

# AUTISM

AND RELATED DEVELOPMENTAL DISABILITIES

## Challenging Behavior

INSIDE THIS ISSUE:

<b>Special Section: Challenging Behavior</b>	<b>1</b>
Program Description	<b>8</b>
Article Synopses and Book Review	<b>15</b>
<b>ABCT SIG NEWS</b>	<b>19</b>
<b>ABA SIG NEWS</b>	<b>20</b>
Announcements	<b>31</b>

The following article appeared in the third issue of the journal *The Behavior Therapist* published in 2006. In the article, Robert LaRue and Jan Handleman detail the state-of-the-art functional behavioral assessment technology, its strengths and limitations.

LaRue, R. H., & Handleman, J. S. (2006, Mar). A primer on school-based functional assessment. *The Behavior Therapist*, 29(3), 48-52.

### Best Practices in School-Based Functional Assessment

With the passage of the 1997 IDEA amendments, school psychologists and administrators have been under increasing pressure to implement functional assessment procedures in school settings. The use of these procedures has prompted a debate regarding the applicability of these procedures in the general school system (Scott, Bucalos, Nelson, Liaupsin, Jolivet, & Deshea, 2004). There exists a wide body of literature supporting the use of these procedures in clinical settings, yet widespread use of empirically validated assessment instruments remains inconsistent. The purpose of the current manuscript is to discuss the purpose of functional assessment, the barriers that keep it from use in school systems and to propose general guidelines for functional behavioral assessment that may be useful in school systems.

#### Definition

The development and refinement of functional behavioral assessment (FBA) procedures represents one of the most significant advances the treatment of behavior problems in recent decades. Functional behavioral assessments are used to generate hypotheses regarding the function (or cause) of challenging behavior. Specifically, it is a process for gathering information that can be used to maximize the effectiveness and efficiency of behavioral support (O'Neill, Horner, Albin, Storey, & Sprague, 1997). The FBA process involves a broad array of procedures used for gathering information regarding antecedents, behaviors, and consequences that allow clinicians to determine the maintaining factors for maladaptive behavior. Common maintaining factors for maladaptive behavior include positive reinforcement (e.g., behavior results in access to social attention or access to preferred items), negative reinforcement (e.g., behavior results in escape from demands or aversive stimulation), and automatic reinforcement (i.e., behavior that persists independent of environmental events). There are three broadly defined components to functional assessment. These components are indirect assessments (e.g., interviews, rating scales, record review), descriptive assessment (direct observation and ABC data collection) and systematic manipulations (or functional analyses\*).

*\*It should be noted that some professionals have used the terms "functional assessment" and "functional analysis" interchangeably. This has led to considerable confusion and, in this paper, will be defined separately. The phrase "functional assessment" will be used to refer to the general array of functional assessment procedures, while the term "functional analysis" will be used to refer to systematic environmental manipulations.*

#### Effectiveness of Functional Assessment

Hundreds of articles from the behavioral literature have documented the effectiveness of functional assessment for developing effective treatments for students exhibiting behavior problems. As mentioned previously, the goal of functional assessment is to identify the



factors that maintain problem behavior. Knowledge of this cause-effect relationship provides clinicians with the necessary information to develop interventions to reduce problem behavior as well as facilitate adaptive behaviors. The greatest strength of FBA lies in the fact that it makes the intervention process more efficient (narrows down the number of potential interventions) and that it leads to effective function-based intervention.

Given its documented effectiveness, functional assessment procedures are now expected practice in the educational field. FBA has been strongly endorsed by the Association for Behavior Analysis (ABA) and the National Institute of Health (NIH). In addition, FBAs were legally mandated in the 1997 amendments to the Individuals with Disabilities Education Act (IDEA). These amendments require schools to provide a functional behavioral assessment and a behavior intervention plan (BIP) when suspensions/placements in alternative settings exceed 10 consecutive days, when a student is placed in an alternative setting for 45 days when misconduct involves weapons or drugs, and/or when a due process hearing officer places a student in an alternative setting as a result of behavior dangerous to themselves or others (Drasgow & Yell, 1997).

## **The Challenges**

Although functional assessment is expected practice, several challenges to its use in applied settings have arisen in recent years. Several researchers have suggested that, although these procedures are effective when used in highly controlled settings, they may have limited usefulness in applied settings, such as schools (Sasso, Conroy, Peck-Sticher, Fox, 2001; Scott, et al., 2004). There are several potential challenges with the use of functional assessment in school settings. First, many school professionals may not be adequately trained to implement FBAs. Although functional assessment is currently a common training component in university-based special education programs, many professionals may have completed their training prior to the passage of the IDEA amendments and therefore have less familiarity with the FBA process.

Another challenge involves inconsistent or improper use of functional assessment techniques. School professionals often use quick, cost-effective functional assessment procedures, such as interviews and rating scales. Unfortunately, these procedures are often less accurate than other, more labor-intensive (and time-consuming) procedures, such as descriptive assessment and functional analysis.

Another significant challenge is the lack of legal guidelines for use of functional assessment. Although FBAs are mandated by the IDEA Amendments of 1997, there are no clear guidelines for implementing these procedures. This ambiguity regarding implementation has led to a considerable amount of confusion and has left practitioners and school districts to decide what constitutes an adequate functional assessment.

In all, these challenges often lead to improper use of functional assessment procedures, which has contributed to the perception that FBA is not a viable procedure for use in public schools and that it is not effective. Poorly implemented functional assessments are not likely to result in positive outcomes for students and, therefore, decrease the likelihood that FBA procedures will be used consistently in the future.

The purpose of the current manuscript is to provide guidelines for conducting FBAs in schools and to provide strategies to combat some of the challenges to effective implementation of these procedures. The proposed guidelines are not intended to dictate school policy or to point out shortcomings of school models of functional assessment, but rather an attempt to supplement current models of functional assessment. These will guidelines provide recommendations regarding the three main components of functional assessment: indirect assessment, direct/descriptive assessment and analogue functional analyses.

## **Indirect/Informant Methods of Functional Assessment**

Indirect assessment procedures represent the preliminary steps of problem solving in functional assessment. Indirect assessment procedures involve the use of rating scales and interviews.

Clinical interviews are extremely important for gathering preliminary information regarding the nature of problem behavior. When possible, teachers, parents and direct care personnel should all be interviewed as a part of functional assessment.

There are several key pieces of information that should be gathered during a clinical interview. First and foremost, an operational definition of the behavior should be developed. An operational definition is a precise description of a target behavior. An adequate operational definition has been developed when all people involved with a student can reliably identify an occurrence of the target behavior. For example, self-injurious behavior may be defined as forceful contact between student's hand (open or closed fist) and their head from a distance of greater than six inches. It should be noted that operational definitions will often have some degree of error. For instance, an individual may engage in a behavior that topographically looks similar to the target behavior (e.g., the student may swing their hands while playing a game and accidentally hit their head). Some degree of error is unavoidable when operationally defining behaviors. The goal should be to develop a definition that will effectively capture the behavior the majority of the time.

During a clinical interview, information should be collected regarding the events that precede the target behavior (antecedents), as well as the events that follow behavior (consequences). Common antecedents to problem behavior include environmental events such as the presentation of demands, periods of low attention and the removal of preferred items. Common consequences for problem behavior may include the removal of demands (e.g., providing a break), reprimands/attention (e.g., "Stop doing that!") and the presentation of preferred items. The interviewer should ask several questions regarding the relationship between the antecedents, behaviors, and consequences. Common questions about antecedents to challenging behavior may include:

In what setting does the behavior occur most frequently?

Are there settings/situations when the behavior never occurs?

What do you think triggers the target behavior?

Does it occur more/less frequently in the presence of specific people?

Does it occur more frequently at specific times of the day?

Are there events more temporally removed from the behavior that may affect responding (e.g., disruptions in sleep cycles, diet, medical problems, medication changes)?

Useful questions regarding the consequences of behavior include:

Is there a consistent response to the behavior?

What does the learner gain from the behavior?

When they get what they want, does the behavior stop?

Can they get the same reinforcer (e.g., attention, break, preferred items) using adaptive communication (e.g., asking, using a communication board)?

In addition to the information regarding antecedents and consequences, practitioners should gather information regarding the prevalence of the behavior of concern. Information regarding the average frequency and duration of maladaptive behavior should be collected.

In recent years a number of useful rating scales and structured interviews have been developed to assist in the functional assessment process. Commonly used rating scales include the Setting Event Checklist (Gardner, Cole, Davidson, & Karan, 1986) and the Motivator Assessment Scale (MAS) (Durand & Crimmins, 1992). In addition to these rating scales, a number of functional assessment interviews have been developed. A commonly used structured interview is Functional Analysis Interview (FAI) (O'Neill et al., 1997).

Indirect methods of functional assessment, such as interviews and rating scales, have one obvious advantage: they provide clinicians with a quick way to get useful information for the assessment process. Indirect measures are also particularly useful for guiding the assessment process. Information obtained during the interview process allows practitioners to know the best times to observe and to prepare for subsequent observation. However, one must use these measures with caution. Given that these are indirect measures, the behavior of concern is not observed and reports from caregivers are often plagued with errors, omissions and inaccuracies. Given the degree of error associated with these measures, indirect assessment methods should be used as a preliminary step in the assessment process rather than the sole basis for behavior intervention plan development.

## Descriptive Assessment

Descriptive assessment involves the systematic observation of the behavior in its natural setting. Procedures fall under the category of descriptive assessment, include direct observation and antecedent-behavior-consequence (ABC) data collection. Informal direct observation involves collecting behavioral data *in vivo*. This involves the development a data sheets and the collection of behavioral data. The main purpose of behavioral observation is to refine the operational definitions and collect information regarding the prevalence of the target behavior. Data can either be collected by behavior analysts/psychologists or the direct care staff themselves.

Antecedent-behavior-consequence (ABC) data involves the collection of information regarding the events that precede the behavior, the behavior itself, and the events that immediately follow the behavior. By recording a variety of instances of the behavior (ABC), patterns can be analyzed to develop a better understanding of the function of behavior. Operational definitions need to be developed not only the behavior itself, but for the antecedents and consequences as well when collecting ABC data. Examples of antecedent definitions may include:

Demand: a work task/activity presented within five seconds of the behavior

No attention: no interaction ten seconds prior to the behavior

Restricted access: opportunity to interact with preferred items/activities blocked within ten seconds of the behavior

Examples of common consequence definitions may include:

Escape: break from demands (lasting 3+ seconds) within five seconds of the behavior

Attention: Reprimands or social interaction within five seconds of the behavior

Access: Allowed to interact with preferred items within five seconds of behavior

Descriptive analysis data can be used to calculate the conditional probabilities for the behavior of concern. This is done by dividing the number of antecedents or consequences by the total number of behaviors (or episodes). For example, a student is observed to have 10 instances of self injury during a behavioral observation. Eight of the ten episodes are preceded by the presentation of demands. This would indicate that 80% of maladaptive behaviors were preceded by task presentation. A similar calculation could be made for the consequences for the behavior (e.g., 7 of ten instances followed by a break in demands). It should be noted that the antecedents or consequences need not add up to the total number of behaviors. Frequently, behaviors have several antecedents and consequences that occur simultaneously (e.g., self injurious behavior that is preceded by both presentation of demands and restricted access to preferred activities). A clear pattern often emerges if a sufficient amount of data has been collected. Descriptive assessment can be the terminal step in the functional assessment process provided that data clearly indicates the function of the behavior.

