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From the Editor

Running Away

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Welcome to another edition of Behavioral Parenting Abstracts. Our most recent prior issue marked the first occasion for a “tips of parents” section. I received a great deal of (positive) feedback on that section, but it was mostly from professionals. We would really like to know if parents are reading that section. To help ensure that parents read the “tips” section, could you please share it with parents with whom you work?

In addition to the parenting tips section, we will continue to have sections designed mainly for professionals working with children and families. These sections include a brief literature review, abstracts related to the brief literature review, and other abstracts related to parenting that have been published since the time of our previous issue.

The “Tips for Parents” section in the current issue is an article written by a Camille Pauly,

who has worked in the field of behavioral parenting for many years and is herself of parent! Luanne Witherup and David Lee, who are both senior behavior analysts on the Florida BASP project, author the “Brief Literature Review” section. Luanne has authored research on the problem of running away and David was instrumental in one of our first evaluations of interventions for the problem of running away.

I have received many emails with comments and suggestions for future topics (which is fine, I enjoy them), but the staff of Behavioral Parenting Abstracts would enjoy hearing directly from you with ideas for future topics. The email address is listed in the box below.

Timothy R. Vollmer

We would like to hear from our readers! Please send your comments and suggestions to:
bpabstracts@gmail.com



Improving Your Relationship with Your Child

Tips for Parents:

Camille Pauly
University of Florida

The better the relationship you have with your child the greater the impact you can have on their lives. Here are a few tips to help you build a stronger relationship with your child.

- Identify activities and items that your child likes. You want to find out which activities your child enjoys and what items your child likes to have. The activities could range from watching a movie to hiking, from talking about video games to talking about their day at school. The items they like could range from an ice cream cone to a new bike. Your child's preferences will change so you should always keep an eye out for what he or she is currently interested in. To identify your child's preferences:
 - Watch your child. What does your child do with his free time?
 - Listen to your child. What does your child ask for or what does she ask to do?
 - Ask your child. Ask your child what he likes to do and what he would like to have.
- Associate yourself with things your child likes. Once you know what activities your child enjoys you should do some of those things with her.
- When you are together stay focused on your child, talk about topics she enjoys and listen to what she has to say. For example, take your child to the park and listen to her tell you about her favorite television program.
- Be careful not to give your child access to preferred items and activities while she is doing something that you do not want her to do.
- If your child is interested in time consuming or expensive activities and items, you can give her opportunities to earn them such as using a contract. (See Volume 4, Number 2 of Behavioral Parenting Abstracts)
- Recognize your child's accomplishments. When your child is doing something that you like, use praise. Tell your child what you like that he is doing. Tell him as soon as you notice. Use praise often but keep it brief. For example, if your child puts away the dishes say "Thank you for putting away the dishes, that is very helpful." You could also reward his behavior by adding, for example, "You have earned some extra time to ride your bike."
- For older children, such as teens, the recognition can be more subtle and age appropriate (e.g., "Thanks").

- **Be consistent and follow through.** Be consistent with rules and consequences. Being consistent lets your child know what to expect. Wavering on rules and consequences confuses your child about which rules she has to follow and what will happen if she breaks them.
- **Follow through on consequences and promises.** If you tell your child that he will earn something for good behavior, be sure to deliver. The same goes for promises. That way the next time that you make a promise or set a consequence your child will trust that what you say.
- **Be a safe person to talk to.** When your child comes to you to talk, be a good listener and control your reactions. Let your child speak and ask him for more information. If he tells you about something he did wrong or about something you do not like, control your reaction.
- **Praise your child for coming to you and talking to you.** When you deliver consequences for an inappropriate behavior make sure that you do not discourage your child's confessions. This will encourage your child to be open with you and will allow you to be involved in your child's life.
- **Make home a nice place to be.** You may not always be available to do your child's favorite things, so be sure to have a number of things for your child to do around the house. Have

activities available that your child can use freely. For example, you could have video games, television, board games, books, magazines, and toys. When your child is doing something without you be sure to check in on her often. You should let her know that you are available or let her know when you will be available and that you appreciate her waiting.

Runaways: A Brief Review of the Literature

**Luanne Witherup & David E. Lee
University of Florida**

Perhaps more so than any other group of children, runaways face a particularly grim future, including risk of sexual and physical abuse, prostitution, substance abuse, criminal activity, emotional difficulties, and HIV (Biehal & Wade, 1999). A study by Hammer, Finkelhor and Sedlak (2002) estimated that, in 1999, approximately 1,682,900 children, representing approximately 2.6% of all youth in the United States, either ran away from home or were forced out by their caretakers (U. S. Bureau of the Census, 2000). Although a number of programs exist to assist runaway youth (e.g., National Runaway Switchboard), most research studies on runaway children are concerned with profiling runaway youth to predict who will or will not run (Cohen, MacKenzie, & Yates, 1991). Unfortunately, only a handful of studies evaluate treatment programs and even fewer attempt an

experimental analysis of the variables that contribute to the runaway behavior in the first place. This article briefly surveys research on the assessment and treatment of running away and offers suggestions for a systematic approach to understanding this extremely serious problem behavior.

Research on Risk Factors

Kaplan (2004) observed, "Enormous variability exists in the data on children who run from care and the manner in which they are described." The assortment of definitions and research methods utilized by researchers has made profiling runaways or predicting which children are likely to run difficult. Wide variety exists in the literature on the definition of runaway. For example, the state of Florida defines a runaway as, "any child age 12 or older whose whereabouts are currently unknown who is believed to have left his or her placement voluntarily and has been missing for more than four (4) consecutive hours from the time that it was learned that the child's location was unknown" (Florida Department of Children and Families, 2006). In contrast, the Child Welfare League of America defines a runaway as any child that is missing for 12 hours or overnight (Kaplan, 2004). Some studies define a runaway as any child that reports to have runaway at least once (Sanchez, Waller, and Greene, 2006). In many studies, being a runaway is defined as simply the presence of a youth in a runaway or youth shelter (e.g., Slesnick, 2001; Yoder, Whitbeck, and Hoyt, 2001).

Various research methods are also used to by researchers attempting to identify predictive variables. Data are usually obtained from various sources, including verbal reports, standardized or nonstandardized checklists, and clinical records. For example, Thompson, Zittel-Palamara, and Maccio (2004) studied 156 runaways admitted to a youth shelter. Some data were collected through informal interview, some via standardized checklists (e.g., Trauma Symptom Checklist, Briere & Runtz, 1989), and other data via Likert scale questionnaires. Their results were based on regression analysis of these measures. In comparison, Yoder, Whitbeck, and Hoyt (2001) interviewed 602 homeless and runaway adolescents on the streets, in shelters, and in drop-in centers, and then used two discrete-time event history models to examine five hypotheses related to adolescent runners.

