

Behavioral Contracting

Contents

- From the Editor ~ 1
- Tips for Parents on Behavioral Contracting ~ 2
- Behavioral Contracting Literature Review ~ 4
- Behavioral Contracting Abstracts ~ 6
- Behavioral Parenting Updates ~ 9

From the Editor

Welcome to another edition of Behavioral Parenting Abstracts. In the past, Behavioral Parenting Abstracts was designed mainly for professionals working with children and families. We are excited to say that this issue marks the first issue that is not only designed for professionals working with children and families, but also for parents themselves. We have initiated a section called “Tips for Parents.” In each issue, the “Tips of Parents” will be on a different topic that we hope will be of interest to parents. This time around, the topic is “Behavioral Contracts.” We provide parents with some basic tips on creating, monitoring, and using behavioral contracts to improve their child’s behavior.

In addition, as always, we will have a section designed for professionals, in which a behavior analyst briefly outlines the literature on the topic of interest. In this issue, Brooke Jones provides a summary of

research on behavioral contracting (also known as contingency contracting). That summary is followed by several recent and classic references (with abstracts) of research and discussion papers on the topic of behavioral contracting.

Other features of Behavioral Parenting Abstracts will be the same as ever. For example, we have provided abstracts on the topic of behavioral parenting (or related topics) that have been published in the interim between our last issue and this current issue. Please feel free to contact us with suggestions for future review topics and future tips for parents.

Timothy R. Vollmer

We would like to hear from our readers! Please send your comments and suggestions to:
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Behavioral Contracting

Tips for Parents:

Make a contract with your kid to improve behavior!

Have you ever signed a contract to do some work or to have some work done for you? Well, behavior analysts help parents design BEHAVIOR contracts to use with their kids. And guess what? Lots and lots of research shows that BEHAVIOR CONTRACTS improve kids' behavior. Here are a few tips on how to get started:

What do you want to improve? Pick the behavior.

- Pick some behavior that you would like to increase or decrease for your child or adolescent.
- It is okay to have more than one type of behavior in the contract. For example, you can have as a target "Get to school on time each day" and "Brush your teeth twice per day," but...
- Don't put too many expectations in one contract! Start simple and make it fun.

Identifying Rewards

- Observe what your child plays with at home, talks about, and plays with in the stores. This can give you some ideas for what to use as a reward if your child meets the contract goals.
- Ask the child what he/she likes to earn. Older kids will probably say "money," but that is okay, we all like to work for money. If money is

tight, there are lots of fun or motivating activities you could do with or for your adolescent ("I'll do your laundry for one day"). Younger kids might pick prizes or special activities like going to a movie. See what your child says, go ahead and ask!

- Be fair, make sure the behavior difficulty matches the amount and/or quality of the reward. For example, it is probably not fair to expect your 16 year old to do everyone's laundry every day and only get one dollar at the end of the week.

Make the contract

- Write or type very clearly what the target behavior will be. For example, it is not clear enough to say "clean room every day." It is better to say "Every day at whatever time of day mom or dad decides to check, there will be zero items of clothing on the bedroom floor, the bed will be made, and all toys will be in the toy box unless you are playing with them at that moment."
- Say what will be earned, how much, and when it will be delivered. For example: "Every day that you walk through your classroom door before the final bell rings, you will get 25 cents added to your allowance. If you make it on time every day of the school week, you get to pick the movie we will rent on Friday night."
- Look out for loopholes. For example, Jill leaves her earrings and wrist watch on the floor of her room. She says "you never said anything about jewelry." You can prepare for this by adding "...zero

items of clothing or other personal items...”

- Build in fair compromises. If Sam is running a fever on Tuesday, he can still earn the Friday movie if he misses school due to illness.

Evaluating the Contract

- *Monitor the target behavior.*
 - Is the contract having the desired effect on the target behavior? If not, evaluate if the target behavior is too difficult or if the reward is not motivating. It is sometimes fun (or at least helpful) to collect data and make a graph or chart to reward yourself as a parent when you see good changes in your child’s behavior.
 - Reconstruct the contract every so often. For example, sit down with your child on a Sunday night or at the end of a month to make adjustments. This way you can work with your child to make corrections as needed and work out any grievances.

- Having the child participate in the negotiation of the process may produce more successful contracts.
- Building in bonuses for extra work or extra high quality work may be beneficial.
- Posting the contract, if appropriate, may help serve as a reminder of what is expected.
- Once the child is successful with contracts, try having the child develop his/her own contract. It is good for a child to gradually learn self-management

Sample Contract:

Let’s say you have crazy mornings that are filled with repeatedly asking your child to get ready for school. Here is a sample contract to start to target this problem.

Elena will be ready to leave for school by 7:30 am. She will be dressed in her school clothes, with her shoes on, and with her backpack. At 7:30am, Mom will check if these things are complete. If so, Elena will get a check on her calendar by the door and she will earn to play her video game for ½ hour after school. On Sunday night, we will go over the contract and make a new one for the week.

Other Considerations

- Be consistent and follow through. It is tough trying not to “give in” but if you do “give in”, the contract will not work. On the other hand, do not forget to give the rewards, that will not work either.
- Avoid using strictly punitive contracts. Always use rewards to build good behavior.

Behavioral Contracting By Brooke A. Jones

"A contingency contract is a written and signed agreement between two parties that specifies behavioral requirements and the consequences for their fulfillment" (Welch & Holborn, 1988, p. 357). Also called a behavioral contract, a contingency contract outlines contingencies for the occurrence or nonoccurrence of a specified target behavior. Some considerations regarding behavioral contracts include: (a) the type of contract you will negotiate, (b) the person responsible for implementing, or enforcing, the contingencies in the contract, and (c) the target forms of behavior and their consequences (Miltenberger, 2004).

The first type of behavioral contract, the one-party contract, involves a contractee and a contract manager. The contractee is the person who must engage in the behavior targeted by the contingencies of the contract, and the contract manager ensures that the contract contingencies are being implemented correctly and consistently. For example, in a behavioral contract targeting bedroom tidiness, the child is the contractee (he or she must engage in a certain behavior) and the parent is the contract manager (he or she must ensure that the child is engaging in the behavior and that the proper consequences are delivered).

The second type of behavioral contract, the two-party contract, involves two related parties (spouses, siblings, friends, etc.) and a contract manager. The target behaviors to be specified in the contract must be mutually agreed upon by both of the contractees and the contract manager. Furthermore, there are two types of two-party contracts: the

quid pro quo contract and the parallel contract. The quid pro quo contract involves a shared contingency in which a change in one party's target behavior provides reinforcement for a change in the other party's target behavior, and vice versa. In other words, one party agrees to engage in his or her target behavior as long as the other party agrees to engage in his or her target behavior. This type of contract has been investigated as a treatment for marital discord in couples (Jacobson, 1978). The parallel contract involves separate contingencies which do not rely on a change in one party's target behavior in order for the other party to access reinforcement. In other words, one party's engagement in his or her target behavior does not have a programmed effect on the other party's engagement in his or her target behavior or access to reinforcement.

Behavioral contracts are applicable to many forms of behavior in many naturalistic settings (Tighe & Elliott, 1968). The behavior specified in the contract can be targeted for reduction, targeted for increase, or both. Examples of behavior to be targeted for reduction are aggressive or oppositional behavior, like hitting or arguing (Wahler & Fox, 1968), while an example of behavior to increase is exercise (Wysocki, Hall, Iwata, & Riordan, 1979). Such behavior can be easily incorporated into a behavioral contract implemented in the home (Wahler et al. 1968), while behavioral contracts targeting appropriate classroom behavior, like number of workbook problems completed correctly (Kelley & Stokes, 1982), can be incorporated into a behavioral contract implemented in the classroom (White-Blackburn, Semb, & Semb, 1977).

To negotiate a behavioral contract, a reasonable level of occurrence of the target behavior should be determined by the contractee and the contract manager. For example, if putting dirty clothes in

the hamper is the target behavior, a reasonable level of occurrence of that behavior may be once per day. However, if washing laundry is the target behavior, a reasonable level of occurrence may be once or twice per week. Next, the consequences for engaging, and failing to engage, in the target behavior should be determined, along with any time specifications for the occurrence of the target behavior. There are two main ways of identifying appropriate consequences to include in a behavioral contract. One way to identify appropriate consequences is by conducting a preference assessment (Fisher et al., 1992; DeLeon & Iwata, 1996) to determine a hierarchical item preference. The highest-ranked items from the preference assessment could be delivered as a consequence for contract compliance. For example, in reference to the room tidiness example, a consequence for engaging in the behavior may be 15 extra minutes of watching television if television ranks as a high-preferred activity according to the preference assessment. Another way to identify appropriate consequences is by asking the contractee to relinquish some item of personal value to be re-delivered upon completion of contract requirements (e.g. Wysocki et al. 1979). For example, if the contractee relinquished his or her favorite movie to the contract manager, access to the movie could be allowed contingent upon the child engaging in the target behavior. The time specification in the behavioral contract requires the completion of the target behavior at or before a specified time. For example, the contractee's bedroom must be tidy every day before dinnertime in order for reinforcement to be delivered.

When a reasonable level of occurrence of the target behavior, the consequences for engaging/failing to engage in the target behavior, and the time specifications have been agreed upon and written down, the document is signed by the contractee and contract

manager and put into effect. When specified levels of target behavior have been reached (e.g. bedroom is consistently more tidy), or if a 'loophole' in the contract contingencies has been identified (e.g. bedroom is only tidy until reinforcement is delivered, after which the contractee engages in untidy behavior), an addendum may need to be written. To add an addendum to a behavioral contract, identify new target behavior or a new level of the target behavior to be specified. In the bedroom tidiness example, a new level of the target behavior may specify that the contractee's bedroom must be tidy all day in order to gain access to reinforcement the following day. Then, re-negotiate the consequences as you would negotiate the original contract.

Research in behavioral contracting has thus far been limited to the application of behavioral contracts, as opposed to the investigation of the effective components of behavioral contracts. Future research could focus on determining the necessary components of behavioral contracts and whether these components are the same when targeting different types of behavior. In other words, should a behavioral contract targeting an increase in appropriate behavior include the same components as a behavioral contract targeting a decrease in inappropriate behavior?

In summary, behavioral contracts, including specific and measurable target behavior and the consequence(s) for the occurrence or nonoccurrence of said behavior, have been useful for providing behavior change in contractees. Behavioral contracts can be used with many different contractees in many types of settings, and are generally uncomplicated to implement. However, there is a need for further research investigating the many components of behavioral contracts, as well as differences regarding various

topographies of behavior targeted in behavioral contracts.

