

Functional Behavior Assessments and Behavior Intervention Plans in Rural Schools: An Exploration of the Need, Barriers, and Recommendations

LINDSAY ORAM, SARAH OWENS, and MELISSA MARAS

University of Missouri, Columbia, MO, USA

A wealth of research highlights negative outcomes associated with mental and behavioral health problems in children and adolescents. Prevention-based frameworks have been developed to provide prevention and early intervention in the school setting. Tertiary behavioral supports often include the use of functional behavior assessments (FBAs) and behavior intervention plans (BIPs), for which considerable positive student outcomes have been documented. However, these supports are not void of implementation barriers that decrease effectiveness and prevent desired student outcomes. Rural communities are characterized by factors that further limit the implementation of FBAs. This article explores general implementation barriers as well as distinct characteristics of rural schools that prevent successful implementation of FBAs and BIPs. Furthermore, recommendations are provided for overcoming implementation barriers in rural schools.

Keywords: behavior intervention plan, functional behavior assessment, rural schools, tier 3

Mental and behavioral health problems are highly prevalent in youth (National Alliance of Mental Illness, 2013) and demonstrate significant negative outcomes including school dropout, low achievement, increased expulsion, increased substance use, antisocial behaviors, relationship problems, and difficulty finding and maintaining employment (Darney, Reinke, Herman, Stormont, & Ialongo, 2013). The literature highlights a myriad of short- and long-term negative outcomes associated with such problems, many of which manifest in the school setting, making schools an ideal intervention point (Weist, 1999). Therefore, it is not surprising that considerable scholarship has targeted interventions specific to the school setting (Hoagwood, Olin, Kerker, Kra-tochwill, Crowe, & Saka, 2007).

Functional Behavior Assessments (FBA)

Functional behavior assessments are multisource assessment procedures that examine relationships between student characteristics and contextual variables that trigger and maintain behavior (Horner, 1994). Considerable research documents efficacy of FBAs in school settings, (Payne, Scott, & Conroy, 2007; Stahr et al., 2006) across the developmental span (e.g., Dufrene, Doggett, Hennington, & Watson, 2007; Lane et al.,

2007), and for a host of behavioral concerns (Kern, Childs, Dunlap, Clarke, & Falk, 1994; Lane, Weisenbach, Little, Phillips, & Wehby, 2006; Vollmer & Iwata, 1991). Furthermore, behavioral interventions connected to function are found to be more efficacious than those not connected to function (Horner, 1999; Marquis et al., 2000), document large effect sizes (Didden, Duker, & Korzilius, 1997; Gage, Lewis, & Stichter, 2012; Marquis et al., 2000), and are further evidenced by single case studies (March & Horner, 2002; McLaren & Nelson, 2009; Patterson, 2009).

FBAs play a critical part in the tiered prevention frameworks, such as Positive Behavior Intervention and Supports (PBIS), by providing the most intense individualized behavioral supports. Examinations of PBIS document positive outcomes such as increased academic performance, decreased discipline referrals, decreased suspensions, and increased perceived safety (Barrett, Bradshaw, & Lewis-Palmer, 2008; Horner et al., 2009; Luiselli, Putnam, Handler, & Feinberg, 2005; Sugai & Horner, 2002). In addition to being considered a best practice within PBIS, FBAs and BIPs are federally mandated within IDEA (Zirkel, 2001). Overall, there are large-scale initiatives and federal mandates that support the use of FBAs and BIPs.

Barriers to FBA Implementation in Rural Schools

As a result of broad applicability, a federal mandate, and rapid growth in the adoption of PBIS, FBAs are becoming

Address correspondence to Lindsay Oram, Thompson Center for Autism & Neurodevelopmental Disorders, University of Missouri, Columbia, MO 65211, USA. E-mail: oraml@health.missouri.edu

more widespread in schools. However, many schools fail to effectively use this practice (Allday, Nelson, & Russel, 2011; Chitiyo & Wheeler, 2009; Katsiyannis, Conroy, & Zhang, 2008; Pindiprolu, Peterson, & Berglof, 2007; Van Acker, Borseon, Gable, & Potterton, 2005). Active consideration of contextual factors is one method of bridging this gap between research and implementation (Ringeisen, Henderson, & Hoagwood, 2003).

