

IS SCHOOL-WIDE POSITIVE BEHAVIOR SUPPORT 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 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.*
- McIntosh, K., Fisher, E., Kennedy, K., Craft, C., & Morrison, G., (2012). Using office discipline referrals and school exclusion data to assess school discipline. In S

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.

A randomized control trial documenting change in the organizational effectiveness of schools as a function of implementing SWPBS.

- d. Bradshaw, C., Koth, C., Bevans, K., Ialongo, N., & Leaf, P. (2008). The impact of school-wide positive behavioral interventions and supports (PBIS) on the organizational health of elementary schools. *School Psychology Quarterly*, 23 (4), 462-473.

Bradshaw et al., document that implementation of school-wide PBIS by typical implementation personnel was successful in achieving high fidelity of adoption, and improved “organizational health” within the schools.

- e. Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effects of School-Wide Positive Behavioral Interventions and Supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions*, 12, 133-148

This randomized control trial documents experimentally that implementation of SWPBIS was related to (a) high fidelity of implementation, (b) reduction in office discipline referrals, (c) reduction in suspensions, and (c) improved fifth grade academic performance

- f. Bradshaw, C., Reinke, W., Brown, L., Bevans, K., & Leaf, P. (2008). Implementation of school-wide positive behavioral interventions and supports (PBIS) in elementary schools: Observations from a randomized trial. *Education and Treatment of Children*, 31, 1-26.

The authors document a randomized control trial of SWPBIS with observations from school implementers.

- g. Bradshaw, C.P., & Pas, E.T. (2011). A state-wide scale-up of School-wide Positive Behavioral Interventions and Supports (PBIS): Developing systems to support and assess adoption, implementation, and outcomes. Manuscript submitted for publication.
- h. Benner, G., Nelson, J.R., Sanders, E., & Ralston, N. (2012). Behavior intervention for students with externalizing behavior problems: Primary-level standard protocol. *Exceptional Children*, 78(2), 181-198.
- i. Ross, S., Romer, N., & Horner, R.H., (2012). Teacher well-being and the implementation of school-wide positive behavior interventions and supports. *Journal of Positive Behavior Interventions* 14(2) 118-128.

- j. Richter, M., Lewis, T., & Hagar, J. (2012). The relationship between principal leadership skills and school-wide positive behavior support: An Exploratory Study. *Journal of Positive Behavior Interventions* 14 (2) 69-77.
- k. Sprague, J., & Biglan, A., et al. (in progress). A Randomized Control Trial of SWPBS with Middle Schools.

This research is currently in data-collection phase, with preliminary results presented at professional conferences indicating reduction in problem behavior levels when SWPBS core features were implemented. Publishable results are anticipated for 2010.

- l. Sprague, J. R., Walker, H., Golly, A., White, K., Myers, D. R., & Shannon, T. (2002). Translating research into effective practice: The effects of a universal staff and student intervention on key indicators of school safety and discipline. *Education and Treatment of Children*, 24(4), 495-511.

Quasi-experimental design documenting improved perception of safety linked to implementation school-wide positive behavior support.

- m. Waasdorp, T., Bradshaw, C., & Leaf, P., (2012) The Impact of School-wide Positive Behavioral Interventions and Supports on Bullying and Peer Rejection: A Randomized Controlled Effectiveness Trial. *Archives of Pediatric Adolescent Medicine*. 166(2):149-156
- n. Bradshaw, C. P., Pas, E. T., Goldweber, A., Rosenberg, M., & Leaf, P. (2012). Integrating schoolwide Positive Behavioral Interventions and Supports with tier 2 coaching to student support teams: The PBISplus Model. *Advances in School Mental Health Promotion*, 5(3), 177-193. doi:10.1080/1754730x.2012.707429

Syntheses of School-wide PBS from Mental Health Institute

Kutash, K., Duchnowski, A., & Lynn, N. (2006). *School-based Mental Health: An Empirical Guild for Decision-makers*. The Research and Training Center for Children's Mental Health, Florida Mental Health Institute, University of South Florida.

“Most experts in the field agree that school-wide PBS is in its infancy (Dunlap, 2006). However, the early results of PBS interventions implemented at the indicated level, and the growing body of support for implementation at the universal and selective levels for children who have emotional/behavioral problem is very promising.” P. 32

“Because the roots of PBS are in applied experimental analysis of behavior, the evidence for PBS, at this time, is primarily derived from single subject designs. This research, while not in the traditional empirical mode, is nevertheless rigorous, generalizable, and strong in social validity (Sugai & Horner, 2002). Therefore, administrators have a preponderance of evidence to support their exploration of PBS as a viable model for School-based Mental Health programs.” P. 33

Evaluation and Quasi-Experimental studies examining SWPBS that used research quality measures, but did NOT employ experimental designs document both implementation of the core feature by typical school personnel, and either improved academic performance, or reductions in office discipline referrals.

Barrett, S., Bradshaw, C., & Lewis-Palmer, T. (2008). Maryland state-wide PBIS initiative. *Journal of Positive Behavior Interventions, 10*, 105-114.