Descriptive assessment has a number of advantages over indirect forms of assessment. One advantage is that the maladaptive behavior is observed in its natural context which increases the social validity of the assessment. In addition, descriptive assessment is based on objective data, rather than impressions or anecdotal report which makes it less subject to bias. However, there is no systematic manipulation of antecedents or consequences, which may lead to ambiguity in the interpretation

of descriptive data. Given the complexity of the natural environment and the multitude of factors affecting behavior from moment to moment, interpretation of descriptive data can be extremely difficult.

### **Analogue Functional Analyses**

Analogue functional analyses represent the most sophisticated functional assessment procedures. Functional analysis involves the systematic manipulation of environmental antecedents and consequences to determine the function of problem behavior. The conceptual basis for functional analysis was established by Carr (1977) and models for clinical practice were developed by Iwata, Dorsey, Slifer, Bauman, & Richman (1982/1994) and Carr and Durand (1985). Functional analysis procedures build upon information already gathered in the functional assessment process (informant methods, descriptive assessment). Functional analysis procedures have been used to treat a wide variety of problem behaviors exhibited by children. These procedures have been widely studied and used effectively in the applied behavior analysis literature (Hanley et al., 2003).

The purpose of a functional analysis is to arrange sample test situations or “conditions” that are representative of contingencies that are common in the natural environment. These conditions may include brief periods of time of little or no social attention, restricted access to preferred items, or times when demands or work materials are presented. Data are collected on the target behavior (e.g., aggression or self injury) and are compared across the different functional analysis conditions. Commonly used functional analysis conditions include social attention, tangible/restricted access, escape/demand, alone/ignore and toy/play control.

*Social Attention:* The social attention condition is designed to test to determine if maladaptive behavior is maintained by positive reinforcement in the form of reprimands or other forms of social attention. In this condition, attention is withheld for a period of time and is provided contingent upon the occurrence of target behavior. The session begins with the therapist acting preoccupied (e.g., busy reading) with low to moderate preference items present in the room. Therapist attention shifts to the learner contingent upon the occurrence of target behavior for 20 to 30 seconds (e.g., “Stop hitting me!” or “Why are you doing that?”). If the individual engages in high rates of inappropriate behavior in this condition, it indicates that social attention functions as reinforcement for maladaptive behavior.

*Tangible/Restricted Access Condition:* The tangible condition is designed to test if the target behavior is maintained by positive reinforcement in the form of receiving access to preferred items or activities. Prior to the start of the condition, the learner typically has access to highly preferred items for about two minutes. The session starts with the therapist removing the preferred items from the learner and providing the items contingent on the occurrence target behavior (20-30 seconds). High rates of maladaptive behavior in this condition indicate that access to preferred items functions as reinforcement for inappropriate behavior.

*Escape/Demand Condition:* The escape condition is designed to determine if maladaptive behavior is maintained by negative reinforcement (i.e., escape from aversive stimulation or demands). In the escape condition, the learner is prompted to complete non-preferred tasks (e.g., school work). Instructional materials are removed contingent on the occurrence of target behavior for 20-30 seconds. High rates of target behavior in the escape condition indicate that escape from demands functions as reinforcement for maladaptive behavior.

*Alone/Ignore Condition:* The alone condition is designed to determine if target behavior is maintained by the consequences that the behavior itself produces (i.e., automatic reinforcement). In an alone or ignore condition, there are no programmed antecedents or consequences for target behavior. Typically, the learner is placed in a room alone without toys or materials to interact with. Ignore conditions can also be conducted where a therapist is present, but does not interact with the learner. High rates of maladaptive behavior in this condition indicate that the behavior is maintained by automatic reinforcement (e.g., sensory stimulation).

*Toy Play/Control:* The toy play condition is the control to which all other conditions are compared. In this condition, the learner has continuous access to attention, access to highly preferred toys and no aversive stimulation (i.e., demands) of any kind. Target behavior receives no differential consequences. Throughout the session, the individual and therapist play together with preferred toys or leisure items. The toy play condition is designed to be an analogue of an “enriched environment.”

Analogue functional analyses have a number of obvious advantages as compared to other assessment procedures. Functional analysis is the most sensitive procedure for determining the maintaining factors for problem behavior, which leads to effective and efficient interventions for maladaptive behavior. In addition, hundreds of research articles have validated the effectiveness of these procedures for the assessment of maladaptive behavior (Hanley et al., 2003).

However, analogue functional analyses have some drawbacks that can make its use in school settings prohibitive. One of the most common concerns regarding functional analysis is the amount of time required to complete the analyses. Often, teachers and administrators do not have several hours to devote to completing an extended functional analysis. However, there are several strategies that have been used to overcome difficulties with time constraints. Brief versions of analogue functional analyses have been developed in recent years with considerable success. One strategy is to present fewer overall conditions. For instance, Northup, Wacker, Sasso, Steege, Cigrand, Cook, & DeRaad (1991) proposed a model where functional analysis conditions were presented one to two times, and treatment probes (i.e., contingency reversals) were presented. Using these procedures, functional analyses could be conducted in approximately 90 minutes and function-based treatment recommendations could be provided. Another potential strategy to reduce the length of functional analyses is to run shorter conditions. Session lengths of five minutes or less have received empirical support in the literature (e.g.,

Northup et al., 1991). However, brief session duration, particularly those under five minutes, may increase the likelihood of errors (false-positives, false-negatives) in the assessment. Another option is to only run specific functional analysis conditions (i.e., hypothesis-driven). It is possible to use prior forms of assessment (interviews and descriptive assessment) to eliminate the need for particular functional analysis conditions.

Another common problem with implementing functional assessments is the level of expertise required. Although these procedures require some level of expertise, the skills are not difficult to teach and can be done efficiently (e.g., Iwata, Wallace, Kahng, Lindberg, Roscoe, Conners, Hanley, Thompson, & Worsdell, 2000). In fact, strategic staff training (e.g., pyramidal staff training) can increase the efficiency of functional assessment (quicker assessment/intervention and application to other situations and students) and ultimately reduce the financial expenditure for hiring outside behavioral consultants. In addition, training teachers to conduct functional analyses has several advantages when compared to hiring outside consultants. When teachers conduct sessions, there is less disruption to ongoing classroom contingences and recommendations can be implemented and evaluated more rapidly.

## Summary and Future Directions

Functional behavioral assessment is a process designed to identify the factors that maintain maladaptive behavior. A substantial body of literature has shown that these procedures are effective for the assessment of challenging behavior and lead to effective intervention. These procedures are federally mandated and expected practice in the field. However, no guidelines for implementation exist. The purpose of the current manuscript is to provide a starting point for practitioners in need of guidance.

The main components of functional assessment include indirect assessment procedures, descriptive assessment and functional analyses. Indirect assessment procedures include clinical interviews and rating scales. These measures are useful of collecting preliminary information in the functional assessment process, but should not be the terminal step in an FBA. Descriptive assessment involves the direct observation of the learner and the collection of objective data to generate hypotheses about the function(s) of behavior. Descriptive assessment offers significant advantages to indirect methods alone because they are less susceptible to bias and provide a clearer description of the maintaining factors for problem behavior. Analogue functional analyses represent the most sensitive tool in the functional assessment process. Functional analysis involves the use of analogue conditions designed to represent situations or settings that the learner may encounter on a daily basis. Functional analysis has been tested and empirically validated over the last 20 years, yet these procedures are not often used outside of clinical settings with highly trained personnel. Furthermore, these procedures are rarely used in schools at all. Some brief models of functional analysis have emerged, but still have not been used on a widespread basis. A flow chart outlining the functional assessment process is outlined in Figure 1.

The potential effectiveness of functional assessment procedures and legal mandates regarding their use has placed a considerable amount of pressure on school-based administrators. Although schools are legally obligated to implement functional behavioral assessments, they have been given relatively little guidance regarding the use of such procedures. There are a number of ways to address these issues. Perhaps the most important step is to ensure that information regarding functional assessments is disseminated to the people who work in schools. This includes psychologists and teachers in training at the university level as well as those who are already established in the school system. Many school-based professionals have received relatively little training in applied behavior analysis (Shriver & Watson, 1999). Perhaps even more problematic is the challenge of conveying this information to large groups of professionals currently in the school system. To school administrators, training large groups of teachers and/or psychologists would be a daunting and costly task. However, there is a considerable amount of literature supporting pyramidal (or train-the-trainer) training procedures that may enable school administrators to circumvent the substantial costs of large scale training. Having a small group of school personnel receive in-depth training in the principles of applied behavior analysis and functional assessment for the purpose of training school staff may prove to be a simple and cost effective way to train others as well as improve services to their students.

Another way to increase the use of functional assessment procedures in school is for researchers to continue to develop "user-friendly" models of functional assessment. Empirically validated functional assessment procedures are not used in schools because they are often complicated and time-consuming. Several brief FBA interviews and rating scales have been developed in recent years, but relatively few abbreviated descriptive assessment or functional analysis procedures have been developed. Developing brief and effective models of functional assessment should be a priority for researchers.

Another future direction for functional assessment research involves the expansion of the use of assessment procedures to novel populations. Over the years, functional assessment and functional analysis has become a tool commonly used when working with developmentally disabled or autistic populations. Contrary to what many clinicians believe, these procedures can be used with a wide variety of populations and a broad range of behavior problems. Several researchers have documented the effectiveness of these procedures for the assessment and treatment of a variety of behavioral problems, including, pediatric feeding disorders, disruptive behavior associated with Attention Deficit Hyperactivity Disorder, disruptive behavior of children with emotional disorders, motor disturbances associated with tardive dyskinesia and off task behavior. The extension and refinement of these procedures to novel populations and behavioral problems will likely have a positive impact on the widespread use of these procedures in the educational system.