Rural residents are less likely to indicate a need for mental health services (Gamm, Stone, & Pittman, 2003), which may lead to poorer outcomes, such as higher suicide rates (Centers for Disease Control and Prevention, 2014). Furthermore, rural populations are less likely to have access to high-quality health care (Gamm & Hutchison 2003; Glasgow, Morton, & Johnson, 2004; Pande & Yazbek, 2003) and rural children are less likely to receive mental and behavioral health intervention (Calloway, Fried, Johnsen, & Morrissey, 1999). Unfortunately, due to their context, rural schools and communities struggle to meet the need of those with mental and behavioral health concerns (Anschutz, 1987; Arnold, 2005; Belsie, 2003). In the next sections, the following barriers to mental and behavioral health services in rural schools will be discussed: (a) geographic isolation, (b) limited financial resources, and (c) limited support systems.

Geographic isolation. Rural schools are often geographically isolated, which significantly decreases access to many resources. For example, Berry, Petrin, Gravelle, and Farmer (2011) surveyed rural special educators and found that 33% of respondents indicated traveling distance as a barrier to off-site professional development workshops. In addition, extending services to rural communities costs more due to expense associated with travel (Helge, 1986; Reeves 2003). Each year, rural schools must spend a greater proportion of their budgets on transportation when compared to urban schools (Reeves, 2003). Overall, geographic isolation creates barriers to high-quality professional development and technical assistance.

Limited financial resources. Rural schools may face a number of financial barriers. The reliance of schools on property tax places rural communities at a larger disadvantage. In many rural schools, enrollment is on a decline and because money is appropriated based on enrollment, rural school budgets are also declining. Despite recent attention, federal funding formulas are often predicated on the number of students or allocated on a per-pupil basis. Therefore, while schools may be awarded funding, the amount based on enrollment is often too small or a negligible amount to use effectively (Reeves, 2003). Although efforts to address the financial barriers are captured through the use of cooperatives and consortia, even then, some rural schools are still too geographically distant to benefit. This forces schools to make fiscal decisions such as cutting programs, consolidating positions, or cutting staff positions entirely (Reeves, 2003). Rural schools already struggle to meet the federal demands for highly qualified teachers. Recruiting and retaining teachers with credentials in areas such as special education, foreign language, and bilingual programs (Reeves, 2003) is difficult

because rural schools provide pay well below national averages. Specifically, literature indicates salaries of teachers in rural areas can differ from urban counterparts by as much as \$10,400 (Reeves, 2003). As a result, some report a shortage of special educators as high as 35% (Brownell, Bishop, & Sinclair, 2005; Berry & Gravelle, 2013). Employing and retaining staff, such as school psychologists and behavioral analysts, is also difficult for rural school districts; this negatively impacts the schools' ability to provide mental and behavioral health supports. For example, research shows that FBAs are more technically adequate when conducted by staff members, such as school psychologists or behavioral analysts (Benazzi, Horder, & Good, 2006).

Limited support systems. When staff members have limited knowledge and skills, they become more dependent on resources and supports. Fortunately, resources have been developed to assist schools as they conduct FBAs (Killu, Weber, Derby, & Barreto, 2006; March & Horner, 2002). In a survey of 49 states, Killu, Weber, Derby, & Barreto (2006) found that 40 states provided some FBA/BIP training materials and resources (e.g., printed materials, CD ROMS, and videos) for schools. Despite the availability of these types of resources, school staff continued to indicate the need for support (Pindiprolu, Peterson, & Berglof, 2007) and struggled with the effective use of FBAs and BIPs (Allday, Nelson, & Russell, 2011; Chitiyo & Wheeler, 2009). Implementation support, in the form of coaches or consultants, has demonstrated efficacy at enhancing fidelity, overall quality, and sustainability (Bradshaw et al., 2012; Muscott et al., 2004; Simonsen et al., 2012). Technical assistance (TA) centers often provide these types of supports to schools. PBIS TA centers are the most likely place that schools receive assistance for FBAs and BIPs, but schools are not automatically provided access. Given the geographic isolation and financial issues previously described, rural schools may have limited access to these resources. As described, the rural school context impacts implementation of evidence-based practices.