Benedict, E., Horner, R.H., & Squires, J. (2007). Assessment and implementation of Positive Behavior Support in preschools. *Topics in Early Childhood Special Education, 27*(3), 174-192.

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.

Blonigen, B., Harbaugh, W., Singell, L., Horner, R.H., Irvin, L., & Smolkowski, K. (2008). Application of economic analysis to school-wide positive behavior support programs. *Journal of Positive Behavior Interventions*.

Bohanon, H., Fenning, P., Carney, K., Minnis, M., Anderson-Harriss, S., Moroz, K., Hicks, K., Kasper, B., Culos, C., Sailor, W., & Piggott, T. (2006). School-wide application of positive behavior support in an urban high school: A case study. *Journal of Positive Behavior Interventions, 8*(3), 131-145.

Boneshefski, M., & Runge, T., (2014). Addressing disproportionate discipline practices within a school-wide positive behavioral interventions and supports framework: A practical guide for calculating and using disproportionality rates. *Journal of Positive Behavior Interventions 16* (3) 149-158.

Burke, M., Davis, J., Hagan-Burke, S., Lee Y, Fogarty, M. (2014). Using SWPBS expectations as a screening tool to predict behavioral risk in middle school. *Journal of Positive Behavior Interventions 16*(1) 5-17.

Chaparro, E., Smolkowski, K., Baker, S., Hanson, N., & Ryan-Jackson, K. (2012) A model for system-wide collaboration to support integrated social behavioral and literacy evidence-based practices. *Psychology in the Schools, 49*(5), 465-482.

Chaparro, E., Ryan Jackson, K., Baker, S. & Smolkowski, K., (2012) Effective

- behavioural and instructional support systems: An integrated approach to behaviour and academic support at the district level, *Advances in School Mental Health Promotion*, 5:3, 161-176
- Chapman, D., & Hofweber, C. (2000). Effective behavior support in British Columbia. *Journal of Positive Behavior Interventions*, 2 (4), 235-237.
- Chitiyo, M., May, M., & Chitiyo, G., (2012). An assessment of the evidence-base for school-wide positive behavior support. *Education and Treatment of Children*, 35(1) 1-24.
- Coffey, J., & Horner, R., (2012). The sustainability of schoolwide positive behavior interventions and supports. *Exceptional Children*, 78 (4) 407-422.
- Colvin, G., & Fernandez, E. (2000). Sustaining Effective Behavior Support Systems in an Elementary School. *Journal of Positive Behavior Interventions*, 2(4), 251-253.
- Curtis, R., Van Horne, J., Robertson, P., & Karvonen, M. (2010). Outcomes of a school-wide positive behavior support program. *Professional School Counseling* 13:3 159-164.
- De Pry, R. L., & Sugai, G. (2002). The effect of active supervision and precorrection on minor behavioral incidents in a sixth grade general education classroom. *Journal of Behavioral Education*, 11, 255-267.
- Doolittle, J., & Horner R., (2007). Sustaining school-wide positive behavior support. Manuscript in preparation.
- Duda, M.A., Dunlap, G., Fox, L., Lentini, R., & Clarke, S. (2004). An experimental evaluation of positive behavior support in a community preschool program. *Topics in Early Childhood Special Education*, 24(3), 143-155.
- Farkas, M., Simonson, B., Migdole, S., Donovan, M., Clemens, K., Cicchese, V. (2012) Schoolwide positive behavior support in an alternative school setting: An evaluation of fidelity, outcomes and social validity of Tier I implementation. *Journal of Emotional and Behavioral Disorders*, 20 (4), 275-288.
- Fanning, P., Theodos, J., Benner, C., & Bohanon-Edmonson, H. (2004). Integrating proactive discipline practices into codes of conduct. *Journal of School Violence*, 3(1), 45-61.
- Galloway, R., Panyan, M., Smith, C. & Wessendorf, S. (2008) Systems change with school-wide positive behavior supports: Iowa's work in progress. *Journal of Positive Behavior Interventions*, 10(2), 129-135.
- George, H., & Kincaid, D. (2008). Building district-level capacity for positive behavior support. *Journal of Positive Behavior Interventions*, 10(1), 20-32.

