

POSITIVE BEHAVIORAL INTERVENTIONS AND SUPPORTS: HISTORY, DEFINING FEATURES, AND MISCONCEPTIONS

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Purpose

Positive Behavioral Interventions and Supports (PBIS) has been defined, described, and studied ever since its introduction in the reauthorization of the Individuals with Disabilities Act (1997). The purpose of this paper is to revisit PBIS with respect to its history, defining practices and features, and supporting evidence-base.

PBIS is an implementation framework that is designed to enhance academic and social behavior outcomes for all students by (a) emphasizing the use of data for informing decisions about the selection, implementation, and progress monitoring of evidence-based behavioral practices; and (b) organizing resources and systems to improve durable implementation fidelity.

Historical Development of PBIS

1980s. During the 1980s, a need was identified for improved selection, implementation, and documentation of effective behavioral interventions for students with behavior disorders (BD) (Gresham, 1991; Sugai & Horner, 1999; Walker et al., 1996). In response, researchers at the University of Oregon began a series of applied demonstrations, research studies, and evaluation projects. These efforts indicated that greater attention should be directed toward prevention, research-based practices, data-based decision-making, school-wide systems, explicit social skills instruction, team-based implementation and professional development, and student outcomes (Biglan, 1995; Colvin, Kame'enui, & Sugai, 1993; Horner, Sugai, & Anderson, 2010; Lewis & Sugai, 1999; Mayer, 1995; Sugai & Horner 2002).

1990s. In the reauthorization of the Individuals with Disabilities Act of 1997, a grant to establish a national Center on Positive Behavioral Interventions and Supports was legislated to disseminate and provide technical assistance to schools on evidence based practices for improving supports for students with BD. Given the results of their work in the 1980s, researchers at the University of Oregon successfully competed for the opportunity to develop the PBIS Center. A defining feature of the original center was the establishment of a partnership comprising researchers and implementers from the Universities of Oregon, Kansas, Kentucky, Missouri, and South Florida, and from prominent providers of specialized supports (i.e., Illinois Wraparound Network, May Institute, Sheppard Pratt Health Systems) (www.pbis.org, Sugai et al., 2000).

2000s. The National Technical Assistance (TA) Center on PBIS is currently in Year 14 (third 5-year grant cycle), and has assisted in shaping the PBIS framework (also referenced as “school-wide positive behavior supports”), and providing direct

professional development and technical assistance to more than 16,000 schools. Other Center activities include (a) web-based collection and dissemination of evidence-based behavior practices and systems (www.pbis.org), (b) two national leadership and dissemination conferences (October Leadership Forum, and March partnership with the Association for Positive Behavior Supports), (c) three best-practices and systems “blueprints” (Implementation, Evaluation, and Professional Development), (d) numerous publications and professional presentations, and (e) school, district, and state implementation demonstrations.

What is PBIS?

Although initially established to disseminate evidence-based behavioral interventions for students with BD, the National TA Center on PBIS shifted focus to the school-wide behavior support of all students, and an emphasis on implementation practices and systems. As a result, *PBIS is defined as a framework for enhancing the adoption and implementation of a continuum of evidence-based interventions to achieve academically and behaviorally important outcomes for all students* (Sugai et al., 2000). As a “framework,” the emphasis is on a process or approach, rather than a curriculum, intervention, or practice. The “continuum” notion emphasizes how evidence- or research-based behavioral practices are organized within a multi-tiered system of support, also called “response-to-intervention” (Sugai & Horner, 2009). Within this definition, the mutually beneficial relationship between academic and social behavior student success is highlighted (Chard, Harn, Sugai, & Horner, 2008; Sugai, Horner, & Gresham, 2002). Finally, the important supportive relationship between positive school- and classroom-wide culture and individual student success is emphasized.

Characteristics of PBIS

The PBIS framework has a number of defining characteristics. First and foremost, student outcomes serve as the basis for practice selection, data collection, and intervention evaluations. These outcomes are (a) academic and social, (b) individual and small group, and (c) judged on their educational and social value and importance (McIntosh, Filter, Bennett, Ryan, & Sugai, 2010; McIntosh, Flannery, Sugai, Braun, & Cochrane, 2008).