Recommendations

Collaboration. Children's mental health services are complex and fragmented, which significantly impedes service delivery. The Substance Abuse and Mental Health Services Administration (SAMHSA) created the Federal Mental Health Action Agenda in 2009 in order to transform the mental health service delivery system. A positive aspect of this plan is that it acknowledges the need for a rural mental health plan; however, school-based services were minimally mentioned. Rural schools should collaborate and develop partnerships with other schools and other child-service agencies in order to advocate for mental and behavioral health services and resources. A three-decade case study from Maryland demonstrates the necessity of collaboration and coordination when developing successful mental health systems (Harburger, Stephan, & Kaye, 2013). Specifically, these researchers cited collaboration as a major factor that led to successful grant writing and advocacy for mental health services.

Federal funding/supports. As discussed, available funding is a barrier for rural school districts (Reeves, 2003). FBAs can be resource-intensive, creating an additional financial burden for rural schools. There are several funding streams available that all schools can access in order to assist with FBAs. For instance, funding through IDEA can be used to fund FBAs if students have qualified for special education services. In addition, 15% of a district's IDEA funding can be used for Coordinated Early Intervention Services (CEIS). This funding can be used to provide services that support students who have not been identified as needing special education services, but who need additional academic and behavioral supports in order to succeed in the general education environment (United States Department of Education, 2008). Specific services supported by these funds include staff professional development, implementation of prevention frameworks such as PBIS, specialists to work with students one-on-one or in small groups, and evaluations to help with educational planning (United States Department of Education, 2008). CEIS could be one avenue rural schools use in order to fund FBAs. However, the amount of IDEA funding is based on a per-student formula, which as discussed might leave rural schools with too small or a negligible amount of money to use effectively (Reeves, 2003). Therefore, it is recommended that school professionals in rural contexts also advocate for funding streams that do not rely on per-student formulas.

Many students in rural communities live in poverty; data reveal that across the nation about 35% of rural children are enrolled in Medicaid (North Carolina Rural Health Research and Policy Analysis Center, 2009). The recent passage of the Affordable Care Act and discussion of Medicaid expansion likely increased this number. During the 2013 legislative sessions, 24 states had moved forward with Medicaid expansion, 21 states were not moving forward, and six states were having ongoing debate (Kaiser Commission on Medicaid and Uninsured, 2013). Many states include behavior intervention/consultation services as a billable school-based service (Angeles, Tierney, & Osher, n.d.). Medicaid funding is available; however, in order for schools to use this funding stream, the school-based provider must be Medicaid eligible. For example, although FBA services are often considered Medicaid-eligible services, the school staff (e.g., school psychologists, school social workers, and school counselors) conducting them may not be Medicaid providers due to lack of professional licensure. It is recommended that school professionals advocate for Medicaid provider eligibility that aligns with school mental health credentialing/licensure requirements. In sum, rural schools need easily accessible funding streams at the state and national level in order to fund federally mandated and research-supported behavioral intervention services in schools.

Training and ongoing support. Emphasis should be placed on staff capacity building when implementing evidence-based practices, such as FBAs. Specialists, such as school psychologists or behavior analysts, most commonly trained in intensive school-based mental and behavioral health interventions are not often found in rural schools. Teachers become the front line when it comes to behavioral and mental health

prevention and intervention efforts. This concept is gaining traction as evidenced by the increased number of school personnel participating in Mental Health First Aid (National Council for Behavioral Health, 2013) and states, such as Minnesota, requiring mental health training as part of the five-year teacher recertification process (Behrens, Lear, & Price, 2013). Unfortunately, research has shown that training related to behavioral and mental health intervention is generally lacking and inconsistent in preservice teacher education (Freeman, Simonsen, Briere, & MacSuga-Gage, 2014).

As such, modifications in preservice education would provide large-scale impacts to all schools, including those in rural areas. Stichter, Shellady, Sealander, & Eigenberger (2000) suggested the development and validation of core FBA competencies followed by the standardization of preservice teacher training related to FBAs across institutes of higher education and across schools of professional development.