The variability across definitions and research methods no doubt influences the measures and therefore the interpretation of the research data. However, despite this variability, some consistent patterns have emerged. Variables that are consistently identified as risk factors for running away include substance use, prior runs or placement disruptions, a history of abuse, and being female. Some additional predictive variables include being a dropout (Cohen, MacKenzie, & Yates, 1991), feeling "dissatisfaction with social support" (de Man, 2000), attending fewer psychotherapy sessions (Fasulo, Cross, Mosley, & Leavey, 2002), and a history of

property crime (Abbey, Nicholas, & Bieber, 1997).

Research on Treatment

Few intervention studies have identified successful interventions for runaways. Although several studies have targeted groups of runaways for intervention, many do not evaluate the actual effect on runaway behavior. For example, Teare and Peterson (1994) reviewed data from 100 youth who were consecutively admitted to a short term emergency shelter program for runaway and homeless youth. Intervention included counseling and a token-based motivation system focused on strengthening positive behavior rather than reducing negative behavior. Results indicated high frequencies of teaching interactions across social skills, high levels of satisfaction with the program, and low frequencies of disruptive behavior among youth. However, no data on runaway behavior following discharge were provided.

Thompson (2000) examined relationships among outcomes and sociodemographic variables (e.g., employment) for 70 runaways and homeless youth treated in community agencies. Positive outcomes, such as less substance use and increased school attendance, were associated with a high percentage of youth who returned to parental homes following discharge. However, no reports on subsequent runaway behavior were obtained. Slesnick (2001) and Slesnick and Prestopnik (2005) conducted two randomized control studies on runaways with substance abuse problems. The focus of these

studies was on increasing treatment attendance (Slesnick 2001) and decreasing substance abuse (Slesnick & Prestopnik, 2005) during 6-and 12 - month follow ups. However, effects on runaway behavior were not reported.

A few intervention studies that do evaluate runaway behavior directly are worth noting. Thompson et al. (2002) examined days on the run, among other variables, in a quasi-experimental design comparing 368 runners in a shelter to 54 youth in a day treatment program 6 weeks following discharge. However, the researchers found improvement on all variables and no difference between the two groups. One limitation of this study is that youth who left the program early (whether running or not) were not included in the sample.

Ostensen (1981) analyzed runaway events 3 months following youth contact with a counseling center to evaluate the effects of two family counseling models. Twenty-five percent of youth who attended at least 3 counseling sessions ran away during the follow-up period, compared with 18% of the nonparticipant group. D'Angelo (1984) found only modest gains in the runaway behavior of 207 youth who participated in a 1-shot intervention targeting school adjustment, self-concept, and use of community resources compared with youth who received no intervention. More research is needed to identify successful treatment options for runaway children.

It is important to note that none of the treatments discussed so far were developed by first conducting an analysis of why the children were running away in the first place. The

only study we could find that attempted to identify the reasons (e.g., functions) of running for the typical adolescent was by Benalcazar (1982). Benalcazar reported anecdotal summaries of case notes, interviews, and questionnaires for 15 adolescent runaways who had been in residential facilities for one year. Some of the identified functions of running away included gaining staff attention, getting away from staff perceived as "cold and intellectual," and escaping interactions with staff that were perceived as punitive. Although the author described these cases from a psychoanalytic model, these are easily translated into behavioral terms, such as positive reinforcement (e.g., gaining attention) or negative reinforcement (e.g., escaping demands). More research aimed at identifying the reasons children choose to runaway is needed. Only then can we move forward in developing the most effective interventions possible.

A New Approach

The field of Behavior Analysis is known for its systematic approach to the study of behavior problems. Behavior Analysts first assess behavior to determine its function, or cause, and then use that information to develop interventions that will directly address the behavioral function (see Iwata, Dorsey, Slifer, Bauman, & Richman, 1982/1994). This approach is typically referred to as function-based treatment development. Given that behavioral function varies across people (e.g., the same behavior can have a

different function for different people), this approach must be done on an individual basis. Once we determine what the function is for a particular person, we can then develop a treatment that will be most likely to work for him/her. What works for one person will not always work for another, therefore there is never just one solution to problem behaviors such as running away.

Unfortunately we found no research by behavior analysts on the runaway behavior of typical children. Although two studies evaluated the elopement of children and adults with developmental disabilities (Piazza et al., 1997; Tarbox, Wallace, & Williams, 2003), elopement in these studies might more aptly be described as wandering off than running away. Nonetheless, these studies demonstrate, at least in principle, how an analysis of runaway behavior might be evaluated in a more systematic way; where an initial analysis of behavior function (i.e., the reason the behavior is occurring) aids in the development of a successful intervention. For example, Piazza et al. (1997) reduced elopement for a developmentally disabled child by first determining that the behavior was occurring to gain access to preferred food and to get attention from others. The researchers then developed an intervention in which the child no longer gained these things when he eloped, but instead gained these things only after a period of time with no elopement. They then required longer and longer periods of time with no elopement. This treatment technique, which behavior analysts call differential reinforcement, was

successful at eliminating elopement for this child.

The assessment and treatment of running away could benefit from a similar systematic approach to treatment development. First we must determine why the behavior is occurring (e.g., why is it benefiting the child to run away?). The answer may be different for different children. Some children run away to gain access to things (e.g., friends, drugs, sex, etc.), others to get away from things (abusive parents, chores, school, etc.). That is why assessment should be done on an individual basis. Once we understand why the behavior is occurring, we must develop a treatment that insures the payoff to the child is bigger for *not running away* than for running. For example, if a child is running away mainly to avoid going to school, we know that we either have to make school more enjoyable (so they don't want to run away in the first place) or we need to develop a plan to reward going to school. Assuming for this example that we cannot make school more enjoyable, we might develop an arrangement in which the child must attend school for X number of days each month in order to earn a new outfit (or cell phone, or whatever reward would work for the child). Therefore, although running away will allow the child to avoid school, the payoff is bigger for going to school (assuming the child wants a new outfit more than they want to skip school). Rewards can be allowing the child to keep something they already have such as a cell phone or use of a vehicle (e.g., running away results in loss of cell phone or car privileges), or it could be some bonus such as a new

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video game or outing. In any case, the goal is to determine *why* the child is running and develop a plan to address that issue directly.