- Hirsch, E. J., Lewis-Palmer, T., Sugai, G., & Schnacker, L. (2004). Using school bus discipline referral data in decision making: Two case studies. *Preventing School Failure, 48*(4), 4-9.
- Horner, R.H., Sugai, G., Todd, A.W., & Lewis-Palmer, T. (2005). School-wide positive behavior support. In L. Bambara & L. Kern (Eds.) *Individualized supports for students with problem behaviors: Designing positive behavior plans*. (pp. 359-390) New York: Guilford Press.
- Irwin D., & Algozzine, R. (2005) *North Carolina Positive Behavior Supports Evaluation Report*. Unpublished evaluation report.
- Knoff, H. (2000). Organizational development and strategic planning for the millennium: A blueprint toward effective school discipline, school safety, and crisis prevention. *Psychology in the Schools, 37*, 17-32.
- Lassen, S., Steele, M., & Sailor, W. (2006). The relationship of school-wide positive behavior support to academic achievement in an urban middle school. *Psychology in Schools, 43*(6), 701-712.
- Lewis, T. J., Colvin, G., & Sugai, G. (2000). The effects of precorrection and active supervision on the recess behavior of elementary school students. *Education and Treatment of Children, 23*, 109-121.
- Lewis, T., Hudson, S., Richter, M., & Johnson, N. (2004). Scientifically supported practices in EBS: A proposed approach and brief review of current practices. *Behavior Disorders, 29*, 247-259.
- Lewis, T. J., Powers, L. J., Kelk, M. J., & Newcomer, L. (2002). Reducing problem behaviors on the playground: An investigation of the application of school-wide positive behavior supports. *Psychology in the Schools, 39*, 181-190.
- Lohrmann-O'Rourke, S., Knoster, T., Sabatine, K., Smith, D., Horvath, G., & Llewellyn, G. (2000). School-wide Application of PBS in the Bangor Area School District. *Journal of Positive Behavior Interventions, 2*(4), 238-240.
- Luiselli, J. K, Putnam, R. F, Handler, M. W, & Feinberg, A. B. (2005). Whole-School Positive Behaviour Support: Effects on student discipline problems and academic performance. *Educational Psychology, 25*(2-3), 183-198.
- Luiselli, J. Putnam, R., & Sunderland M. (2002). Longitudinal evaluation of behavior support interventions in public middle school. *Journal of Positive Behavior Interventions, 4* (3), 182-188.
- Marin, A., Filce, H. (2013). The relationship between implementation of School-wide Positive Behavior Intervention and Supports and Performance on State

Accountability Measures. *Sage Open*, (3) 1-10. DOI:
10.1177/2158244013503831

- 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.
- Mayer, G. R., Butterworth, T., Nafpaktitis, M., & Suzer-Azaroff, B. (1983). Preventing school vandalism and improving discipline: A three year study. *Journal of Applied Behavior Analysis*, 16, 355-369.
- Metzler, C. W., Biglan, A., Rusby, J. C., & Sprague, J. R. (2001). Evaluation of a comprehensive behavior management program to improve school-wide positive behavior support. *Education and Treatment of Children*, 24, 448-479.
- McCrary, D., Lechtenberger, D., & Wand, E. (2012). The effect of schoolwide positive behavioral supports on children in impoverished rural community schools. *Preventing School Failure*, 56 (1) 1-7.
- 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(4), 243-255.
- McIntosh, K., Horner, R.H., Chard, D., Boland, J., & Good, R. (2006). The use of reading and behavior screening measures to predict non-response to school-wide positive behavior support: A longitudinal analysis. *School Psychology Review*, 35, 275-291.
- McIntosh, K., Mercer, S., Hume, A., Frank, F., Turri, M., and Mathews, S., (2013). Factors relate to sustained implementation of schoolwide positive behavior support. *Exceptional Children*, 79 (3) 293-311.
- McIntosh, K., predy, L., Upreti, G., Hume, A., Turri, M., Mathews, S. (2014) Perceptions of contextual features related to implementation and sustainability of school-wide Positive Behavior Support. *Journal of Positive Behavior Interventions*, 16(1), 31-43.
- McIntosh, K., Sadler, C., & Brown, J. A. (2012). Kindergarten reading skill level and change in as risk factors for chronic problem behavior. *Journal of Positive Behavior Interventions* 14 (1) 17-28.
- Muscott, H., & Mann, E. & LeBrun (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(3), 190-205.

- Nakasato, J. (2000). Data-based Decision-making in Hawaii's Behavior Support Effort. *Journal of Positive Behavior Interventions*, 2(4), 247-250.
- Nelson, J. R. (1996). Designing schools to meet the needs of students who exhibit disruptive behavior. *Journal of Emotional and Behavioral Disorders*, 4, 147-161.
- Nelson, J. R., Colvin, G., & Smith, D. J. (1996). The effects of setting clear standards on students' social behavior in common areas of the school. *The Journal of At-Risk Issues, Summer/Fall*, 10-17.
- Nelson, J.R., Hurley, K., Snyhorst, L., Epstein, M., Stage, S., & Buckley, J. (2009). The child outcomes of a behavior model. *Exceptional Children*, 76, 7-30.
- Nelson, J.R., Martella, R., & Marchand-Martella, N. (2002). Maximizing student learning: The effects of a comprehensive school-based program for preventing problem behaviors. *Journal of Emotional and Behavioral Disorders*, 10, 136-148.
- Solomon, B., Klein, S., Hintze, J., Cressey, J., & Peller, S. (2012). A meta-analysis of school-wide positive behavior support: An exploratory study using single-case synthesis. *Psychology in the Schools*. 49(2), 105-121.
- Sprague, J. R., Walker, H., Golly, A., White, K., Myers, D. R., & Shannon, T. (2002). Translating research into effective practice: The effects of a universal staff and student intervention on key indicators of school safety and discipline. *Education and Treatment of Children*, 24(4), 495-511.
- Morrissey, K., Bohanon, H., & Fenning, P. (2010). Teaching and acknowledging expected behaviors in an urban high school. *Teaching Exceptional Children*, May/June 27-35.
- Nelson, J. R., Johnson, A., & Marchand-Martella, N. (1996). Effects of direct instruction, cooperative learning, and independent learning practices on the classroom behavior of students with behavioral disorders: A comparative analysis. *Journal of Emotional and Behavioral Disorders*, 4, 53-62.
- Nelson, J. R., Martella, R., & Galand, B. (1998). The effects of teaching school expectations and establishing a consistent consequence on formal office disciplinary actions. *Journal of Emotional and Behavioral Disorders*, 6, 153-161.
- Nersesian, M., Todd, A., Lehmann, J., & Watson, J. (2000). School-wide Behavior Support Through District-Level System Change. *Journal of Positive Behavior Interventions*, 2 (4), 244-246.
- Pas, E., & Bradshaw, C.P., (2012). Examining the association between implementation and outcomes. *Journal of Behavioral Health Services & Research*, 39(4), 417-433.