References

DeLeon, I. G., & Iwata, B. A. (1996). Evaluation of a multiple-stimulus presentation format for assessing reinforcer preferences. *Journal of Applied Behavior Analysis, 29*, 519-533.

Fisher, W. Piazza, C. C., Bowman, L. G., Hagopian, L. P., Owens, J. C., & Slevin, I. (1992). A comparison of two approaches for identifying reinforcers for persons with severe and profound disabilities. *Journal of Applied Behavior Analysis, 25*, 491-498.

Jacobson, N. S. (1978). Specific and nonspecific factors in the effectiveness of a behavioral approach to the treatment of marital discord. *Journal of Consulting and Clinical Psychology, 46*(3), 442-452.

Kelley, M. L., & Stokes, T. F. (1982). Contingency contracting with disadvantaged youths: Improving classroom performance. *Journal of Applied Behavior Analysis, 15*, 447-454.

Miltenberger, R. G. (2004). Behavioral contracts. In *Behavior modification: Principles and procedures* (pp. 493-505). California: Thomson Wadsworth.

Tighe, T. J., & Elliott, R. (1968). A technique for controlling behavior in natural life settings. *Journal of Applied Behavior Analysis, 1*, 263-266.

Wahler, R. G., & Fox, J. J. (1980).

Solitary toy play and time out: A family treatment package for children with aggressive and oppositional behavior. *Journal of Applied Behavior Analysis, 13*, 23-39.

Welch, S. J., & Holborn, S. W. (1988). Contingency contracting with delinquents: Effects of a brief training manual on staff contract negotiation and writing skills. *Journal of Applied Behavior Analysis, 21*, 357-368.

White-Blackburn, G., Semb, S., & Semb, G. (1977). The effects of a good-behavior contract on the classroom behaviors of sixth-grade students. *Journal of Applied Behavior Analysis, 10*, 312.

Wysocki, T., Hall, G., Iwata, B., & Riordan, M. (1979). Behavioral management of exercise contracting for aerobic points. *Journal of Applied Behavior Analysis, 12*, 55-64.

Behavioral Contracting Abstracts

Behavioral Contracting: Research Articles

DeLeon, I. G., & Iwata, B. A. (1996). Evaluation of a multiple-stimulus presentation format for assessing reinforcer preferences. *Journal of Applied Behavior Analysis, 29*(4), 519-533.

Compared 3 methods for presenting stimuli during reinforcer-preference assessments: a paired-stimulus format (PS), a multiple-stimulus format in which selections were made with replacement (MSW), and a multiple-stimulus format in which selections were made without replacement (MSWO).

Results obtained for 7 participants showed moderate to high rank-order correlations between the MSWO and PS procedures and a similar number of identified reinforcers. In addition, the time to administer the MSWO procedure was comparable to that required for the MSW method method and less than half that required to administer the PS procedure. Subsequent tests of reinforcement effects revealed that some stimuli selected in the PS and MSWO procedures, but not selected in the MSW procedure, functioned as reinforcers for arbitrary responses. These preliminary results suggest that the MSWO procedure may share the respective advantages of the other methods.

Fisher, W., Piazza, C. C., Bowman, L. G., & Hagopian, L. P. (1992). A comparison of two approaches for identifying reinforcers for persons with severe and profound disabilities. *Journal of Applied Behavior Analysis, 25*(2), 491-498.

Discusses the reinforcer assessment procedure developed by G. M. Pace et al (see record 1986-07144-001), which involves repeatedly presenting a variety of stimuli to Ss with profound mental retardation and then measuring approach behaviors to differentiate preferred from nonpreferred stimuli. One potential limitation of this procedure is that some clients consistently approach most or all of the stimuli on each presentation, making it difficult to differentiate among these stimuli. A concurrent operants paradigm was used to compare the Pace procedure with a modified procedure wherein clients were presented with 2 stimuli simultaneously and were given access only to the 1st stimulus approached. Four Ss, aged 2-10 yrs, participated. This forced-choice stimulus preference assessment resulted in greater differentiation among stimuli and predicted better which stimuli would result in higher levels of responding when presented contingently in a concurrent operants paradigm.

Jacobson, N. S. (1978). Specific and nonspecific factors in the effectiveness of a behavioral approach to the treatment of marital discord. *Journal of Consulting and Clinical Psychology, 46*(3), 442-452.

Compared 2 behavioral treatments for marital discord with a nonspecific control and a waiting-list control. The behavioral treatments combined training in problem-solving skills with training in contingency management procedures, differing only with respect to the contracting form: One group learned to form good faith contracts, and the other, quid pro quo contracts. 32 couples were randomly assigned to 1 of these 2 treatment conditions and 1 of 3 therapists. Improvement was assessed by 2 observational measures and by 2 self-report questionnaires, Marital Adjustment and Marital Happiness Scales. On all measures, both behavioral groups improved significantly more than waiting-list couples. On 3 of the 4 measures, behavioral couples improved significantly more than nonspecific couples. The 2 behavioral groups did not differ from one another on any of the measures.

Kelley, M. L., & Stokes, T. F. (1982). Contingency contracting with disadvantaged youths: Improving classroom performance. *Journal of Applied Behavior Analysis, 15*(3), 447-454.

Evaluated the effects of a student-teacher contracting procedure on adolescent students' academic productivity. Participants were 13 16-21 yr olds enrolled in a vocational training program for disadvantaged youth. During the baseline conditions, Ss were paid contingent on attendance alone, the system operating in the program prior to this research. During contracting conditions, Ss were paid contingent on contract fulfillment of academic productivity goals set by mutual agreement between student and teacher. Contracting and contingent pay procedures were developed with and implemented by the teacher. A reversal experimental design showed that Ss' productivity more than doubled during contracting conditions as compared to their productivity during baseline.

Miltenberger, R. G. (2001). *Behavior modification: Principles and procedures (2nd ed.)*. Wadsworth/Thomson Learning.

Presents the study of behavior modification by consistently illustrating concepts and procedures with exercises and examples of how they are used in everyday life. The reader learns not only how environmental events influence human behavior, but also the strategies that are used to change behavior. After an introduction to the field, the author includes five understandable chapters that discuss the basic principles of behavior modification and establish a foundation for the procedures presented in later chapters. This edition includes applied exercises, examples from everyday life, application exercises, misapplication exercises, and practice tests.

Saigh, P. A., & Umar, A. M. (1983). The effects of a Good Behavior Game on the disruptive behavior of Sudanese elementary school students. *Journal of Applied Behavior Analysis, 16*(3), 339-344.

An endemic version of the good behavior game (H. H. Barrish et al, 1969) was applied to a class of 20 Sudanese 2nd graders. Official letters of commendation, extra time for recess, victory tags, and a winner's chart were used as backup reinforcers. The class was divided into 2 teams, and the Ss were told that the team with the fewest rule violations would win the game and receive the prizes. After an initial adaptation period, the rate of disruption was charted across 4 treatment phases: Baseline 1, introduction of the game, Baseline 2, and reintroduction of the game. The game phases were associated with marked decreases in the rate of seat leaving, talking without permission, and aggression. The teacher, principal, parents, and Ss were consequently individually interviewed, and their comments indicated the social validity of the game.

Tighe, T. J., & Elliott, R. (1968). A technique for controlling behavior in natural life settings. *Journal of Applied Behavior Analysis, 1*(3), 263-266.

Presents a behavior control technique, consisting primarily of having a patient give up some portion of his reinforcers (usually money) with the understanding that he must behave in the therapeutically prescribed ways in his natural environment to re-earn the reinforcers. The critical features and requirements of the technique are discussed, and various applications are suggested.

Wahler, R. G., & Fox, J. J. (1980). Solitary toy play and time out: A family treatment package for children with aggressive and oppositional behavior. *Journal of Applied Behavior Analysis, 13*(1), 23-39.

After baseline measurement of the behavior of 4 5-8 yr old boys referred for oppositional (O), rule violating, and aggressive (A) behaviors, several interventions were applied successively with each S. Use of a social play contract designed to teach appropriate social behaviors resulted in either no improvement or in worsening of problem behaviors in observations made when the contract was not in effect. Changing the contract behavior to solitary toy play resulted in reduced O behavior during the observations, fewer parental reports of low-rate problem behaviors, and improvements in parent attitudes toward Ss. However, these data showed a reversal during later sessions. Inclusion of a time-out contingency with the contract recovered the earlier improvements. Results suggest that for children with severely O and A behaviors, a treatment approach emphasizing productive, solitary behaviors may be superior to one stressing appropriate social interaction. However, a combined strategy of reinforcement for solitary play and punishment for problem behaviors appears necessary for lasting effects.

Welch, S. J., & Holborn, S. W. (1988). Contingency contracting with delinquents: Effects of a brief training manual on staff contract negotiation and writing skills. *Journal of Applied Behavior Analysis, 21*(4), 357-368.

Developed a training manual for teaching child-care workers to contingency contract with delinquent youths (DYs) with emotional and behavior problems in residential care

facilities. The manual was designed to require minimal supplementary training by a professional. In Exp 1, a multiple baseline design was used to assess the effect of the manual on contract negotiation and writing behaviors in 4 child-care workers (aged 26-35 yrs). Exp 2 consisted of 4 A-B systematic replications. Behaviors were assessed within the context of analog training simulations and generalization tests with DYs. Results from the simulations indicate that the manual was successful in increasing both types of behaviors to a level of proficiency that equaled or surpassed that of behaviorally trained graduate students, and results from the generalization tests indicate that the workers were able to apply their newly acquired contracting skills with DYs.

White-Blackburn, G., Semb, S., & Semb, G. (1977). The effects of a good-behavior contract on the classroom behaviors of sixth-grade students. *Journal of Applied Behavior Analysis, 10*(2), 312.

Results from the 4 participating 6th graders show that a good-behavior contract making use of existing facilities and privileges in a public school classroom can be effective. Ss' on-task behavior and daily assignment completion increased, weekly grades were higher, and disruptive behavior decreased when the contract was in effect.

Wysocki, T., Hall, G., Iwata, B., & Riordan, M. (1979). Behavioral management of exercise: Contracting for aerobic points. *Journal of Applied Behavior Analysis, 12*(1), 55-64.