Although the assessment and treatment of running away is likely most effective if done on an individual basis, it is also helpful to identify common reasons children tend to run in order to develop prevention programs. Research such as this can aid in the development of community-wide interventions. For example, because children who come from abusive homes tend to run frequently, programs aimed at teaching parenting skills might prevent abuse, and subsequently reduce runaway behavior.

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Yoder, K. A., Whitbeck, L. B., & Hoyt, D. R. (2001). Event history analysis of antecedents to running away from home and being on the street. The American Behavioral Scientist, 45, 1, 51-65.

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 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.

Runaway Abstracts

Runaway: 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

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

Antrop, I., Stock, P., Verte, S., Wiersema, J. Antrop, I., Stock, P., Verte, S., Wiersema, J. R., Baeyens, D., & Roeyers, H. (2006). ADHD and delay aversion: the influence of non-temporal stimulation on choice for delayed rewards. *Journal of Child Psychology and Psychiatry*, 47(11), 1152-1158.

Background: Delay aversion, the motivation to escape or avoid delay, results in preference for small immediate over large delayed rewards. Delay aversion has been proposed as one distinctive psychological process that may underlie the behavioural symptoms and cognitive deficits of attention deficit/hyperactivity disorder (ADHD). Furthermore, the delay aversion hypothesis predicts that ADHD children's preference for immediate small over large delayed rewards will be reduced when stimulation, which makes time appear to pass more quickly, is added to the delay interval. The current paper tests these predictions. Methods: A group of children with a diagnosis of ADHD (with or without oppositional defiant disorder (ODD)), a group with a diagnosis of high-functioning autism (HFA), and a normal control group were compared on an experimental paradigm

giving repeated choices between small immediate and large delayed rewards (Maudsley Index of Delay Aversion-MIDA) under two conditions (stimulation and no stimulation). Results: As predicted, ADHD children displayed a stronger preference than the HFA and control children for the small immediate rewards under the no-stimulation condition. The ADHD children preferences were normalised under the stimulation condition with no differences between the groups. This pattern of results was the same whether the ADHD children had comorbid ODD or not. Discussion: The findings from the MIDA are consistent with the delay aversion hypothesis of ADHD in showing that preference for small immediate rewards over large delayed rewards is a specific feature of ADHD and that this preference can be reduced by the addition of stimulation. Further research is required to better understand the emotional and motivational mechanisms underpinning delay aversion.

Ardoin, S. P., McCall, M., & Klubnik, C. (2007). Promoting Generalization of Oral Reading Fluency: Providing Drill versus Practice Opportunities. *Journal of Behavioral Education*, 16(1), 55-70.

Extensive evidence exists demonstrating the benefits of repeated readings (RR) interventions at increasing students' fluency on intervention passages. Few studies however have examined the extent to which repeatedly reading one passage improves students' reading fluency on similar passages. Using an alternating treatment design, we examined the extent to which two interventions resulted in improvements in students' fluency on generalization passages. While both interventions incorporated RR, one intervention involved students reading one passage four times and the other involved students reading two similar passages each twice. Intervention effects were evaluated by having students read a generalization passage prior to and following intervention implementation. Results indicate that both interventions were effective in increasing students reading fluency on generalization passages. For 3 participants the RR intervention produced greater gains in fluency on the generalization passages, while data for

the remaining 3 participants are inconclusive. Implications of these findings for practice and for better understanding application of the instructional hierarchy to the development of reading interventions are discussed.

Banda, D. R., & Kubina, R. M. J. (2006). The Effects of a High-Probability Request Sequencing Technique in Enhancing Transition Behaviors. *Education & Treatment of Children, 29*(3), 507-516.

In this study, an autism support teacher used a high-probability request sequencing technique to help a middle-school student with autism engage in three transition behaviors. High probability request sequencing refers to a procedure in which 2 to 3 preferred questions, highly associated with compliance, are rapidly given before presenting a low probability demand likely to result in noncompliance. An ABAB design was used to evaluate the effectiveness of the intervention. The intervention reduced the number of minutes required to complete transition behaviors. In addition, the teacher provided fewer prompts during the intervention phases.

Carr, E. G., & Blakeley-Smith, A. (2006). Classroom Intervention for Illness-Related Problem Behavior in Children With Developmental Disabilities. *Behavior Modification, 30*(6), 901-924.

There is growing evidence of an association between physical illness and problem behavior in children with developmental disabilities. Such behavior can compromise school performance. Therefore, the purpose of the present study was to evaluate, using a group design, the effectiveness of medical intervention alone (N = 11) versus behavioral plus medical intervention (N = 10) for illness-related problem behavior in a school setting. Following intervention, the behavioral plus medical intervention group showed lower levels of problem behavior and completed more academic tasks than did the medical intervention alone group. The results are discussed with respect to the concept of illness and pain as a setting event for problem behavior. The need for research to develop

algorithms that allow one to select the best combination of medical and behavioral interventions for specific illnesses and contexts is noted.

Carroll, K. M., Easton, C. J., Nich, C., Hunkele, K. A., Neavins, T. M., Sinha, R., et al. (2006). The Use of Contingency Management and Motivational/Skills-Building Therapy to Treat Young Adults With Marijuana Dependence. *Journal of Consulting and Clinical Psychology, 74*(5), 955-966.

Marijuana-dependent young adults (N = 136), all referred by the criminal justice system, were randomized to 1 of 4 treatment conditions: a motivational/skills-building intervention (motivational enhancement therapy/cognitive-behavioral therapy; MET/CBT) plus incentives contingent on session attendance or submission of marijuana-free urine specimens (contingency management; CM), MET/CBT without CM, individual drug counseling (DC) plus CM, and DC without CM. There was a significant main effect of CM on treatment retention and marijuana-free urine specimens. Moreover, the combination of MET/CBT plus CM was significantly more effective than MET/CBT without CM or DC plus CM, which were in turn more effective than DC without CM for treatment attendance and percentage of marijuana-free urine specimens. Participants assigned to MET/CBT continued to reduce the frequency of their marijuana use through a 6-month follow-up.

Casey, S. D., Cooper-Brown, L. J., Wacker, D. P., & Rankin, B. E. (2006). The Use of Descriptive Analysis to Identify and Manipulate Schedules of Reinforcement in the Treatment of Food Refusal. *Journal of Behavioral Education, 15*(1), 41-52.