## References

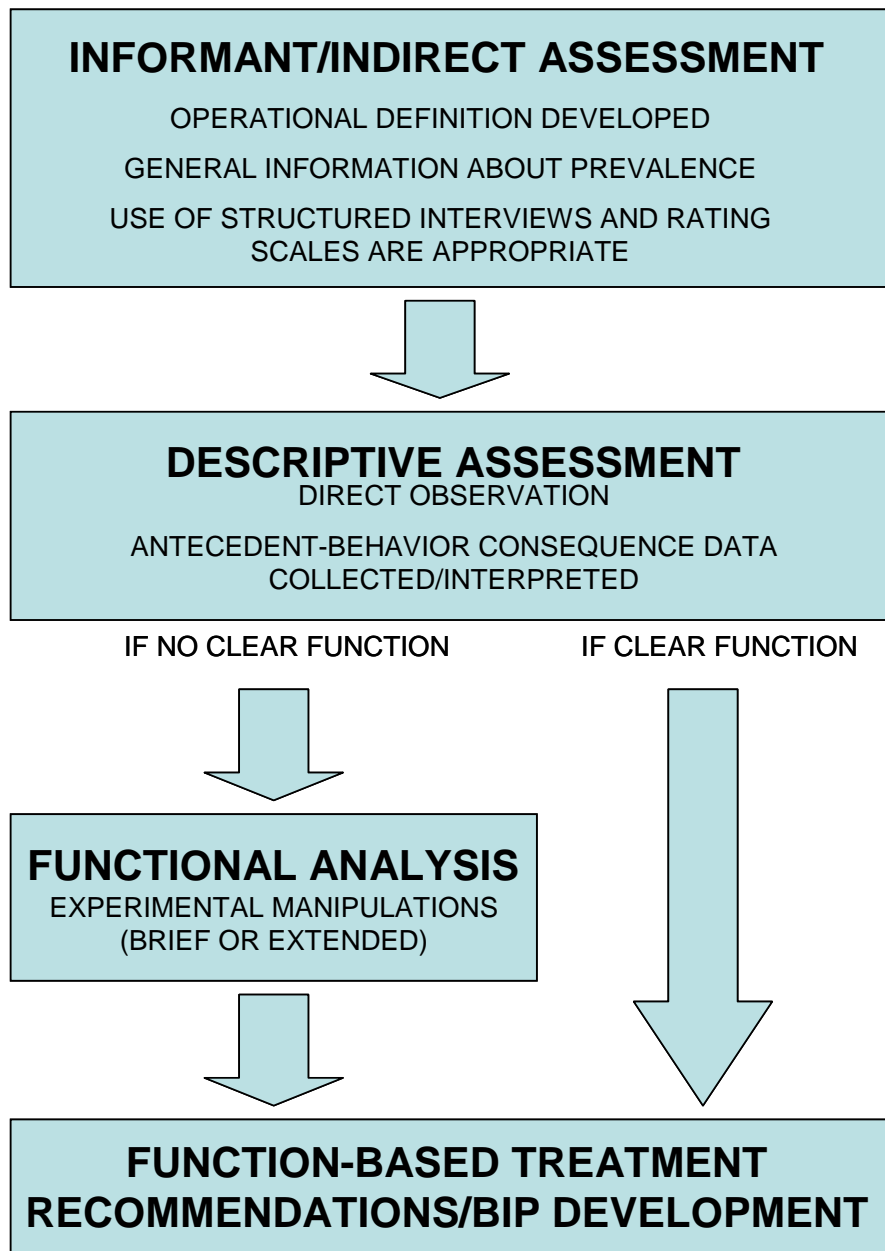
- Carr, E. G. (1977). The motivation of self-injurious behavior: A review of some hypotheses. *Psychological Bulletin*, 84, 800-816.

- Carr E.G. & Durand V.M. (1985). Reducing behavior problems through functional communication training, *Journal of Applied Behavior Analysis*, 18, 111-126.
- Drasgow, E. & Yell, M. L. (2001). Functional behavioral assessments: Legal requirements and challenges. *School Psychology Review*, 30(2), 239-251.
- Durand, V. M., & Crimmins, D. B. (1992). The Motivation Assessment Scale (MAS) administration guide. Topeka, KS. Monaco and Associates.
- Gardner, W.I., Cole, C.L., Davidson, D.P., & Karan, O.C. (1986). Reducing aggression in individuals with developmental disabilities: An expanded stimulus control, assessment, and intervention model. *Education and Training of the Mentally Retarded*, 21, 7.
- Hanley, G. P., Iwata, B. A., & McCord, B. E. (2003). [Functional analysis of problem behavior: A review](#). *Journal of Applied Behavior Analysis*, 36, 147-185.
- Hartwig, L., Healthfield, L. T., Jenson, W. R. (2004). Standardization of the Functional Assessment and Intervention Program (FAIP) with children who have externalizing behaviors, *School Psychology Quarterly*, 19(3), 272-287.
- Individuals with Disabilities Education Act Amendments of 1997. 20.USC. Chapter 33, Sections 1400 *et seq.*
- Iwata, B. A., Dorsey, M. F., Slifer, K. J., Bauman, K. E., & Richman, G. S. (1994). Toward a functional analysis of self-injury. *Journal of Applied Behavior Analysis*, 27, 197-209.
- Iwata, B. A., Wallace, M. D., Kahng, S., Lindberg, J. S., Roscoe, E. M., Conners, J., Hanley, G. P., Thompson, R. H., & Worsdell, A. S. (2000). Skill acquisition in the implementation of functional analysis methodology. *Journal of Applied Behavior Analysis*, 33, 181-194.
- Nelson, J. R., Roberts, M. L., Rutherford, R. B., Mathur, S. R., & Aaroe, L. A. (1999). A statewide survey of special education administrators and school psychologists regarding functional behavioral assessment. *Education and Treatment of Children*, 22, 267-279.
- Northup, J., Wacker, D., Sasso, G., Steege, M., Cigrand, K., Cook, J., & DeRaad, A. (1991). A brief functional analysis of aggressive and alternative behavior in an outclinic setting. *Journal of Applied Behavior Analysis*, 24, 509-522.
- O'Neill, R.E., Horner, R.H., Albin, R., Storey, K., & Sprague, J. (1997). *Functional assessment of problem behavior: A practical assessment guide*. Pacific Grove, CA: Brookes/Cole.
- Reschly, D. J., & Ysseldyke, J. E. (1995). School psychology paradigm shift. In A. Thomas & J. Grimes (Eds.), *Best Practices in School Psychology III*. Bethesda, MD: The National Association of School Psychologists.
- Sasso, G. M., Conroy M. A., Peck-Sticher, J., Fox, J. J. (2001). Slowing down the bandwagon: The misapplication of functional assessment for students with emotional or behavioral disorders. *Behavior Disorders*, 26, 282-296.
- Scott, T. M., Bucalos, A., Nelson, C. M., Liaupsin, C., Jolivet, K., & Deshea, L. (2004). Using functional assessment in general education settings: Making a case for effectiveness and efficiency. *Behavioral Disorders*, 29, 190-203.
- Shriver, M. D., & Watson T. S. (1999). A survey of behavior analysis and behavioral consultation courses in school psychology: Implications for training school psychologists. *Journal of Behavioral Education*, 9, 211-221.

*See next page for Functional  
Behavioral Assessment Flow Chart*



# FUNCTIONAL BEHAVIORAL ASSESSMENT FLOW CHART



## Program Descriptions

### The Severe Behavior Day Treatment Program at the Marcus Institute

Nathan Call, Marcus Institute and Emory School of Medicine & Katherine Powers, Marcus Institute

For children who engage in severe problem behaviors, the most intensive treatment option at the Marcus Institute (MI) is the Severe Behavior Day Treatment Program (SBDT). The SBDT Program is intensive in terms of the total and daily time spent in therapeutic activities, as well as the staffing ratio maintained for each child. Children typically attend the program five days per week for six hours per day. Most admissions are scheduled to last for approximately 12 weeks. While admitted to the SBDT Program children are staffed at a ratio of approximately 2.5 staff per child. This high level of staffing is necessary to assess and treat the especially dangerous and destructive target behaviors addressed by this program while simultaneously ensuring child and staff safety.

Of the 42 children admitted to the SBDT Program in 2006 the average age was 11 (range 2-18). Seventy-seven percent were male, which may reflect the higher male prevalence of specific developmental disabilities (e.g., autism) with which children of the SBDT Program are most frequently diagnosed. In addition, the vast majority (92%) of children were from counties surrounding the metropolitan area where the MI is located. Of the remaining 6% of children, 4% were from Georgia counties outside the Atlanta area, and a single child was from a neighboring state. Of the axis I or II diagnoses encountered in the SBDT, the greatest percentage of children in 2006 had a diagnosis of an autism spectrum disorder (62%). Other diagnostic labels applied to children admitted to the SBDT Program in 2006 include disruptive behavior disorders (26%), cerebral palsy (17%), mental retardation (17%), bipolar disorder (7%), and Down Syndrome (5%). The remaining children seen in 2006 had diagnoses that included low incidence medical conditions (e.g., SCHAD, CHARGE disorder, right hemiparesis, etc.), or broad/ill-defined diagnostic labels (e.g., psychosis NOS, mood disorder NOS, unnamed genetic syndrome, developmental delays). In addition, 7% of children had no axis I or II diagnosis.

Consistent with the literature on the treatment of severe behavior disorders (Hanley, Iwata, & McCord, 2003), a hypothesis testing methodology is utilized by the SBDT Program as opposed to a fixed protocol for the assessment and treatment of targeted behaviors. Treatment development is based on an idiographic approach, with interventions matched to individuals based on the environmental variables to which a specific child's behavior is shown to be sensitive. Throughout this process, repeated measures and single subject research designs are used to empirically demonstrate relationships between environmental variables and a given child's target behavior. Although assessments and treatments generally vary with respect to specific variables evaluated, some generalities exist.

Typically, an indirect assessment is conducted prior to a child's admission. Care providers, educators, and other individuals familiar with the child are interviewed regarding times and situations that appear to be associated with occurrences of the target behavior. These individuals are also queried about behavior management strategies that are being, or have been, implemented. During this initial interview, admission goals are also developed. Generally, goals include an 80% or greater reduction in the targeted problem behavior, an increase in an appropriate replacement behavior, and training of care providers and/or educational personnel in the implementation of the final treatment.

During the direct assessment and treatment analysis portions of the admission, systematic observations are repeatedly conducted each day. These sessions allow for data collection on rates of targeted problem behaviors as well as adaptive behaviors under specific environmental conditions that control for extraneous variables to the greatest extent possible. Across sessions, specific environmental variables are manipulated to observe the effect of doing so on the targeted problem behavior. Similarly, the influence of specific consequences or treatment components on target behavior is examined in the same manner. Sessions are a fixed duration (typically 10 mins. each), with between 15 and 20 conducted per day for a typical child. Sessions are typically conducted in rooms designated for that purpose, which are equipped with one-way mirrors and video recording equipment. Fully padded rooms are available for the assessment and treatment of behaviors that have the potential for injury of the child or staff members. Initially, all sessions are conducted by MI personnel. Each child is assigned a team of two clinical staff members. An additional staff member splits time between two teams to provide assistance when necessary and to collect interobserver agreement data. These same teams work with the child during nonsession related times such as direct care activities (i.e., meals, toileting, etc.).

Based on information obtained in the indirect assessment, hypotheses are developed regarding stimuli and events that set the occasion for the target behavior and consequences that may function to maintain it. A functional analysis (Iwata et al., 1982/1994) is then conducted that includes analog test conditions designed to replicate the conditions hypothesized to evoke and maintain the target behavior. These analog conditions allow for the evaluation of potential social reinforcers (e.g., attention, access to preferred items, escape from demands) and automatic reinforcers. For example, an analog condition designed to test whether a target behavior is maintained by access to attention would include the presence of a therapist who diverts his/her attention away from the child, but delivers a brief period of attention contingent upon the occurrence of problem behavior. The rates of the target behavior during these analog conditions are compared with rates of the target behavior during the control condition using single subject research designs. Based on these data, conclusions are reached regarding the most likely function of the target behavior.