Used behavioral contracting to encourage physical exercise among 8 undergraduate and graduate students in a multiple-baseline design. Ss deposited items of personal value with experimenters (Es), which they could earn back on fulfillment of 2 types of contract contingencies. Ss selected weekly aerobic point criteria, which they could fulfill by exercising in the presence of other Ss. In addition, Ss contracted to observe and record the exercise of other Ss and to perform an independent reliability observation once each week, with both of these activities monitored by the Es. Results indicate that the contract

contingencies produced increases in the number of aerobic points earned per week for 7 of 8 Ss, that the aerobic point system possesses several advantages as a dependent variable for behavioral research on exercise, and that inexperienced observers could be quickly trained to observe exercise behavior and to translate those observations into their aerobic point equivalents. Finally, in a follow-up questionnaire completed 12 mo after the end of the study, 7 of the 8 Ss reported that they were earning more aerobic points per week than had been the case during the baseline condition of this experiment.

Behavioral Parenting Abstracts

Behavioral Parenting Updates: Research Articles

Achenbach, T. M. (2005). Advancing assessment of children and adolescents: Commentary on evidence-based assessment of child and adolescent disorders. *Journal of Clinical Child & Adolescent Psychology, 34*(3), 541-547.

This article addresses the following cross-cutting issues evident in the special section of this issue: (a) current diagnoses do not provide adequate validity criteria; (b) the heterogeneity and comorbidity of target problems raise taxonomic challenges; (c) accurate assessment requires integration of multisource data; (d) developmental variations must be accommodated; (e) appropriate norms are needed; and (f) categorical and quantitative approaches are not incompatible. Less evident in the special section articles but equally important are the need to cope with multicultural issues, avoid premature closure regarding diagnostic labels, assess caregivers, and standardize broad-spectrum assessment procedures. Studies and use of evidence-based treatment (EBT) should be linked to evidence-based assessment (EBA) to advance both EBT and EBA.

Baker, A. J. L., Wulczyn, F. and Dale, N. (2005). Covariates of length of stay in residential treatment. *Child Welfare, 84*(3), 363-386.

The article explores variables associated with length of stay in a child welfare residential treatment center. The study followed three entry cohorts from admission through discharge. The researchers conducted event history analyses to examine the rates of discharge over time and the covariates of length of stay. Residential treatment is the highest level of care in the child welfare system's continuum of care. It is one of the most restrictive and most expensive types of child welfare services. To be eligible for such treatment, children must have emotional and behavior problems usually but not always associated with histories of abuse, abandonment, and neglect. Accurate figures for children and youth in residential treatment are difficult to obtain, with some estimating that approximately 20 percent of the 500,000 children served by the child welfare system are in some form of group facility, including residential treatment. Researchers can expect that mental health status and substance abuse issues would be associated with length of stay for children and adolescents in residential treatment. Similarly, substance abuse problems are prevalent in the families that come into contact with the child welfare system.

Borrero, C. S. W., Vollmer, T. R., Borrero, J. C. and Bourret, J. (2005). A method for evaluating parameters of reinforcement during parent-child interactions. *Research in Developmental Disabilities, 26*(6), 577-592.

We conducted functional analyses and identified reinforcers for problem behavior for three individuals with developmental disabilities. Based on results of the functional analysis, we evaluated the rate, probability, delay, and duration of reinforcement for problem and appropriate behavior during descriptive parent-child observations. Results showed that parameters of reinforcement, including rate, probability, delay, and duration may interact, and that evaluations of a single reinforcement parameter may be insufficient in describing response allocation.

Hence, this study represents a movement toward a method for analyzing reinforcer dimensions, other than rate and probability, in a descriptive analysis.

Brotman, L. M., Gouley, K. K., Chesir-Teran, D., Dennis, T., Klein, R. G. and Shrout, P. (2005). Prevention for preschoolers at high risk for conduct problems: Immediate outcomes on parenting practices and child social competence. *Journal of Clinical Child & Adolescent Psychology, 34*(4), 724-734.

This study investigated the immediate impact of an 8-month center- and home-based prevention program for preschoolers at high risk for conduct problems. We report immediate program effects on observed and self-rated parenting practices and observed child behavior with peers. Ninety-nine preschool-age siblings of adjudicated youths and their families were randomly assigned to an enhanced version of the Incredible Years Series (Webster-Stratton, 1989; $n = 50$) or to a no-intervention control condition ($n = 49$). In an intent-to-treat design, the intervention yielded significant effects on negative parenting, parental stimulation for learning, and child social competence with peers. Improvements in negative parenting, stimulation for learning, and child social competence support the potential of the intervention to prevent later conduct problems in high-risk children.

Buckley, S. D., Strunck, P. G. and Newchok, D. K. (2005). A comparison of two multicomponent procedures to increase food consumption. *Behavioral Interventions, 20*(2), 139-146.

We compared two procedural variations of response cost (RC) of preferred materials to increase mouth clean in a five-year-old boy diagnosed with autism. Noncontingent presentation of preferred materials (NCR) was compared to differential reinforcement of alternative behavior (DRA) when returning preferred materials once they have been removed for refusal or expulsion of food. Results indicated that both procedures increased swallowing and reduced problem behavior; however, NCR + RC was superior to

DRA + RC with respect to overall mean and initial treatment measures.

Caron, A., Weiss, B., Harris, V. and Catron, T. (2006). Parenting behavior dimensions and child psychopathology: Specificity, task dependency, and interactive relations. *Journal of Clinical Child & Adolescent Psychology*, 35(1), 34-45.

This study examined the specificity of relations between parent or caregiver behaviors and childhood internalizing and externalizing problems in a sample of 70 fourth-grade children (64% boys, M age = 9.7 years). Specificity was assessed via (a) unique effects, (b) differential effects, and (c) interactive effects. When measured as unique and differential effects, specificity was not found for warmth or psychological control but was found for caregiver's use of behavior control. Higher levels of behavior control were uniquely related to lower levels of externalizing problems and higher levels of internalizing problems; differential effects analyses indicated that higher levels of behavior control were related to decreases in the within-child difference in relative levels of level of internalizing versus externalizing problems. Interactive relations among the 3 parenting behavior dimensions also were identified. Although caregivers emphasized different parenting behavior dimensions across 2 separate caregiver-child interaction tasks, relations between parenting behavior dimensions and child psychopathology did not vary as a function of task. These findings indicate the importance of assessing and simultaneously analyzing multiple parenting behavior dimensions and multiple child psychopathology domains.

Carr, J. E. (2005). Recommendations for reporting multiple-baseline designs across participants. *Behavioral Interventions*, 20(3), 219-224.

Two recommendations are offered for reporting multiple-baseline designs across participants. These recommendations will better enable readers to (a) distinguish concurrent from nonconcurrent multiple-

baseline designs and (b) determine the temporal order in which sessions were conducted in concurrent multiple-baseline designs.

Carr, J. E., Sidener, T. M., Sidener, D. W. and Cummings, A. R. (2005). Functional analysis and habit-reversal treatment of tics. *Behavioral Interventions*, 20(3), 185-202.

Although there is empirical support for a biological etiology of Tourette syndrome and other tic disorders, researchers have recently begun examining the role of reinforcement in tic maintenance. Using experimental functional analyses, researchers have identified both social and nonsocial functions for the tics of a variety of individuals. However, there are at least two problems with this developing literature. First, all but one of the studies employed a single participant and many of them were referred for clinical treatment. These factors leave open the possibility that the selection or referral process may have contributed to the reported outcomes. Second, five of the seven participants had a developmental disability or delay. Thus, the majority of participants in this literature are unrepresentative of most individuals with tic disorders. The purpose of the present study was to investigate the operant functions of the tics of multiple children who were recruited for the study. We evaluated the tics of three typically developing children using functional analysis. Results indicated nonsocial functions for all tics. Two of the participants were then treated using habit reversal; both of them experienced tic reductions.

Chong, I. M. and Carr, J. E. (2005). An investigation of the potentially adverse effects of task interspersal. *Behavioral Interventions*, 20(4), 285-300.

This series of experiments sought to replicate the findings by Charlop, Kurtz, and Milstein (<BIBR>1992</BIBR>) in which presenting the same consequences for maintenance (previously learned tasks) and nonacquired tasks was found to impede learning of the latter during task interspersal. In Experiment 1, we conducted a systematic replication with

three children diagnosed with autism. All participants reached mastery criteria for the nonacquired tasks, even though the same consequences were delivered for maintenance and nonacquired tasks. In Experiment 2, we conducted a direct replication of the Charlop et al. (<BIBR>1992</BIBR>) with the same children from Experiment 1. In four of five evaluations, participants reached mastery criterion for the nonacquired task, even though same consequences were provided for maintenance and nonacquired tasks. The results are discussed in the context of the differences between studies that might have contributed to the discrepant findings.

Ciccione, F. J., Graff, R. B. and Ahearn, W. H. (2005). An alternate scoring method for the multiple stimulus without replacement preference assessment. *Behavioral Interventions*, 20(2), 121-127.

DeLeon and Iwata (1996) described the difficulties in applying the percentage approached scoring method to the multiple stimulus without replacement (MSWO) preference assessment relative to its application in the paired stimulus assessment. This scoring method may result in highly preferred items being misidentified as moderate or low preference. In the present study, the results of 57 MSWO assessments were scored using both the percentage approach method and a point weighting method. More items were identified as highly preferred with the point weighting method. Reinforcer assessments were conducted on a subset of stimuli judged to be high preference using the point weighting method but moderately or non-preferred when scored with the percentage approached method; all stimuli functioned as reinforcers.

Codding, R. S., Skowron, J. and Pace, G. M. (2005). Back to basics: Training teachers to interpret curriculum-based measurement data and create observable and measurable objectives. *Behavioral Interventions*, 20(3), 165-176.

Historically the link between assessment data, IEP objectives, and instruction has been weak and cause for concern for educators,

especially as accountability for schools and teachers has increased. In addition, IEP objectives have suffered from being too abstract or overly specific, possibly compounding the gap between objectives and instructional practices. Recently, focus has also emphasized the need for teachers to make data-based instructional decisions. In order to increase the data-based decision making of teachers, the first step may be to train teachers to interpret curriculum-based measurement (CBM) data and translate these data into objective, measurable, and technically adequate objectives. A training package including modeling, practice, and performance feedback was used to instruct special education teachers to use CBM data to develop individualized, observable, and measurable educational objectives. A multiple baseline design across teachers was used to demonstrate that the treatment package resulted in teachers correctly using CBM data to formulate students' instructional goals and objectives. These results revealed that accurate use of CBM information was maintained without the treatment package and from simulated to actual student data.

Cote, C. A., Thompson, R. H. and McKerchar, P. M. (2005). The effects of antecedent interventions and extinction on toddler's compliance during transitions. *Journal of Applied Behavior Analysis*, 38(2), 235-238.

We compared the effects of two antecedent strategies commonly used in early childhood settings to increase compliance during activity transitions: a warning condition, in which children were informed of the transition 2 min before it began, and a condition in which children were allowed access to a toy during the transition. Both antecedent interventions were ineffective when implemented alone; however, when these strategies were combined with extinction, improvements in compliance were observed for all children.