The feeding behaviors of a child diagnosed with failure to thrive were assessed using descriptive analysis methodology to identify the schedules of reinforcement provided by the child's parents. This analysis revealed that the child's appropriate feeding behaviors (i.e., bite acceptance, self-feeding) were on a lean schedule of positive reinforcement and that the child's refusal behaviors (e.g., non-

acceptance, expulsion) were on a rich schedule of negative reinforcement. A treatment package consisting of differential positive reinforcement for bite acceptance with and without escape extinction was evaluated by manipulating the schedules of reinforcement that were identified to be used by the child's parents. The results showed a reduction of the child's inappropriate mealtime behaviors and increases in the child's acceptance of offered food items. The results also suggested that the differential reinforcement component appeared to be most responsible for ongoing effectiveness of the treatment. These results are discussed in terms of treating the food refusal behavior of children diagnosed with failure to thrive as a preventive measure for later development of developmental disabilities.

Chamberlain, P., Leve, L. D., & DeGarmo, D. S. (2007). Multidimensional Treatment Foster Care for Girls in the Juvenile Justice System: 2-Year Follow-Up of a Randomized Clinical Trial. *Journal of Consulting and Clinical Psychology, 75*(1), 187-193.

This study is a 2-year follow-up of girls with serious and chronic delinquency who were enrolled in a randomized clinical trial conducted from 1997 to 2002 comparing multidimensional treatment foster care (MTFC) and group care (N = 81). Girls were referred by juvenile court judges and had an average of over 11 criminal referrals when they entered the study. A latent variable analysis of covariance model controlling for initial status demonstrated maintenance of effects for MTFC in preventing delinquency at the 2-year assessment, as measured by days in locked settings, number of criminal referrals, and self-reported delinquency. A latent variable growth model focusing on variance in individual trajectories across the course of the study also demonstrated the efficacy of MTFC. Older girls exhibited less delinquency over time relative to younger girls in both conditions. Implications for gender-sensitive programming for youths referred from juvenile justice are discussed.

Coldwell, J., Pike, A., & Dunn, J. (2006). Household chaos--links with parenting and child behaviour. *Journal of Child Psychology and Psychiatry, 47*(11), 1116-1122.

Background: The study aimed to confirm previous findings showing links between household chaos and parenting in addition to examining whether household chaos was predictive of children's behaviour over and above parenting. In addition, we investigated whether household chaos acts as a moderator between parenting and children's behaviour. Method: The sample consisted of 118 working- and middle-class two-parent English families with two children aged 4-8. Parents provided reports of the parent-child relationship, the level of chaos in their home and the children's problematic behaviour. The children also provided reports of parent-child relationships via a puppet interview. Results: The results confirmed the links between household chaos and parenting, and indicated that household chaos is predictive of children's problem behaviour over and above parenting. In addition, in a minority of cases, household chaos played a moderating role between parenting and children's behaviour in that it exacerbated the effect of poorer quality parenting on children's behaviour. Conclusions: Household chaos is able to work in an additive way and predict children's problem behaviour over and above parenting, and is particularly potent when in combination with less positive/more negative parenting.

Cooke, B. (2006). Competencies of a Parent Educator: What Does a Parent Educator Need To Know and Do? *Child Welfare Journal, 85*(5), 785-802.

This article examines efforts by organizations and states to describe the competencies of a parent educator, to explain what parent educators teach parents through parent education, and to show how that informs parent educator competencies. It summarizes examples of certification, licensure, and other accountability programs, and identifies the issues involved, along with ways practitioners can use these identified competencies to assess their level of competency. Finally, the article concludes with a call to continue developing certification and other

accountability programs to insure quality in parent education.

Crockett, J. L., Fleming, R. K., Doepke, K. J., & Stevens, J. S. (2007). Parent training: Acquisition and generalization of discrete trials teaching skills with parents of children with autism. *Research in Developmental Disabilities, 28*(1), 23-36.

This study examined the effects of an intensive parent training program on the acquisition and generalization of discrete trial teaching (DTT) procedures with two parents of children with autism. Over the course of the program, parents applied the DTT procedures to teach four different functional skills to their children, which allowed for an assessment of "free" and programmed generalization across stimulus exemplars. Parent training was conducted by the first author utilizing instructions, demonstrations, role-play, and practice with feedback. Parents' use of DTT skills and children's correct and incorrect responding were measured. A within-subject multiple-baseline across stimulus exemplars (functional skills taught) design was employed both to demonstrate control of the training program over parents' correct use of DTT, and to allow a preliminary investigation of the generalized effects of training to multiple stimulus exemplars. Results demonstrate initial control of the training program over parent responding, and the extent to which each parent extended her use of DTT procedures across untrained and topographically different child skills. The potential for designing more generalizable and thus more cost-effective parent training programs is discussed.

Croft, C., Beckett, C., Rutter, M., Castle, J., Colvert, E., Groothues, C., et al. (2007). Early adolescent outcomes of institutionally-deprived and non-deprived adoptees. II: Language as a protective factor and a vulnerable outcome. *Journal of Child Psychology and Psychiatry, 48*(1), 31-44.

Background: There is uncertainty about the extent to which language skills are part of general intelligence and even more uncertainty on whether deprivation has

differential effects on language and nonlanguage skills. Methods: Language and cognitive outcomes at 6 and 11 years of age were compared between a sample of 132 institution-reared Romanian children adopted into UK families under the age of 42 months, and a sample of 49 children adopted within the UK under the age of 6 months who had not experienced either institutional rearing or profound deprivation. Results: The effects of institutional deprivation were basically similar for language and cognitive outcomes at age 6; in both there were few negative effects of deprivation if it ended before the age of 6 months and there was no linear association with duration of deprivation within the 6 to 42 month range. For the children over 18 months on arrival (range 18-42 months), the presence of even very minimal language skills (imitation of speech sounds) at the time of arrival was a strong beneficial prognostic factor for language and cognitive outcomes, but not for social/emotional/behavioural outcomes. Individual variations in adoptive parent characteristics were unrelated to differences in language or cognitive outcomes, possibly as a consequence of the limited variability in the adoptive family group. Conclusions: Minimal language probably indexes some form of cognitive reserve that, in turn, indexes the degree of institutional deprivation.

Doughty, S. S., & Anderson, C. M. (2006). Effects of Noncontingent Reinforcement and Functional Communication Training on Problem Behavior and Mands. *Education & Treatment of Children, 29*(1), 23-50.