Treatments are matched to children based on outcomes of the functional analyses conducted during the assessment portion of the admission. Specific treatments vary based on the function of the problem behavior identified, the topography of the targeted problem behavior, and specific issues present in the child's natural environment. Treatments most often include replacement of problem behavior with a communicative alternative behavior that serves the same function. In addition to this functional communication training (Carr & Durand, 1985), treatments also commonly utilized include, but are not limited to, noncontingent reinforcement (Vollmer, Iwata, Zarcone, Smith, & Mazaleski, 1993), contingency contracting (Cantrell, Cantrell, Huddleston, & Wooldridge, 1969), token economies (Kazdin, & Bootzin, 1972), differential reinforcement of alternative, other, and incompatible behaviors (Vollmer & Iwata, 1992), and in some cases the use of reductive procedures (Lerman & Vorn-dran, 2002).

Once an effective treatment has been identified, parents and/or school personnel receive training in how to implement the procedures. Initial training takes place at the MI facility to ensure high treatment integrity in a highly controlled environment. Additional training and generalization sessions then take place in the home and/or school environment, typically for 1-2 days in each setting.

A less intensive treatment option (in terms of time spent in therapeutic activities) for children who engage in severe problem behavior is an admission in the MI Severe Behavior Outpatient (SBO) Program. A typical admission in the SBO Program is 10 appointments, with the duration of the admission varying based on care provider request and clinical need. The duration of a daily treatment appointment is 1 to 6 hours. Referral concerns are slightly more broad than those encountered in the SBDT Program, and are more likely to include skill deficits (e.g., toilet training, communication) and less severe problem behaviors (e.g., sleep related problems, tantrums, noncompliance). However, severe problem behaviors (e.g., aggression, self-injury, destruction) continue to constitute a large percentage of referral concerns.

A total of 67 children were admitted for services in the SBO Program in 2006. Demographics of children in the SBO Program were similar to those in the SBDT Program, with the majority of children served being male (85%) and the most common Axis I diagnosis being autism (49%). The average age of children served in the SBO Program in 2006 was 7 years (range, 2 to 16 years). All of the children served in the SBO Program during the 2006 year lived in Georgia, with the highest percentages of children living in counties in the city of Atlanta (Fulton, 32.84%; DeKalb, 16.42%). Care providers' primary referral concerns most frequently included aggression, self-injury, and disruption.

The assessment and treatment evaluation procedures are identical to those implemented in the SBDT Program and described above, although more brief. There is a precedent for abbreviated assessments of environmental variables in the literature (e.g., Wacker et al., 2003), though a change in emphasis is required. While attempts are always made to achieve clinically significant reductions in problem behavior or increases in targeted adaptive behaviors, in many cases time limitations are too restrictive to accomplish these goals. Thus, the primary focus of SBO Program admissions is generally to develop and test treatments and then train care

providers to implement those treatments. In some cases, the majority of actual behavior change must take place after the admission in the natural environment with consistent implementation of the treatments developed during the admission by care providers.

During an SBO admission, two clinical staff conduct the assessment and treatment evaluation sessions for each child. Care providers are included in the assessment and treatment evaluation sessions in some cases. For example, some children only aggress towards a specific family member (e.g., the mother). Because functional analyses involve observing the target problem behavior under specific conditions, it is important for the care provider to participate in the assessment to observe the target problem behavior. Therefore, in these cases the care provider serves as the therapist in the assessment and treatment evaluation sessions. The MI staff provide the care provider specific instructions on how to implement the assessment procedures and provide feedback following sessions. The MI staff observe the sessions and collect data through a one-way mirror located in each treatment room. Care provider and/or teacher training on the final treatment procedures typically occur in the clinic during the last one to two days of the child's admission.

The presence of the SBO Program in the array of MI clinical services provides greater flexibility for serving the clinical needs of MI's children. Specifically, the SBO Program provides the opportunity to serve children who do not require or are otherwise unable to participate in an intensive and potentially disruptive SBDT admission. Day treatment admissions generally require suspension of school placement which is detrimental and not to be undertaken lightly for some children. Similarly, the degree of disruption to the child's family routine and finances can be substantial for a SBDT admission when one considers the travel and in some cases lodging that are required to attend a daily 12 week admission. Finally, some children benefit from less intensive services in the SBO Program while waiting for an admission into the SBDT Program, for which the wait for an admission can last several months.

For both the SBDT and SBO programs, social validity data are collected at the end of each child's admission by having the care provider complete a satisfaction questionnaire. Care providers answer questions by circling a rating on a Likert-type scale. Ratings range from 1 (Totally Disagree) to 5 (Totally Agree). The content of the questions assess the parent's perception of improvement (increase or decrease) in the target behavior, the feasibility of the procedure, the quality of staff interactions, and willingness to return or refer others for similar services. These data are compiled for program evaluation purposes. However, these social validity data have only recently begun to be collected, and insufficient sample exists for drawing conclusions at this time. Additional data meant to reflect meaningful outcomes (e.g., restrictiveness of educational setting pre and post-admission) have recently begun to be collected post-discharge. However, additional data collection at 6-month and 1-years post discharge are needed and are in the early stages of collection.

#### References

Cantrell, R. P., Cantrell, M. L., Huddleston, C. M., & Wooldridge, R. L. (1969). Contingency contracting with

school problems. *Journal of Applied Behavior Analysis*, 2, 215-220.

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

Hanley, G. P., Iwata, B. A., & McCord, B. E. (2003). Functional analysis of problem behavior: A review. *Journal of Applied Behavior Analysis*, 36, 147-185.

Iwata, B. A., Dorsey, M. F., Slifer, K. J., Bauman, K. E., & Richman, G. S. (1982). Towards a functional analysis of self-injury. *Analysis and Intervention in Developmental Disabilities*, 2, 3-20, 1982.

Kazdin, A. E., & Bootzin, R. R. (1972). The token economy: An evaluative review. *Journal of Applied Behavior Analysis*, 5, 343-372.

Lerman, D. C., & Vorndran, C. M. (2002). On the status of knowledge for using punishment: Implications for treating behavior disorders. *Journal of Applied Behavior Analysis*, 35, 431-464.

Vollmer, T. R., & Iwata, B. A. (1992). Differential reinforcement as treatment for behavior disorders: Procedural and functional variations. *Research in Developmental Disabilities*, 13, 393-417.

## Intensive Behavioral Intervention Following a Verbal Behavior Model

Alice Shillingsburg, Marcus Institute and Emory School of Medicine

Crystal Bowen & Amber Valentino, Marcus Institute

### *Clients and Referral Process*

The Language and Learning Clinic (LLC) at the Marcus Institute serves children with autism and related developmental disabilities between the ages of 2 and 18 years who are exhibiting significant language and social communication delays. There are no specific diagnostic criteria, skill level, or IQ score requirements for admission.

At intake, each child is observed and a comprehensive behavioral and family background interview is conducted. Each family is seen by social work, psychology, nursing, and psychiatry. At intake, a referral to the LLC is made if appropriate.

### *Assessment*

The first few weeks are spent conducting a variety of direct and indirect assessments. Via direct interaction, information regarding the child's social interaction, social initiations, spontaneous vocalizations, receptive skills, and play skills are assessed. Daily or weekly preference assessments are conducted with each client. Readiness for structured teaching is assessed via structured direct observation. Ten minute play sessions and 10 minute demand sessions are conducted. During these sessions inappropriate behaviors such as attempted elopement from the room, crying/whining, aggression, and disruptive behaviors are recorded. Appropriate behaviors such as appropriate in-seat behavior and voluntarily coming to sit at the teaching table are also observed and recorded.

The Assessment of Basic Language and Learning Skills (ABLBS) is conducted via direct assessment and parental report. The ABLBS is an assessment, curriculum guide, and skills tracking system for individuals with developmental disabilities and language delays. It consists of a task analysis of the skills necessary for successful communication, and social interaction. The ABLBS provides information regarding a child's current repertoire of skills and provides a curriculum that serves as the basis of educational objectives and program implementation.

Prior to beginning language-based instruction with each child, the first nine skill areas of the ABLBS are completed. The first nine skill areas consist of those areas most relevant to beginning language skills and include 1) Cooperation and Reinforcer Effectiveness, 2) Visual Performance, 3) Receptive Language, 4) Imitation, 5) Vocal Imitation, 6) Requests, 7) Labeling, 8) Intraverbals, and 9) Spontaneous Language. The results of the ABLBS assessment and information regarding parental goals and priorities are used to determine appropriate language and educational programs selected for each child.

Once language and acquisition programming is implemented, ongoing assessment during baseline and treatment conditions is conducted. Trial-by-trial data, daily probe data, and daily frequency data are collected and analyzed.

In addition, to these standard assessments, individualized assessments are conducted depending on the needs of each child. Each child admitted to the LLC displays a unique set of skills and problem behaviors. Additional structured assessment consisting of the manipulation of conditions (i.e., antecedents and consequences) is conducted as needed. Some unique presentations requiring additional assessment and treatment have been refusal to wear corrective eyeglasses, food selectivity/refusal, screams, peer aggression, incontinence, and repetitive straightening. Numerous functional analyses and descriptive assessments have been conducted to address these and other problem behaviors.

### *Staffing*

The LLC is divided into three different clinics: The LLC Day Treatment program, After-school Program, and Home-based program. The LLC Day Treatment program offers a staff to client ratio of 1.5:1. Clients attend the Day Treatment program every weekday from 9:00 am to 3:00 pm and work in a one-on-one teaching format throughout the day. Clients in the LLC After-school program are staffed at a 1.3:1 staff to client ratio and the Home-based program is staffed 1:1. Staff members consist of individuals pursuing or with a bachelor's degree in a relevant field of study such as psychology, special education, and social work. They receive intensive training during the first few weeks of employment and consistent training and feedback during treatment integrity checks.

### *Treatment Components*

*Structured Intervention.* The Language and Learning Clinic provides intensive one-on-one services based on the science of applied behavior analysis. Services are aimed at increasing functional communication skills, social skills, pre-academic skills, and adaptive skills and decreasing inappropriate behaviors that often conflict with a structured teaching environment. A combination of discrete-trial intervention at the child's desk and natural environment teaching in various areas around the institute (e.g., kitchen, life skills room) are implemented throughout the day. Based on the outcomes of the assessment of learning readiness, instructional fading procedures are implemented at the child's desk. During the first several days, the therapist engages the child in preferred activities and provides noncontingent access to preferred items. Demands from targeted programs are slowly introduced into the interaction and are increased as the child begins to respond. Requesting is one of the first skills targeted and emphasized throughout this process. Over time, several instructions are presented in a fast-paced (i.e., short intertrial interval) manner with opportunities to request items and activities interspersed during teaching using a most-to-least prompting procedure. Monthly maintenance probes are conducted to assess long-term maintenance of skills following mastery.

*Parent-Training.* Parent-training is a crucial component of successful intervention with children with autism and related developmental disabilities. The LLC offers parent-training in three primary formats: group, individual, and intensive transition planning.