Daly, E. J. I., Bonfiglio, C. M., Mattson, T., Persampieri, M. and Foreman-Ya, K. (2006). Refining the experimental analysis of academic skills deficits: Part ii. Use of brief experimental analysis to evaluate reading fluency treatments. *Journal of Applied Behavior Analysis, 39*(3), 323-331.

The technology of brief experimental analysis is just beginning to be used for identification of effective treatments for individual students who experience difficulty with oral reading fluency. In this study, the effect of a reading fluency treatment package was examined on easy and hard passages, and generalization was assessed on passages with high content overlap. The results suggest that the treatment package increased reading fluency for all 3 students. Effects were moderated by difficulty level for all 3 students. Results are discussed in terms of future refinements to the procedures, validation of the methods, and potential applications in clinical and school settings.

DeLeon, I. G., Uy, M. and Gutshall, K. (2005). Noncontingent reinforcement and competing stimuli in the treatment of pseudoseizures and destructive behaviors. *Behavioral Interventions, 20*(3), 203-217.

Individuals diagnosed with epilepsy have sometimes also been observed to display "pseudoseizures", or clinical events that mimic those observed during epileptic seizures, but are not associated with abnormal cortical electrical discharges. Several investigators have hypothesized that pseudoseizures, in some proportion of those individuals that display them, may be maintained through operant contingencies. In the present study, this sort of hypothesis was tested in a 10-year-old boy with severe mental retardation and a seizure disorder. Informal observations, and later, response-reinforcer contingencies, revealed that the pseudoseizures, as well as other destructive behaviors, occurred at high rates when they resulted in attention from caregivers. Subsequently, a treatment package consisting of noncontingent reinforcement (NCR) and competing stimuli was used to decrease levels of seizure-like activity and other problem behaviors. This study adds to the literature

that suggests that seizure-like activity may come under operant control and extends the use of NCR and competing stimuli to a novel target behavior.

Erickson, M. J., Stage, S. A. and Nelson, J. R. (2006). Naturalistic study of the behavior of students with ebd referred for functional behavioral assessment. *Journal of Emotional and Behavioral Disorders, 14*(1), 31-40.

A descriptive study of 22 students (K-10th grade) with emotional and behavioral disabilities (EBD) who were referred for functional behavioral assessment (FBA) revealed less on-task and more avoidant and inappropriate behaviors in comparison to classroom peers without EBD. Students who had been diagnosed as having attention-deficit/hyperactivity disorder and were taking psychotropic medications had higher levels of inappropriate behavior. However, sequential analysis showed that individual variation in teacher and peer attention as consequent events best predicted students' inappropriate behavior. These findings indicate that individual differences in the consequent events that purportedly maintain problem behavior are unique to the student, as proponents of FBA have suggested.

Eyberg, S. M. and Graham-Pole, J. R. (2005). Mindfulness and behavioral parent training: Commentary. *Journal of Clinical Child & Adolescent Psychology, 34*(4), 792-794.

We review the description of mindfulness-based parent training (MBPT) and the argument that mindfulness practice offers a way to bring behavioral parent training (BPT) in line with current empirical knowledge. The strength of the proposed MBPT model is the attention it draws to process issues in BPT. We suggest, however, that it may not be necessary to posit automatized transactional procedures in the parent-child interaction to justify the need for better delineation of therapist-parent communication in treatment. Empirically established behavioral processes may be used within BPT to accomplish parent-training goals similar to those proposed for mindfulness training. Yet, Dumas (2005) offers refreshing ideas for

enhancing the therapeutic alliance and success with the parents of disruptive children.

Fisher, W. W., Adelinis, J. D., Volkert, V. M., Keeney, K. M., Neidert, P. L. and Hovanetz, A. (2005). Assessing preferences for positive and negative reinforcement during treatment of destructive behavior with functional communication training. *Research in Developmental Disabilities, 26*(2), 153-168.

Results of prior studies (e.g. [J. Appl. Behav. Anal. 32 (1999) 285]) showing that participants chose alternative behavior (compliance) over escape-reinforced destructive behavior when this latter response produced escape and the former response produced positive reinforcement may have been due to (a) the value of the positive reinforcer overriding the value of the negative reinforcer or (b) the presence of the positive reinforcer altering the value of the negative reinforcer (i.e., lessening the aversiveness of the demands). In this investigation we evaluated the relative contributions of these alternative mechanisms with two girls with autism. We compared the relative effects of positive and negative reinforcement using equivalent communication responses under both a restricted-choice condition (in which participants could choose positive or negative reinforcement, but not both) and an unrestricted-choice condition (in which participants could choose one or both reinforcers). Both participants often chose positive over negative reinforcement in the restricted-choice condition. However, in the unrestricted-choice condition (in which participants could choose one or both reinforcers), one participant consistently chose both reinforcers by the end of the analysis whereas the other primarily chose only positive reinforcement. Results suggested that for one participant the value of the positive reinforcer overrode the value of the negative reinforcer, whereas for the other participant, the presence of the positive reinforcer in the demand context lessened the aversiveness of the demands.

Fletcher, J. M., Francis, D. J., Morris, R. D. and Lyon, G. R. (2005). Evidence-based assessment of learning disabilities in children and adolescents. *Journal of Clinical Child & Adolescent Psychology, 34*(3), 506-522.

The reliability and validity of 4 approaches to the assessment of children and adolescents with learning disabilities (LD) are reviewed, including models based on (a) aptitude-achievement discrepancies, (b) low achievement, (c) intra-individual differences, and (d) response to intervention (RTI). We identify serious psychometric problems that affect the reliability of models based on aptitude-achievement discrepancies and low achievement. There are also significant validity problems for models based on aptitude-achievement discrepancies and intra-individual differences. Models that incorporate RTI have considerable potential for addressing both the reliability and validity issues but cannot represent the sole criterion for LD identification. We suggest that models incorporating both low achievement and RTI concepts have the strongest evidence base and the most direct relation to treatment. The assessment of children for LD must reflect a stronger underlying classification that takes into account relations with other childhood disorders as well as the reliability and validity of the underlying classification and resultant assessment and identification system. The implications of this type of model for clinical assessments of children for whom LD is a concern are discussed.

Fox, J. and Davis, C. (2005). Functional behavior assessment in schools: Current research findings and future directions. *Journal of Behavioral Education, 14*(1), 1-4.

Presents a special issue of "Journal of Behavioral Education". The special issue contains articles that discuss the current research findings and future directions in the functional behavior assessment (FBA) in schools. FBA has become a standard of practice in special education. The roots of functional behavior assessment technology can easily be traced to the development of applied behavior analysis and to the early research and application of FBA to analyzing the behavior challenges of children in real life

settings such as schools and homes. Some of the questions included in this issue are concerned with the technical adequacy of specific FBA instruments and procedures, that is, their reliability, validity, and the agreement/disagreement between various methods of assessing behavior function. The articles, despite some troubling conclusions, help to advance the field of FBA. The increased study and use of structural analysis is clearly warranted and provides researchers with additional questions for analysis and practitioners with another.

Gest, S. D. and Gest, J. M. (2005). Reading tutoring for students at academic and behavioral risk: Effects on time-on-task in the classroom. *Education & Treatment of Children, 28*(1), 25-47.

This study examined the effects of individual reading tutoring on the time-on-task and student-teacher interactions of students displaying early signs of academic and behavior problems. Participants were 17 students in Kindergarten, Grade 1 and Grade 2 who were rated by classroom teachers as below average in academic skills and above average in aggressive-disruptive behavior. Ten of these students were randomly selected to receive individual tutoring from paraprofessionals. Classroom observations indicated that tutoring had generally positive effects on time-on-task in the classroom but no clear effects on patterns of teacher attention. Among tutored students, increases in time-on-task were largest among children whose reading skill gains were largest. Results suggest that for students with the dual risks of reading and behavior problems, individual reading tutoring may enhance reading skills and lead to meaningful increases in engagement in classroom learning tasks.

Green, V. A., Pituch, K. A., Itchon, J., Choi, A., Oâ€™Reilly, M. and Sigafos, J. (2006). Internet survey of treatments used by parents of children with autism. *Research in Developmental Disabilities, 27*(1), 70-84.

We developed an Internet survey to identify treatments used by parents of children with autism. The survey listed 111 treatments and was distributed via colleagues and through chapters of the Autism Society of America and Autism Organizations Worldwide. A total of 552 parents submitted usable returns during the 3-month survey period. On average the parents reported using seven different treatments. The number of treatments used varied as a function of the child's age and type/severity of disability within the autism spectrum. Speech therapy was the most commonly reported intervention, followed by visual schedules, sensory integration, and applied behavior analysis. In addition, 52% of parents were currently using at least one medication to treat their child, 27% were implementing special diets, and 43% were using vitamin supplements. Because parents were using a large number of treatments, many of which lack empirical support, future research should focus on understanding the decision-making processes that underlie treatment selection by parents of children with autism.

Haight, W. L., Mangelsdorf, S., Black, J., Szewczyk, M., Schoppe, S., Giorgio, G., Madrigal, K. and Tata, L. (2005). Enhancing parent-child interaction during foster care visits: Experimental assessment of an intervention. *Child Welfare, 84*(4), 459-481.

Mothers of young children recently placed in foster care participated in an intervention to enhance parent-child interaction during visits. The mothers all reported substantial loss and trauma histories. Immediately prior to the visits, the mothers were coached on strategies for separating from their children at the visit's end. The mothers displayed more behavioral strategies for supporting their children when the visit was over, but were less engaged with their children during the leave-taking sequence and displayed fewer ways of maintaining the child's involvement in mother-child interaction during leave-taking than those in a comparison group. This article discusses consideration of parents' trauma history in designing interventions to enhance parent-child interaction.

Harvey, M. T., May, M. E. and Kennedy, C. H. (2004). Nonconcurrent multiple baseline designs and the evaluation of educational systems. *Journal of Behavioral Education*, 13(4), 267-276.

Important findings are often a balance between the rigor of the experimental design and innovativeness of the experimental question. One broad topic area that has received a great deal of discussion, but little empirical study, is the evaluation of educational systems. Experimental designs that permit the analysis of practices used by state education agencies, local education agencies, and schools have the potential for yielding socially significant findings that could improve education. In this article we discuss the use of nonconcurrent multiple baseline designs as an option for studying the activities and effects of educational programs. Nonconcurrent multiple baseline designs stagger the timing of baseline-to-intervention changes across various entities, but the baselines and intervention phases are not contemporaneous across each of the tiers. Although considered less rigorous than concurrent multiple baseline designs, nonconcurrent designs have a degree of flexibility that may allow for their use in studying complex social contexts, such as educational settings, that might otherwise go unanalyzed.