- 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.
- Putnam, R. F., Handler, M. W., Ramirez-Platt, C. M., & Luiselli, J. K. (2003). Improving student bus-riding behavior through a whole-school intervention. *Journal of Applied Behavior Analysis, 36*, 583-589.
- Putnam, R.F., Luiselli, J.K., Handler, M.W., & Jefferson G.L. (2003). Evaluating student discipline practices in a public school through behavioral assessment of office referrals. *Behavior Modification, 27*, 505-523.
- Putnam, R.F., Luiselli, J.K. & Sunderland, M. (2002). Longitudinal evaluation of behavior support intervention in a public middle school. *Journal of Positive Behavior Interventions, 4*, 182-188.
- Sadler, C. (2000). Effective Behavior Support Implementation at the District Level: Tigard-Tualatin School District. *Journal of Positive Behavior Interventions, 2*(4), 241-243.
- Safran, S. P. & Oswald, K. (2003). Positive behavior supports: Can schools reshape disciplinary practices? *Exceptional Children, 69*, 361-373.
- Skiba, R. J., Peterson, R. L., & Williams, T. (1997). Office referrals and suspensions: Disciplinary intervention in middle schools. *Education and Treatment of Children, 20*, 295-315.
- Simonson, B., Britton, L., & Young D. (2010). School-wide positive behavior support in an alternative school setting: A case study. *Journal of Positive Behavior Interventions, 12*, 180-191.
- Simonson, B., Eber, L., Black, A., Sugai G., Lewandowski, H., Sims, B., & Myers, D. (2012). Illinois statewide positive behavioral interventions and supports: Evolution and impact on student outcomes across years. *Journal of Positive Behavior Interventions 14*(1) 5-16.
- Stewart, R.M., Benner, G.J., Martella, R.C., Marchand-Martella, N.E. (2007). Three-tier models of reading and behavior: A research review. *Journal of Positive Behavior Interventions 9*, 239-253.
- Sulzer-Azaroff, B., & Mayer, G. R. (1994). *Achieving educational excellence: Behavior analysis for achieving classroom and schoolwide behavior change*. San Marcos, CA: Western Image.
- Taylor-Greene & Kartub, D. (2000). Durable implementation of School-wide Behavior Support: The High Five Program. *Journal of Positive Behavior Interventions, 2*(4), 231-232.

Taylor-Greene, S., Brown, D., Nelson, L., Longton, J., Gassman, 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.

Vaughn, B., White, R., Dunlap, G., & Strobeck, S. (in press). A case study of a classroom intervention for problem behaviors: Collateral effects and social validation. *Journal of Positive Behavior Interventions*.

Bully Prevention within PBIS

Nese, R., Horner, R., Rossetto Dickey, C., Stiller, B., & Tomlanovich, A. (2014). Decreasing bullying behaviors in middle school: Expect Respect. *School Psychology Quarterly*, 29, (3) 272-286.

Ross, S., & Horner, R. (2009). Bully prevention in positive behavior support. *Journal of Applied Behavior Analysis*, 42, 747-759. Doi: 10.1901/jaba.2009.42-747

Ross, S., & Horner, R., (2014). Bully prevention in positive behavior support: Preliminary evaluation of third-, fourth-, and fifth-grade attitudes toward bullying. *Journal of Emotional and Behavioral Disorders*, 22(4) 225-236.

Waasdorp, T., Bradshaw, C., & Leaf, P., (2012) The Impact of Schoolwide Positive Behavioral Interventions and Supports on Bullying and Peer Rejection: A Randomized Controlled Effectiveness Trial. *Archive of Pediatric Adolescent Medicine*. 2012;166(2):149-156

Secondary Tier of School-wide Positive Behavior Support.

Randomized Controlled Trials

Cheney, D., Stage, S. Hawken, L., Lynass, L., Mielenz, C., Waugh, M. (2009). A 2-year outcome study of the check, connect, and expect intervention for students at risk for severe behavior problems. *Journal of Emotional and Behavioral Disorders*. 17, 226-243.

Randomized trial of Check-in/ Check-out procedures. Results indicate functional effect between use of procedures and both improved scores on standardized assessment instruments, and direct observation of problem behavior.

