IS SCHOOL-WIDE POSITIVE BEHAVIORAL INTERVENTIONS AND SUPPORTS (PBIS) AN EVIDENCE-BASED PRACTICE?

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A major focus for current policy and systems change efforts in education and mental health is the extent to which states are investing in practices and procedures that are supported by rigorous research evidence. Evidence-based practices have been demonstrated in formal research studies to be related to valued outcomes for children and their families.

A reasonable question is if School-wide Positive Behavioral Interventions and Supports (PBIS) is an evidence-based practice. The purpose of this document is to lay out the current evidence assessing PBIS and the considerations that may be relevant for state, district and national decision-makers.

Any claim that a practice or procedure is “evidence-based” should be framed in the context of (a) explicit description of the procedure/practice, (b) clear definition of the settings and implementers who use the procedure/practice, (c) identification of the population of individuals who are expected to benefit, and (d) the specific outcomes expected. Given this context, the research involving the practice/procedure may be reviewed, and an array of criteria have been proposed by different agencies and organizations (c.f. American Psychological Association, What Works Clearinghouse, SAMSA, Institute for Education Science) for how this literature may be examined to determine the level of experimental rigor, and the confidence with which any statement about “evidence-based” effects can be claimed. A summary of suggestions for defining evidence-based practices from Quantitative (Gersten et al., 2005), Correlational (Thompson et al., 2005) and Single Subject (Horner et al., 2005) research methods was reviewed for educational literature in special section of Exceptional Children (Odom et al., 2005).

We provide here (a) the citations defining the context content for PBIS, (b) the current status of evidence for each of the three tiers of the PBIS approach (Tier 1 Supports, Tier 2 Supports, Tier 3 Supports), and (c) summary of current and expected directions.
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School-wide Positive Behavioral Interventions and Supports

School-wide Positive Behavioral Interventions and Supports (PBIS) is a systems approach to establishing the social culture and behavioral supports needed for all children in a school to achieve both social and academic success. PBIS is not a packaged curriculum, but an approach that defines core elements that can be achieved through a variety of strategies.

The core elements at each of the three tiers in the prevention model are defined below:

<table>
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<tr>
<th>Prevention Tier</th>
<th>Core Elements</th>
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| Tier 1          | • Behavioral Expectations Defined  
                 • Behavioral Expectations Taught  
                 • Reward system for appropriate behavior  
                 • Clearly defined consequences for problem behavior  
                 • Differentiated instruction for behavior  
                 • Continuous collection and use of data for decision-making  
                 • Universal screening for behavior support |
| Tier 2          | • Progress monitoring for at risk students  
                 • System for increasing structure and predictability  
                 • System for increasing contingent adult feedback  
                 • System for linking academic and behavioral performance  
                 • System for increasing home/school communication  
                 • Collection and use of data for decision-making  
                 • Basic-level function-based support |
| Tier 3          | • Functional Behavioral Assessment (full, complex)  
                 • Team-based comprehensive assessment  
                 • Linking of academic and behavior supports  
                 • Individualized intervention based on assessment information focusing on (a) prevention of problem contexts, (b) instruction on functionally equivalent skills, and instruction on desired performance skills, (c) strategies for placing problem behavior on extinction, (d) strategies for enhancing contingency reward of desired behavior, and (e) use of negative or safety consequences if needed.  
                 • Collection and use of data for decision-making |

The core elements of PBIS are integrated within organizational systems in which teams, working with administrators and behavior specialists, provide the training, policy support and organizational supports needed for (a) initial implementation, (b) active application, and (c) sustained use of the core elements (Sugai & Horner, 2010).
Is there evidence indicating that PBIS can be implemented with fidelity and is related to improved social and/or academic outcomes for students?

Among the most rigorous standards for documenting that a practice/procedure is “evidence-based” is demonstration of at least two peer-reviewed randomized controlled trial research studies that document experimental control. To meet this standard the practice/procedure must be operationally defined, there must be formal measures of fidelity, there must be formal outcome measures, and these elements must be used within a randomized control trial group research design. The citations below summarize first the technical adequacy of relevant research measures, then randomized controlled trials, and evaluation studies examining the effects of PBIS.

PBIS Measures Documenting Fidelity


**Tier 1 of PBIS: Randomized Controlled Trials**


Tier 1 of PBIS: Synthesis of School-wide PBIS from Mental Health Institute


Tier 1 of PBIS: Evaluation and Quasi-Experimental Studies


Mathews, S., McIntosh, K., Frank, J., & May, S., (2014). Critical features
predicting sustained implementation of school-wide positive behavioral interventions and supports. *Journal of Positive Behavior Interventions* 16(3) 168-178.


**Tier 1 of PBIS: Bully Prevention within PBIS**


**Tier 2 of PBIS: Randomized Controlled Trials**


**Tier 2 of PBIS: Literature Reviews**


Tier 2 of PBIS: Materials & Interventions


**Tier 2 of PBIS: Check-In, Check-Out (CICO)**


Tier 2 of PBIS: Check & Connect


**Tier 2 of PBIS: First Steps**


and behavioral disorders (pp. 179-197). New York: Oxford University
Press.

Step to Success program: An analysis of outcomes with identical twins

and Social Validation of an Early Intervention Program. Journal of
Emotional and Behavioral Disorders 6(4), 243-250.

Sprague, J. & Perkins, K., (2009). Direct and collateral effects of the First Step to
Success program. Journal of Positive Behavior Interventions 11 (4) 208-
221.

Exceptional Children, 30(4), 16-19.

(1998). First Step to Success: An Early Intervention Approach for
Preventing School Antisocial Behavior. Journal of Emotional and
Behavioral Disorders, 6(2), 66-80.

Walker, H., Seeley, J., Small, J., Severson, H., Graham, B., Feil, E., Serna, L.,
to success early intervention: Demonstration of program efficacy
outcomes in a diverse, urban school district. Journal of Emotional and
Behavioral Disorders. 17, 197-212.

Home- School Intervention for Preventing Antisocial Behavior at the Point
of School Entry. Young Exceptional Children, 1(2), 2-6.

Tier 2 of PBIS: Social Skills

social skills training for students with high-incidence disabilities.
Exceptional Children, 67(3), 331-334.

Lane, K. L., Wehby, J., Menzies, H. M., Doukas, G. L., Munton, S. M., & Gregg,
R. M. (2003). Social skills instruction for students at risk for antisocial
behavior: The effects of small-group instruction. Behavioral Disorders,
28(3), 229-248.


**Tier 3 of PBIS**


Teachers and Staff FBA intervention measure. *Journal of Positive Behavior Interventions, 10*(1), 33-45.