Heering, P. W. and Wilder, D. A. (2006). The use of dependent group contingencies to increase on-task behavior in two general education classrooms. *Education & Treatment of Children*, 29(3), 459-468.

Dependent group contingencies were used to increase the on-task behavior of general education students in third and fourth grade classrooms. The class-wide intervention allowed students to gain access to preferred items/activities (identified via a stimulus preference assessment) contingent upon being on-task at a random times during math instruction. A multiple baseline design across classrooms was used to evaluate intervention effects. During baseline, mean levels of on-task behavior were 35% and 50% in the third and fourth grade classes, respectively. These means rose

above 80% for both classrooms during the intervention phases. In addition, social validity measures suggested that the procedure was feasible for classroom staff to implement, acceptable to students, and produced few, if any, adverse effects on student social standing.

Herschell, A. D. and McNeil, C. B. (2005). Theoretical and empirical underpinnings of parent-child interaction therapy with child physical abuse populations. *Education & Treatment of Children*, 28(2), 142-162.

Children who experience physical abuse often suffer numerous negative short- and long-term difficulties in comparison to non-abused children. Considerable effort has been invested in developing and identifying treatment interventions to attenuate these negative outcomes. Parent-Child Interaction Therapy (PCIT), originally developed for the treatment of externalizing behavior problems in children aged two to seven years, has also been used to treat child physical abuse populations. The results of emerging treatment outcome studies indicate that PCIT is a promising treatment approach for child physical abuse. This article will review the theoretical rationale for applying PCIT to physically abusive parent-child dyads as well as provide details on the clinical modification made to PCIT for this population. Emerging treatment outcome studies will be critiqued and future research directions will be highlighted.

Higbee, T. S., Chang, S.-m. and Endicott, K. (2005). Noncontingent access to preferred sensory stimuli as a treatment for automatically reinforced stereotypy. *Behavioral Interventions*, 20(3), 177-184.

Researchers have previously suggested that interventions designed to decrease stereotypic behavior are most effective when they include access to stimuli that are matched to the specific sensory consequences hypothesized to maintain the stereotypy. In an attempt to replicate this finding, we used stimulus preference assessments and a reversal design to evaluate the effectiveness of noncontingent access to highly preferred

stimuli that were matched to the specific sensory consequences hypothesized to be maintaining the stereotypic behavior of an individual with developmental disabilities. The participant was also given noncontingent access to a highly preferred edible stimulus as a control condition. Results indicated that noncontingent access to a matched sensory stimulus produced consistent decreases in aberrant behavior while access to a highly preferred edible stimulus did not.

Ingersoll, B. and Dvortcsak, A. (2006). Including parent training in the early childhood special education curriculum for children with autism spectrum disorders. *Journal of Positive Behavior Interventions*, 8(2), 79-87.

Parent training has been shown to be a very effective method for promoting generalization and maintenance of skills in children with autism. However, despite its well-established benefits, few public school programs include parent training as part of the early childhood special education (ECSE) curriculum. Barriers to the provision of parent training include the need for parent education models that can be easily implemented in ECSE programs and the need for preparation of special educators in parent education strategies. This article describes a parent training model for children with autism developed for use in ECSE programs. The implementation of the program, teacher preparation, and preliminary outcomes and challenges will be discussed.

Ingvarsson, E. T. and Hanley, G. P. (2006). An evaluation of computer-based programmed instruction for promoting teachers' greetings of parents by name. *Journal of Applied Behavior Analysis*, 39(2), 203-214.

Although greeting parents by name facilitates subsequent parent-teacher communication, baseline measures revealed that 4 preschool teachers never or rarely greeted parents by name during morning check-in. To promote frequent and accurate use of parents' names by teachers, the effects of a fully automated computerized assessment and programmed

instruction (CAPI) intervention were evaluated in a multiple baseline design. The CAPI intervention involved assessment and training of relations among parents' and children's pictures and names, and produced rapid learning of parent names. The CAPI intervention also resulted in substantial improvements in the classroom use of parents' names for 3 of the 4 teachers; however, a supervisor-mediated feedback package (consisting of instructions, differential reinforcement, and error correction) was necessary to maintain name use for 2 of those teachers. The practical strengths and limitations of computer-based teacher training are discussed.

Johnson, B. M., Miltenberger, R. G., Knudson, P., Egemo-Helm, K., Kelso, P., Jostad, C. and Langley, L. (2006). A preliminary evaluation of two behavioral skills training procedures for teaching abduction-prevention skills to schoolchildren. *Journal of Applied Behavior Analysis*, 39(1), 25-34.

Although child abduction is a low-rate event, it presents a serious threat to the safety of children. The victims of child abduction face the threat of physical and emotional injury, sexual abuse, and death. Previous research has shown that behavioral skills training (BST) is effective in teaching children abduction-prevention skills, although not all children learn the skills. This study compared BST only to BST with an added in situ training component to teach abduction-prevention skills in a small-group format to schoolchildren. Results showed that both programs were effective in teaching abduction-prevention skills. In addition, the scores for the group that received in situ training were significantly higher than scores for the group that received BST alone at the 3-month follow-up assessment.

Kamps, D., Wendland, M. and Culpepper, M. (2006). Active teacher participation in functional behavior assessment for students with emotional and behavioral disorders risks in general education classrooms. *Behavioral Disorders*, 31(2), 128-146.

This study presents functional assessment data from two second-grade students with behavior and academic problems. Functional assessment procedures included interview, observation, functional analysis, and intervention. Functional analysis conditions, conducted by the classroom teacher, with coaching from the researcher, indicated multiple functions for the behavior. Intervention consisted of teacher attention (praise) and points, and self-management of appropriate responses during group instruction. Intervention during independent seatwork consisted of modeling by the teacher to decrease task difficulty, the use of "help tickets" to request assistance from peers or the teacher, and social attention for task completion. Results indicated improved on-task and decreased disruptive behaviors during function-based intervention. The use of functional assessment in general education settings is discussed.

Kapp, S. A. and Vela, R. H. (2004). The parent satisfaction with foster care services scale. *Child Welfare, 83*(3), 263-287.

Client satisfaction measures are an essential component of program evaluation. This article describes the development of a scale for measuring the satisfaction levels of parents whose children have received foster care services. Subjected to various statistical measures, the Parent Satisfaction with Foster Care Services Scale appears to be a reliable instrument with the promise of utility for social work researchers, practitioners, and administrators.

Klein, D. N., Dougherty, L. R. and Olino, T. M. (2005). Toward guidelines for evidence-based assessment of depression in children and adolescents. *Journal of Clinical Child & Adolescent Psychology, 34*(3), 412-432.

We aim to provide a starting point toward the development of an evidence-based assessment of depression in children and adolescents. We begin by discussing issues relevant to the diagnosis and classification of child and adolescent depression. Next, we review the prevalence, selected clinical correlates, course, and treatment of juvenile

depression. Along with some general considerations in assessment, we discuss specific approaches to assessing depression in youth (i.e., interviews, rating scales) and briefly summarize evidence on the reliability and validity of a few selected instruments. In addition, we touch on the assessment of several other constructs that are important in a comprehensive evaluation of depression (i.e., social functioning, life stress, and family history of psychopathology). Last, we highlight areas in which further research is necessary and conclude with some broad recommendations for clinical practice given the current state of the knowledge.

Luiselli, J. K., Ricciardi, J. N. and Gilligan, K. (2005). Liquid fading to establish milk consumption by a child with autism. *Behavioral Interventions, 20*(2), 155-163.

Liquid avoidance by children with developmental disabilities is a common problem but has not been researched extensively. In this study, a 4-year-old girl who had autism and food selectivity was taught to drink milk through a liquid fading procedure. The feeding protocol consisted of gradually increasing the concentration of milk in a beverage she consumed 100% of the time. Intervention was implemented by educational staff in a school setting. Milk consumption was achieved rapidly without interruption to the fading sequence. Clinical and research issues related to liquid avoidance and fading treatments are discussed.

MacDonald, R., Clark, M., Garrigan, E. and Vangala, M. (2005). Using video modeling to teach pretend play to children with autism. *Behavioral Interventions, 20*(4), 225-238.

Children with autism often fail to develop the rich repertoires of pretend play seen in typically developing children. Video modeling is a teaching methodology that has been shown to produce rapid acquisition of a variety of skills in children with autism. The purpose of the present study was to use video modeling to teach thematic pretend play skills to two preschool children with autism. Scripted play scenarios involving up to 17

verbalizations and 15 play actions by toy figurines were videotaped using adult models. A multiple probe design within child across play sets was used to demonstrate experimental control. Children were shown the video model two times and no further prompting or reinforcement was delivered during training. Results indicated that both children acquired the sequences of scripted verbalizations and play actions quickly and maintained this performance during follow-up probes. These findings are discussed as they relate to types of play and the development of extended play repertoires in young children with autism.

Mash, E. J. and Hunsley, J. (2005). Evidence-based assessment of child and adolescent disorders: Issues and challenges. *Journal of Clinical Child & Adolescent Psychology, 34*(3), 362-379.

The main purpose of this article and this special section is to encourage greater attention to evidence-based assessment (EBA) in the development of a scientifically supported clinical child and adolescent psychology. This increased attention is especially important in light of (a) the omission of assessment considerations in recent efforts to promote evidence-based treatments for children and (b) ongoing changes in the nature of clinical child assessment. We discuss several key considerations in the development of guidelines for EBA, including the purposes of assessment, the role of disorder or problem specificity, the scope of assessment, assessment process parameters, possible "cross-cutting" assessment issues, psychometric considerations, and issues related to the clinician's integration of assessment data. We conclude the article with suggestions for how current, summary information on EBA can be developed, maintained, and disseminated.

McCartney, E. J., Anderson, C. M. and English, C. L. (2005). Effect of brief clinic-based training on the ability of caregivers to implement escape extinction. *Journal of Positive Behavior Interventions, 7*(1), 18-32.

Escape extinction has been demonstrated to be an effective treatment for children exhibiting food refusal. To date, most studies have been conducted in inpatient treatment settings by trained clinicians. Few studies have evaluated the extent to which caregivers are able to implement efficacious interventions in their home for their food-selective child. This study evaluated a systematic strategy for training caregivers to implement escape extinction. A modified changing-criterion design was used to evaluate a clinic-based training procedure consisting of escape extinction and differential reinforcement. After participants met prespecified criteria with regard to the number of bites accepted and latency until acceptance, caregivers were taught to implement the procedure in the clinic. After criteria were met with caregivers feeding their children, caregivers were taught to implement the procedure during meals conducted at their home. Follow-up data conducted for three participants indicated that generalization across time and food types had occurred.