The parent-training group meets weekly for approximately 8 weeks and covers a variety of topics including basic behavior management, toilet training, beginning requesting skills using sign and vocalizations, and increasing cooperation during teaching. These sessions provide psychoeducational information that is not specific to any one child. Parents are given the opportunity to ask questions at the end of the session.

Individual parent-training sessions are scheduled weekly or bi-weekly with the primary therapist of the child. These sessions reiterate topics covered in the group parent-training sessions, but are specific to that parent's child. Training on specific behavior and acquisition protocols is provided as well as updates on progress via visually displayed graphs. Parents are able to observe treatment through a one-way mirror and video of treatment is shown to demonstrate particular teaching methods.

Toward the end of a child's admission, transition planning, which includes intensive parent-training, is conducted. During the last few weeks of a child's admission, written training material is compiled and presented to the caregivers. Parents are often faded into treatment sessions for hands-on experience with behavior management and acquisition protocols. Home and school visits are conducted to ensure generalization of correct treatment procedures to the child's other environments.

### *Clients Served*

The Language and Learning Clinic has been in operation since February 2006. In the last year we have served 45 children and their families. The average length of stay of those discharged was 4 months with a range from 1 month to 14 months. The average age of our clients was 6.45 years with a range from 2.08 years to 17.42 years. Nine percent of our children had received no formal diagnosis. Seven percent had a primary diagnosis of PDD-NOS, 69% were diagnosed with autism, and the remaining percentage were diagnosed with developmental delay (4%), Mental Retardation (2%), Fragile X Syndrome (4%), FG Syndrome (2%), and Fetal Alcohol Syndrome (2%). The majority of our clients also present with behavioral difficulties. The primary inappropriate behavior exhibited was aggression (93%), followed by elopement (78%), flopping (71%), and disruption (67%). Forty-two percent of parents indicated that toilet training was a primary concern.

### *Behavior Change Measures*

Improvements in language and adaptive skills are tracked in a variety of ways. The ABLLS is updated every 3-4 months and indicates improvement across a variety of language and foundational learning skill areas. In addition, cumulative records of targets as they are mastered are kept throughout the admission. Thus, the number of skills mastered can be determined. The rate of independent requesting is recorded daily and probes of the mean length of utterance are conducted to track increases in independent vocalizations and lengthening of vocalizations to phrases and sentences. Percentage of continent and incontinent voids are also recorded to track improvements in toileting skills. Rates of problem behaviors are also recorded daily to determine the decrease in problem behavior from baseline levels throughout the admission.



## **PROFILE: PROJECT NSTM**

**Russ Kormann, Natural Setting Therapeutic Management**

Natural Setting Therapeutic Management (NSTM) is a psychoeducational consultation and training program designed to enrich the therapeutic capacity of a referred individual's natural environment. The special needs of the "at risk" individuals living therein are thus addressed by increasing the behavioral competency of the newly trained, responsible persons. Competency is achieved by mastering the precepts of eleven interactive models, which collectively represent the NSTM Multiple-Model system. All program activities take place in the referred individual's natural environment, which is behaviorally scrutinized and subsequently transformed, into a therapeutic milieu. This milieu, the behavior of the person with mental retardation, the individuals empowered with the responsibility of managing the program, and the socio-political system in which all of the above exist, collectively represent the four discrete areas within which a complete NSTM assessment is conducted. We do not assume the person with mental retardation necessarily "is" or "has" the problem, but that the problem is more likely to be complex and reflect difficulty in each of the above four areas. Therefore, the NSTM four factor assessment program yields intervention strategies which address not only the short range goal of remedying the presenting problem but the more important long range purpose of maintaining change over time. That is, our goal is to achieve lasting change by transferring ownership of the entire NSTM process to those who are directly affected by it, the person originally referred and those who are responsible for him/her.

Project NSTM has evolved over twenty years of research and development and is currently housed within the Graduate School of Applied and Professional Psychology (GSAPP) at Rutgers, The State University of New Jersey. The goal of the Project as originally conceived in March, 1978, was to provide an alternative to institutionalization for families and agencies caring for individuals with a developmental disability who also manifested severe behavioral problems. Project NSTM was adopted by the New Jersey Division of Developmental Disabilities as one of the cornerstones of the clinical service delivery system available to families throughout the state. It has also been adopted nationally as a model for service delivery. NSTM continues to serve as a Center for state-of-the-art behavioral services as well as an important training site for graduate students through its affiliation with GSAPP.

### *Questions Most Often Asked About the NSTM Approach:*

#### **1. Why the natural setting?**

The behaviors for which an individual is referred occur in the natural setting. In reviewing the research on community based treatment approaches for psychiatric populations, Kormann and Petronko (2002), Davidson, Morris, Cain (1999) and Petronko, Harris & Kormann (1994) found that not only were such "assertive community treatment" approaches effective but highly relevant. They describe issues such as training stimuli relevancy, increased treatment consistency (i.e. reduction in cancellations) and cost-benefit analysis that makes such ecologically based treatment approached highly attractive. Ethical arguments associated with normalization principles (Nirje, 1969; Wolfensberger, 1972) deinstitutionalization and inclusion (Koegel, Koegel and Dunlap (1996)) demand that behavioral treatments be focused on ecological constancy. That is, assisting people with disabilities to become and/or remain active, productive members of their communities. Finally, empirically, applied behavior analysis demands that in order to change behavior, one must identify and understand it before being able to change it (Bellak and Hersen, 1988). If it occurs in the natural setting, it must be assessed and treated in just that setting to ensure that maintenance of behavioral gains is realized and that generalization across environments and care providers is effected.

Behavioral consultation in the natural setting is complex, as every setting presents with a different constellation of variables that could affect the referred behavior. Project NSTM addresses this complexity through the reliance on a multi-factor approach to assessment and training. The "referred" person, the environment in which the behavior is being demonstrated, the individual(s) who interact with him/her each day and the system in which all of these factors operate are the four components of the assessment model. More often than not, the Project encounters a wide variety of caregiver issues, which affect its ability to be effective. One such issue is the effect of stress and emotional burden on caregivers' ability to participate in behavioral training. These "caregivers" are often faced with not only the stress of living and dealing with an individual with a developmental disability and a severe behavioral disorder but the other stressors involved in their daily life as well. Dunlap, Robbins and Darrow (1994); Bristol and Schopler (1984) and Gallagher, Beckman and Cross (1983) are examples of the extensive literature base devoted to the role of stress and emotional burden on families who have children with disabilities. The burden and corresponding emotional indicators (i.e. guilt, depression, anger/resentment) are only exacerbated when the individual with a disability also possesses a severe behavioral problem that has been resistant to change.

#### **2. Why work with parents/staff instead of directly with the individual who "has" the problem?**

Project NSTM is unique in that it provides the bulk of its service to the caregivers in the form of training. Many individuals who access the service are surprised when NSTM staff does not spend more in-session time with the referred individual. NSTM does not assume that the individual with a developmental disability "is" or "has" the problem which

needs to be corrected. Rather, the problem is understood as a multidimensional phenomenon (see the four factor diagram) comprised of differing points of emphasis dependent on the referral. One of those points of emphasis, however, must be the parent(s) or staff member(s) as he/she is the person most likely to be interacting with the referred behavior on a regular basis. The use of parents or staff as paraprofessionals who are trained to carry out the prescriptive treatment plans developed by consultants is not a new concept. Researchers as early as Hawkins et al (1966) and Becker (1971) and as recent as Santos et al. (1995) have addressed behavior management approaches in the home that utilized the parent and/or siblings in the therapeutic role. These relatively early works share much in common with the more contemporary literature: the caregiver is seen as a critical member of the treatment team. In fact, without the caregiver's involvement, behavior change is unlikely.

A large body of research is devoted to the efficacy of parent & staff training as a means toward managing severe behaviors. Dunlap, Robbins & Darrow, 1994; Baker, 1989; Allin, 1988, 1984; Harris, 1983 Philips, 1986 among others have discussed training parents, staff and invested others in the use of behavior management techniques. Similarities in all training literature cited there is an emphasis on training flexibility and allowances for the differing settings and life experiences that trainees present. One variable, which is routinely overlooked or under emphasized during assessment and intervention development, is ethnicity. Lo-Schiavo and Krohn (1993); Gallimore et al., 1989 and Lo-Schiavo et al. (1995) outlined the effect that ethnicity has on the decision making of parents who have children with disabilities. When one considers the effect of ethnic background on the understanding of developmental disabilities, behavioral techniques, professional assistance, etc., one can begin to see how complex a proposition treatment in the natural setting becomes. Cheng and Tang (1995) and Shapiro and Simonse (1994) describe the effect cultural beliefs of Chinese and Latino families might have on professional/behavioral consultation. Without understanding how these cultures are affected by and deal with disabilities and severe behaviors can one hope to be effective in ameliorating behavioral challenges. Project NSTM's multi-factor approach to behavioral assessment allows staff members to gather such data before completing training and developing an intervention.

An emphasis on behavioral competence rather than academic competence is the goal of behavioral training in the natural setting. In dealing with lower SES families, Coates and Vietze (1987) and Clark and Baker (1983) discussed development of action skills, that is, being able to carry out in practice the behavioral skills learned during training. The NSTM training paradigm is natural setting based, heavily steeped in assessment and devoted to achieving behavioral competence. NSTM views caregiver competence as an essential pre-requisite to intervention. It is no less vital than any professional receiving a license or certification before he/she is allowed to practice his/her craft.

### 3. Why a University based service?

Direct access to a University provides any organization with a vast array of professional and academic resources that can only benefit those served. Rutgers University is the home of three organizations that provide services to the developmental disabilities field. Project NSTM, the Douglass Developmental Disabilities Center and the Rutgers Autism Program at the Center for Applied Psychology make up the triumvirate of service delivery providers and create a beacon of developmental disability expertise that is unmatched in New Jersey. An academic atmosphere demands excellence and cutting edge technology as the professional literature is constantly made a priority in the classroom. Since a significant number of our staff are advanced graduate students, it is incumbent upon the Project to remain current with and a contributor to the professional development of our field. This results in a service provider who is constantly evolving with the field and passing those advances along to the consumers with whom it works. Therefore, the Project has an ongoing, built-in quality control component that ensures a high level of clinical service.

The graduate student component to our staffing patterns allows the Project to appropriately recognize the role that "burnout" plays in the field of developmental disabilities. Maslach, (1981) describes "burnout" as the phenomenon in which "a dedicated caregiver physically or emotionally disengages from an activity in which he/she feels ineffective." We avoid our own burnout by using part time people who are highly motivated and gifted clinicians. We protect the graduate students from burnout by providing them with a short term, high intensity experience. They receive an exposure to the field with a premium on supervision, support and training. Due to a large percentage of part time employees, Project NSTM is able to cover a wider geographical area and a larger array of treatment times by having a greater number of staff available at critical times. Many of our contacts occur in the evening; a large part time workforce allows numerous treatment teams to be available simultaneously.

