

# Effects of a Collaborative Behavior Management Plan on Reducing Disruptive Behaviors of a Student with ADHD

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## Abstract

Freddy, a student diagnosed with Attention Deficit Hyperactivity Disorder served for part of the school day in special education, was having difficulty staying on task. Teachers reported that Freddy was continuously getting up out of his seat, bothering classmates, and making verbal comments or requests without raising his hand. Observations were taken in 2 of his general education classes. A collaborative behavior management plan was developed to help Freddy stay on-task. The team found that allowing Freddy to enjoy one of his favorite activities, contingent upon a decrease in the disruptive behavior, was effective in maintaining the desired behavior of staying on-task and decreasing inappropriate behavior. In addition to Freddy's inappropriate behavior changing in his regular education classroom, his behavior also improved in 3 of his special education classes.

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Attention/Deficit Hyperactivity Disorder (ADHD) is described as “inappropriate levels of inattention, impulsiveness, and hyperactivity” (Luiselli, 1991). ADHD is the most prevalent emotional and behavioral disorder among children and is the most controversial, with some professionals seeing these children as having developmental problems (Bateman, 1992) and others saying that better discipline would resolve the issue (Armstrong, 1995). The onset of ADHD is evident before the age of 7, affecting children both academically and socially, with no known cause or cure (Kauffman, 2005). Kauffman further states that possible causes of ADHD may include adverse reactions to food, genetics, or difficult temperament. Early intervention is key in preventing the escalation of disruptive behavior. Intervention may include any one or a combination of the following: behavior intervention, parent training, teacher training, cognitive strategy training, and medication. One difficulty with developing behavior management plans for students with ADHD is their hypersensitivity to reward and/or an insensitivity to punishment cues (Arnet, Fisher, & Newby, 1996).

The assessment of ADHD should include a medical examination, a clinical interview, and parent/teacher ratings of behavior (Barkley, 1998). However, the primary means of assessing ADHD in school settings are teacher/peer rating scales, direct observation, and interviews (DuPaul, Power, Anastopolous, & Reid, 1998).

Glass and Wega (2000) indicate that the classroom is usually where problems are most evident. They suggest that the actual behavior problems may be related to classroom size and that some children are labeled as ADHD because teachers can not or do not want to

make appropriate modifications. Some teachers express a preference that the students be removed from their classroom, while other teachers feel that medication is the best way to control the behavior.

### **Behavior Management and Interventions**

When trying to develop a behavior management plan, it is important to first identify the target behavior (Marron, 2002). The following are important assessment issues to consider when selecting the behavior to modify:

- What is the functional level of the child or what are they able to do?
- Does the behavior interfere with the goals for the child?
- Whose quality of life are you trying to change?
- Are you going to be able to monitor the behavior to see if there is improvement?

Various behavior management plans can be attempted; however, the first step needs to be the determination of the function of the behavior (or to determine why the child is behaving the way that he is). Disruptive behavior could serve a variety of functions, including the acquisition of positive reinforcement, negative reinforcement, or stimulation/sensory regulation (Repp, 1999). In the case of children with ADHD, it is more likely that the behavior is being maintained by either positive reinforcement, which may include attention seeking from either peers or an adult/teacher or negative reinforcement, which may include the escape of an activity or task. Different intervention plans need to be established for each child. For example, if the disruptive behavior is escape motivated, then changing the activities or allowing a choice may be enough to halt the behavior

(Romaniuk et al, 2002). For example, four students studied by Carr and Durand (1985) were found to have different reasons for acting out. Two of the students were acting out to avoid the assignments, one was acting out for the attention of an adult, and the last student engaged in off-task behavior for both escape of the task and attention from the adult. All four students needed different intervention plans.

Once the function of the behavior has been identified, a behavior management plan can be successfully designed. Various plans have been shown to be successful. Robinson, Newby, and Ganzell (1981) used a token economy system to increase student performance in a large classroom of underachieving hyperactive children. The students were 18 third-grade boys who were identified by teachers as hyperactive. The students worked together to learn new reading and vocabulary words. Students would earn tokens for the units completed correctly and then could use the tokens to play a game for 15 minutes. Results indicated that children completed nine times as many assignments when working with the token system.

In another study, an elementary school student's inappropriate behaviors were reduced using a token economy system (Higgins, Williams, & McLaughlin, 2001). This elementary school student was engaging in out-of-seat behavior, inappropriate talking, and off-task behavior. A plan was established whereby the student would earn check marks for appropriate behaviors. Those checkmarks were then turned into minutes that he could use for acquisition of rewards.