Presently, many schools rely on in-service professional development workshops to close the gap left by preservice training (Allday, Nelson, & Russel, 2011). However, in-service training does not necessarily facilitate sustained intervention integrity and FBA implementation is not exempt from this struggle (Scott, Liaupsin, Nelson, & McIntyre, 2005; Van Acker, Boreson, Gable, & Potterton, 2005). Therefore, additional supports, in the form of technical assistance, are necessary in schools. Given the financial burdens and geographic isolation associated with rural schools, they require technical assistance that is feasible with more limited resources. Therefore, organizations and agencies that provide TA may need incentives in order to make their services accessible to rural schools. Exploring possible assistance and incentive programs for rural community serving agencies or organizations is a suggested next step.

One option is to hire school professionals, such as school psychologists or behavior analysts, who could provide technical assistance to staff. Although it may not be realistic for rural districts to hire these professionals as full-time staff members, there are more feasible options available. For example, rural districts often rely on special education cooperatives or consortia to provide specialized services to students across multiple schools and districts (Mason, Perales, & Gallegos, 2013). This could also be done for mental and behavioral health services.

Rural schools often have difficulty recruiting and retaining personnel. If trained staff members leave the district, then the knowledge of the evidence-based practices often goes with them, continuing the cycle of untrained staff. The health-care system has implemented several programs in order to recruit and retain a rural workforce. Such programs include pipeline programs (i.e., recruiting from rural areas to return to rural areas), rural training track programs, and providing incentives for practicing in rural areas (e.g., scholarships, loan repayment programs) (Goodwin & Tobler, 2014). Rural schools should examine such programs to see if they could be implemented in the education system.

Telehealth services. Telehealth, or the use of electronic and telecommunications technologies to support long-distance clinical health services, has emerged as a method of providing

access to medical care for rural populations. For example, Cason, Behl, and Ringwalt (2012) surveyed service providers from 26 states. Of the surveyed providers, which included developmental specialists, speech/language pathologists, occupational therapists, physical therapists, behavior specialists, and audiologists, 30% used telehealth for service delivery. Furthermore, 42 states provide some level of Medicaid reimbursement for telehealth services. Not only is telehealth becoming a commonly supported practice, but the research suggests that it can be an effective service delivery model. Boydell et al. (2014) conducted a literature review of 126 studies that used technology to deliver mental health services to children. The findings of the literature review suggested that telehealth service delivery increased children's access to care, increased clinician capacity, yielded positive child and family outcomes, and improved quality of life. Telehealth has further demonstrated some application to functional assessment and analysis. For example, Wacker et al. (1999) conducted functional analysis for 20 children diagnosed with autism via a telehealth model. Furthermore, Wacker and colleagues were able to identify environmental variables that maintained problem behavior for 18 of the 20 cases. This study provides initial support for the use of telehealth within the school. Although not extensively studied in the school context, telehealth may have applications for rural school-based behavioral health services.

Distance education seeks to tackle geographical barriers and provide services to both teachers and students. A variety of technological learning modalities have surfaced as effective methods of providing education at a distance (Stichter, Laffey, Galyen, & Herzog, 2014). In addition, rural education journals have noted an increasing trend in published articles targeting distance education in preparation of special educators in rural areas (Ludlow & Brannon, 1999). Although distance education in teacher training has historically focused on preparatory training within programs, it is recommended that rural schools incorporate the use of founded distance education methods to provide support for teachers in an ongoing manner.

Taken together, telehealth and distance education delivery systems seek to bridge the obvious geographical barrier of distance and provide research-based and scientifically founded services via alternative modalities. Therefore, it is suggested that researchers and practitioners continue to investigate the use of such services in school settings to meet teacher and student needs in a more feasible, cost-effective manner. Furthermore, it is suggested that rural school districts and communities advocate for access to related services.

Research. Rural contexts pose unique challenges, but there is a noticeable lack of empirical attention to this unique context. Although research in implementation is in its infancy, it is growing rapidly. Context-specific implementation barriers should not be void of attention. It is necessary for scholars to examine the needs of rural school districts related to academic and behavioral concerns. The field would greatly benefit from a survey and analysis of present methods rural schools use to overcome the described barriers. This information would shed important light on potential solutions to

increasing school-related concerns. In addition, research determining the efficacy of recommended rural school supports (e.g., telehealth, staff training, capacity building, etc.) is suggested. Federal and state initiatives and funding to promote and reinforce the attention to geographically isolated areas may provide incentive for attention to areas of high need in the mental and behavioral health fields.