Walker, H., Seeley, J., Small, J., Severson, H., Graham, B., Feil, E., Serna, L., Golly A., Forness, S. (2009). A randomized controlled trial of the first step to success early intervention: Demonstration of program efficacy outcomes in a diverse, urban

school district. *Journal of Emotional and Behavioral Disorders*. 17, 197-212.

Materials and Research on Specific Secondary Interventions.

- Campbell, A., & Anderson, C. (2008). Enhancing effects of Check-in/ Check-out with function-based support. *Behavior Disorders*, 33(4), 233-245.
- McIntosh, K., Campbell, A., Carter, D., & Dickey, C. (2009). Differential effects of a tier 2 behavioral intervention based on function of problem behavior. *Journal of Positive Behavior Interventions*, 11(2), 82-93.
- Beard-Jordan, K., & Sugai, G. (2004). First Step to Success: An early intervention for elementary children at risk for antisocial behavior. *Behavioral Disorders*, 29, 396-409.
- Cheney, D., Flower, A., Templeton, T. (2008). Applying response to intervention metrics in the social domain for students at risk of developing emotional and behavioral disorders. *Journal of Special Education*, 42(2), 108-126.
- Carter, D.R. & Horner, R.H. (2009). Adding functional behavioral assessment to First Step to Success: A case study. *Journal of Positive Behavior Interventions*, 9(4), 229-238.
- Chafouleas, S.M., Christ, T.J., Riley-Tillman, T.C., Briesch, A.M., & Chanese, J.M. (2007). Generalizability and dependability of Daily Behavior Report Cards to measure social behavior of preschoolers. *School Psychology Review*, 36(1), 63-79.
- Chafouleas, S., Riley-Tillman, C., Sassu, K., LaFrance, M., Patwa, S. (2007) Daily behavior report cards: An investigation of the consistency of on-task data across raters and methods. *Journal of Positive Behavior Interventions*, 9(1), 30-37.
- Debnam, K., Pas, E., Bradshaw, C. (2012). Secondary and tertiary support systems in schools implementing School-wide Positive Behavioral Interventions and Supports: A Preliminary Descriptive Analysis. *Journal of Positive Behavior Interventions*, 14(3), 142-152.
- Fairbanks, S., Sugai, G., Guardino, D., & Lathrop, M. (2007). Response to intervention: Examining classroom behavior support in second grade. *Exceptional Children*, 73(3), 288-310.
- Filter, K. J., McKenna, M. K., Benedict, E. A., Horner, R. H., Todd, A. W., & Watson, J. (2007). Check in/ check out: A post-hoc evaluation of an efficient, secondary-level targeted intervention for reducing problem behaviors in schools. *Education and Treatment of Children*, 30(1), 69-84.

- Hawken, L. H. & Johnston, S. (2007). Preventing severe problem behavior in young children: The Behavior Education Program. *Journal of Early and Intensive Behavior Intervention, 4*(3), 599-613.
- Hawken, L. & Horner, R. (2003). Evaluation of a targeted group intervention within a school-wide system of behavior support, *Journal of Behavioral Education, 12*, 225-240.
- Hawken, L. H. & MacLeod, K. S., & O'Neill, R. (2007). *Effects of function of problem behavior on the responsiveness to the Behavior Education Program*. Manuscript submitted for publication.
- Hawken, L. S., MacLeod, K. S. & Rawlings, L. (2007). Effects of the Behavior Education Program (BEP) on problem behavior with elementary school students. *Journal of Positive Behavior Interventions, 9*, 94-101.
- Hawken, L. (2006). School psychologists as leaders in the implementation of a targeted intervention: The Behavior Education Program (BEP). *School Psychology Quarterly, 21*, 91-111.
- Lane, K., Capizzi, A., Fisher, M., & Ennis, R. (2012). Secondary prevention efforts at the middle school level: An application of the Behavior Education Program. *Education and Treatment of Children 35*(1), 51-90.
- March, R. E., & Horner, R.H. (2002). Feasibility and contributions of functional behavioral assessment in schools. *Journal of Emotional and Behavioral Disorders, 10*, 158-170.
- McCurdy, B. L., Kunsch, C., & Reibstein, S. (2007). Secondary prevention in the urban school: Implementing the Behavior Education Program. *Preventing School Failure, 12-19*.
- Miller, M., Fenty, N., & Scott, T. M. (in press). An examination of the effects of social skills instruction in the context of small group reading. *Preventing School Failure*.
- Todd, A. W., Kaufman, A., Meyer, G., & Horner, R. H. (2008). The Effects of a Targeted Intervention to Reduce Problem Behaviors: Elementary School Implementation of Check In - Check Out. *Journal of Positive Behavior Interventions, 10*(1), 46-55.

Daily Report Card Interventions (e.g. Check & Connect; Check-in/ Check-out)

- Bruhn, A., Lane, K., & Hirsch, S., (2014). A review of Tier 2 interventions conducted within multitiered models of behavioral prevention. *Journal of Emotional and Behavioral Disorders 22*(3) 171-189.