Another intervention, class wide peer tutoring for students with ADHD, was found to be

successful (DuPaul, Ervin, Hook, & McGoey, 1998). In this study, peer tutoring increased active engagement times and reduced disruptive off-task behaviors. Fifty percent of the students showed greater academic success. The study included 19 students in grades 1-5. Teachers were trained on peer tutoring and then taught students the process. Tutoring pairs worked with each other 15 to 20 minutes per day three to four times per week. The teachers monitored the pairs and rewarded them if they followed the guidelines.

Disruptive behavior has been shown to decrease with the use of a timer that provides students with a 30 second break for playtime after assigned tasks were completed (Jones, Drew, & Weber, 2000). A functional analysis was performed on an 8-year old boy to see what was reinforcing his behavior, attention or escape. It was determined that peer attention was maintaining the behavior. During the sessions with the non-contingent reinforcement (30 second break), his disruptive behavior decreased.

Self-monitoring has been used to reduce problem behavior (Shimabukuro, Prater, Jenkins, Edelen-Smith, 1999). In this study, three male students that were diagnosed with ADHD learned self-monitoring techniques using graph forms. The three students made improvements with their academics and their on-task behaviors.

Letting the child select the reinforcer has also been shown to be successful (McGee & Daly, 1999). Rewards are then selected based on the student's preferences. Students can gain time for these activities or even gain tangible rewards contingent on the absence of the behavior or the presence of the desired behavior.

The evidence suggests that functional behavior assessment (FBA) and positive behavior support plans can be effective when addressing a variety of behavioral issues. Providing supports within a framework of collaboration adds additional empirical support. In addition, this aligns with our philosophical orientation of inclusion of all students into the general education setting to the maximum extent appropriate. Therefore, this is the approach that was taken with the following case study.

### **Student Background Information**

Freddy was a 13-year old male student diagnosed with ADHD. He was in the 6<sup>th</sup> grade in a rural Georgia middle school. Freddy was functioning within a normal intelligence range but was two grade levels behind his peers. He was not on any medication. He was being served in a special education classroom for science, social studies, and language arts and in a general education classroom setting for reading and math. At the beginning of the year, Freddy was only served in special education for language arts. At the request of his mother, Freddy was put in special education classes for science and social studies after the first progress report indicated that he was failing subjects. Freddy received a modified curriculum in both special education classes and accommodations in general education. His mother did not want Freddy to be in a self-contained classroom setting.

Freddy's reading teacher expressed concern with his disruptive behavior. He was bothering other students, blurting out comments, and getting out of his seat throughout the class period. His grades were dropping in reading and math. It was decided to first observe Freddy's behavior in order to attempt to determine the function of his behavior.

Freddy was observed in both of his general education classes.

### **Phase I- Observations**

The special education teacher, who had been trained in FBA, systematically observed Freddy in two of his regular education classes (reading and math), and collected data on the target behaviors. His reading class is the first period of the day and his math class is the third period. The following is a description of each classroom observation.

### **Reading Class**

The observer sat near the general education teacher's desk, which was close to Freddy. It was immediately noticed that Freddy was singing to himself while the other students were writing down their assignments from the board. Freddy blurted out something about his name. The teacher ignored him. Others in the class began to talk, and Freddy blurted out "everyone be quiet." The teacher calmly asked Freddy to be quiet. Freddy then began to look at a magazine. The teacher reminded him to copy his work from the board. Freddy got up and told everyone to get out of his way. The teacher again asked him to be quiet. Freddy did not get his work completed before the timer went off; he then proceeded to shout "No, no. I need more time!" The teacher ignored him and began to go over each problem assignment. Freddy grabbed a student's purse, put it on his arm, and walked back to his desk. After sitting at his desk, he began to sing once again. The teacher gave Freddy a stern look, and Freddy quit talking. The teacher noticed that Freddy had a purse and asked him to give it back. The teacher handed out a worksheet for homework and started going over it. Freddy said that he didn't understand the work. All of the other students appeared to be paying attention and following

along. The teacher took Freddy's break away and said if he continued that he would have to stay after school. After a few minutes, he began to draw. The teacher tapped him on the shoulder and instructed him to begin his worksheet. The bell rang for class to be over and Freddy had not started his worksheet while most of the other students were halfway finished with theirs.

### **Math Class**

The classroom was arranged in three rows with all three rows facing the board and the teacher. Freddy did not wear his glasses and could not see the board from far away. Therefore, Freddy sat in the front close to the board. Freddy's desk was located beside the teacher's desk.