McCord, B. E. and Neef, N. A. (2005). Leisure items as controls in the attention condition of functional analyses. *Journal of Applied Behavior Analysis, 38*(3), 417-426.

Leisure items (e.g., games, toys) are commonly made available as controls during attention conditions of functional analyses. However, Ringdahl et al. raised questions about this practice (see record 2003-04327-010). This paper reviews research that supports and conflicts with the inclusion of leisure items as controls, including a quantitative analysis of relevant articles published in the *Journal of Applied Behavior Analysis* over a 10-year period. Data reviewed suggest that practitioners may consider omitting leisure items as controls or including such items strategically based on the accumulation of assessment information.

McDiarmid, M. D. and Bagner, D. M. (2005). Parent child interaction therapy for children with disruptive behavior and developmental disabilities. *Education & Treatment of Children, 28*(2), 130-141.

Children with developmental disabilities (DD) often present with comorbid disruptive behavior problems that may negatively affect their education, treatment, and social interactions. Therefore, treatments that reduce disruptive behavior in children with OD are critical. Three characteristics strongly suggest that PCIT is an appropriate treatment choice among children with DD: PCIT shares several features with treatments that have demonstrated efficacy for children with DD in single case design studies; PCIT needs little modification to be effective with children with DD; and PCIT is an evidence-based treatment for disruptive behavior in typically developing children. Techniques for adapting PCIT for children with DD are presented. Further research is suggested to augment anecdotal evidence for the effectiveness of PUT with this population.

McDougall, D. (2005). The range-bound changing criterion design. *Behavioral Interventions, 20*(2), 129-137.

This article describes a novel form of the classic changing criterion design called the range-bound changing criterion design. The article illustrates the new design by reporting results from the first study to use this simple variation of the changing criterion design. The article also identifies other interventions, target behaviors, and contexts for which the range-bound changing criterion design is useful, as well as guidelines and rationales for using this new design.

McMahon, R. J. and Frick, P. J. (2005). Evidence-based assessment of conduct problems in children and adolescents. *Journal of Clinical Child & Adolescent Psychology, 34*(3), 477-505.

This article provides a summary of research in 4 areas that have direct and important implications for evidence-based assessment of children and adolescents with conduct problems (CP): (a) the heterogeneity in types and severity of CP, (b) common comorbid conditions, (c) multiple risk factors associated with CP, and (d) multiple developmental pathways to CP. For each of these domains, we discuss implications for evidence-based

assessment, present examples of specific measures that can aid in such assessments, and provide recommendations for evidence-based assessment of CP in children and adolescents. We conclude that there is a need to (a) enhance the clinical utility of evidence-based measures for assessing CP; (b) increase attention to the sensitivity of such measures to change, for both treatment evaluation and monitoring; and (c) develop assessment methods that reliably and validly identify a child or adolescent's placement and progress on the various developmental pathways to CP.

McNeil, C. B., Herschell, A. D., Gurwitsch, R. H. and Clemens-Mowrer, L. (2005). Training foster parents in parent-child interaction therapy. *Education & Treatment of Children, 28*(2), 182-196.

Parent-Child Interaction Therapy (PCIT) is an empirically supported, parent-training program designed to teach parents specific techniques to manage the behavior of children between the ages of two and seven exhibiting extreme disruptive behavior. Over 30 published studies (see Herschell, Calzada, Eyberg, & McNeil, 2002b for a review) have lent support to the efficacy of this clinic-based program. The current paper will highlight the need for disruptive behavior disorder treatment for children in foster care, discuss the appropriateness of applying PCIT to children in foster care, and report on the effectiveness of and reported satisfaction with a modified procedure for training foster parents in PCIT skills.

Miltenberger, R. G., Gatheridge, B. J., Satterlund, M., Egemo-Helm, K. R., Johnson, B. M., Jostad, C., Kelso, P. and Flessner, C. A. (2005). Teaching safety skills to children to prevent gun play: An evaluation of in situ training. *Journal of Applied Behavior Analysis, 38*(3), 395-398.

This study evaluated behavioral skills training with added in situ training for teaching safety skills to prevent gun play. Following baseline, each child received two sessions of behavioral skills training and one in situ training session. Additional in situ training sessions were

conducted until the child exhibited the safety skills (don't touch the gun, get away, and tell an adult). All children acquired and maintained the safety skills at a 3-month follow-up. In addition, of the 7 children assessed in a dyad situation, all exhibited the correct skills in the presence of another child.

Minke, K. M. and Anderson, K. J. (2005). Family-school collaboration and positive behavior support. *Journal of Positive Behavior Interventions*, 7(3), 181-185.

Positive behavior support (PBS) offers schools a structured approach to address children's behavior from the individual level to the school-wide level. PBS practitioners can expect family-school collaboration efforts to be similarly challenging. This article reviews some of those challenges briefly, then advocates for ways in which family-school collaboration efforts can complement PBS initiatives in schools. Parent involvement in children's education is an important goal, but care must be taken in how such involvement is encouraged. There is emerging evidence that family-school collaboration principles can be effectively applied to a broad spectrum of school issues. There is an emphasis on relationship building at all levels of the system and empowerment of both teachers and families is a key component. Despite increasing illustrations of the advantages of family-school collaboration, implementation in schools has been slow. Involving families effectively at all levels of PBS is challenging yet critical to meaningful implementation. Trusting, respectful relationships among teachers and families appear to be the foundation of successful interventions.

Najdowski, A. C., Wallace, M. D., Penrod, B. and Cleveland, J. (2005). Using stimulus variation to increase reinforcer efficacy of low preference stimuli. *Behavioral Interventions*, 20(4), 313-328.

Recent research findings suggest that low preference stimuli can be effective reinforcers. This study compared responding to high preference and low preference stimuli under continuous reinforcement. Results demonstrated that responding was greater

when a high preference stimulus was presented. Other research findings suggest that stimulus variation increases the potency of reinforcers perceived to be of high preference. This study extended this line of research by evaluating whether stimulus variation would increase the potency of low preference stimuli. Results demonstrated that when three low preference stimuli were presented in a varied fashion, responding corresponded with the levels obtained when a high preference stimulus was presented. Furthermore, a varied reinforcer presentation of low preference stimuli was found to increase and maintain high percentages of correct responding and on-task behavior to levels equal to those obtained with a high preference stimulus during a discrete trial preparation.

Ndoro, V. W., Hanley, G. P., Tiger, J. H. and Heal, N. A. (2006). A descriptive assessment of instruction-based interactions in the preschool classroom. *Journal of Applied Behavior Analysis*, 39(1), 79-90.

The current study describes preschool teacher-child interactions during several commonly scheduled classroom activities in which teachers deliver instructions. An observation system was developed that incorporated measurement of evidence-based compliance strategies and included the types of instructions delivered (e.g., integral or deficient directives, embedded directives, "do" or "don't" commands), the children's behavior with respect to the instructions (e.g., compliance, noncompliance, active avoidance, problem behavior), and the differential responses of the teacher to the child's behavior following an instruction (e.g., appropriate or inappropriate provision of attention and escape). After 4 classroom teachers were observed at least five times in each of five target activities, simple and conditional probabilities were calculated. Results indicated that (a) the frequency of instruction and probability of compliance varied as a function of activity type, (b) "do" commands and directive prompts were delivered almost to the exclusion of "don't" commands and nondirective prompts, (c) the likelihood of compliance was highest following an embedded or an integral directive prompt,

and (d) although putative social reinforcers were more likely to follow noncompliance than compliance and were highly likely following problem behavior, compliance occurred over twice as much as noncompliance, and problem behavior during instructions was very low. Implications for using descriptive assessments for understanding and improving teacher-child interactions in the preschool classroom are discussed.

Nesmith, A. (2006). Predictors of running away from family foster care. *Child Welfare, 85*(3), 585-609.

Running away is a frequent but little studied phenomenon among adolescents in foster care. Repeated running from care often leads to premature discharge and homelessness for youth. This article uses cumulative risk theory in the context of normative adolescent development to investigate predictors of running away from foster care. Results indicate risks stemming from individual, foster home, and child welfare system sources, which offer some insight for prevention and intervention.

Pelham, J., William E., Fabiano, G. A. and Massetti, G. M. (2005). Evidence-based assessment of attention deficit hyperactivity disorder in children and adolescents. *Journal of Clinical Child & Adolescent Psychology, 34*(3), 449-476.

This article examines evidence-based assessment practices for attention deficit hyperactivity disorder (ADHD). The nature, symptoms, associated features, and comorbidity of ADHD are briefly described, followed by a selective review of the literature on the reliability and validity of ADHD assessment methods. It is concluded that symptom rating scales based on the Diagnostic and Statistical Manual of Mental Disorders (4th ed. [DSM-IV]; American Psychiatric Association, 1994), empirically and rationally derived ADHD rating scales, structured interviews, global impairment measures, and behavioral observations are evidence-based ADHD assessment methods. The most efficient assessment method is

obtaining information through parent and teacher rating scales; both parent and teacher ratings are needed for clinical purposes. Brief, non-DSM based rating scales are highly correlated with DSM scales but are much more efficient and just as effective at diagnosing ADHD. No incremental validity or utility is conferred by structured interviews when parent and teacher ratings are utilized. Observational procedures are empirically valid but not practical for clinical use. However, individualized assessments of specific target behaviors approximate observations and have both validity and treatment utility. Measures of impairment that report functioning in key domains (peer, family, school) as well as globally have more treatment utility than nonspecific global measures of impairment. DSM diagnosis per se has not been demonstrated to have treatment utility, so the diagnostic phase of assessment should be completed with minimal time and expense so that resources can be focused on other aspects of assessment, particularly treatment planning. We argue that the main focus of assessment should be on target behavior selection, contextual factors, functional analyses, treatment planning, and outcome monitoring.

Petscher, E. S. and Bailey, J. S. (2006). Effects of training, prompting, and self-monitoring on staff behavior in a classroom for students with disabilities. *Journal of Applied Behavior Analysis, 39*(2), 215-226.

This study extended the limited research on the utility of tactile prompts and examined the effects of a treatment package on implementation of a token economy by instructional assistants in a classroom for students with disabilities. During baseline, we measured how accurately the assistants implemented a classroom token economy based on the routine training they had received through the school system. Baseline was followed by brief in-service training, which resulted in no improvement of token-economy implementation for recently hired instructional assistants. A treatment package of prompting and self-monitoring with accuracy feedback was then introduced as a multiple baseline design across behaviors. The treatment package was successfully

faded to a more manageable self-monitoring intervention. Results showed visually significant improvements for all participants during observation sessions.