- Christenson, S., & Carroll, E. B. (1999). Strengthening the family-school partnership through Check and Connect. In E. Frydenberg (Ed.), *Learning to cope: Developing as a person in complex societies* (pp. 248-273). London: Oxford University Press.
- Christenson, S. L., & Havsy, L. H. (2004). Family-school-peer relationships: Significance for social-emotional and academic learning. In J. E. Zins, R. P. Weissberg, M. C. Wang, & H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 59-75) New York: Teachers College Press.
- Christenson, S. L., Sinclair, M. F., Lehr, C. A., & Hurley, C. M. (2000). Promoting successful school completion. In D. Minke & G. Bear (Eds.), *Preventing school problems—Promoting school success: Strategies and programs that work*. Bethesda, MD: National Association of School Psychologists.
- Ennis, R. P., Jolivette, K., Swoszowski, N. C., & Johnson, M. L. (2012). Secondary prevention efforts at a residential facility for students with emotional and behavioral disorders: Function-based check-in, check-out. *Residential Treatment for Children and Youth, 29*, 79-102.
- Filter, K. J., McKenna, M. K., Benedict, E. A., Horner, R. H., Todd, A. W., & Watson, J. (2007). Check in/ Check out: A Post-Hoc Evaluation of an Efficient, Secondary-Level Targeted Intervention for Reducing Problem Behaviors in Schools. *Education and Treatment of Children, 30*, 69-84.
- Hunter, K., Chenier, J., & Gresham, F. (2014). Evaluation of Check In/Check Out for students with internalizing behavior problems. *Journal of Emotional and Behavioral Disorders, 22*(3) 135-148.
- Miller, L., Dufrene, B., Olmi, D.J. Tingstrom, D., & Filce, H. (2015) Self-monitoring as a viable fading option in Check-in/ Check-out, *Journal of School Psychology, 53*, 121-135.
- Reschly, A., & Christenson, S. L. (2006). School completion. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 103-112). Bethesda, MD: National Association of School Psychologists.
- Simonsen, B., Meyers, D., & Briere, D. (2010). Comparing a behavioral check-in/ check-out (CICO) intervention to standard practice in an urban middle school setting using an experimental design. *Journal of Positive Behavior Interventions, 12*(4)
- Sinclair, M., Hurley, C., Christenson, S., Thurlow, M., & Evelo, D. (2002). Connections that keep kids coming to school. In R. Algozzine & P. Kay (Eds.), *Preventing problem behaviors: A handbook of successful prevention strategies*. Thousand Oaks, CA: Corwin Press.

- Stage, S., Cheney, D., Lynass, L., Mielenz, C., & Flower, A. (2012). Three validity studies of the Daily Progress Report in relationship to the Check, Connect, and Expect Intervention. *Journal of Positive Behavior Interventions, 14*(3) 181-191./
- Todd, A., Kauffman, A., Meyer, G., & Horner, R.H. (2008). The effects of a targeted intervention to reduce problem behaviors: Elementary school implementation of check-in-check-out. *Journal of Positive Behavior Interventions, 10*(1), 46-55.
- Swoszowski, N. C., Jolivette, K., Fredrick, L. D., & Heflin, L. J. (2012). Check in/Check out: Effects on students with emotional and behavioral disorders with attention- or escape-maintained behavior in a residential facility. *Exceptionality, 20*, 163-178.
- Swoszowski, N. C., McDaniel, S., C., Jolivette, K., & Melius, P. (in review). The effect of Check in/Check out including adaptation for non-responders on the off-task behavior of students with E/BD. *Education and Treatment of Children (invited special issue)*
- Swoszowski, N. C., Jolivette, K., & Fredrick, L. D. (in press). Addressing the social and academic behavior of a student with emotional and behavioral disorders in an alternative setting. *Journal of Classroom Interaction.*
- Swoszowski, N. C., Patterson, D. P., & Crosby, S. (2011). Check in/Check out: Implementation in and adaptations for residential and juvenile justice settings for students with emotional and behavioral disorders. *Beyond Behavior, 20*, 32-36.
- Turtura, J., Anderson, C., Boyd, J. (2014). Addressing task avoidance in middle school students: Academic behavior Check-in/ Check-Out. *Journal of Positive Behavior Interventions, 16* (3) 159-167.
- McDaniel, S., Houchins, D. E., Jolivette, K., & Robinson, C. (in review). The effects of Check, Connect, and Expect in an alternative elementary school on behavioral and academic growth. *Journal of Special Education.*

Other Refereed Journal Articles: Secondary Interventions

- Anderson, A. R., Christenson, S. L., Sinclair, M. F., & Lehr, C. A. (2004). Check & Connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology, 42*(2), 95-113.
- Christenson, S. L., Hurley, C. M., Hirsch, J. A., Kau, M., Evelo, D., & Bates, W. (1997). Check and Connect: The role of monitors in supporting high-risk youth. *Reaching Today's Youth: The Community Circle of Caring Journal, 2*(1), 18-21.
- Christenson, S. L., & Thurlow, M. L. (2004). School dropouts: Prevention considerations, interventions, and challenges. *Current Directions in Psychological Science, 13*(1), 36-39.