Students contribute to the growth of both the field in general and the Project in particular through their research and academic pursuits, their enthusiasm and drive for knowledge. This, in turn, requires the supervisory staff to remain current with the recent treatment literature and constantly challenges their own skill level. A large student population increases the likelihood that the professional field will be enhanced through their introduction. Since its inception, Project NSTM has delivered over 50 professionals to the field of developmental disabilities nationally. Finally, our staff remains constantly changing and representative of the same cultural diversity that the treatment population demands in order to best understand the individuals we serve.

### 4. Why a team of two?

- Due to the fact that we treat severe and often dangerous behaviors in the natural setting where there are less environmental safeguards, a second team member provides support and protection. This is also made necessary because of an increasingly litigious society.
- The referred individual may be present during training ses-

sions. It is often imperative that one team member work with the referred individual while the other engages in training with parents/staff.

- We use role-play and video taped instruction extensively in our contact with parents and staff. This allows us to remain true to our pledge of utilizing behavioral competence as a measure of treatment progress. Therefore, a clinical team of two, functioning as an instructional cast, is necessary to enhance the training experience to its fullest.

- Our part-time graduate students. Students generally spend 1-2 year rotations with the Project as a part of their overall clinical training at the University. In order to provide clinical training and supervision to these students, each treatment team is staffed with a senior member of the NSTM staff. This apprentice model ensures both treatment (i.e. product) quality and ongoing training continuity.

### 5. Why does NSTM take so long?

NSTM is referred cases that are complex. Individuals with a developmental disability and a severe behavioral disorder living in the community presents the clinician with a number of challenges. Davidson et al. (1994) completed an exhaustive survey of individuals with a developmental disability referred to a community based psychiatric crisis service. He reports that these individuals present with severe behavioral disorders between 10% and 60% of the time, depending on what format one uses to define severe behaviors. Moreover, Menolascino (1983) reports that between 10 and 30% of individuals with a developmental disability present with some form of psychiatric complication (i.e. a dual diagnosis). Borthwisck, (1988) and Bruininks, Rotegrad, Lakin & Hill, (1987) present data which define behavioral crises as the primary threat to community placement for people with developmental disabilities. Behaviors such as severe aggression and self-injury are behaviors which have, in the past, only been tolerated in institutional settings (Landesman, 1987). As these individuals increasingly remain in the community or return after stays within the institutional system, treating such complex behaviors is imperative.

Our approach is not just person oriented but multi-factor in nature. Because we believe the target problem to be a compilation of the four factors, our treatment team must assess all factors prior to training and/or developing an intervention. Moreover, we must ensure that the parent/staff become **behaviorally competent** before an intervention is developed. Due to the fact that they are the ones that must carry out any behavior plan, it is imperative that they are skilled enough to do so. We base this assessment on demonstrated skill in carrying out the behavioral assessment and intervention techniques required for the referred individual. Intervention **will not be written** until such behavior competence is demonstrated. If competence is not verified, it then becomes our focus of treatment. That is, we spend our time developing their competence. Not doing this would cause any behavior change program to fail because of a failure to generalize.

Therapeutic issues remain of paramount impor-

ance. The impact of burnout and emotional burden mentioned earlier must be dealt with on an ongoing basis. It is often impossible to proceed with training when a parent/staff emotional issue is pending. Without its resolution, training is contraindicated and may even be unethical.

Due to system issues within the State (i.e. staff reductions through budgetary modifications), it is often a necessity for NSTM staff members to engage in some amount of case management. Tasks such as investigating summer camp availability, investigating Big Brother/mentor services, accessing psychological/psychiatric services are activities that our senior staff routinely complete. Their ability to complete these tasks represents their knowledge of the state system, a knowledge only developed through years of experience while working with state personnel and developing professional contacts. While such case management may seem to prolong a case's "life", without it, movement through a case would be severely hampered due to a dependence on an overburdened system.

Finally, it is true that NSTM is involved with cases for an extended period of time. In fact, we make it clear to potential families/staff that their investment of time and effort will be significant. We also make it clear that NSTM is not a crisis-oriented service, specifically designed to address behavioral reduction. In fact, our goal is a long term one, focused on skill acquisition and behavioral competence of the caretaker and maintenance of training and intervention effect. In order to ensure maintenance and provide a vehicle for ongoing skill acquisition, a problem-solving model is presented and utilized during training. Social problem solving training has been described as a method of assisting individuals in becoming more skilled at solving problems which affect their ability to experience mastery (Nezu and Nezu, 1989). The hypothesis is that if one becomes increasingly competent in the ability to solve problems in general, the skill will effectively generalize to a variety of stressful life circumstances. In many psychotherapeutic scenarios, the clinician is identified as the problem solver. In the model we present here, the problem solver becomes the parent or staff member as a function of NSTM involvement. This is particularly relevant because caregivers must **manage** a complex therapeutic system involving a host of professionals.

### 6. What are the greatest challenges to NSTM?

- a. Family resistance to accepting responsibility for managing the intervention developed.
- b. The inability to identify "one" family member who is willing to accept responsibility for training and programming.
- c. The existence of an environment that is able to support escalation of the target behavior as a function of changes made in parent/staff behavioral styles, prior to intervention.
- d. Cancellations

# Book and Article Reviews

## Visual Supports for People with Autism: A Guide for Parents and Professionals

By Marlene Cohen and Donna Sloan

Reviewed by Jenna Glennon

How many people rely on a map to help plan a trip to a new destination, a recipe to cook a favorite dish, or a calendar to schedule upcoming important events? These universal supports allow us to travel, cook and plan beyond what is restricted to memory. Using visual supports helps to broaden our horizons and experience new and different things. It is this same concept that applies to the use of visual supports for individuals with autism. Visual strategies can be used to improve language, memory, attention, motivation and behavior for individuals with autism. In their book *Visual Supports for People with Autism*, Marlene Cohen Ed.D., BCBA and Donna Sloan M.A., BCBA provide parents and educators with detailed guidelines on how to incorporate visual supports to improve a variety of skills and behaviors which can add greater meaning to daily activities. The book is divided into 10 chapters in which the authors provide a well illustrated guide on how to identify an individual who needs visual supports, provide instructions about a variety of tools to teach various skills and improve behavior, and determine the effectiveness of these interventions.

**Chapter 1: The features of a Good Visual Support.** The opening section of the book discusses general guidelines to keep in mind when creating visual supports. The authors discuss considerations when creating materials such as preferences, durability, portability, age appropriateness and measuring effectiveness. They emphasize that each individual's needs are unique and the supports used should be based on their abilities. The authors also include a materials list for creating the many visual supports discussed in their book. Finally they provide a simple way to measure progress and determine the effectiveness of visual supports.

**Chapter 2: Some Commonly Used Visual Supports.** This chapter provides a list of commonly used visual supports including activity schedules, calendars, checklists, color coding, comic strip conversations, graphic organizers, manipulatives, mnemonics, pictures and photos, Picture Exchange Communication System™, Power Cards™, sign language, social skills picture books, social stories™, and video modeling. In this chapter the authors briefly describe each of these supports. This prepares the reader for a more detailed discussion that comes in later chapters about how to use these materials to improve a variety of behaviors and skills.

**Chapter 3: How Visual Supports Can Help with the Development of Language.**

The complexity of language acquisition which includes the component skills of comprehension, expression, and pragmatics is explained in this chapter. The authors explain and illustrate how methods such as graphic organizers and thinking stories can provide concrete information to help learners better understand these concepts.

**Chapter 4 Using Visual Supports to Increase Memory.** This chapter provides information on the detailed process of how relevant information is stored in long-term memory. The author's reference David Sousa's *How the Special Needs Brain Learns* (2001) to describe the complex process of memory (sensory register, working memory, short term memory and how information is organized in the brain). The chapter is dedicated to helping individuals understand abstract concepts such as Who, What, Where When, Why, and How as it pertains to their daily experiences. The authors provide a variety of strategies that can be used to teach these skills.

**Chapter 5: Temporal Sequential Skills.** Understanding sequence and order is critical in helping an individual predict what may happen on a given day. This is extremely important for individuals with autism who experience difficulties in this area. Without predictability there is confusion which at times can lead to challenging behavior. The authors describe a variety of supports to help teach the passage of time, multi-step tasks, understanding historical perspective, math skills, reading, and writing. They highlight the importance of considering individual capabilities such as cognitive skills and motor skills when creating materials to meet an individual's needs.

**Chapter 6: Using Visual Supports to Increase Attending.** In this chapter the authors provide an explanation for difficulties with attending related to processing (intake of information while filtering out irrelevant information) and production (distracted by environment and cannot stay on task). The reader is asked to consider what challenges the learner may have when determining which visual supports to use.

**Chapter 7: Using Visual Supports to Increase Motivation.** The authors emphasize the significance of motivation in teaching new skills. They outline key considerations when providing reinforcement such as frequency of delivery, amount, quality and intensity. This chapter presents a clear explanation on using motivation systems to teach a learner what is being earned, how much will be earned, who they will be working with, when reinforcement will be delivered, where it will be delivered and why they learner is engaging in the skill or behavior that is being rewarded. The authors discuss the importance of individual preference and abilities when creating visual supports to increase motivation.

**Chapter 8: Using Visual Supports to Increase Social Skills** Social skills is a critical area of functioning for individuals with autism. The authors provide a flow chart of major areas of social skills in order of complexity to help the reader understand the myriad of skills in this domain. They provide examples of how to use visual supports to teach non-interactive social skills, social impression, interactive social skills, social initiation and reciprocation, play, friendship management, emotional regulation, empathy and conflict management.

**Chapter 9: Strategies for Fading Supports.** While visual supports can enhance learning, it is important to have a plan

to fade them out to avoid dependence. This chapter describes different methods for fading supports and increasing independence. Tips for generalizing and self monitoring are provided. In addition they offer suggestions for troubleshooting if you have difficulty fading the supports.

**Chapter 10: An Example of the Use of Visual Supports to Increase Opportunities.** In the final chapter, the authors share a vignette about the successful use of many of the strategies described in their book. This personal story highlights the profound differences visual supports can make in an individuals life. Additionally, they provide abundant reproducible diagrams and a thorough resource Guide.

*Visual Supports for People with Autism* is a well illustrated guide for parents and professionals. It is a user friendly book written in a conversational style which leaves the reader feeling empowered and equipped to use the strategies provided. The authors have successfully illustrated how visual supports can be used to address deficits in communication, socialization and behavior typical of autism.

#### Reference

Cohen, M. & Sloan, D. (2007). *Visual Supports for People with Autism: A Guide for Parents and Professionals*. Bethesda, Md: Woodbine House

## **Johnston, J. M. (2006). “Replacing” problem behavior: An analysis of tactical alternatives. *The Behavior Analyst, 29*, 1-11**

Reviewed by: Nathan Lambright, Douglass Developmental Disabilities Center  
Ryan J. Madigan, Douglass Developmental Disabilities Center

“In recent years, it has become routine, if not obligatory, to accompany efforts to reduce problem behavior in individuals with developmental disabilities, with auxiliary efforts to establish or strengthen one or more behaviors that are often intended to ‘replace’ those targeted for reduction.” This notion has become a pervasive aspect of problem behavior interventions, to the point that they are found throughout the state and local laws governing the field. Prominent authorities in the field of applied behavior analysis have implied that this type of supplement to reduction contingencies, often referred to as the “fair pair” rule, is a broadly accepted notion. It is the thesis of this paper however, that these widely accepted norms represent various oversimplifications and misunderstandings that may impede the development and effectiveness of behavior interventions.