Second, rather than focusing on specific packaged or manualized interventions, the PBIS framework highlights specification and adoption of evidence- and research-based practices that characterize packaged programs. These practices are organized to support students across (a) school-wide (e.g., teaching and acknowledging a small number of positively stated behavioral expectations, clear and distinctive definitions for rule violations, and data-decision rules), (b) nonclassroom (e.g., active supervision, reminders, teaching setting-specific routines), (c) classroom (e.g., effective academic instruction, active supervision, high praise rates), and (d) individual student (e.g., function-based behavior intervention supports, explicit social skills instruction, wraparound processes) routines (Eber, Sugai, Smith, & Scott, 2002; Lewis & Sugai, 1999).

Third, consistent with the response-to-intervention approach, PBIS is characterized by the establishment of a continuum of behavior support practices and systems (Sugai & Horner, 2009). These practices are unified with procedures for universal screening, continuous progress monitoring, team-based decision making rules and procedures, explicit monitoring of implementation fidelity, and local content expertise and fluency. In addition, the PBIS framework stresses the importance of embedded and continuous professional development, monitoring based on phase of implementation, and systems-based competence and supports (e.g., policy, leadership, funding) (Sugai, Horner, Fixsen, & Blase, 2010).

Finally, the effective, efficient, and relevant use of data or information to guide decision-making links the above characteristics. The collection, analysis, and use of data are considered essential for a number of PBIS purposes: (a) need clarification and priority, (b) matching of need and intervention or practice, (c) evaluation of research-base for practice selection, (d) student responsiveness and outcome impact, (e) intervention or practice fidelity, (f) social and ecological validity, and (g) implementation adjust for efficiency, effectiveness, and relevance (Lewis-Palmer, Sugai, & Larson, 1999).

Impact and Evidence Base for PBIS

Included in the 16,000 school teams that have been trained on the PBIS implementation framework (especially, tier 1 or primary prevention), are 3 states with more than 60% of schools involved in PBIS implementation, 9 states with more than 40%, and 16 states with more than 30%. This impact reflects efforts by state and district leadership teams to build capacity for sustaining and scaling up their implementation of PBIS. Schools that are effective in their implementation have (a) more than 80% of their students and staff who can indicate the desired positive behavioral expectations for a given school setting, (b) high rates of positive acknowledgements for contributing to a positive and safe school climate, (c) have more than 70-80% of their students who have not experienced an office discipline referral for a disciplinary rule infraction, (d) a good idea about which students require more intensive behavior supports, and (e) systems for regular review of their school-wide behavior data to guide their PBIS action planning and implementation decision making (Lewis & Sugai, 1999; Sugai et al., 2000; Taylor-Greene et al., 1997).

In addition, since the 1980s, a number of experimental studies have documented the effectiveness of the PBIS framework at the school-wide level. This body of research supports improvements in problem disciplinary behavior, school climate, organizational health, student bullying behavior and peer victimization, and academic achievement (Bradshaw, Koth, Bevens, Ialongo, & Leaf, 2008; Bradshaw, Koth, Thornton, & Leaf, 2009; Bradshaw, Mitchell, & Leaf, 2010; Bradshaw, Reinke, Brown, Bevens, & Leaf, 2008; Horner et al., 2009; Horner, Sugai, & Anderson, 2010; Luiselli, Putnam, & Sunderland, 2002; Muscott, Mann, & LeBrun, 2008; Nelson et al., 2009; Pas, Bradshaw, & Mitchell, 2011; Sadler & Sugai, 2009; Simonsen et al., 2011; Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008; Waasdorp, Bradshaw, & Leaf, in press).

Common Misconceptions About PBIS

Misconception #1: “PBIS is an intervention or practice.” Although PBIS is comprised of research-based behavioral practices and interventions that have been shown to improve social behavior and academic achievement, PBIS is more accurately described as a “framework” or “approach” that provides the means of selecting, organizing and implementing these evidence-practices by giving equal attention to (a) clearly defined and meaningful student outcomes, (b) data-driven decision making and problem solving processes, and (c) systems that prepare and support implementers to use these practices with high fidelity and durability.

