

IS SCHOOL-WIDE POSITIVE BEHAVIOR SUPPORT AN EVIDENCE-BASED PRACTICE?

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April, 2015

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 Behavior Interventions and Supports (PBIS) is an evidence-based practice. The purpose of this document is to lay out the current evidence assessing SWPBIS 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 SWPBS, (b) the current status of evidence for each of the three tiers of the SWPBS approach (Primary Prevention, Secondary Prevention, Tertiary Prevention), and (c) summary of current and expected directions.

School-wide Positive Behavior Support

School-wide Positive Behavior Interventions and Supports 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:

Prevention Tier	Core Elements
Primary	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
Secondary	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
Tertiary	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 SWPBS 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.

Measures

SWPBS measures documenting fidelity

- Bradshaw, C., Debnam, K., Koth, C., & Leaf, P. (2009). Preliminary validation of the implementation phases inventory for assessing fidelity of school-wide positive behavior supports. *Journal of Positive Behavior Interventions, 11* (3), 145-160.
- Burk, M., Davis, J., Lee, Y., Hagan-Burke, S., Kwok, O. & Sugai, G. (2012). Universal screening for behavioral risk in elementary schools using SWPBIS expectations. *Journal of Emotional and Behavioral Disorders, 20*(1), 38-54.
- Childs, K., Kincaid, D., & George, H. (2010). A model for statewide evaluation of a universal positive behavior support initiative. *Journal of Positive Behavior Interventions, 12* (4), 195-197.
- Cohen, R., Kincaid, D., & Childs, K. (2007). Measuring school-wide positive behavior support implementation: Development and validation of the “Benchmarks of Quality.” *Journal of Positive Behavior Interventions, 9*(4), 203-213.
- Horner, R. H., Todd, A., Lewis-Palmer, T., Irvin, L., Sugai, G., & Boland, J. (2004). The school-wide evaluation tool (SET): A research instrument for assessing school-wide positive behavior support. *Journal of Positive Behavior Intervention, 6*(1), 3-12.
- Irvin, L.K., Horner, R.H., Ingram, K., Todd, A.W., Sugai, G., Sampson, N., & Boland, J. (2006). Using office discipline referral data for decision-making about student behavior in elementary and middle schools: An empirical investigation of validity. *Journal of Positive Behavior Interventions, 8*(1), 10-23.
- Irvin, L.K., Tobin, T., Sprague, J., Sugai, G. and Vincent, C. (2004). Validity of office discipline referral measures as indices of school-wide behavioral status and effects of school-wide behavioral interventions. *Journal of Positive Behavior Interventions, 6*, 131-147.
- McIntosh, K, Campbell, A., Carter, D., & Zumbo, B., (2009) Concurrent validity of office discipline referrals and cut points used in school-wide positive behavior support. *Behavioral Disorders.*
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- Jimerson, A. Nickerson, M. Mayer & M Furlong (Eds.) *Handbook of School Violence and School Safety*. New York, Routledge. 305-315.
- Spaulding, S., Irvin, L., Horner, R., May, S., Emeldi, M., Tobin, T., & Sugai, G. (2010). School-wide Social-Behavioral Climate, Student Problem Behavior, and Related Administrative Decisions: Empirical Patterns from 1,510 Schools Nationwide. *Journal of Positive Behavior Intervention*, 12, 69-85
- Stover, A.C., Dunlap, G., & Neff, B. (2008). The effects of a contingency contracting program on the nocturnal enuresis of three children. *Research on Social Work Practice*, 18, 421-428.
- Safran, S. P. (2006). Using the Effective Behavior Supports Survey to guide development of school-wide positive behavior support. *Journal of Positive Behavior Interventions*, 8, 3-9.
- Tobin, T., Vincent, C., Horner, R., Rossetto Dickey, C. & May, S., (2012). Fidelity measures to improve implementation of positive behavioural support. *International Journal of Positive Behavioural Support*. 2-2, 12-19.
- Vincent, C., Spaulding, S., & Tobin, T.J. (2010). A reexamination of the psychometric properties of the *School-wide Evaluation Tool* (SET). *Journal of Positive Behavior Interventions*, 12, 161-179.

Primary Prevention Tier of School-wide Positive Behavior Support

Randomized Controlled Trials assessing PBIS

- a. Horner, R., Sugai, G., Smolkowski, K., Todd, A., Nakasato, J., & Esperanza, J. (2009). A Randomized Control Trial of School-wide Positive Behavior Support in Elementary Schools. *Journal of Positive Behavior Interventions*, 11 (3), 113-144.

This paper documents that typical state agents were successful in implementing SWPBS practices, and that these practices were experimentally linked to improved perception of school safety, with preliminary support that implementation was associated with improved proportion of students at 3rd grade who met the state reading standard.

- b. Bradshaw, C., Waasdorp, T., & Leaf P. (2012) Examining the variation in the impact of School-wide Positive Behavioral Interventions and Supports. *Pediatrics*, 10 (5), 1136-1145.
- c. Bradshaw, C., Koth, C., Thornton, L., & Leaf, P. (2009). Altering school climate through School-wide Positive Behavioral Interventions and Supports: Findings from a Group-Randomized Effectiveness Trial. *Prevention Science*, 10, 100-115.