The observer took a seat at the back of the classroom with a clear view of Freddy. When Freddy came in, he slammed his books down on his desk. The teacher asked him not to slam his books down. Another student brought Freddy his coat, which he had left in another class. Freddy put the coat on, but the teacher asked him to take it off since it was bulky. The teacher began to go over the problem set that was assigned the night before. She asked if anyone had questions about any of the problems. She glanced at Freddy's paper and asked how he got the answer to problem 15. He shrugged his shoulders. She asked if he did them and he replied "No." The teacher began to put one of the problems on the board. She asked the students what the answer was. They all called out the correct answer. After they said the correct answer, Freddy blurted out the wrong answer (which appeared to be a number off the top of his head). Freddy never looked at the board. The teacher asked Freddy if he was going to copy the correct answer from the board. He shrugged his shoulders again. Freddy did not

start copying the work from the board; he began to draw. The teacher seemed to ignore his behavior. Freddy then began to start tapping his pencil on the desk. The teacher turned to him and said, "Stop it!" During the entire class period, the teacher repeatedly asked him to be quiet because he kept making little noises. The teacher told Freddy that he could come in after school if he didn't understand something.

### **Summary of Observations**

#### *General education classes-*

As a result of the observations, it was determined that Freddy was either being ignored or threatened with punishment, and, on occasion, being yelled at. When asked to stop something, he would stop. However, the behavior that he stopped was replaced with another behavior that was still not acceptable. Freddy did not perform any work in either of the two classes during the observation time. By interviewing his teachers about Freddy's behavior, it was determined that this has been ongoing since the beginning of the school year. However, in the beginning of this project, Freddy was passing reading with an 85/100 and math with an 85/100 on teacher designed classroom assessments. By the third nine-week semester, the teachers had not reported any improvement in Freddy's behaviors. His grades had dropped, reflected by grades of 79/100 in reading and 45/100 in math.

#### *Special education classes-*

Freddy did very well in his special education classes. He had a 95/100 average in science, a 98/100 average in social studies, and a 94/100 average in language arts on teacher designed assessments. In the special education classes, all material was based on Georgia's Quality Core Curriculum objec-

tives, the state instructional standards. The special education classes went at a slower pace than the general education classes, but were estimated to be only one or two lessons behind the general education classes.

Class sizes in special education classes were considerably smaller than in general education. There were twenty-one students in each of his general education classes. In the special education classrooms, there were seven students in science, six students in social studies, and thirteen students in language arts. According to Glass and Wega (2000), classroom size can be a problem with children with ADHD, with these children needing smaller class sizes or additional help, possibly from a classroom aide.

### **Theory of Inappropriate Behavior**

After discussing Freddy's situation with the reading teacher, an operational definition was established for his inappropriate behavior. Freddy's disruptive behavior was defined as getting out of his seat to stand or move from his desk without first raising his hand and asking permission, blurting out any type of comment without first raising his hand and asking permission, and/or sticking out his legs from under his desk in order to trip another classmate. The reading teacher was willing to work on a behavioral intervention plan for Freddy. The math teacher was not approached at this time, since in the past she had not had favorable comments about positive behavior management plans.

It was hypothesized that Freddy's disruptive behavior would decrease when positive reinforcement was provided contingent on appropriate classroom behavior. Repp (1998) suggested that the function of disruptive behavior is usually for positive reinforcement (gaining a reward), for negative reinforcement (escaping a task), or stimulation/sensory regula-

tion. It was believed that Freddy was engaging in disruptive behavior for the positive reinforcement gained from attention. One evidence leading to the formulation of this hypothesis was that during the observations, Freddy would continue to make comments or get out of his seat even when there was not work to complete, suggesting that escape was not maintaining the target behavior. It was further hypothesized that the attention he was seeking was that of the teacher given that the other students in the classroom rarely acknowledged his comments or disruptive behaviors.

### **Phase II- Data Collection**

The number of occurrences of the disruptive behavior was recorded per class session in reading, science, social studies, and language arts. Each session consisted of 55 minutes. The teachers used a system where peas were placed in the teacher's pocket. When there was an occurrence of the disruptive behavior, a pea was moved to the other pocket. At the end of the session, the peas were removed, counted, and recorded. These procedures were used for all classes. Before the intervention, Freddy displayed a range of as many as 30 disruptive occurrences during reading and as few as 11, with an average of 19.2 occurrences. In the special education classes Freddy averaged 3.2 disruptions for science, 3.8 for social studies, and 3 for language arts. The range was from as many as 7 occurrences and as few as 0. Freddy's behavior in the special education classes was not a concern because he was completing his work and had good grades. However, data were collected in those classes also to see if there was any generalization of behavior change.