Two children with developmental delays and a history of problem behavior participated in this study to examine the efficacy of combining two treatments demonstrated to reduce problem behavior: noncontingent reinforcement and functional communication training. At issue was whether the noncontingent delivery of an alternative preferred stimulus and reinforcement of mands increased the rate of mands, and suppressed problem behavior prior to and during the schedule thinning of noncontingent reinforcement. The necessity of extinction to obtain suppression of problem behavior also was examined. For both participants,

noncontingent reinforcement using an alternative (or, arbitrary) preferred stimulus increased manding maintained by access to attention and decreased problem behavior. Extinction may be necessary to maintain response suppression during thinning of the noncontingent reinforcement schedule. Preliminary results, as well as the potential impact for practitioners and suggestions for future research are provided.

Erion, J. (2006). Parent Tutoring: A Meta-Analysis. *Education & Treatment of Children, 29*(1), 79-106.

This article provides a synthesis of research in which parents provided academic instruction to their own children. The effectiveness of parent tutoring in 37 studies was examined across grade level, basic skill area (e.g., reading, math), training feature (e.g., treatment length, availability of consultation), treatment fidelity, type of assessment (i.e. criterion-referenced or norm-referenced), and whether or not the study was published. Thirty-two comparisons were found for 20 group design studies and 25 comparisons were found for 17 single subject design studies. Separate analyses were conducted for group design and single-subject design studies using standardized mean difference between experimental and control groups, and percentage of non-overlapping data (PND), respectively. Effect size (ES) and PND were generally positive across both types of studies. A mean weighted ES of +0.55 was obtained for trimmed group design studies and a median PND of 94 was obtained for the single subject studies. Most studies involved reading and the use of primary grade students as subjects. Certain treatment characteristics appeared to moderate outcome. Implications of the current analysis for future practice and research in the area of parent tutoring are discussed.

Frick, P. J. (2007). Editorial: Providing the Evidence for Evidenced-Based Practice. *Journal of Clinical Child and Adolescent Psychology, 36*(1), 2-7.

The goal of the "Journal of Clinical Child and Adolescent Psychology" is to provide the

evidence to guide evidence-based practice in clinical child and adolescent psychology. A new feature of the journal is to facilitate the translation of research findings into practical applications will be to include a new type of article: Case Studies in Evidenced-Based Practice. Also, it attempts to promote better integration between research on normal development and research and practice with youth who have problems in adjustment. The journal will start a regular feature of Invited Developmental Commentaries to promote the integration between developmental and clinical research in a way that makes the relevance of developmental research clear to clinical child and adolescent psychologists.

Gardner, F., Burton, J., & Klimes, I. (2006). Randomised controlled trial of a parenting intervention in the voluntary sector for reducing child conduct problems: outcomes and mechanisms of change. *Journal of Child Psychology and Psychiatry, 47*(11), 1123-1132.

Background: To test effectiveness of a parenting intervention, delivered in a community-based voluntary-sector organisation, for reducing conduct problems in clinically-referred children. Methods: Randomised controlled trial, follow-up at 6, 18 months, assessors blind to treatment status. Participants--76 children referred for conduct problems, aged 2-9, primarily low-income families, randomised to treatment vs. 6-month wait-list group. Retention was 93% at 6 months, 90% at 18 months. Interventions--Webster-Stratton Incredible Years video-based 14-week group programme, teaches cognitive-behavioural principles for managing behaviour, using a collaborative, practical, problem-solving approach. Primary outcomes--child problem behaviour by parent-report (Eyberg) and home-based direct observation; secondary outcomes--observed positive and negative parenting; parent-reported parenting skill, confidence and depression. Results: Post-treatment improvements were found in child problem behaviour, by parent-report (effect size (ES) .48, $p=.05$) and direct observation (ES .78, $p=.02$); child independent play (ES .77, $p=.003$); observed negative (ES .74, $p=.003$) and positive (ES .38, $p=.04$)

parenting; parent-reported confidence (ES .40, $p=.03$) and skill (ES .65, $p=.01$), using ANCOVA to control for baseline scores. Maternal depression did not change. Consumer satisfaction was high. At 18-month follow-up, although no randomised comparison was possible, changes appeared to maintain, with no significant change toward baseline level on any measure. Change in observed positive parenting appeared to mediate change in child problem behaviour ($p < .025$). Conclusions: Findings suggest that a group-based cognitive-behavioural parenting programme, delivered by well-trained and supervised staff, can be effective in a community voluntary-sector setting, for reducing conduct problems and enhancing parenting skills. Change in parenting skill appears to be a key mechanism for change in child behaviour. Findings have implications for feasibility of translating evidence-based programmes, even for clinically-referred conduct problems, into less specialised community settings, likely to have lower costs and be more accessible for families.

Gorin, A., Raynor, H., Chula-Maguire, K., & Wing, R. (2006). Decreasing household television time: A pilot study of a combined behavioral and environmental intervention. *Behavioral Interventions*, 21(4), 273-280.

Excessive TV viewing is associated with weight gain across the lifespan; thus developing strategies to decrease household viewing time may be an effective obesity prevention approach. This pilot study ($n = 6$ families) examined the feasibility and short-term impact of a 2-pronged environmental plus behavioral approach designed to reduce TV time in the entire family. The environmental manipulation involved placing TV Allowances (programmed to turn off power after family members had watched 75% of their baseline hours) on all TVs in the home. A kit with behavioral strategies for reducing TV time was also sent to the home each week and family members self-monitored viewing time. Viewing was objectively assessed with the TV Allowances at baseline and at 8 weeks. A significant decrease in objectively measured TV viewing hours was observed, $t(5) = 3.1$, $p = 0.03$, 29.8 ± 10.3 versus 14.9 ± 6.0 h (equivalent of decreasing from 7.5 to 3.7 h

per day). Fifty percent of families reduced their viewing time by 50%. The acceptability of the intervention was high, with 100% of families reporting they would recommend the TV Allowances to others. Further research is needed to test the long-term efficacy of the program and its impact on weight.

Hanley, G. P., Iwata, B. A., & Roscoe, E. M. (2006). Some determinants of changes in preference over time. *Journal of Applied Behavior Analysis*, 39(2), 189-202.

Results of longitudinal studies suggest that the stability of preferences varies across individuals, although it is unclear what variables account for these differences. We extended this work by conducting periodic assessments of preference for leisure activities over 3 to 6 months with 10 adults with developmental disabilities. Although previous research has collectively shown that preferences identified via repeated assessment are highly variable, our results showed that preferences were relatively stable for the majority (80%) of participants. In an attempt to identify some environmental determinants of shifts in preference, we provided extended daily access to high-preference items (preference-weakening manipulation) and paired access to low-preference items with social and edible putative reinforcers during brief sessions (preference-strengthening manipulation). Preference assessments continued over the course of these manipulations with 2 participants. Results showed that changes in preference across time could be produced systematically and suggest that naturally occurring changes in establishing operations or conditioning histories contribute to temporal shifts in preference. Implications for preference assessments, reinforcer usage, and planned attempts to change preferences are discussed.