Pincus, D. B., Eyberg, S. M. and Choate, M. L. (2005). Adapting parent-child interaction therapy for young children with separation anxiety disorder. *Education & Treatment of Children, 28*(2), 163-181.

Separation Anxiety Disorder (SAD) is currently the most prevalent, yet most under-researched anxiety disorder in childhood. To date, there have been few studies investigating the efficacy of interventions for young children with SAD. The primary purpose of this paper is to describe the process of tailoring Parent Child Interaction Therapy (PCIT) for young children aged 4-8 with SAD. The paper provides a theoretical rationale for using PCIT to treat young children with SAD. The first randomized clinical trial for young children with SAD is then described. The paper focuses on the process of adapting PCIT to make it most relevant for children with SAD. The specific challenges and rewards of conducting PCIT with anxious children and their parents are presented.

Rapp, J. T. (2005). Some effects of audio and visual stimulation on multiple forms of stereotypy. *Behavioral Interventions, 20*(4), 255-272.

Three experiments were conducted to evaluate the effects of audio and visual stimulation, alone or in combination, on the behavior of three children who displayed multiple forms of stereotypy (e.g., hand mouthing, body rocking). The results of experiment 1 showed that all three participants displayed different forms of stereotypy when audio and visual stimulation were provided versus when no stimulation was provided. The results of experiments 2 and 3 showed that the form of one participant's stereotypy, but not the other two, changed when visual stimulation and audio stimulation were presented separately. Overall, the results suggest that ambient

stimulation may influence both the form of and time allocation to stereotypy.

Rapp, J. T. (2005). An assessment of preference for caregivers and antecedents for problem behavior. *Behavioral Interventions, 20*(4), 301-311.

A young boy's problem behavior (e.g., hand biting, jumping) was evaluated in two experiments. In Experiment 1, the participant's relative preference for three caregivers was assessed using a concurrent operants procedure. During each session, only one individual in the pair provided attention contingent on physical proximity. The results indicated that the participant had a relative preference for attention from his mother. In Experiment 2, the participant's behavior was evaluated during antecedent conditions involving noncontingent maternal attention and no maternal attention. The results showed that problem behavior was displayed almost exclusively when noncontingent attention was provided. The potential role of adventitious reinforcement is briefly discussed.

Roberts, C., Mazzucchelli, T., Studman, L. and Sanders, M. R. (2006). Behavioral family intervention for children with developmental disabilities and behavioral problems. *Journal of Clinical Child & Adolescent Psychology, 35*(2), 180-193.

The outcomes of a randomized clinical trial of a new behavioral family intervention, Stepping Stones Triple P, for preschoolers with developmental and behavior problems are presented. Forty-eight children with developmental disabilities participated, 27 randomly allocated to an intervention group and 20 to a wait-list control group. Parents completed measures of parenting style and stress, and independent observers assessed parent-child interactions. The intervention was associated with fewer child behavior problems reported by mothers and independent observers, improved maternal and paternal parenting style, and decreased maternal stress. All effects were maintained at 6-month follow-up.

Roscoe, E. M., Fisher, W. W., Glover, A. C. and Volkert, V. M. (2006). Evaluating the relative effects of feedback and contingent money for staff training of stimulus preference assessments. *Journal of Applied Behavior Analysis, 39*(1), 63-77.

Performance feedback has facilitated the acquisition and maintenance of a wide range of behaviors (e.g., health-care routines, seat-belt use). Most researchers have attributed the effectiveness of performance feedback to (a) its discriminative functions, (b) its reinforcing functions, or (c) the combination of the two. In this study, we attempted to evaluate the relative contributions of the discriminative and reinforcing functions of performance feedback by comparing a condition in which the discriminative functions were maximized and the reinforcing functions were minimized (i.e., performance-specific instructions without contingent money) with one in which the reinforcing functions were maximized and the discriminative functions were minimized (i.e., contingent money with no performance-specific instructions). We compared the effects of these two conditions on the acquisition of skills involved in conducting two commonly used preference assessments. Results showed that acquisition of these skills occurred primarily in the condition with performance-specific instruction without contingent money, suggesting that the delivery of performance-specific instructions was critical to skill acquisition, whereas the delivery of contingent money had little effect.

Scott, T. M., Liaupsin, C., Nelson, C. M. and McIntyre, J. (2005). Team-based functional behavior assessment as a proactive public school process: A descriptive analysis of current barriers. *Journal of Behavioral Education, 14*(1), 57-71.

Although functional behavior assessment (FBA) has been widely recognized as a promising practice for providing proactive interventions with students exhibiting challenging behaviors in typical schools, questions persist as to how FBA should best be trained and used in such public settings. Debate has balanced the issue of what is practical for public school personnel and

whether FBA can ever reach that level of practicality while maintaining a level of integrity necessary to be a valid technology for behavior intervention. This paper presents a descriptive analysis of the perceptions and practices of 13 school-based FBA teams that included one or more members who received a 1-day workshop on FBA. Teams were asked to respond to a brief questionnaire regarding their perceptions of the process, what information they found useful, and how that information was used. Results indicate several problem issues and barriers that must be addressed before team-based FBA is widely advocated and practiced in public school settings. Sample team responses and discussion of future directions are included.

Scott, T. M., McIntyre, J., Liaupsin, C., Nelson, C. M., Conroy, M. and Payne, L. D. (2005). An examination of the relation between functional behavior assessment and selected intervention strategies with school-based teams. *Journal of Positive Behavior Interventions, 7*(4), 205-215.

Although functional behavior assessment (FBA) is widely advocated as best practice in developing effective behavior intervention plans for students with challenging behaviors, there is no compelling evidence supporting the ability of school-based personnel to use the outcomes of FBA to develop effective interventions. In this study, selected staff members from four elementary schools were trained in how to use the outcomes of an FBA to develop function-based intervention plans. They then formed school-based intervention teams and served as facilitators for a total of 31 cases. The same cases also were distributed to three national FBA experts who selected interventions based on the identified function for each case. The number and type of selected intervention strategies were recorded and analyzed across cases. Comparisons between team and expert intervention strategy selection revealed that school-based personnel in this study were more likely to select punitive and exclusionary strategies regardless of function. Thus, in real-world school settings, the link between FBA and intervention is far more complex than has been recognized or discussed in the literature. Discussion focuses on possible

explanations for the finding that school-based teams tend to gravitate toward more negative and exclusionary strategies, even when mediated by a trained FBA facilitator.

Silverman, W. K. and Ollendick, T. H. (2005). Evidence-based assessment of anxiety and its disorders in children and adolescents. *Journal of Clinical Child & Adolescent Psychology*, 34(3), 380-411.

We provide an overview of where the field currently stands when it comes to having evidence-based methods and instruments available for use in assessing anxiety and its disorders in children and adolescents. Methods covered include diagnostic interview schedules, rating scales, observations, and self-monitoring forms. We also discuss the main purposes or goals of assessment and indicate which methods and instruments have the most evidence for accomplishing these goals. We also focus on several specific issues that need continued research attention for the field to move forward toward an evidence-based assessment approach. Finally, tentative recommendations are made for conducting an evidence-based assessment for anxiety and its disorders in children and adolescents. Directions for future research also are discussed.

Stichte, J. P. and Conroy, M. A. (2005). Using structural analysis in natural settings: A responsive functional assessment strategy. *Journal of Behavioral Education*, 14(1), 19-34.

Since the reauthorization of IDEA (1997), the use of functional assessments to examine factors that are related to students' challenging behaviors has gained increasing attention in the literature. Over the past five years, several groups of investigators have conducted systematic analyses of the current status of the use of functional assessment in relation to students with or at risk for emotional/behavioral disorders (EBD). Their findings outline a number of critical, applied research issues for the field to consider. The purpose of this paper is to respond to a number of these issues by highlighting the relevance of structural analysis in addition to

and in some cases in lieu of more traditional functional assessments. A brief review of current trends in the functional assessment research is presented as well as a rationale for the use of structural analysis to examine the occurrence of appropriate behavior for students with EBD. Finally, illustrations of studies conducting structural analyses in classrooms settings are provided.

Symon, J. B. (2005). Expanding interventions for children with autism: Parents as trainers. *Journal of Positive Behavior Interventions*, 7(3), 159-173.

The number of individuals diagnosed with autism has risen at an alarming rate. Expanding services should be a primary consideration of programs for children and their families. This article presents outcome data from a week-long parent education program for families of children with autism to suggest that parents can learn not only how to effectively implement strategies into their interactions with their children but also to train others who work with their children. Single-case research methods were used to assess the spread of effect of a parent education program from parents to other care providers. Results indicate that parents successfully trained others to implement the techniques presented during the program. Additionally, the children's social communication and behaviors improved during interactions with the other caregivers.

Taylor, B. A., Hoch, H. and Weissman, M. (2005). The analysis and treatment of vocal stereotypy in a child with autism. *Behavioral Interventions*, 20(4), 239-253.

This study examined procedures for the assessment and treatment of automatically reinforced vocal stereotypy of a 6-year-old girl with autism. Stimulus assessments were conducted to identify toys that were correlated with higher rates of vocal stereotypy and toys that were not. A concurrent operants assessment identified preferred stimuli (toys that produced auditory stimulation), which were then used as reinforcers for the non-occurrence of vocal stereotypy. A reversal design was used to

compare the effects of a fixed time schedule of reinforcement (FT 1-min) to differential reinforcement for the non-occurrence of behavior (DRO) to reduce vocal stereotypy. Implementation of the FT schedule revealed no effect, whereas the DRO schedule led to a reduction in the target behavior during treatment sessions and across the school day. This study adds to the body of literature supporting the identification of matched stimuli to reduce non-socially mediated problem behavior.

Tiger, J. H. and Hanley, G. P. (2006). Using reinforcer pairing and fading to increase the milk consumption of a preschool child. *Journal of Applied Behavior Analysis, 39*(3), 399-403.

The present study replicates and extends previous research on the treatment of food selectivity by implementing pairing and fading procedures to increase a child's milk consumption during regularly scheduled preschool meals. The treatment involved mixing a small amount of chocolate syrup into a glass of milk and gradually eliminating the chocolate. The procedure and data collection were implemented by preschool teachers and resulted in increased milk drinking at school, which was maintained at home.

Tiger, J. H., Hanley, G. P. and Hernandez, E. (2006). An evaluation of the value of choice with preschool children. *Journal of Applied Behavior Analysis, 39*(1), 1-16.