The rationale for replacement behaviors was first offered by Azrin and Holz in 1966. They stated that, “An alternative response should be available which will not be punished but which will produce the same or greater reinforcement as the punished response.” While the above statement is reasonable, it may have gradually earned the status of a general rule by oversimplification. This oversimplification stems from the necessity to simplify the complexities of operant conditioning as a means of delivering the technology of ABA through paraprofessionals. Over time, these simplifications have become established practices, whose underlying rules are no longer evident in the professional curricula.

A second factor for the prevalence of replacement and alternative behaviors in reduction interventions is the influence of cultural norms and values brought about by the aversive controversy during the 1970’s. Since this controversy, numerous approaches were developed whose net impact was to deemphasize the use of interventions that focus on reducing problem behavior, in favor of those designed to strengthen appropriate alternative behaviors. This increased focus may have contributed to the assumption that replacement tactics are required even when explicit reduction contingencies are already in place.

This trend can be seen as a direct result of the unavoidable conflict between scientific and cultural influences on applied behavioral analysis. Cultural influence is important for the evolution of the field, but its potential impact must be examined in each specific case in light of the scientific foundations applied behavioral analysis is derived from.

### **Nature of Behavioral Responses**

To adequately understand whether it may, or may not, be useful to include efforts to strengthen other behavior in reduction programs the very nature of response classes must be addressed. It should be clear that when a single response class decreases in frequency some other response class must increase in frequency. "An organism's repertoire is always 'full', and therefore there is no such phenomenon as a behavioral void." The increasing response class is most likely already in the client's repertoire. Therefore, after an intervention, most of the time spent engaging in the problem behavior will now be spent engaging in other behaviors that contact reinforcement. These reinforcers will often be different from those that maintained the problem behavior and will be contingent on other behavior, which will make such behavior more likely to occur over time. Thus, "it should be clear that decreasing problem behavior does not leave a repertoire otherwise unchanged."

### **Influencing Unprogrammed Behavioral Changes**

An applied behavior analyst should be informed, from the assessment process, about the nature of the changes that may be observed in the client's repertoire when a reduction contingency is implemented. This knowledge should instruct whether reinforcement contingencies should be established for replacement behaviors. For example, if an intervention is put in place for a client whose other behaviors are generally appropriate, it is foreseeable that the problem behavior will naturally be replaced by one of these acceptable alternatives. In this case, establishing reinforcement for replacement behaviors appears unnecessary.

### **Strengthening Reduction Effects**

Basic and applied literature suggests that punishment contingencies should be combined with the reinforcement of one or more alternative behaviors, to facilitate decreases in punished responding. Varied applied literature also supports these results when different reduction procedures are employed. When deciding which reduction procedures to employ, the best place to start is with the nature of the problem behavior. Specifically, what is problematic about the behavior; its main effect (its function) or its side effects (its remaining consequences that do not directly support the behavior)? When the consequences maintaining the target behavior are not themselves problematic, implementing reinforcement contingencies for alternative behavior, producing the same non-problematic consequences, would be suitable. On the contrary, when the target behavior is maintained by inappropriate consequences it would not be logical to strengthen other behaviors that produce the same inappropriate consequence. For example, teaching acceptable ways to escape appropriate demands or useful activities may decrease an escape behavior, but at a cost that should be taken into account. In other words, it only makes sense to "replace" a problem behavior if the maintaining reinforcer is acceptable.

### **Supplementing Deficits in Repertoires**

An additional reason practitioners often support the ubiquitous reinforcement of alternative behaviors may be that individuals with mental retardation are identified as having deficiencies in their repertoires compared with typical individuals. The notion that behaviors should be added to the repertoire is noble, but it may be inappropriate to include in reduction interventions. While building individual's repertoires is a worthy concern, it does not take into account the intricacies

of the particular reduction interventions. If a client has a general need for more skills, they should be addressed in programming irrespective of any reduction interventions.

### **Increasing Generality**

Another reason to accompany reduction contingencies with efforts to build the behavioral repertoire in some targeted way, concerns the need to insure generalization. This may be proposed on the premise that targeting a new or existing behavior for strengthening will teach an individual to behave appropriately in ways that will be supported via natural contingencies. However, the need to facilitate the transfer of reduction effects to secondary settings might be possible through the extension of reduction contingencies alone (though perhaps in a less intensive form).

### **Cultural Values**

It has already been noted that a primary reason for combining the reinforcement of alternative behaviors with reduction interventions is based on cultural values, pertaining to the ethical issues, raised in the "aversives" controversy. It should be also noted that this rationale is often backed by the argument that it is better to address problem behaviors indirectly, by means of strengthening alternative behaviors, rather than directly weakening inappropriate behavior using aversives.

Although the above argument offers sound reasons for supplementing reduction contingencies with a focus on establishing or strengthening specific alternative behaviors, it is clear that they are also oversimplified. Perhaps the primary rationale against the ubiquitous reinforcement of alternative behaviors is that such supplements may simply not be necessary. There is abundant evidence that many reduction procedures (punishment in particular) can be highly effective on their own, and often generate desirable side effects. If a reduction program is effective on its own merits, than it seems justifiable to speculate that additional procedures are added only on the grounds of certain values. If in fact a reduction program might be beneficial from some supplementary support, than increasing the frequency of some alternative behavior may not be the only option. Making changes in antecedent variables often provides ways of facilitating the effectiveness of treatment contingencies. Furthermore, antecedent changes alone may increase the likelihood of various unspecified alternative behaviors, thereby facilitating a decrease in problem behavior. It is important to remember that any benefit added by strengthening alternative behaviors, may be outweighed by the cost of increasing program complexity. It is of considerable advantage to keeping programming as operationally simple as possible, to insure accurate implementation.

There may be good reasons to design reduction programs that include efforts to increase alternative behaviors based on technical data or cultural values; either way this is unnecessary unless the alternative behavior serves the same function. The tactic should also never be viewed as a general rule for reduction programs. Reduction programs may not require any supplementary contingencies to effectively decrease problem behavior. Therefore, behavior analysts should approach problem behavior in an idiosyncratic manner, taking into account unique features of the individual's history, repertoire, available resources, and the applicable literature.

## Applying Behavior Analysis Across the Autism Spectrum: A Field Guide for Practitioners

by Beth Sulzer-Azaroff and Associates

Review by: Robert H. LaRue, Ph.D., BCBA

*Applying Behavior Analysis Across the Autism Spectrum: A Field Guide for Practitioners* was written by Beth Sulzer-Azaroff and Associates and was published in 2008. The book is a carefully programmed sequence to train parents and educators to employ Applied Behavior Analysis (ABA) with learners on the autism spectrum. The book extends beyond simple lecturing and rote memorization to outline lesson plans and allows supervisees to gain applied experience with autistic learners. Presented as an alternative to loosely run training experiences, the authors structure an intensive training protocol that provides the trainee with an active role throughout the intervention process. The practicum outlined in the book is geared for supervisees who understand the basic concepts of ABA and need to refine their knowledge and learn to use the concepts of ABA in clinical practice. The book covers a wide range of important skills including the assessment of adaptive/maladaptive behavior, conducting behavioral observations, instructing learners with autism, recording, measuring, graphing, and analyzing data, and communicating results of instructional efforts.

The authors begin by clearly defining the roles of both the supervisee and the supervisor. The book outlines the skills that should be possessed by the student taking the practicum (e.g., familiarity with the concepts of ABA with a need for clinical experience) and the skills and resources possessed by the supervisor (e.g., proficiency in ABA, time to allocate to appropriate supervision). The book also guides both the student and the supervisor through the process of establishing a meeting schedule, scheduling activities to be completed (e.g., assignments), gathering the materials required and providing discussion topics (e.g., critical features of autism, generalization). The authors outline a number of preliminary steps, such as, choosing an appropriate practicum setting, identifying a student, identifying learning objectives, measuring the behavior of interest, and developing effective teaching procedures. In addition, the book provides the readers with a wide variety of data sheets and forms to make the intervention process as simple as possible (e.g., examples of consent forms, reports).

What follows the initial chapters that involve role definition, is a structure designed to train the supervisee to effectively intervene with a learner on the autism spectrum. The structure allows both the supervisor and supervisee to avoid problems that may be encountered during the training process regarding expectations of all parties involved. Subsequent chapters address the process of conducting behavioral observations, critical issues in data collection, and using ABC analyses to identify target skills. The book also instructs the supervisee in what to look for during observations (contextual arrangement, materials, strategies used, consequences delivered). The supervisee is guided through the process of developing an objective, measuring the effects of the instructional procedure and monitoring progress, calculating inter-observer reliability (IOA), generating progress reports, programming for generalization and reporting their findings.

In addition to the clinical experience outlined in the book, the authors also incorporate reading of the research literature into the training process. While often neglected in the training process, the authors emphasize the importance of staying current with the empirical literature and highlight the need for reading. The authors provide a list of appropriate journals to draw information from and build in journal reading into the weekly objectives.

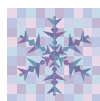
The book provides both supervisor and supervisee with a structured sequence to maximize the effectiveness and efficiency of the training process. It possesses a variety of forms to allow the supervisor to supervise, rather than prepare materials. The authors provide a useful tool to meet the increasing need for qualified personnel to work with learners on the autism spectrum. The structure of the book also provides an alternative to the traditional approach of teaching that involves watching someone teach, rather than allowing the trainee to get hands-on experience. *Applying Behavior Analysis Across the Autism Spectrum: A Field Guide for Practitioners* represents a useful tool for practitioners to train individuals to become effective practitioners in the field of Applied Behavior Analysis.



# Association for Behavior Analysis 34<sup>th</sup> Annual Convention

**May 23 – 27, 2008  
Hilton Chicago  
Chicago, IL**

For more information, visit [www.abainternational.org/](http://www.abainternational.org/)



## **Autism SIG Minutes Association for Behavioral and Cognitive Therapies Philadelphia, PA Friday, November 16<sup>th</sup>, 2007 12:00-1:30 p.m.**

Thanks to those of you who joined us for our annual ABCT Autism SIG meeting in Philadelphia, PA. If you were unable to make it to the meeting, please see the minutes that follow. Many thanks to the staff and students of the High School Asperger's Program of the Douglass Developmental Disabilities Center, for their presentations on the importance of integrating student interests into academic and social curricula. Summaries of their talk follow the minutes.

The winner of the 2006 Student Research Award was announced. Lisa Jobe-Shields was presented with a certificate and a book award for her winning poster, "Loneliness, Social Relationships, and a Broader Autism Phenotype in College Students." Lisa's poster can be found in the Winter 2006-2007 issue of the Autism SIG newsletter. Congratulations, Lisa! Thank you to Sandra Harris, Emily Thomas-Johnson, and Peter Gerhardt for their help in judging this year's research contest.