Heering, P. W., & 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 "unknown" 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.

Hoerger, M. L., & Mace, F. C. (2006). A computerized test of self-control predicts classroom behavior. *Journal of Applied Behavior Analysis, 39*(2), 147-159.

We assessed choices on a computerized test of self-control (CTSC) for a group of children with features of attention deficit hyperactivity disorder (ADHD) and a group of controls. Thirty boys participated in the study. Fifteen of the children had been rated by their parents as hyperactive and inattentive, and 15 were age- and gender-matched controls in the same classroom. The children were observed in the classroom for three consecutive mornings, and data were collected on their activity levels and attention. The CTSC consisted of two tasks. In the delay condition, children chose to receive three rewards after a delay of 60 s or one reward immediately. In the task-difficulty condition, the children chose to complete a difficult math problem and receive three rewards or complete an easier problem for one reward. The children with ADHD features made more impulsive choices than their peers during both conditions, and these choices correlated with measures of their activity and attention in the classroom.

Ingersoll, B., & 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., & 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., et al. (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.

Kawashima, K. (2006). The effects of inflation and interest rates on delay discounting in human behavior. *Psychological Record, 56*(4), 551-568.

Interest and inflation rates may be major determinants of delay discounting, but these variables have not been controlled in past experiments because they depend on macroeconomic conditions. This study uses a computer game-like task to investigate the effects of inflation rates on people's subjective valuation of delayed rewards. During the task, participants saved virtual money, received interest, and bought items under inflation and interest rate conditions controlled by the experimenter. The subjective values participants placed on delayed rewards were measured during choice periods, after participants learned of item price changes and expected interest earnings. In 2 of 3 experiments, the effects of

inflation rates were investigated when the nominal interest rate (Experiment 1) or the real interest rate (Experiment 3) was constant across the 3 experimental conditions (inflationary, zeroinflationary, and deflationary). The effect of nominal interest rates under the deflationary condition was also investigated (Experiment 2). The results suggest that inflation and interest rates affect participants' subjective discounting of delayed rewards.

Lane, K. L., Weisenbach, J. L., Little, M. A., Phillips, A., & Wehby, J. (2006). Illustrations of Function-Based Interventions Implemented by General Education Teachers: Building Capacity at the School Site. *Education & Treatment of Children, 29*(4), 549-571.

This paper examines two illustrations of teacher-led function-based interventions to explore the extent to which teachers are able to design and implement function-based interventions with limited support from university personnel. Results of these A-B-A-B intervention designs suggest a functional relation between the introduction of the interventions and the corresponding changes in student behaviors for both examples. Further, all parties rated the intervention process favorably. Limitations and future directions are discussed.

Liaupsin, C. J., Umbreit, J., Ferro, J. B., Urso, A., & Upreti, G. (2006). Improving Academic Engagement through Systematic, Function-Based Intervention. *Education & Treatment of Children, 29*(4), 573-591.

Fiona was a 14-year-old 7th-grader whose academic history, frequent behavior problems, and low levels of academic engagement put her at-risk for academic failure. This study's purpose was to examine the effectiveness of a systematic process for identifying the function of her problem behaviors and designing interventions that directly addressed that function. The study was conducted in two phases. Data from a descriptive functional assessment (Phase 1) were used to develop function-based interventions that were implemented in multiple classes (Phase 2). Substantial

increases in academic engagement resulted.

Mancil, G. R. (2006). Functional Communication Training: A Review of the Literature Related to Children with Autism. *Education and Training in Developmental Disabilities, 41*(3), 213-224.

Numerous researchers have employed functional communication training (FCT) to address both the communication and behavioral needs of children with autism. Thus, the purpose of this review is to examine FCT, particularly, the environments and individuals involved in the training and the effectiveness of FCT with children who have a diagnosis of Autism Spectrum Disorder (ASD) and to provide suggestions for practitioners and researchers. FCT consistently reduces challenging behavior and increases communication; however, the majority of research is clinically based and focuses on one communication mand. Future research teams should address maintenance and generalization by training teachers in classrooms and parents in homes while collecting data across time.

Mancil, G. R., Conroy, M. A., Nakao, T., & Alter, P. J. (2006). Functional Communication Training in the Natural Environment: A Pilot Investigation with a Young Child with Autism Spectrum Disorder. *Education & Treatment of Children, 29*(4), 615-633.

A child with Autism Spectrum Disorder (ASD) and a history of aberrant behaviors participated in this study with his mother. The primary purpose of the current study was to determine the effectiveness and efficiency of FCT on decreasing problem behaviors, increasing communication mands, and increasing spontaneous communication with a child with ASD in his home environment. Further, the number and diversity of spontaneous verbalizations were anecdotally recorded. The results of the multiple baseline study across mands demonstrated a dramatic decrease in aberrant behavior while increasing the number of mands and the latency to respond. In addition, the participant's number and diversity of words dramatically increased.

Martens, B. K., Eckert, T. L., Begen, J. C., Lewandowski, L. J., DiGennaro, F. D., Montarello, S. A., et al. (2007). Effects of a Fluency-Building Program on the Reading Performance of Low-Achieving Second and Third Grade Students. *Journal of Behavioral Education, 16*(1), 39-54.

This study evaluated the effects of a fluency-based reading program with 15 second and third grade students and 15 matched controls. Gains in oral reading fluency on untrained CBM probes were evaluated using a matched-pairs group-comparison design, whereas immediate and two-day retention gains in oral reading fluency on trained passages were evaluated using an adapted changing criterion design. Increases in WRCM due to training and number of trainings to criterion were also evaluated as a function of pre-training fluency levels. Results showed statistically significant gains on dependent measures for the treatment group, mean increases of two to three grade levels in passages mastered, and an optimal pre-training fluency range of 41-60 WRCM. Implications for fluency-based reading programs are discussed.

Napolitano, D. A., Tessing, J. L., McAdam, D. B., Dunleavy, J. J. I., & Cifuni, N. M. (2006). The Influence of Idiosyncratic Antecedent Variables on Problem Behavior Displayed by a Person with PDD. *Journal of Developmental and Physical Disabilities, 18*(3), 295-305.