Conclusion

In sum, the unique context of rural school settings creates additional implementation barriers that likely impact the delivery of effective school mental health services to a population with an increased need for such services (Calloway, Fried, Johnsen, & Morrissey, 1999; Centers for Disease Control and Prevention, 2014; Gamm, Stone, & Pittman, 2003). FBAs have emerged as a promising practice in providing behavioral intervention for high-needs students. Not only are FBAs considered best practice, but they are encouraged by No Child Left Behind (NCLB, 2001) and mandated by IDEA. However, like any evidence-based intervention, FBAs must be implemented correctly in order for students to receive the maximum benefits. Therefore, implementation barriers must be identified and ameliorated. In rural schools, implementation barriers may be reduced through collaboration, federal funding and supports, staff training and supports, and telehealth and distance education. In addition, there is a significant need for more research on rural school mental health with an emphasis on FBAs.

Author Notes

Lindsay Oram is a postdoctoral fellow at the University of Missouri. Her current research interests include mental health service provision in rural schools, preservice teacher education, classroom management, and interventions for emotional and behavioral disorders.

Sarah Owens is a predoctoral intern at the Boone County Schools Mental Health Coalition, University of Missouri. Her current research interests include implementation science, implementation integrity, and adoption of evidence-based practices.

Melissa Maras is the associate director of research at the Hook Center for Educational Renewal, University of Missouri. Her current research interests include policy/program development and evaluation, evaluation capacity building, and school mental health promotion.

References

- Allday, R. A., Nelson, J. R., & Russel, C. S. (2011). Classroom-based functional behavioral assessment: Does the literature support high fidelity implementation? *Journal of Disability Policy Studies, 22*(3), 140–149. doi:10.44207311399380.