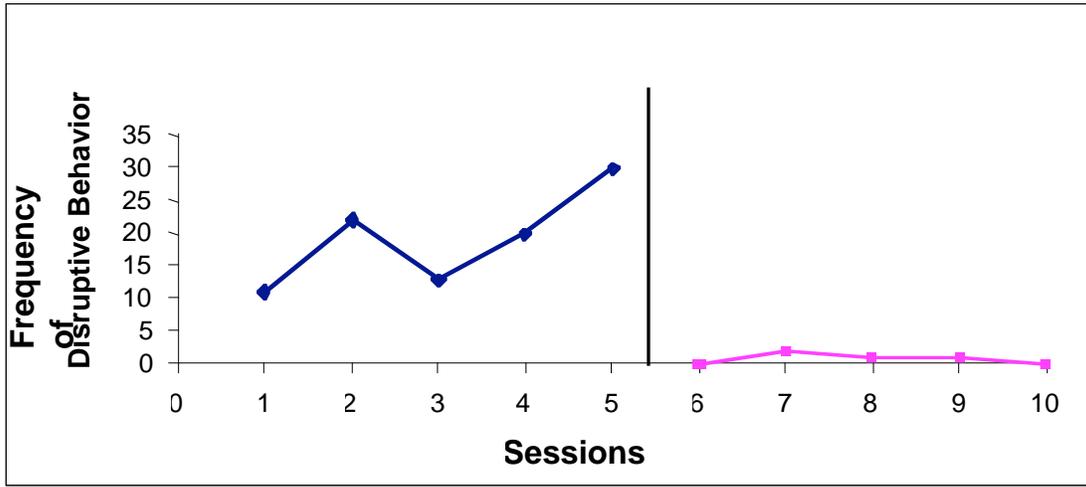
### **Intervention**

It had been determined during observations and by interviewing Freddy that he enjoyed drawing. It seemed to be his favorite thing to do. The intervention therefore included drawing time for Freddy. The earning of drawing time was combined with earning contingent teacher attention, primarily in the form of verbal praise, when Freddy followed the outlined behavior plan. The collaborative team decided on the following plan for Freddy.

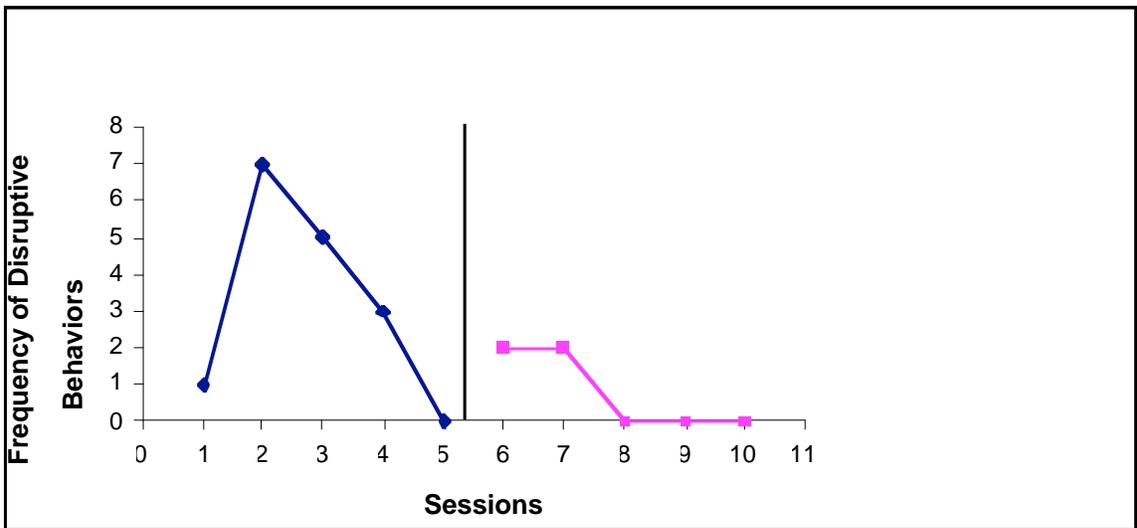
First, a clear understanding of the rules for the classroom needed to be established for Freddy. They included the following: no getting out of seat without raising hand, no blurting out any type of comment without raising his hand first, all work was to be completed during class time, and no bothering other students in the class. If Freddy could follow these rules during each session with no more than five occurrences of disruptive behavior, he would be rewarded with drawing time in his special education classes. If he maintained low rates of disruptive behavior all week, his reading teacher would give him a set of drawing pencils. Each time he earned the reward that he had collaboratively established with his teachers (drawing time and supplies), he was also reinforced with positive teacher attention.