This study describes an assessment of the influence of idiosyncratic antecedent variables on the problem behavior of a 9-year-old boy with pervasive developmental disorder and attention deficit hyperactivity disorder. The results of these analyses suggested that the boy displayed problem behavior during situations in which demands were provided and idiosyncratic variables were present. The efficacy of a treatment package consisting of a visual cue and differential reinforcement to treat the boy's problem behaviors is described. Finally, the importance of assessing the influence of antecedent variables on the problem behavior of persons with developmental disabilities and limitations of the current research are discussed.

Ndoro, V. W., Hanley, G. P., Tiger, J. H., & 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.

Pade, H. (2004). A long-term follow-up study of a parent-child interaction and temperament based program for preschoolers with behavior problems. *Dissertation Abstracts International: Section B: The Sciences and Engineering (California)*. ProQuest Information & Learning.

The purpose of this study was to measure the long-term effectiveness of a parent-child interaction therapy (PCIT) and temperament based intervention program (TOTS) for preschoolers with behavior problems offered at a Northern California Kaiser Permanente. The program was designed to teach parents and their children (ages 2-5 years) new and adaptive behaviors that would lead to more positive and healthy parent-child interactions and reduce child problem behaviors. TOTS is a temperament-based interactive behavioral group therapy that utilizes PCIT techniques. Participants at the follow-up evaluation included 23 parent-child dyads that completed the TOTS program 5-6 years previously, as well as the initial pre- and post-treatment assessments. The follow-up sample consisted of 32% of the initial sample. Measures used were the Eyberg Child Behavior Inventory (ECBI), Parenting Stress Index-Short Form (PSI-SF), The Middle Childhood Temperament Questionnaire (MCTQ), The Family Inventory of Life Events (FILE), Marlowe-Crowne Social Desirability Scale, Form C, and a Participant Demographics and Health Service Use Questionnaire. Significant positive changes obtained at the immediate post-treatment assessment were maintained at the follow-up for the ECBI Intensity Scale, which reflects the frequency of child problem behaviors. Significant positive changes obtained at the immediate post-treatment assessment were not maintained for the ECBI Problem Scale, which reflects the parent perception of whether a behavior is viewed as a problem. Such results are not clearly related to the long-term effectiveness of the TOTS program because over three fourths of the follow-up participants reported that they sought additional therapy services after completion of TOTS. Such services included individual therapy, family therapy, and psychiatric medications. In addition, this study found that families experience a variety of important life events, for example immediate or extended family changes and financial or work changes that may impact maintenance of skills learned at an intervention program. Despite an inability to draw firm conclusions from the results regarding the maintenance of treatment results over a long period of time, this study supported the idea that parent perceptions and understanding of their child's

behaviors are as important as the actual child behaviors and that an intervention program for childhood problem behaviors which focuses on children alone will not likely be successful. Rather both parent and child need to be targeted in treatment.

Perry, A., Prichard, E. A., & Penn, H. E. (2006). Indicators of quality teaching in intensive behavioral intervention: A survey of parents and professionals. *Behavioral Interventions, 21*(2), 85-96.

Intensive Behavioral Intervention (IBI) is being used extensively with children with autism. It is widely accepted that a large quantity of IBI is necessary to maximize children's outcomes, but outcomes remain variable and one reason for this is likely related to the quality of intervention children are receiving. There is little empirical evidence regarding the nature and measurement of quality IBI. This paper presents results of a survey examining the views of parents and professionals about quality IBI and how it should be measured. Parents rated the importance of 11 IBI characteristics and professionals indicated whether these characteristics should be measured objectively or subjectively. All respondents selected three characteristics they thought most important and answered open-ended questions about: additional quality indicators and IBI programming issues for which empirical evidence is needed. Parental ratings supported the importance of virtually all the suggested characteristics. Professional results emphasized the importance of objective measurement. The most frequently selected indicators of high quality teaching across groups were: creating generalization opportunities, administering reinforcers of the appropriate type, and using effective/appropriate behavior management strategies. There were interesting differences across groups and many valuable suggestions about additional indicators of quality and empirical questions of interest.

Peterson, L. D., Young, K. R., Salzberg, C. L., West, R. P., & Hill, M. (2006). Using Self-Management Procedures to Improve Classroom Social Skills in Multiple General Education Settings. *Education & Treatment of Children, 29*(1), 1-21.

This study used self-monitoring, coupled with a student/teacher matching strategy, to improve the classroom social skills of five inner-city middle school students, who were at risk for school failure. Using a multiple-probe across students and settings (class periods) design, we evaluated intervention effects in up to six different settings. Results indicated that self-monitoring and the student/teacher matching intervention led to increases in targeted appropriate social skills and decreases in off-task behavior for all five students across all class periods. Data suggested that self-monitoring with student/teacher matching is an effective procedure to promote the use of appropriate social skills across multiple general education settings.

Petscher, E. S., & 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.

Poncy, B. C., Skinner, C. H., & Jaspers, K. E. (2007). Evaluating and Comparing Interventions Designed to Enhance Math Fact Accuracy and Fluency: Cover, Copy, and Compare Versus Taped Problems. *Journal of Behavioral Education, 16*(1), 27-37.

An adapted alternating treatments design was used to evaluate and compare the effects of two procedures designed to enhance math fact accuracy and fluency in an elementary student with low cognitive functioning. Results showed that although the cover, copy, compare (CCC) and the taped problems (TP) procedures both increased the student's math fact accuracy and fluency, TP was more effective as it took less time to implement. Discussion focuses on the need to develop strategies and procedures that allow students to acquire basic computation skills in a manner that will facilitate, as opposed to hinder, subsequent levels of skill and concept development.

Riley-Tillman, T. C., Chafouleas, S. M., & Briesch, A. M. (2007). A School Practitioner's Guide to Using Daily Behavior Report Cards to Monitor Student Behavior. *Psychology in the Schools, 44*(1), 77-89.

With the growing popularity of a response to intervention model of service delivery, the role of intervention management is becoming more prominent. Although many aspects of intervention management have received significant attention, one area that warrants further development involves feasible methods for monitoring student behavior in a formative fashion. By formative, we mean behavior that is frequently monitored, such as on a daily basis, with the premise that the information will be used to make appropriate intervention decisions. Within a problem-solving model of intervention development, implementation, and evaluation, at least one educational professional must be responsible for using an effective tool for monitoring behavior. Yet, identifying and using such a tool can be a challenge in applied settings in which resources are often limited. The purpose of this article is to briefly review available tools for behavior monitoring, with emphasis on reviewing the potential of the Daily Behavior Report Card to serve as a

supportive methodology to more established measures of behavior assessment. Examples and guidelines for use of the Daily Behavior Report Card in behavior monitoring are provided.