- Christenson, S. L., Sinclair, M. F., Thurlow, M. L., and Evelo, D. (1999). Promoting student engagement with school using the Check & Connect model. *Australian Journal of Guidance & Counselling*, 9(1), 169-184.
- Lyst, A. M., Gabriel, S., O'Shaughnessy, T. E., Meyers, J., & Meyers, B. (2005). Social validity: Perceptions of Check and Connect with early literacy support. *Journal of School Psychology*, 43(3), 197-218.
- Lehr, C. A., Hansen, A., Sinclair, M. F., & Christenson, S. L. (2003). Moving beyond dropout towards school completion: An integrative review of data-based interventions. *School Psychology Review*, 32(3), 342-364.
- Lehr, C. A., Sinclair, M. F., & Christenson, S. L. (2004). Addressing student engagement and truancy prevention during the elementary years: A replication study of the Check & Connect model. *Journal of Education for Students Placed At Risk*, 9(3), 279-301.
- McIntosh, K., Campbell, A., Carter, D., & Dickey, C. (2009). Differential effects of a tier 2 behavioral intervention based on function of problem behavior. *Journal of Positive Behavior Interventions*, 11(2), 82-93.
- Morse, A. B., Anderson, A. R., Christenson, S. L., & Lehr, C. A. (2004). Promoting school completion. *Principal Leadership*, 4(6), 9-13.
- Sanford, A. K., & Horner, R. H. (under review). The effects of function-based literacy instruction on problem behavior and reading growth.
- Sinclair, M. F., Christenson, S. L., Evelo, D. L., & Hurley, C. M. (1998). Dropout prevention for youth with disabilities: Efficacy of a sustained school engagement procedure. *Exceptional Children*, 65(1), 7-21.
- Sinclair, M. F., Christenson, S. L., & Thurlow, M. L. (2005). Promoting school completion of urban secondary youth with emotional or behavioral disabilities. *Exceptional Children*, 71(4), 465-482.
- Sinclair, M. F., Lam, S. F., Christenson, S. L. & Evelo, D. (1994). Parent-teacher action research in profile. *Equity and Choice*, 10(1), 21-35.
- Thurlow, M. L., Christenson, S. L., Sinclair, M. F., & Evelo, D. L. (1997). Wanting the unwanted: Keeping those "out of here" kids in school. *Beyond Behavior*, 8(3), 10-16.

First Steps to Success

- Epstein, M. H., & Walker, H. M. (2002). Special education: Best practices and First Step to Success. In B. J. Burns & K. Hoagwood (Eds.), *Community treatment for*

youth: *Evidence-based interventions for severe emotional and behavioral disorders* (pp. 179-197). New York: Oxford University Press.

Golly, A., Sprague, J., Walker, H. M., Beard, K., & Gorham, G. (2000). The First Step to Success program: An analysis of outcomes with identical twins across multiple baselines. *Behavioral Disorders, 25*(3), 170-182.

Golly, A., Stiller, B., & Walker, H. M. (1998). First Step to Success: Replication 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.

Walker, H., Stiller, B., & Golly, A. (1998). First Step to Success: A collaborative Home-School Intervention for Preventing Antisocial Behavior at the Point of School Entry. *Young Exceptional Children, 1*(2), 2-6. (\$5.00)

Walker, H. M. (1998). First Steps to Prevent Antisocial Behavior. *Teaching Exceptional Children, 30*(4), 16-19.

Walker, H. M., Kavanagh, K., Stiller, B., Golly, A., Severson, H. H., & Feil, E. G. (1998). First Step to Success: An Early Intervention Approach for Preventing School Antisocial Behavior. *Journal of Emotional and Behavioral Disorders, 6*(2), 66-80.

Social Skills Training – Research Summary Articles

Gresham, F. M., Sugai, G. & Horner, R. H. (2001). Interpreting outcomes of 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.

Moote, G., Smyth, N. J., & Wodarski, J. S. (1999). Social Skills Training With Youth in School Settings: A Review. *Research on Social Work Practice, 9*, 427-465.

Powers, L. J. (2003). Examining the effects of targeted group social skills intervention in schools with and without school-wide systems of positive behavior support. Unpublished doctoral dissertation. Columbia, MO: University of Missouri.

Tertiary Prevention

The research supporting the effectiveness of functional behavioral assessment, the design of individualized behavioral interventions, and the active use of data in the implementation of behavior support is perhaps the most robust of the databases within SWPBS. The majority of this research has employed single-case designs to examine the effects of specific interventions, but increasingly studies are linking behavioral and academic interventions to reduction in problem behavior.

This research has not at this time assessed the interaction effects associated with implementation of elements at all three tiers in the SWPBS prevention framework.

Benazzi, L., Horner, R.H., & Good, R.H. (2006). Effects of behavior support team composition on the technical adequacy and contextual fit of behavior support plans. *Journal of Special Education, 40*(3), 160-170.

Blair, K.C., Umbreit, J., Dunlap, G., & Jung, G. (2007). Promoting inclusion and peer participation through assessment-based intervention. *Topics in Early Childhood Special Education, 27*(3), 134-147.