Misconception #2: “PBIS emphasizes the use of tangible rewards which can negatively affect the development of intrinsic motivation.” The PBIS framework includes practices that provide students with feedback on the accuracy and use of their social skills and behaviors, in the same manner that feedback is provided for successful and accurate academic performance. When new and/or difficult social skills are being acquired, more teacher and external feedback systems might be used to give students information about their social behavior. However, as students become more fluent in their use of social skills, external feedback systems are reduced and replaced by more natural environmental and/or self-managed feedback (Akin-Little & Little, 2009; Akin-Little, Eckert, Lovett, & Little, 2004). Although intrinsic motivation is difficult to conceptualize and measure from a behavior analytic perspective, little evidence exists to suggest that the use of positive reinforcement, rewards, acknowledgements, and recognition has negative effects on academic and social behavior achievement (Cameron, Bank, & Pierce, 2001; Cameron & Pierce, 2002; Cameron, 2005).

Misconception #3: “PBIS is something new that was designed for students with disabilities.” The phrase “Positive Behavioral Interventions and Supports” was first coined in the reauthorization of the IDEA; however, the practices, principles, and systems that characterize PBIS have been described, studied and implemented since the early 1960s and 1970s (Carr, 2007; Carr et al., 2002; Sugai & Horner, 2002). PBIS is a marriage of behavioral theory, behavior analysis, positive behavior supports, and prevention and implementation science that has been developed to improve how schools select, organize, implement, and evaluate behavioral practices in meeting the needs of all students (Sugai et al., 2000).

Misconception #4: “PBIS is for behavior, and RtI is for academics.” RtI is best conceptualized as a framework for developing and implementing multi-tiered systems of academic and behavior support, and is comprised of (a) universal screening, (b) continuous progress monitoring, (c) continuum of evidence-based practices, (d) team-driven data-based decision making, and (e) implementation fidelity evaluation (Sugai & Horner, 2009). The PBIS framework is the application of RtI principles to the improvement of social behavior outcomes for all students. PBIS is often described as the “behavior side” of the RtI multi-tiered continuum; however, this description misrepresents the actual integrated implementation of behavior and academic supports (Sugai, Horner, Fixsen, & Blase, 2010).

References

- Akin-Little, A., & Little, S. G. (2009). The true effects of extrinsic reinforcement on “intrinsic” motivation. In A. Akin-Little, S. G. Little, M. A. Bray, & T. J. Kehle (Eds). *Behavioral interventions in schools: Evidence-based positive strategies* (pp. 73-92). Washington DC: American Psychological Association.
- Akin-Little, K. A., Eckert, T. L., Lovett, B. J., & Little, S. G. (2004). Extrinsic reinforcement in the classroom: Bribery or best practices. *School Psychology Review, 33*, 344-362.
- Biglan, A. (1995). Translating what we know about the context of antisocial behavior in to a lower prevalence of such behavior. *Journal of Applied Behavior Analysis, 28*, 479-492.
- Bradshaw, C. P., Koth, C. W., Bevans, K. B., Ialongo, N., & Leaf, P. J. (2008). The impact of school-wide positive behavioral interventions and supports (PBIS) on the organizational health of elementary schools. *School Psychology Quarterly, 23*, 462-473.
- Bradshaw, C. P., Koth, C. W., Thornton, L. A., & Leaf, P. J. (2009). Altering school climate through school-wide Positive Behavioral Interventions and Supports: Findings from a group-randomized effectiveness trial. *Prevention Science, 10*(2), 100-115.
- Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effects of schoolwide positive behavioral interventions and supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavioral Interventions, 161-179*.
- Bradshaw, C. P., Reinke, W. M., Brown, L. D., Bevans, K. B., & Leaf, P. J. (2008). Implementation of school-wide Positive Behavioral Interventions and Supports (PBIS) in elementary schools: Observations from a randomized trial. *Education & Treatment of Children, 31*, 1-26.
- Cameron, J., Banko, K. M., & Pierce, W. E. (2001). Pervasive negative effects of rewards on intrinsic motivation: The myth continues. *The Behavior Analyst, 24*(1), 1-44.
- Cameron, J. & Pierce, W. D. (2002). *Rewards and intrinsic motivation: Resolving the controversy*. Westport, CT: Bergin and Garvey.
- Cameron, J. (2005). The detrimental effect of reward hypothesis: Persistence of a view in the face of disconfirming evidence. In Heward, W.L., Heron, T.E., Neef, N.A., Peterson, S.M., Sainato, D.M., Cartledge, G., Gardner, R., Peterson, L.D., Hersh, S.B., & Dardig, J.C. (Eds). *Focus on behavior analysis in education: Achievements, challenges, and opportunities* (pp. 304-315). Upper Saddle River, New Jersey: Pearson Merrill Prentice Hall.
- Caplan, G. (1964). *Principles of prevention in psychiatry*. New York: Basic Books.
- Carr, E. G. (2007). The expanding vision of positive behavior support: Research perspectives on happiness, helpfulness, and hopefulness. *Journal of Positive Behavior Interventions, 9*, 3-14.
- Carr, E. G., Dunlap, G., Horner, R. H., Koegel, R. L., Turnbull, A. P., & Sailor, W. (2002). Positive behavior support: Evolution of an applied science. *Journal of Positive Behavior Interventions, 4*, 4-16.