The current study examined the reinforcing effects of choosing among alternatives in a four-part evaluation. In the first study, initial-link responses in a concurrent-chains arrangement resulted in access to terminal links in which the completion of an academic task resulted in (a) the choice of a reinforcer (choice), (b) the delivery of an identical reinforcer (no choice), or (c) no material reinforcer (control). Three patterns of responding emerged: persistent preference for choice (3 participants); initial preference for choice, which did not persist (2 participants); and preference for no choice (1 participant). Additional evaluations determined if preference for choice could be enhanced (Study 2) or established (Study 3)

by including more stimuli from which to choose. Choice-link selections systematically increased for all participants when more items were available from which to choose. Study 4 identified the precise value of the opportunity to choose by progressively increasing the response requirement during the choice terminal links for 3 children and determining the point at which these children stopped selecting the choice link. All children continued to select the choice link even when the work required in the choice link was much greater than that arranged in the no-choice link.

van Vonderen, A. and de Bresser, A. (2005). The effect of supervisory feedback, self-recording, and graphic feedback on trainer behavior during one-to-one training. *Behavioral Interventions, 20*(4), 273-284.

The effectiveness of supervisory feedback, self-recording, and graphic feedback on trainer behavior during one-to-one training sessions was assessed with three trainers, and three students with mental retardation. Supervisory feedback consisted of a supervisor interrupting the course of the training if an error occurred, administering appraisal when accurate trainer behavior occurred, and prompting the trainer to avoid errors. Following this, self-recording and graphic feedback were in effect. During the latter condition, the trainer was instructed to record her own behavior, to graph the data following each training session, and to set a goal to increase her performance. Data were collected in a quasi non-concurrent multiple baseline design across dyads of trainers and students. The results showed a statistically significant increase of accurate trainer behavior during supervisory feedback, which was maintained during the condition of self-recording and graphic feedback. Maintenance of trainer behavior was recorded during follow-up. The trainers rated supervisory feedback as more acceptable than self-recording and graphic feedback.

Vaughn, B. J., White, R., Johnston, S. and Dunlap, G. (2005). Positive behavior support as a family-centered endeavor. *Journal of Positive Behavior Interventions, 7*(1), 55-58.

The authors administered a federally funded project for families who have school-age children with developmental disabilities and challenging behavior. Part of the project consisted of a 6-week group that focused on helping the families develop positive behavior support plans for their children. The authors discuss the effects of child-focused behavior support on families. This discussion is complemented by a case example in which a grandmother's work environment improved as a function of her grandson's improved behavior at school. This case emphasizes the interconnectedness of family members' lives and the importance of a broad quality-of-life perspective on the enterprise of all behavioral interventions.

Volkert, V. M., Lerman, D. C. and Vorndran, C. (2005). The effects of reinforcement magnitude on functional analysis outcomes. *Journal of Applied Behavior Analysis, 38*(2), 147-162.

The duration or magnitude of reinforcement has varied and often appears to have been selected arbitrarily in functional analysis research. Few studies have evaluated the effects of reinforcement magnitude on problem behavior, even though basic findings indicate that this parameter may affect response rates during functional analyses. In the current study, 6 children with autism or developmental disabilities who engaged in severe problem behavior were exposed to three separate functional analyses, each of which varied in reinforcement magnitude. Results of these functional analyses were compared to determine if a particular reinforcement magnitude was associated with the most conclusive outcomes. In most cases, the same conclusion about the functions of problem behavior was drawn regardless of the reinforcement magnitude.

Wacker, D., Berg, W., Harding, J. and Cooper-Brown, L. (2004). Use of brief experimental analyses in outpatient clinic and home settings. *Journal of Behavioral Education, 13*(4), 213-226.

We describe the historic and current use of brief experimental analysis procedures in

outpatient clinic and home settings. We discuss some applications of the designs and suggest design modifications for improving internal validity. We describe our application of the designs to longitudinal, in-home programs for children with severe behavior disorders and demonstrate how related versions of brief experimental analysis procedures can be linked to form a more comprehensive evaluation.

Wells, K. C., Hinshaw, S. P., Pfiffner, L., Owens, E. B., Abikoff, H. B., Elliott, G. R., Hechtman, L., Jensen, P. S., Newcorn, J. H., Severe, J. B., Vitiello, B., Chi, T. C., Epstein, J. N., Nebel-Schwalm, M., Arnold, L. E., Conners, C. K., Greenhill, L. L., Hoza, B., March, J. and Peiham, W. E. (2006). Treatment-related changes in objectively measured parenting behaviors in the multimodal treatment study of children with attention-deficit/hyperactivity disorder. *Journal of Consulting & Clinical Psychology, 74*(4), 649-657.

The present study examined treatment outcomes for objectively measured parenting behavior in the Multimodal Treatment Study of Children with Attention-Deficit/Hyperactivity Disorder (ADHD). Five hundred seventy-nine ethnically and socioeconomically diverse children with ADHD-combined type (ages 7.0-9.9 years) and their parent(s) were recruited at 6 sites in the United States and Canada and randomly assigned to 1 of 4 treatment groups for 14 months of active intervention: medication management (MedMgt), intensive behavior therapy, combination of the 2 (Comb), or a community-treated comparison (CC). Baseline and posttreatment laboratory observations of parent-child interactions were coded by observers blind to treatment condition. Comb produced significantly greater improvements in constructive parenting than did MedMgt or CC, with effect sizes approaching medium for these contrasts. Treatment effects on child behaviors were not significant. The authors discuss the importance of changes in parenting behavior for families of children with ADHD and the need for reliable and objective measures in evaluating treatment outcome.

Wilder, D. A., Atwell, J. and Wine, B. (2006). The effects of varying levels of treatment integrity on child compliance during treatment with a three-step prompting procedure. *Journal of Applied Behavior Analysis, 39*(3), 369-373.

The effects of three levels of treatment integrity (100%, 50%, and 0%) on child compliance were evaluated in the context of the implementation of a three-step prompting procedure. Two typically developing preschool children participated in the study. After baseline data on compliance to one of three common demands were collected, a therapist implemented the three-step prompting procedure at three different integrity levels. One integrity level was associated with each demand. The effects of the integrity levels were examined using multielement designs. The results indicate that compliance varied according to the level of treatment integrity that was in place.

Wilder, D. A., Chen, L., Atwell, J., Pritchard, J. and Weinstein, P. (2006). Brief functional analysis and treatment of tantrums associated with transitions in preschool children. *Journal of Applied Behavior Analysis, 39*(1), 103-107.

A brief functional analysis was used to examine the influence of termination of prechange activities and initiation of postchange activities on tantrums exhibited by 2 preschool children. For 1 participant, tantrums were maintained by access to certain (pretransition) activities. For a 2nd participant, tantrums were maintained by avoidance of certain task initiations. Although advance notice of an upcoming transition was ineffective, differential reinforcement of other behavior plus extinction reduced tantrums for both participants.

Williams, G., Sears, L. and Allard, A. (2006). Parent perceptions of efficacy for strategies used to facilitate sleep in children with autism. *Journal of Developmental & Physical Disabilities, 18*(1), 25-33.

Autism is a relatively common developmental disability that has neurobiological origins and

is characterized by pervasive deficits in social interaction, communication and range of interests. In a previously published article, the authors described commonly occurring sleep problems in children with autism [Williams, P. G., Sears, L. L., and Allard, A. (2004). *J. Sleep Res. 13*: 265-268.] Current estimates of sleep disorders in this population range from 44 to 83% [Richdale, A. (1999). *Develop. Med. Child Neurol. 41*: 60-66]. Parents often have to devise their own strategies for dealing with sleep problems. This study surveyed interventions being used by families of children with autism. Likert-based surveys were sent out to 500 families of autistic children with 210 returned. Based on records of psychological testing, survey responses for these children were categorized into mental retardation (MR) or not mental retardation (not MR) groups. Among the most frequently used behavior interventions for both groups were establishing a regular bedtime and waking time, providing a darkened room, reading to the child, and providing toys to play with in bed. Behavioral strategies considered most effective included establishing a regular bedtime, bringing the child into the parents'™ bed, wrapping the child, using a noise masker, and allowing the child to have toys in his bed. When surveys were divided into MR/not MR groups, some differences in perceived effectiveness of behavioral interventions for sleep were noted. Reading a story and using a nightlight were perceived as much less effective for the MR group as compared to those in the not MR group. In general, medications were used much less frequently than behavioral interventions to help with sleep. When comparisons between the MR/not MR groups were made, no statistically significant differences were seen for perceived effectiveness of medications.

Wright-Gallo, G. L., Higbee, T. S., Reagon, K. A. and Davey, B. J. (2006). Classroom-based functional analysis and intervention for students with emotional/behavioral. *Education & Treatment of Children, 29*(3), 421-436.

We conducted functional analyses of disruptive behavior in a classroom setting for two students of typical intelligence with

emotional/behavioral disorders (E/BD) using the classroom teacher to implement functional analysis conditions. The functional analyses suggested that both participants' disruptive behavior was maintained by escape from task demands and access to attention. Based on this information, we implemented a DRA procedure in which participants could request either escape or attention while disruption was placed on extinction. DRA decreased the disruptive behavior of both participants and the schedule of reinforcement was successfully thinned to a level that was practical for the classroom teacher to consistently implement.

Youngstrom, E. A., Findling, R. L., Kogos Youngstrom, J. and Calabrese, J. R. (2005). Toward an evidence-based assessment of pediatric bipolar disorder. *Journal of Clinical Child & Adolescent Psychology, 34*(3), 433-448.

This article outlines a provisional evidence-based approach to the assessment of pediatric bipolar disorder (PBD). Public attention to PBD and the rate of diagnosis have both increased substantially in the past decade. Accurate diagnosis is crucial to avoid harm due to mislabeling or unnecessary medication exposure. Because there are no proven efficacious or effective treatments for PBD, the role of assessment is heightened to demonstrate efficacy in individual cases as well as to identify cases for participation in clinical trials. This review discusses (a) the state of psychopathology research regarding PBD; (b) the likely base rate of PBD in multiple clinical settings; (c) the diagnostic value of family history; (d) challenges to differential diagnosis, including comorbidity and symptom overlap with other diagnoses, shortcomings in contemporary assessment methods, and the cyclical nature of PBD; (e) practical methods for improving diagnosis, focusing on the most discriminative symptoms, extending the temporal window of assessment to capture mood changes, and using screening tools within an actuarial framework; and (f) monitoring response to treatment using a variety of assessment methods. Twelve recommendations are offered to move toward an evidence-based assessment model for PBD.