- Angeles, J., Tierney, M., & Osher, D. (n.d.). *How to obtain Medicaid funding for school-based services: A guide for schools in system of care communities*. Retrieved from <http://www.rippleeffects.com/pdfs/MedicaidFunding.pdf>
- Anschutz, J. M. (1987). *Conditions influencing recruitment and retention of teachers in rural schools*. (Doctoral dissertation, Kansas State University, Manhattan, KS).
- Arnold, M. L. (2005). Rural education: A new perspective is needed at the U.S. Department of Education. *Journal of Research in Rural Education, 20*, 1–3.
- Barrett, S. B., Bradshaw, C. P., & Lewis-Palmer, T. (2008). Maryland state-wide PBIS initiative systems, evaluation, and next steps. *Journal of Positive Behavior Interventions, 10*, 105–114. doi:10.1177/1098300707312541
- Behrens, D., Lear, J. G., & Price, O. A. (2013). *Improving access to children's mental health care: Lessons from a study of eleven states*. Retrieved from <http://healthinschools.org/School-Based-Mental-Health/Eleven-State-Report.aspx>
- Belsie, L. (2003). Rural schools at a disadvantage in the current education-reform climate. *The Christian Science Monitor, 18*, 1–3.
- 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. *The Journal of Special Education, 40*(5), 160–170.
- Berry, A. B., & Gravelle, M. (2013). The benefits and challenges of special education positions in rural settings: Listening to the teachers. *Rural Educator, 30*(4), 3. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1013121.pdf>
- Berry, A. B., Petrin, R. A., Gravelle, M. L., & Farmer, T. W. (2011). Issues in special education teacher recruitment, retention, and professional development: Considerations in supporting rural teachers. *Rural Special Education Quarterly, 30*(4), 3–11.
- Boydell, K. M., Hodgins, M., Pignatiello, A., Teshima, J., Edwards, H., & Willis, D. (2014). Using technology to deliver mental health services to children and youth: A scoping review. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 23*(2), 87–99.
- Bradshaw, C. P., Pas, E. T., Bloom, J., Barrett, S., Hershfeldt, P., Alexander, A., & Leaf, P. J. (2012). State-wide partnership to promote safe and supportive schools: The PBIS Maryland Initiative. *Administration and Policy in Mental Health and Mental Health Services Research, 39*, 225–237. doi:10.1007/s10488-011-0384-6
- Brownell, M. T., Bishop, A. M., & Sindelar, P. (2005). NCLB and the demand for highly qualified teachers: Challenges and solutions for rural schools. *Rural Special Education Quarterly, 24*, 9–14.
- Calloway, M. O., Fried, B. J., Johnsen, M. C., & Morrissey, J. (1999). Characterization of rural mental health service systems. *The Journal of Rural Health, 15*(3), 296–307.
- Cason, J., Behl, D., & Ringwalt, S. (2012). Overview of states' use of telehealth for the delivery of early intervention (IDEA Part C) services. *International Journal of Telerehabilitation, 4*(2), 39–45.
- Centers for Disease Control and Prevention. (2014). *National suicide statistics at a glance*. Retrieved from http://www.cdc.gov/violenceprevention/suicide/statistics/suicide_map.html
- Chitiyo, M., & Wheller, J. J. (2009). Challenges faced by school teachers in implementing positive behavior support in their school systems. *Remedial and Special Education, 30*(1), 58–63.
- Darney, D., Reinke, W. M., Herman, K. C., Stormont, M., & Ialongo, N. (2013). Children with co-occurring academic and behavior problems in first grade: Distal outcomes in twelfth grade. *Journal of School Psychology, 51*, 117–158. doi:10.1016/j.jsp.2012.09.005
- Diden, R., Duker, P. C., & Korzilius, H. (1997). Meta-analytic study on treatment effectiveness for problem behaviors with individuals who have mental retardation. *American Journal on Mental Retardation, 101*(4), 387–399.
