Current Practice Alerts
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A FOCUS on Functional Behavioral Assessment
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What Is It?

Functional behavioral assessment (FBA) is a systematic way to gather data, examine the environment, and look for relationships that can help us identify variables that influence students' behavior. When we understand what influences students' behaviors, we can determine how those variables can be changed in ways that promote positive behavior. FBA is grounded in Applied Behavior Analysis (ABA) theory, where behavioral principles such as positive reinforcement are used to bring about socially valuable outcomes for individuals (Baer, Wolf, & Risley, 1968). The use of FBA is guided by the basic assumptions that a) behavior serves a purpose, and b) behavior is related to the environment.

In the FBA process, conditions in the environment are examined to identify what occurs prior to (antecedents to) and what occurs after (consequences of) problem behavior. Examples of variables in the environment that might influence a student's behavior include physical conditions in the classroom such as temperature, noise levels, or the seating arrangement; the presence of particular peers or staff persons and their behaviors; the type, level, and appropriateness of instruction; the content and nature of the curriculum; or the presence or absence of positive reinforcement for desirable behaviors. By identifying relationships between a student's behavior and environmental variables, teachers can develop hypotheses about why particular behaviors may occur—or the function the behavior serves for the student. In general, the functions of problem behaviors can be categorized as a) what a student gains, such as teacher or peer attention, tangible items, or access to a preferred area or activity; b) what a student avoids or escapes from, such as a difficult task, an unpleasant activity, or any social or academic demand for which the student lacks appropriate skills; and c) the desirable sensory input a student receives as a result of engaging in problem behavior. Because functions of problem behavior are related to student needs and desires, we do not typically classify them as good or bad. Instead, we try and understand why the behavior happens so that we can teach students more appropriate behaviors that will meet their needs and desires.

FBA provides information that is used in the development of a behavioral intervention plan (BIP) to address a student's problem behavior. In an effective BIP, the intervention will address the function of the problem behavior, and will reduce the problem behavior by teaching alternative, acceptable behaviors that fulfill students' needs and desires and thereby eliminate the need for inappropriate or unacceptable behaviors. The FBA process is typically applied to problem behaviors, but it can be used to address social behaviors and academic task performance as well.

For Whom Is It Intended?

FBA was developed to address the needs of individuals with severe behavior problems such as self injury or serious aggression (Day, Rea, Schusser, Larsen, & Johnson, 1988; Repp & Karsh, 1994), and limited functional communication skills (Carr & Durand, 1985; Frea, & Hughes, 1999), and was primarily used in clinical settings. FBA is now used regularly in schools to plan interventions for students in both general and special education classrooms.

FBA became a part of the discipline provisions with the enactment of the 1997 Amendments to the Individuals with Disabilities Education Act (IDEA 1997). IDEA 2004 maintains the legal requirement to use FBA when disciplinary actions for problem behavior could result in a more restrictive placement for a student with an Individualized Education Program (IEP). IDEA also suggests that FBA should be used proactively to develop behavioral interventions and supports that address the functions of behaviors, reduce or prevent the occurrence of problem behavior, and support the use of appropriate alternatives for all students who receive special education services.

How Does It Work?

Although the use of FBA is required by IDEA, the law does not describe a specific blueprint for the FBA process. Researchers and practitioners have developed a variety of formats for FBA, but core components of FBA are essential within any format. FBA must include information about the student, the problem behavior (often referred to as the target behavior), and related environmental variables from both indirect and direct sources. Indirect sources of information include interviews with parents, peers, and teachers; information from inventories and behavior rating scales; and the review of records such as social history reports, cumulative school files, health records, and academic reports. Direct information comes from observations of the target behavior under various

conditions in classrooms and in other relevant settings, and includes information about the antecedents and consequences of the target behavior under different conditions.

FBA helps teachers understand what a student's problem behavior "looks like", the circumstances under which it is likely to occur, and the events or stimuli that are likely to trigger the behavior. FBA also provides important information about the consequences (what happens immediately after the problem behavior) that may actually be maintaining (causing to occur or to occur more frequently) the behavior. The basic goal of FBA is to use information about behaviors and the environments in which those behaviors occur to plan and implement effective interventions so that problem behavior decreases and the student's needs are met (the function of the problem behavior is served) through the use of appropriate, alternative behaviors. The FBA process can be viewed as a series of steps toward gaining a full and comprehensive understanding of students' problem behaviors as they relate to the classroom, school, community, or home environments in which they occur.