Sarafino, E. P., & Graham, J. A. (2006). Development and Psychometric Evaluation of an Instrument to Assess Reinforcer Preferences: The Preferred Items and Experiences Questionnaire. *Behavior Modification, 30*(6), 835-847.

The Preferred Items and Experiences Questionnaire (PIEQ) is a new instrument to assess reinforcer preferences in adolescents and adults. Research was conducted with college and high school students to develop the PIEQ, to examine its reliability with test-retest and internal consistency methods, and to test its validity. This research provides support for the PIEQ's reliability and validity.

Schinke, S., Schwinn, T., & Cole, K. (2006). Preventing Alcohol Abuse Among Early Adolescents Through Family and Computer-Based Interventions: Four-Year Outcomes and Mediating Variables. *Journal of Developmental and Physical Disabilities, 18*(2), 149-161.

Ill-timed and excessive use of alcohol is associated with multiple and irreversible disabilities. The relationship between perinatal alcohol use and developmental disabilities, including fetal alcohol syndrome, is well documented. Empirical evidence also links alcohol use to a host of other developmental and physical problems among the offspring of drinkers and among drinkers themselves. Toward advancing the science of how to reduce alcohol abuse risks, this study developed and tested family and computer-based approaches for preventing alcohol use among a community sample of inner-city minority youth. Original findings from 4-year follow-up data obtained from over 90% of the study sample document continued positive program outcomes and shed light on cognitive problem solving, peer, and family mediators of alcohol use risk and protective factors among target youth.

Singh, N. N., Matson, J. L., Lancioni, G. E., Singh, A. N., Adkins, A. D., McKeegan, G. F., et al. (2006). Questions About Behavioral Function in Mental Illness (QABF-MI): A Behavior Checklist for Functional Assessment of Maladaptive Behavior Exhibited by Individuals With Mental Illness. *Behavior Modification, 30*(6), 739-751.

The Questions About Behavioral Function (QABF), a 25-item rating scale, was developed to identify the function(s) of maladaptive behavior in individuals with developmental disabilities. The authors adapted it for use with individuals with serious mental illness who engage in maladaptive behavior and assessed the psychometric characteristics of the new scale (Questions About Behavioral Function in Mental Illness; QABF-MI) in a sample of 135 adults with serious mental illness from three inpatient psychiatric hospitals. Staff most familiar with each person rated each item on a 5-point Likert-type rating scale, and the ratings were subjected to a number of psychometric analyses. The results of factor analyses provided a conceptually meaningful five-factor solution: physical discomfort, social attention, tangible reinforcement, escape, and nonsocial reinforcement. Congruence between the five factors derived with the QABF-MI and the corresponding factors in the original QABF was perfect. The results indicated that the QABF-MI has robust psychometric properties and may be useful as a screening tool for determining the nature of the variables that maintain maladaptive behavior exhibited by individuals with serious mental illness.

Stichter, J. P., Lewis, T. J., Richter, M., Johnson, N. W., & Bradley, L. (2006). Assessing Antecedent Variables: The Effects of Instructional Variables on Student Outcomes through In-Service and Peer Coaching Professional Development Models. *Education & Treatment of Children, 29*(4), 665-692.

A student's behavioral performance within the classroom is influenced, in large part, by the interaction that student has with the learning environment and the people in that environment. Identifying antecedent variables

that effect student performance enables practitioners to set the stage for prosocial behavior and academic learning. One targeted strategy that has been recommended in the literature as essential for insuring student learning is increasing the number of student opportunities to respond (OTR). The current study utilized two separate professional development models, traditional inservice and peer coaching, to assess the effects of optimizing teacher levels of four instructional strategies, often defined as core to OTR, on students' academic and social behavior. Data were collected across a total of 16 teachers and 16 target students across two diverse elementary schools. Standardized, survey, direct observation, and work product measures were collected and are reported across academic, behavior, and social student outcomes. Implications for next steps research regarding instructional strategies as potent antecedents for academic and social behavior outcomes and professional development models are discussed.

Tiger, J. H., Hanley, G. P., & 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.

Vorndran, C. M., & Lerman, D. C. (2006). Establishing and maintaining treatment effects with less intrusive consequences via a pairing procedure. *Journal of Applied Behavior Analysis, 39*(1), 35-48.

The generality and long-term maintenance of a pairing procedure designed to improve the efficacy of less intrusive procedures were evaluated for the treatment of problem behavior maintained by automatic reinforcement exhibited by 2 individuals with developmental disabilities. Results suggested that a less intrusive procedure could be established as a conditioned punisher by pairing it with an effective punisher contingent on problem behavior. Generalization across multiple therapists was demonstrated for both participants. However, generalization to another setting was not achieved for 1 participant until pairing was conducted in the second setting. Long-term maintenance was observed with 1 participant in the absence of further pairing trials. Maintenance via intermittent pairing trials was successful for the other participant.

Wallace, M. D., Iwata, B. A., & Hanley, G. P. (2006). Establishment of mands following tact training as a function of reinforcer strength. *Journal of Applied Behavior Analysis, 39*(1), 17-24.

We examined some conditions under which a response acquired as a tact might facilitate the establishment of a mand. We taught 3 participants with developmental disabilities to tact the items ranked highest and lowest in a preference assessment and subsequently tested to see if the responses occurred as mands. All participants manded for the highly preferred item but rarely manded for the nonpreferred item. These results indicate that, although tact and mand functions are different, conditions can be created to

facilitate transfer from the former to the latter. Implications for communication training are discussed.

Wilder, D. A., & Atwell, J. (2006). Evaluation of a guided compliance procedure to reduce noncompliance among preschool children. *Behavioral Interventions, 21*(4), 265-272.

The effectiveness of a guided compliance procedure to reduce noncompliance among typically developing preschool children was evaluated. After baseline data on compliance to common demands were collected, a parent, instructional assistant, or graduate research assistant implemented the guided compliance procedure, which involved the delivery of progressively more intrusive prompts contingent upon noncompliance. The effects of the procedure were examined using a non-concurrent multiple baseline design across participants. The results suggest that the procedure was effective for four of the six children who participated.

Wilder, D. A., Chen, L., Atwell, J., Pritchard, J., & 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.

Wright-Gallo, G. L., Higbee, T. S., Reagon, K. A., & Davey, B. J. (2006). Classroom-Based Functional Analysis and Intervention for Students with Emotional/Behavioral Disorders. *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.