- Chard, D., Harn, B., Sugai, G., & Horner, R. (2008). Core Features of Multi-Tier Systems of Academic and Behavioral Support. In Greenwood, C. G. (Ed.), *Elementary School-Wide Prevention Models: Real Models and Real Lessons Learned*. New York: Guilford.
- Colvin, G., Kame'enui, E. J., & Sugai, G. (1993). School-wide and classroom management: Reconceptualizing the integration and management of students with behavior problems in general education. *Education and Treatment of Children, 16*, 361-381.
- Eber, L., Sugai, G., Smith, C., & Scott, T. (2002). Blending process and practice to maximize outcomes: Wraparound and positive behavioral interventions and supports in the schools. *Journal of Emotional and Behavioral Disorders, 10*, 171-181.
- Gordon, R. S. (1983). An operational classification of disease prevention. *Public Health Reports, 48*, 107-109.
- Gresham, F. S. (1991). Conceptualizing behavior disorders in terms of resistance to intervention. *School Psychology Review, 18*, 37-50.
- Gresham, F. S. (2002). Responsiveness to intervention: an alternative approach to the identification of learning disabilities. In R. Bradley, L. Danielson, & D. Hallahan (Eds.). *Learning Disabilities: Research to Practice* (pp. 467-519). Mahwah, NJ: Lawrence Erlbaum.
- Horner, R., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A., & Esperanza, J., (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. *Journal of Positive Behavior Interventions, 11*, 133-145.
- Horner, R. H., Sugai, G., & Anderson, C. M. (2010). Examining the evidence base for school-wide positive behavior support. *Focus on Exceptionality, 42*(8), 1-14.
- Individuals with Disabilities Education Improvement Act (2004). Public Law 108-446 (20 U.S.C. 1400 *et seq.*).
- Lewis, T. J., & Sugai, G. (1999). Effective behavior support: A systems approach to proactive school-wide management. *Focus on Exceptional Children, 31*(6), 1-24.
- Lewis-Palmer, T., Sugai, G., & Larson, S. (1999). Using data to guide decisions about program implementation and effectiveness. *Effective School Practices, 17*(4), 47-53.
- Luiselli, J. K., Putnam, R. F., & Sunderland, M. (2002). Longitudinal evaluation of behavior support intervention in a public middle school. *Journal of Positive Behavior Interventions, 4*, 182-188.
- Mayer, G. (1995). Preventing antisocial behavior in the schools. *Journal of Applied Behavior Analysis, 28*(7), 467-478.
- McIntosh, K., Filter, K. J., Bennett, J., Ryan, C., & Sugai, G. (2010). Principles of sustainable prevention: Designing scale-up of school-wide positive behavior support to promote durable systems. *Psychology in the Schools, 47*, 5-21.
- McIntosh, K., Flannery, K. B., Sugai, G., Braun, D., & Cochrane, K. L. (2008). Relationships between academics and problem behavior in the transition from middle school to high school. *Journal of Positive Behavior Interventions, 10*, 243-255.