The Center for Effective Collaboration and Practice (1998) recommended seven steps that are necessary in order for school-based teams to conduct FBA and develop behavior intervention plans in accordance with IDEA. The FBA process is represented in the first five of these steps, which includes 1) thorough description of the target behavior in observable and measurable terms; 2) refinement of the problem to clarify when, where, and under what circumstances the target behavior typically occurs; 3) collection of data about the target behavior and relevant variables in the environment 4) analysis of data to identify relationships; 5) development of hypotheses about what function the behavior serves for the student; 6) development and implementation of a BIP; and 7) evaluation and modification of the BIP based on changes in the student's behavior. Successful FBA generates behavior intervention or behavior support plans that are individualized for a student, specific to a particular behavior or class of behaviors, address the function of problem behaviors, bring about a decrease in the rate or frequency of problem behaviors, and support the development of appropriate and acceptable behaviors and skills.

How Adequate Is The Research Knowledge Base?

Early research on FBA occurred mainly in research centers or clinical settings, and involved individuals with serious problem behaviors such as self-injury and aggression, or those with significant limitations in self-help and communication skills. However, most recent research involves FBA in school and classroom settings and demonstrates the utility of FBA in the development of effective interventions across a broader range of behaviors and disability categories (Foster-Johnson & Dunlap, 1993; Ingram, Lewis-Palmer, Sugai, 2005). The value of FBA has been demonstrated with young children (Moes & Frea, 2002), students with emotional or behavioral disorders or at-risk for mild disabilities (Kern, Hilt, & Gresham, 2004), and students with special needs in both self-contained (Freeman et al., 2006); and general education environments (Scott et al., 2004). These studies and others report the development of successful behavioral interventions based on FBA methodology, and confirm the merit of FBA as a means of identifying the functions of behaviors and planning effective function-based interventions.

Recent studies have examined whether function-based and non-function based interventions differ in effectiveness (Ingram, Lewis-Palmer & Sugai, 2005) as well as the longitudinal outcomes of FBA (Kern, Gallagher, Starosta, Hickman, & George, 2006). Data from these studies indicate that FBA can contribute to positive and sustained changes in behavior.

How Practical Is It?

The use of FBA to address problem behavior in schools continues to be under investigation as researchers and school personnel work together to examine FBA across the broad range of settings available within the continuum of special education services. The primary factors that impact the practicality of FBA are training and resources.

FBA requires basic skills in behavioral observation, data collection, and data analysis, as well as an understanding of the major principles of behavior analysis, such as positive and negative reinforcement. Resources for staff training on FBA are usually required to ensure that the school personnel involved in FBA understand the FBA process and related forms and materials, and have a working knowledge of positive behavior supports. Along with training, additional staff resources are sometimes required for ongoing data collection and analysis. Behavior interventionists or school psychologists have primary responsibility for conducting FBA in some school systems, but when teachers have primary responsibility the demand on time becomes an important factor.

A further concern about the practicality of FBA involves how teachers, administrators and staff regard positive behavioral support approaches. FBA is most effective in school settings where positive school wide disciplinary approaches are in place. In such settings, FBA becomes a secondary or tertiary tool to address the needs of students for whom the school wide approaches are insufficient.

What Questions Remain?

Although FBA is well established as an effective practice in the planning and implementation of positive and proactive behavioral supports, there is still room for guidance and refinement on some aspects of FBA. For example, absolute answers to questions such as "who needs to be trained?" and "how much training is necessary?" have not been clearly established. Additionally, since many variables contribute to the success of behavioral interventions, it is nearly impossible to measure the direct contribution of FBA to positive outcomes for students when function-based interventions derived through FBA are used. Future researchers should continue to document the effectiveness of FBA-based behavioral interventions in comparison to interventions developed without attention to function of problem behaviors. Because of the uniqueness of individual students and their environments, as well as the many differences and complexities of behaviors addressed through FBA, extensive research will be required to determine the particular strengths of various models or approaches to FBA based on behavior, setting, or student characteristics.

How do I learn more?

The following resources provide detailed information on the principles and procedures involved in Functional Behavioral Assessment.

