWPBIS with fidelity during the 2015-2016 school year.</td>
<td>Data from all public schools in the state of Georgia during the 2015-2016 school year were collected from the Georgia Department of Education (GaDOE) website (n = 1,755).</td>
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<tr>
<td>Low fidelity (31%) for schools implementing SWPBIS at different fidelity levels compared to matched control schools.</td>
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<td></td>
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</tr>
<tr>
<td>Black</td>
<td>White</td>
<td>Hawaiian</td>
<td>Na,ve American</td>
</tr>
<tr>
<td>24.6</td>
<td>29.9</td>
<td>50.1</td>
<td>28.6</td>
</tr>
<tr>
<td>55.7</td>
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<tr>
<td>13.8</td>
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</tbody>
</table>

Sample and Measures

- Data from all public schools in the state of Georgia during the 2015-2016 school year were collected from the Georgia Department of Education (GaDOE) website (n = 1,755).
- A total 119 schools implemented SWPBIS with fidelity during the 2015-2016 school year.
- BoQ, demographics, behavioral incidents, school suspensions

Research Design

- three levels of fidelity of implementation: Installing, Emerging, Operational
- In this study, we focused exclusively on schools implementing SWPBIS with fidelity (Emerging and Operational), and excluded schools (n = 218) that were installing as they were not implementing Tier 1 prevention efforts with fidelity, but had received training.
- Used Propensity Score Matching
- Conducted ToF models using Poisson Regression
- Calculated effect sizes as described above

Study #2: Georgia

- Research Question #1: Is there a statistically significant difference in the number of disciplinary incidents and in-school and out-of-school suspensions for schools implementing SWPBIS with fidelity compared to matched comparison schools?
- Research Question #2: Is there a statistically significant difference in the number of disciplinary incidents and in-school and out-of-school suspensions for schools implementing SWPBIS at different fidelity levels compared to matched control schools?

Study #3: Florida

- Primary research questions:
  1. Is there a statistically significant difference in the number of in-school and out-of-school suspensions between schools implementing SWPBIS with fidelity and propensity score matched comparison schools?
  2. Do schools implementing SWPBIS with fidelity have fewer incidents of corporal punishment?
- Exploratory research questions:
  3. Are there differences in suspensions for Black students in schools implementing SWPBIS with fidelity compared with propensity score matched comparison schools?
  4. Are there differences in the frequency of corporal punishment for Black students in schools implementing SWPBIS with fidelity compared with propensity score matched comparison schools?
Sample and Outcomes

- Data from all Florida public schools were collected from the U.S. Department of Education’s Civil Rights Data Collection website for all available discipline outcomes for the 2013-2014 school year (n = 3,513).
- During the 2013-2014 school year, 1,129 regular schools were trained to implement SWPBIS. Of those, 593 implemented SWPBIS with fidelity and were retained, while the remaining 536 schools were removed from the dataset.
- Demographics, and disciplinary actions: (a) corporal punishment, (b) in-school suspension (ISS), (c) out-of-school suspension (OSS), (d) expelled, and (e) contact with law enforcement.

Research Design

- Propensity score matching of schools implementing with fidelity
- Zero-predicted Poisson Regression Models
- Effect sizes as described above

Results

<table>
<thead>
<tr>
<th>Discipline Outcome</th>
<th>Intercept</th>
<th>OSS 2011</th>
<th>OSS 2011</th>
<th>OSS 2011</th>
<th>OSS 2011</th>
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</thead>
<tbody>
<tr>
<td>Expulsion</td>
<td>-0.07***</td>
<td>-1.53***</td>
<td>-1.53***</td>
<td>-1.53***</td>
<td>-1.53***</td>
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<tr>
<td>School-Related Arrest</td>
<td>0.00*</td>
<td>0.00*</td>
<td>0.00*</td>
<td>0.00*</td>
<td>0.00*</td>
</tr>
<tr>
<td>Corporal Punishment</td>
<td>1.93</td>
<td>0.78</td>
<td>0.78</td>
<td>0.78</td>
<td>0.78</td>
</tr>
</tbody>
</table>

What does it all mean

- SWPBIS is an effective approach for addressing disciplinary exclusions
- Next Steps: MORE STUDIES