- Muscott, H. S., Mann, E. L., & LeBrun, M. R. (2008). Positive behavioral interventions and supports in New Hampshire: Effects of Large-Scale Implementation of Schoolwide positive behavior support on student discipline and academic achievement. *Journal of Positive Behavior Interventions, 10*, 190-205.
- Nelson, J. R., Hurley, K. D., Synhorst, L., Epstein, M. H., Stage, S., & Buckley, J. (2009). The child outcomes of a behavior model. *Exceptional Children, 76*, 7-30.
- Pas, E., Bradshaw, C. P., & Mitchell, M. M. (2011). Examining the validity of office discipline referrals as an indicator of student behavior problems. *Psychology in the Schools, 48*(6), 541-555.
- Pierce, W.D., Cameron, J., Banko, K.M., & So, S. (2003). Positive effects of rewards and performance standards on intrinsic motivation. *Psychological Record, 53*, 561-579.
- Sadler, C., & Sugai, G. (2009). Effective behavior and instructional support: A district model for early identification and prevention of reading and behavior problems. *Journal of Positive Behavior Interventions, 11*, 35-46.
- Simonsen, B., Eber, L., Black, A., Sugai, G., Lewandowski, H., Myers, D., & Sims, B. (2011). Positive behavioral interventions and supports in Illinois: Lessons learned for large-scale implementation. *Journal of Positive Behavior Interventions, 14*, 5-16.
- Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based practices in classroom management: Considerations for research to practice. *Education and Treatment of Children, 31*, 351-380.
- Sugai, G., & Horner, R. H. (2010). School-wide positive behavior support: Establishing a continuum of evidence based practices. *Journal of Evidence-based Practices for Schools, 11*(1), 62-83.
- Sugai, G., & Horner, R. H. (2009). Responsiveness-to-intervention and school-wide positive behavior supports: Integration of multi-tiered approaches. *Exceptionality, 17*, 223-237.
- Sugai, G., & Horner, R. H. (2008). What we know and need to know about preventing problem behavior in schools. *Exceptionality, 16*, 67-77.
- Sugai, G., & Horner, R. H. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child and Family Behavior Therapy, 24*, 23-50.
- Sugai, G., & Horner, R. H. (1999). Discipline and behavioral support: Preferred processes and practices. *Effective School Practices, 17*(4), 10-22.
- Sugai, G., Horner, R. H., & Gresham, F. (2002). Behaviorally effective school environments. In M. R. Shinn, G. Stoner, & H. M. Walker (Eds), *Interventions for academic and behavior problems: Preventive and remedial approaches* (pp. 315-350). National Association of School Psychologists. Silver Spring, MD.
- Sugai, G., Horner, R. H., Dunlap, G. Hieneman, M., Lewis, T. J., Nelson, C. M., Scott, T., Liaupsin, C., Sailor, W., Turnbull, A. P., Turnbull, H. R., III, Wickham, D. Reuf, M., & Wilcox, B. (2000). Applying positive behavioral support and functional behavioral assessment in schools. *Journal of Positive Behavioral Interventions, 2*, 131-143.
- Sugai, G., & Horner, R. H., Fixsen, D., & Blase, K. (2010). Developing systems-level capacity for RtI implementation: Current efforts and future directions. In T. A. Glover & S. Vaughn (Eds.). *Response to intervention: Empowering all students to*

- learn – A critical account of the science and practice* (pp. 286-309). New York: Guilford.
- Taylor-Greene, S., Brown, D., Nelson, L., Longton, J., Gassman, T., Cohen, J., Swartz, J., Horner, R. H., Sugai, G., & Hall, S. (1997). School-wide behavioral support: Starting the year off right. *Journal of Behavioral Education, 7*, 99-112.
- Waasdorp, T. E., Bradshaw, C. P., & Leaf, P. J. (in press). The impact of school-wide positive behavioral interventions and supports on bullying and peer rejection: A randomized control effectiveness trial. *Archives of Pediatrics and Adolescent Medicine*.
- Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Sprague, J. R., Bricker, D., & Kaufman, M. J. (1996). Integrated approaches to preventing antisocial behavior patterns among school-age children and youth. *Journal of Emotional and Behavioral Disorders, 4*, 193-256.