The ABCT Autism SIG conducts an annual student research award for undergraduate and graduate students who are the first author on a poster presented at ABCT. Members were asked to apply or to encourage their students to apply to this year's contest. This year's contestants will compete with those from the Association for Behavior Analysis conference in May, 2008. Good luck!

The SIG Newsletter is a quarterly publication that features articles, conference information, article synopses, free advertisements and announcements. The newsletter is a joint publication of the Autism SIGs of the Association for Behavior Analysis and ABCT. Submissions are always welcome. Opportunities to renew and initiate a subscription were given. Members were given the opportunity the volunteer to serve as judges for this year's poster contest, and to serve on ABCT's program committee. Thank you to all those who volunteered!

Following the business portion of the Autism SIG meeting, staff and students from the High School Asperger's Program at the Douglass Developmental Disabilities Center in New Brunswick, New Jersey, gave a presentation about the development of their program curriculum. Pamela Lubbers, a special education teacher in the program, emphasized the importance of integrating student interests into curriculum development, and highlighted the utilization of this approach with presentations by three of her students:

Kevin is a student in the high school program who evidences a lot of self-determination for himself and for the greater Asperger's/autism community. He supports the importance of individuality among students with Asperger's and autism. The staff of the High School Program have integrated this self-determination into his curriculum by encouraging him to create a newsletter and drawings that reflect his viewpoints and beliefs. These outlets allow for opportunities for Kevin to share his work with others and will soon provide staff with opportunities to work with Kevin on story development and grammar. Kevin shared one of his drawings with the gathered membership through pre-recorded video.

David is student who has shown an interest in the violin and photography. David began playing the violin at the suggestion of one of his teachers during a time when he was fascinated by the scene in which a violinist plays “Nearer, My God, to Thee” in the movie *Titanic*. David’s violin skills have allowed him to be integrated into the community in a special way: He is now a member of the New Jersey Youth Symphony Orchestra, a coveted position for which he had to audition. David’s photography—through the support of staff and his family—has also brought him acclaim in gallery showings and craft fairs. Staff members have incorporated this interest into the classroom by developing academic lessons in basic economics that are based in the sale of his photographs. David shared his photography with the membership, and also played “Nearer, My God, to Thee” on the violin for the crowd.

Ian recently joined the High School program, and his interest in Broadway musicals quickly became apparent. The staff members in the program have used his Broadway trivia aptitude to help strengthen his social skills by using it to facilitate interactions with others. Ian frequently stumps people with his vast knowledge of Broadway show tunes, but the “Guess-That-Tune” game helps facilitate interactions with others and creates an enjoyable activity for him to share. During the presentation, Ian led the membership in an uproarious game of “Guess-That-Tune.”

Thank you again to all of the staff and students at the High School Program who worked to make the presentation at the ABCT Autism SIG possible. Your work is appreciated!

---

## Letter from the ABA SIG President

We hope you enjoy this issue of the newsletter. Our theme is challenging behaviors. Our thanks go to the many contributors to this issue: Robert LaRue, Jan Handleman, Nathan Call, Katherine Powers, Alice Shillingsburg, Crystal Bowen, Amber Valentino, Russ Kormann, Jenna Glennon, Nathan Lambright, and Ryan Madigan.

I want to draw your attention to the letter sent by myself and Dave Celiberti (Past President) and Ruth Donlin (President-Elect) to ABAA, the BACB, and the newly formed Association for Professional Behavior Analysts (APBA). (The letter is contained in this issue.) We wanted to express our enthusiasm for the formation of an organization to address practitioner issues and our willingness to assist all the organizations in their future endeavors. We have received very positive feedback from all three organizations, and look forward to working collaboratively with all of them in the future.

In addition, I want to alert you to an email you will receive within the next month, regarding elections. We will need a new President-Elect, and will be following the guidelines shared at last year’s business meeting. If you have any questions after reading the email, feel free to contact me. I would be happy to share with you how reinforcing the experience of serving the SIG can be!!

We look forward to seeing many of you in Atlanta in February and Chicago in May.

Best regards,

## Website Update

We’ve been hard at work replacing the server for our website. Mission accomplished! [www.autismsig.org](http://www.autismsig.org) ([www.autismsig.org/](http://www.autismsig.org/)) is now up and running with some initial revisions. New content will be added in the upcoming month, along with additional links for upcoming conferences and workshops. We are also in the process of creating a document that delineates the process of becoming involved with the Autism SIG, becoming an officer, and our voting procedures. Substantial new content has been added to the Parent Professional Partnership SIG’s website ([www.ppps.org/](http://www.ppps.org/)), which is a link that can be found on our site as well.





Mary Jane Weiss, Ph.D.,  
BCBA  
President

Ruth Donlin, M.S.  
President-Elect

David Celiberti, Ph.D.,  
BCBA  
Past President

Kate Fiske, M.S.  
Secretary-Treasurer

David Fisher, Psy.D.  
Newsletter Editor

Dear ABA, BACB, and ABPA,

On behalf of the Autism SIG, we wanted to personally congratulate the organizations on the announcement of the formation of The Association of Professional Behavior Analysts. As you know, the Autism SIG has been fully committed to the missions of serving practitioners of ABA, advancing the science of ABA, and empowering consumers of ABA.

In many ways, the Autism SIG has served as a bridge between science and practitioner issues. As an example, our development of the Autism SIG consumer guidelines helps consumers to identify competent professionals and outlines minimal competence criteria for professionals. We thank all three organizations for their support of the guidelines. More specifically, the BACB contributed to their development and issued a letter of support. Also, all three organizations have assisted in disseminating the document.

We are tremendously excited by the evolution of the field and by the formation of this new organization. We look forward to working collaboratively with all three organizations, as we endeavor to build the field, support professionals, and assist consumers of our services in making informed choices.

Thank you for all you are doing to advance the field of behavior analysis. The Autism SIG is very committed to and excited by your initiatives. As members of the SIG leadership, we are very willing to assist you as you move forward.

Sincerely,

Mary Jane Weiss  
President

Ruth Donlin  
President-Elect

David Celiberti  
Past President

**News from the Parent Professional Partnership SIG**  
**David Celiberti, PPP SIG President**

I am writing to you regarding a number of matters related to the Parent Professional Partnership SIG. As you may know, the PPP SIG was created in 2001 to better meet the needs of the parents within the ABA community. In particular, the PPP SIG provides information, networking and resources for the parents attending the annual ABA convention or seeking information about the behavior analytic treatment of autism. Although the bulk of our SIG's efforts center around Autism spectrum disorders, parents of children with other disorders and disabilities may be interested in our activities or our website. There are also dozens of professionals who are members of our SIG. We encourage you to share our link, [pppsig.org](http://pppsig.org), with the families with whom you work.

We are an all volunteer group but are proud of our accomplishments thus far. The leadership of this SIG is comprised of a small handful of parents and professionals. There are no financial resources as we charge no dues.

### Parent Professional Partnership SIG Officers and Committees

#### Current Officers (2007-2008):

Co-Presidents: David Celiberti, Ph.D., BCBA  
 Barbara Wells, Parent Member

Secretary: Tamara Bannon, LMSW, BCBA

Consumer Liaisons: Marianne Butler, Parent Member  
 Lynn Faerber, BA  
 Jenna Glennon, MAT, BCBA  
 Peggy Halliday, BA, BCABA  
 Germaine Ibrahim, M.Ed.  
 Audrey Meissner, M.Ed., BCBA (Canada)

#### Public Relations Committee

##### Objectives:

- Support the Association for Behavior Analysis International in reaching out to the local and adjoining communities of the region hosting each annual ABA convention, but more extensively the Autism specific conferences.
- Forge alliances with organizations that have compatible goals with the PPP SIG.
- Support the public awareness of the websites for the PPP SIG and the Autism SIG by sharing our link with other organizations and distributing information about the SIG.

##### Members

Jenna Glennon, MAT, BCBA (chair)  
 Germaine Ibrahim, M.Ed.  
 Lynn Faerber, BA  
 Marianne Butler, Parent Member

#### Convention Committee

##### Objectives

- Develop and distribute materials for parents attending the ABA convention
- Organize networking opportunities for parents and professionals at the convention
- Inform SIG members about upcoming conference experiences
- Coordinate our activities with the Association for Behavior Analysis International

##### Members

Tamara Bannon, LMSW, BCBA (Chair)  
 Germaine Ibrahim, M.Ed.  
 Barbara Wells, Parent

## SIG Website Committee

### Objectives

Develop the website for the PPP SIG  
Expand and update content

### Members

David Celiberti, Ph.D., BCBA (Chair)  
Lori Bechner, MA, BCBA  
Marianne Butler, Parent Member  
Peggy Halliday, BA, BCABA  
Audrey Meissner, M.Ed., BCBA  
Barbara Wells, Parent

## Update on PPSIG.org

If you have not already done so, please visit our website, [www.pppsig.org](http://www.pppsig.org). The website includes information about the goals and objectives of the SIG, officers and contact information, an extensive list of links, books, and resources, and a description of upcoming conferences. We will be adding new content prior to the ABA conference in May, specifically more frequently asked questions and resource descriptions. This is a work in progress and we are grateful to Josh Milstein from Rutgers University who has provided significant support in maintaining and improving upon our site.

*Want to become involved with the PPP SIG?*

1. If you would like to join the Parent Professional Partnership SIG or discuss ways to become more involved, please contact Tamara Bannon at [tamara.bannon@njcosac.org](mailto:tamara.bannon@njcosac.org).
2. If you have suggestions for resources and links for our website, please contact David Celiberti at [dacnys@aol.com](mailto:dacnys@aol.com).
3. If you have a suggestion for a consumer friendly, behavior analytic conference that can be added to our website, please contact Barbara Wells at [barbara.wells@njcosac.org](mailto:barbara.wells@njcosac.org).



*Please send your suggestions of topic ideas for possible inclusion in an upcoming issue of the SIG newsletter to:*

*David Fischer, Psy.D., BCBA  
SIG Newsletter Editor  
Douglass Developmental Disabilities Center  
Rutgers University  
151 Ryders Lane  
New Brunswick, NJ 08901  
Phone: (732)-932-3017  
Fax: (732)-932-3095  
Email: [david.fischer@rutgers.edu](mailto:david.fischer@rutgers.edu)*



**RUTGERS**

Douglass Developmental  
Disabilities Center

Douglass Developmental Disabilities Center  
Rutgers, The State University of New Jersey  
151 Ryders Lane  
New Brunswick, NJ 08901  
Phone: 732-932-3017  
Fax: 732-932-4509  
[dddc.rutgers.edu](http://dddc.rutgers.edu)

**SPECIAL INTEREST GROUP**

**NEWLETTER STAFF**

*David Fischer, Editor*

**ABCT SIG**

*Jan S. Handleman, Ed.D.*

*SIG Chair*

*Kate Fiske, M.S.*

*SIG Co-Chair*

**ABA SIG**

*Mary Jane Weiss, Ph.D., BCBA*

*SIG President*

*Ruth Donlin, M.S.*

*SIG President-Elect*