On the first day of the intervention, the reading teacher and the special education teacher met with Freddy to discuss the rules and his rewards. The definition of disruptive behavior was also explained to him. The first day Freddy had zero occurrences in reading and a significant reduction in science, social studies, and language arts. During the rest of the week, the special education teacher reminded Freddy every morning of the rules. Throughout the rest of the week, Freddy was able to stay below the preset level of 5 disruptive behaviors per session. Freddy's average number of disruptions for reading was .8. His disruptive behaviors were also reduced in his other classes with the following average results: science, .8; social studies, 1.2; language arts, .6. During his special education classes, he was rewarded with drawing time, and at the end of the week, he was given the drawing pencil set. In addition to Freddy's disruptive behavior being reduced, the reading teacher indicated that he had completed all of his assignments during the week and expected his grades to improve. Tables 1-4 show Freddy's progress from all classes during baseline and intervention. Within each table, Sessions 1-5 show baseline data, and sessions 6-10 show intervention data.

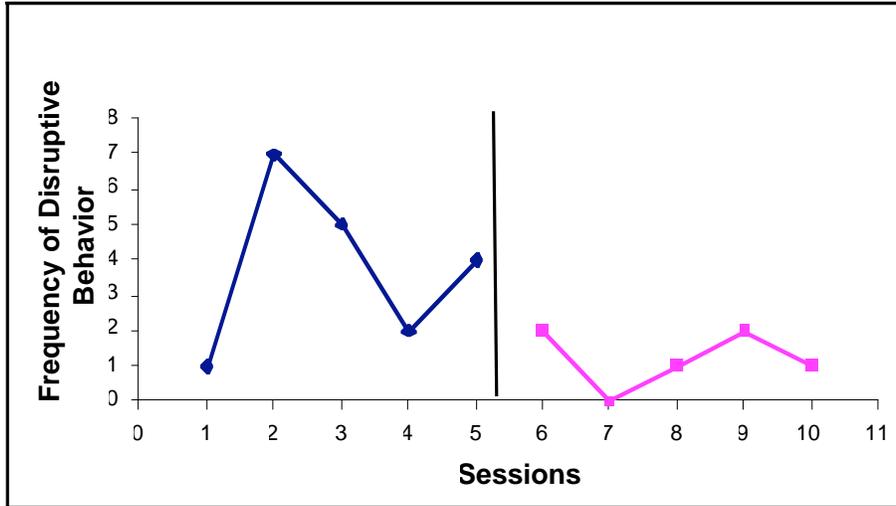
**Table 1** Comparison of Disruptive Behavior Prior to and During Intervention in Reading Class



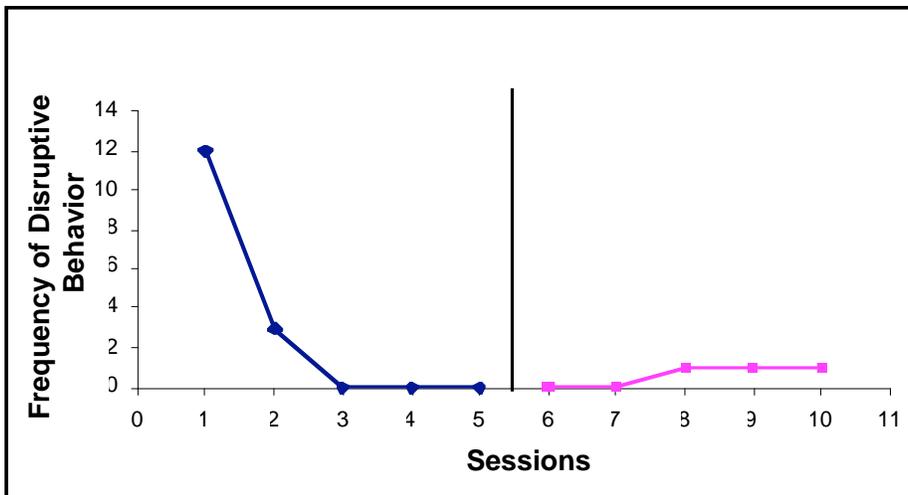
**Table 2** Comparison of Disruptive Behavior Prior to and During Intervention in Science Class