Borgmeier, C., & Horner, R.H. (2006). An evaluation of the predictive validity of confidence ratings in identifying accurate functional behavioral assessment hypothesis statements. *Journal of Positive Behavior Interventions, 8*(2), 100-105.

Brooks, A., Todd, A. W., Tofflemoyer, S., & Horner, R. H. (2003). Use of functional assessment and a self-management system to increase academic engagement and work completion. *Journal of Positive Behavior Intervention, 5*, 144-152.

Burke, M. D., Hagan-Burke, S., & Sugai, G. (2003). The efficacy of function-based interventions for students with learning disabilities who exhibit escape-maintained problem behavior: Preliminary results from a single case study. *Learning Disabilities Quarterly, 26*, 15-25.

Carr, E. G., Horner, R. H., Turnbull, A. P., Marquis, J. G., Magito-McLaughlin, D., McAtee, M. L., et al. (1999). Positive behavior support for people with developmental disabilities: A research synthesis. *American Association on Mental Retardation Monograph Series*. Washington, D. C.: American Association on Mental Retardation.

Crone, D., Hawken, L., & Bergstrom, M., (2007). A demonstration of training, implementing and using functional behavioral assessment in 10 elementary and middle school settings. *Journal of Positive Behavior Interventions, 9*(1), 15-29.

Fairbanks, S., Sugai, G., Guardino, D., & Lathrop, M. (2007). Response to intervention: Examining classroom behavior support in second grade. *Exceptional Children, 73*(3), 288-310.

Grow, L. L., Carr, J., & LeBlanc, L. (2009). Treatments for attention-maintained problem behavior: empirical support and clinical recommendations. *Journal of Evidence-based Practices for Schools, Vol. (10)*, 70-92.

- Harvey, M. T., Lewis-Palmer, T., Horner, R. H., & Sugai, G. (2003). Trans-situational interventions: Generalization of behavior support across school and home environments. *Behavioral Disorders, 28*, 299-213.
- Iovannone, R., Greenbaum, P., Wang, W., Kincaid, D., Dunlap, G., Strain, P. (2009). Randomized controlled trial of the Prevent-teach-reinforce (PTR) tertiary intervention for students with problem behaviors. *Journal of Emotional and Behavioral Disorders 17*, 213-225.
- Ingram, K., Lewis-Palmer, T., & Sugai, G. (2005). Function-based intervention planning: Comparing the effectiveness of FBA indicated and contra-indicated intervention plans. *Journal of Positive Behavior Interventions, 7*, 224-236.
- Loman, S., & Horner, R., (2014). Examining the efficiency of a basic functional behavioral assessment training package for school personnel. *Journal of Positive Behavior Interventions 16*(1), 18-30.
- Lucyshyn, J., Albin, R., Horner, R.H., Mann, J. C., Mann, J. A. & Wadsworth, G. (2007). Family Implementation of Positive Behavior Support with a Child with Autism: A Longitudinal, Single Case Experimental and Descriptive Replication and Extension. *Journal of Positive Behavior Interventions, 9*(3), 131-150.
- McIntosh, K., Borgmeier, C., Anderson, C., Horner, R.H., Rodriguez, B., & Tobin, T. (2008). Technical adequacy of the Functional Assessment Checklist for Teachers and Staff FBA intervention measure. *Journal of Positive Behavior Interventions, 10*(1), 33-45.
- McIntosh, K. Chard, D., Boland, J., & Horner, R. (2006). A demonstration of combined efforts in school-wide academic and behavioral systems and incidence of reading and behavior challenges in early elementary grades. *Journal of Positive Behavior Interventions, 8*(3), 146-154.
- Newcomer, L. L. & Lewis, T. J. (2004). Functional Behavioral Assessment: An Investigation of Assessment Reliability and Effectiveness of Function-Based Interventions. *Journal of Emotional and Behavioral Disorders, 12*(3), 168-181.
- Pindiprolu, S. (2009). Functional assessment-based intervention in the general education setting. *Journal of Evidence-based Practices for Schools 10* (1), 48-65.
- Preciado, J., Horner, R.H., & Baker, S. (2009). Using a function-based approach to decrease problem behavior and increase academic engagement for Latino English Language Learners. *Journal of Special Education, 42* (4), 227-240.
- Scott, T. M., & Caron, D. (2006). Functional Behavior Assessment at the School-Wide Level: Determining Predictability and Function of Typical Problem Behaviors. *Preventing School Failure, 50*(1), 13-20.

- Scott, T. M., Liaupsin, C., & Nelson, C. M., & McIntyre, J. (2005). Team-Based Functional Behavior Assessment as a Proactive Public School Process: A Descriptive Analysis of Current Barriers. *Journal of Behavioral Education, 14*(1), 57-71.
- Scott, T. M., McIntyre, J., Liaupsin, C., Nelson, C. M., Conroy, M., & Payne, L. (2005). An Examination of the Relation Between Functional Behavior Assessment and Selected Intervention Strategies with School-Based Teams. *Journal of Positive Behavior Interventions, 7*(4), 205-215.
- 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.