- Alberto, P. A., & Troutman, A. C. (2006) *Applied behavior analysis for teachers* (7th ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Artesani, A. J. (2001). *Understanding the purpose of challenging behavior: A guide to conducting functional assessments.* Upper Saddle River, NJ: Merrill/Prentice Hall.
- Chandler, L. K., & Dahlquist, C. M. (2006). *Functional assessment: Strategies to prevent and remediate challenging behavior in school settings* (2nd.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Kerr, M. M., & Nelson, C. M. (2006). *Strategies for addressing behavior problems in the classroom* (5th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- McConnell, M. E. (2001). F*unctional behavioral assessment: A systematic process for assessment and intervention in general and special education classrooms.* Denver: Love Publishing.
- O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook* (2nd ed.). Pacific Grove, CA: Brookes/Cole.
- Repp, A. C., & Horner, R. H. (1999). *Functional analysis of problem behavior: From effective assessment to effective support.* Belmont, CA: Wadsworth.

References

Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis, 1,* 91-97.

Carr, E. G., & Durand, V. M. (1985). Reducing behavior problems through functional communication training. *Journal of Applied Behavior Analysis, 18,* 111-126.

Day, R. M., Rea, J. A., Schusser, N. G., Larsen, S. E., & Johnson, W. L. (1988). A functionally based approach to the treatment of self-injurious behavior. *Behavior Modification, 12,* 565-589.

Foster-Johnson, L., & Dunlap, G. (1993). Using functional assessment to develop effective, individualized interventions for challenging behaviors. *Teaching Exceptional Children, 25,* 44-50.

Frea, W. D., & Hughes, C. (1997). Functional analysis and treatment of social-communicative behavior of adolescents with developmental disabilities. *Journal of Applied Behavior Analysis, 30,* 701-704.

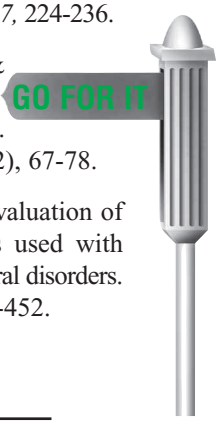
Freeman, R., Eber, L., Anderson, C., Irvin, L., Bounds, M., Dunlap, G., & Horner, R. H. (2006). Building inclusive school cultures using school-wide PBS: Designing effective individual support systems for students with significant disabilities. *Research and Practice for Persons with Severe Disabilities,* 4-17.

Individuals with Disabilities Education Act Amendments of 1997, Pub. L. No. 105-17, 105th Cong., 1st Sess. (1997).

Ingram, K., Lewis-Palmer, T., & Sugai, G. (2005). Function-based intervention planning: Comparing the effectiveness of FBA function-based and non-function-based intervention plans. *Journal of Positive Behavior Interventions, 7,* 224-236.

Kern, L., Gallagher, P., Starosta, K., Hickman, W., & George, M. (2006). Longitudinal outcomes of functional behavioral assessment-based intervention. *Journal of Positive Behavior Interventions, 8*(2), 67-78.

Kern, L., Hilt, A. M., & Gresham, F. (2004). An evaluation of the functional behavioral assessment process used with students with or at risk for emotional and behavioral disorders. *Education and Treatment of Children, 27,* 440-452.



References

Moes, D. R., & Frea, W. D. (2002). Contextualized behavioral support in early intervention for children with autism and their families. *Journal of Autism and Developmental Disorders, 32*, 519-533.

Quinn, M. M., Gable, R. A., Rutherford, R. B. Jr., Nelson, C. M., & Howell, K. (1998). *Addressing student problem behavior: An IEP team's introduction to functional behavioral assessment and behavior intervention plans* (2nd ed.). Washington, DC: Center for Effective Collaboration and Practice.

Repp, A. C., & Karsh, K. G. (1994). Hypothesis-based interventions for tantrum behaviors of persons with developmental disabilities in school settings. *Journal of Applied Behavior Analysis, 27,* 21-31.

Scott, T. M., Bucalos, A., Liaupsin, C., Nelson, C. M., Jolivette, K., & DeShea, L. (2004). Using functional behavior assessment in general education settings: Making a case for effectiveness and efficiency. *Behavioral Disorders, 29,* 189-201.

About the Author

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About the Alert Series

Current Practice Alerts is a joint publication of the **Division for Learning Disabilities** and the **Division for Research** within the **Council for Exceptional Children.** The series is intended to provide an authoritative resource concerning the effectiveness of current practices intended for individuals with specific learning disabilities.

Each Alerts issue focuses on a single practice or family of practices that is widely used or discussed in the LD field. The Alert describes the target practice and provides a critical overview of the existing data regarding its effectiveness for individuals with learning disabilities. Practices judged by the Alerts Editorial Committee to be well validated and reliably used are featured under the rubric of Go For It. Those practices judged to have insufficient evidence of effectiveness are featured as Use Caution.

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