- Dufrene, B. A., Doggett, R. A., Henington, C., & Watson T. S. (2007). Functional assessment and intervention for disruptive classroom behaviors in preschool and head start classrooms. *Journal of Behavioral Education, 16*, 368–388.
- Freeman, J., Simonsen, B., Briere, D. E., & Macsuga-Gage, A. (2014). Pre-service teacher training in classroom management: A review of state accreditation policy and teacher preparation programs. *Teacher Education and Special Education, 37*(2), 106–120. doi:10.1177/0888406413507002
- Gage, N. A., Lewis, T. J., & Stichter, J. P. (2012). Functional behavioral assessment-based interventions for students with or at risk for emotional and/or behavioral disorders in school: A hierarchical linear modeling meta-analysis. *Behavioral Disorders, 37*(2), 55–77.
- Gamm, L., & Hutchison, L. (2003). Public health rural health priorities in America: Where you stand depends on where you sit. *The Journal of Rural Health, 19*(3), 209–213.
- Gamm, L., Stone, S., & Pittman, S. (2003). Mental health and mental disorders—A rural challenge. In L. Gamm, L. Hutchison, B. Dabney, & A. Dorsey (Eds.), *Rural healthy people 2010: A companion document to Healthy People 2010*. Retrieved from <https://sph.tamhsc.edu/srhrc/docs/rhp-2010-volume1.pdf>
- Glasgow, N., Morton, L. W., & Johnson, N. E. (Eds.). (2004). *Critical issues in rural health*. Ames, IA: Blackwell Publishing.
- Goodwin, K., & Tobler, L. (2014). *Medicaid and marketplace outreach and enrollment options for states*. National Conference of State Legislatures. Retrieved from <http://www.ncsl.org/documents/health/MedicaidandMarketplaceOandEOptionsforStates514.pdf>
- Harburger, D. S., Stephan, S. H., & Kaye, S. (2013). Children's behavioral health system transformation: One state's context and strategies for sustained change. *The Journal of Behavioral Health Services & Research, 40*, 404–415. doi:10.1007/s11414-013-9339-x
- Helge, D. (1986). Establishing an empirically determined national rural education research agenda. *Research in Rural Education, 3*(3), 99–105.
- Hoagwood, K. E., Olin, S. S., Kerker, B. D., Kratochwill, T. R., Crowe, M., & Saka, N. (2007). Empirically based school interventions targeted at academic and mental health functioning. *Journal of Emotional and Behavioral Disorders, 15*, 66–92.
- Horner, R. H. (1994). Functional assessment: Contributions and future directions. *Journal of Applied Behavior Analysis, 27*, 401–404.
- Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & 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*, 133–144. doi:10.1177/1098300709332067
- Kaiser Commission on Medicaid and the Uninsured. (2013). *Analyzing the impact of state Medicaid expansion decisions*. Retrieved from <https://kaiserfamilyfoundation.files.wordpress.com/2013/07/8458-analyzing-the-impact-of-state-medicare-expansion-decisions2.pdf>
- Katsiyannis, A., Conroy, M., & Zhang, D. (2008). District-level administrators' perspectives on the implementation of functional behavior assessment in schools. *Behavioral Disorders, 34*(1), 14–26.
- Kern, L., Childs, K. E., Dunlap, G., Clarke, S., & Falk, G. D. (1994). Using assessment-based curricular intervention to improve the classroom behavior of a student with emotional and behavioral challenges. *Journal of Applied Behavior Analysis, 27*, 7–19. doi:10.1901/jaba.1994.27-7
- Killu, K., Weber, K. P., Derby, K. M., & Barretto, A. (2006). Behavior intervention planning and implementation of positive behavioral support plans: An examination of states' adherence to standards of practice. *Journal of Positive Behavior Interventions, 8*, 195–200. doi:10.1177/10983007060080040201
- Lane, K. L., Rogers, L. A., Parks, R. J., Weisenbach, J. L., Mau, A. C., Merwin, M. T., & Bergman, W. A. (2007). Function-based interventions for students who are nonresponsive to primary and secondary prevention efforts illustrations at the elementary and middle school levels. *Journal of Emotional and Behavioral Disorders, 15*(3), 169–183.

- Lane, K. L., Weisenbach, J. L., Little, M. A., Phillips, A., & Wehby, J. (2006). Illustrations of function-based interventions implemented by general education teachers: Building capacity at the school site. *Education and Treatment of Children, 29*(4), 549–571.
- Ludlow, B. L., & Brannan, S. A. (1999). Distance education programs preparing personnel for rural areas: Current practices, emerging trends, and future directions. *Rural Special Education Quarterly, 18*, 5–20.
- 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.
- March, R. E., & Horner, R. H. (2002). Feasibility and contributions of functional behavioral assessment in schools. *Journal of Emotional and Behavioral Disorders, 10*(3), 158–170.
- Marquis, J. G., Horner, R. H., Carr, E. G., Turnbull, A. P., Thompson, M., Behrens, G. A., ... Doolabh, A. (2000). In R. M. Gersten, E. P. Schiller, & S. Vaughn (Eds.), *Contemporary special education research: A syntheses of the knowledge base on critical instructional issues* (pp. 137–178). Mahwah, NJ: Lawrence Erlbaum.
- Mason, L. L., Perales, J., & Gallegos, E. (2013). Community-based development of rural behavior analysts. *Rural Special Education Quarterly, 32*(3), 20–23.
- McLaren, E. M., & Nelson, C. M. (2009). Using functional behavior assessment to develop behavior interventions for students in Head Start. *Journal of Positive Behavioral Intervention, 11*(1), 3–21. doi:10.1177/1098300708318960
- Muscott, H. S., Mann, E., Benjamin, T. B., Gately, S., Bell, K. E., & Muscott, A. J. (2004). Positive behavioral interventions and supports in New Hampshire: Preliminary results of a statewide system for implementing schoolwide discipline practices. *Education and Treatment of Children, 27*(4), 453–475.
- National Alliance of Mental Illness. (2013). *Mental illness facts and numbers*. Retrieved from http://www.nami.org/factsheets/mentalillness_factsheet.pdf.
- National Council for Behavioral Health. (2013). *Mental health first aid*. Retrieved from <http://www.thenationalcouncil.org/about/mental-health-first-aid/>
- No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107–110, § 115, Stat. 1425 (2002).
- North Carolina Rural Health Research and Policy Analysis Center. (2009). *Characteristics of rural & urban children who qualify for Medicaid or CHIP but are not enrolled*. Retrieved from http://www.shepscenter.unc.edu/rural/pubs/finding_brief/FB91.pdf
- Pande, R., & Yazbeck, A. (2003). What's in a country average? Wealth, gender, and regional inequalities in immunization in India. *Social Science & Medicine, 57*(11), 2075–2088. doi:10.1016/S0277-9536(03)00085-6
- Patterson, S. T. (2009). The effects of teacher–student small talk on out-of-seat behavior. *Education and Treatment of Children, 32*(1), 167–174.
- Payne, D. L., Scott, T. M., & Conroy, M. (2007). A school-based examination of the efficacy of function-based intervention. *Behavioral Disorders, 32*(3), 158–174.
- Pindiprolu, S. S., Peterson, S. M., & Bergloff, H. (2007). School personnel's professional development needs and skill level with functional behavior assessments in ten midwestern states in the United States: Analysis and issues. *The Journal of the International Association of Special Education, 8*(1), 31–42.
- Reeves, C. (2003). *Implementing the No Child Left Behind Act: Implications for rural schools and districts*. Naperville, IL: North Central Regional Educational Laboratory. Retrieved January 13, 2015, from http://www.mc3edsupport.org/community/kb_files/NCLB_RuralPolicyBrief.pdf
- Repp, A. C., & Horner, R. H. (1999). *Functional analysis of problem behavior: From effective assessment to effective support*. New York, NY: Cengage Learning.
- Ringeisen, H., Henderson, K., & Hoagwood, K. (2003). Context matters: Schools and the “research to practice” gap in children's mental health. *School Psychology Review, 32*, 153–168.
- 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*, 57–71. doi:10.1007/s10864-005-0961-4
- Simonsen, B., Eber, L., Black, A. C., 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*, 5–15. doi:10.1177/1098300711412601
- Stahr, B., Cushing, D., Lane, K., & Fox, J. (2006). Efficacy of a function-based intervention in decreasing off-task behavior exhibited by a student with ADHD. *Journal of Positive Behavior Interventions, 8*(4), 201–211.
- Stichter, J. P., Laffey, J., Galyen, K., & Herzog, M. (2014). iSocial: Delivering the social competence intervention for adolescents (SCI-A) in a 3D virtual learning environment for youth with high functioning autism. *Journal of Autism and Developmental Disorders, 44*, 417–430. doi:10.1007/s10803-013-1881-0
- Stichter, J. P., Shellady, S., Sealander, K. A., & Eigenberger, M. E. (2000). Teaching what we do know: Preservice training and functional behavioral assessment. *Preventing School Failure, 44*(4), 142–146.
- Sugai, G., & Horner, R. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child & Family Behavior Therapy, 24*, 23–50. doi:10.1300/J019v24n01_03
- United States Department of Education. (n.d.). *Building the legacy: IDEA 2004*. Retrieved from <http://idea.ed.gov/explore/view/p/%2Croot%2Cstatute%2CI%2CD%2C654%2Ca%2C3%2CB%2Ciii%2CI%2C;>
- Van Acker, R., Boreson, L., Gable, R. A., & Potterton, T. (2005). Are we on the right course? Lessons learned about current FBA/BIP practices in schools. *Journal of Behavioral Education, 14*, 35–56. doi:10.1007/s10864-005-0960-5
- Vollmer, T. R., & Iwata, B. A. (1991). Establishing operations and reinforcement effects. *Journal of Applied Behavior Analysis, 24*, 279–291. doi:10.1901/jaba.1991.24-279
- Wacker, D. P., Lee, J. F., Dalmau, Y. C. P., Kopelman, T. G., Lindgren, S. D., Kuhle, J., & Weist, M. D. (1999). Challenges and opportunities in expanded school mental health. *Clinical Psychology Review, 19*, 131–135. doi:10.1007/s10964-005-1330-2
- Weist, M. D. (1999). Challenges and opportunities in expanded school mental health. *Clinical Psychology Review, 19*, 131–135. doi:10.1016/S0272-7358(98)00068-3
- Zirkel, P. A. (2001). State special education laws for functional behavioral assessments and behavior intervention plans. *Behavioral Disorders, 36*(4), 262–278.

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