**Table 3** Comparison of Disruptive Behavior Prior to and During Intervention in Social Studies Class



**Table 4** Comparison of Disruptive Behavior Prior to and During Intervention in Language Arts Class



## Discussion

As predicted, Freddy's behavior improved rapidly with the implementation of the positive behavior management plan. It cannot be said with certainty that Freddy's behavior was for attention. However, it is likely that Freddy's disruptive behavior was for the attention of an adult. This was believed to be true because he was gaining adult attention from his reading teacher and his special education teacher who continued to praise Freddy daily on his work based on positive rather than negative behavior. He would even ask after class how well he did and seemed to be proud of the teachers' responses. The special education teacher also sent a note to the principal bragging about Freddy for his recent changes in behavior. She sent Freddy a brag note with a card to get something from the school store. Furthermore, after the project was completed, Freddy was shown a copy of this report. He asked if he could get a copy to take home to his mom.

A second intervention was not applied since the first intervention was successful. It is possible that Freddy's decline in disruptive behavior could have been either because the rules of the classroom were explained, because of the reinforcement of drawing time later in the day or the reinforcement of the drawing pen set at the end of the week, because he received additional teacher attention, or a combination of all of these interventions. Each of the rewards could have been systematically withheld to see exactly which one caused the decline in the disruptive behavior. However, the team did not feel that this would be in the best interest of Freddy.

Collaborative teams of involved school-based professionals including general education teachers, special education teach-

ers, and school social workers can develop behavior management plans that are effective and have many advantages over more traditional methods of intervention. First, the assessment data may be more complete due to input from a variety of involved professionals. Second, participants who collaborate may be more likely to fully implement the behavior management plan. Finally, collaborative behavior management plans provide an efficient service modality that has been shown to be helpful with students with a variety of behavioral difficulties. Associated with this is the fact that this service modality facilitates providing care in the least restrictive placement, which is a federal requirement of working with children with identified disabilities in the school setting. It is our belief that collaborative behavior management planning should be a carefully evaluated service option and considered as part of best practice intervention options when working with children in the schools.

This study must be interpreted within the parameters of the limitations of the methodology. While the collaborative team was pleased with the results, this study represents an A-B research design, which means that cause and effect cannot be inferred. This study was conducted across several classrooms, however, which lends more confidence that the interventions contributed to the behavior change observed.

In addition, several interventions were applied, confounding the ability to determine which specific intervention, or combination of interventions, lead to the behavior change measured. However, we contend that this type of applied work, done by school-based professionals, has external validity, and has much to offer to the field of current practitioners.

Replication of similar interventions by other practitioners will strengthen the confidence of our findings, and this type of work is easily manageable in the classroom. Data will continue to be collected, both for the purposes of evaluation of the IEP behavioral goals and to monitor the progress of the intervention. If disruptive behavior emerges, the collaborative team can make modifications to the behavior plan as needed. Our hope is that replication of this type of project can compensate for the limited internal validity, and in the process will have a positive impact of the school experience of many students we work with daily.

## References

- Armstrong, T. (1995). ADD: Does it really exist? *Phi Delta Kappan*, 77, 424-428.
- Arnet, P. A., Fischer, M., & Newby, R. F. (1996). The effect of Ritalin on response to reward and punishment in children with ADHD. *Child Study Journal*, 26, 57-70.
- Bateman, B. D. (1992). Learning disabilities: The changing landscape. *Journal of Learning Disabilities*, 25, 29-36.
- Barkley, R. A. (1998). *Attention deficit hyperactivity disorder: A handbook for diagnosis and treatment* (2<sup>nd</sup> ed.). New York: Guilford.
- Carr, E. G. & Durand, V. M. (1985). Reducing behavior problems through functional communication training. *Journal of Applied Behavior Analysis*, 18, 111-126.
- DuPaul, G. J., Power, D. T. J., Anastopolous, A. D., & Reid, R. (1998). *ADHD Rating Scale-IV: Checklists, norms, and clinical interpretations*. New York: Guilford.
- DuPaul, G. J., Ervin, R. A., Hook, C. L., & McGoey, K. E. (1998). Peer tutoring for children with attention deficit hyperactivity disorder: Effects on classroom behavior and academic performance. *Journal of Applied Behavior Analysis*, 31, 579-592.
- Glass, C. & Wega, K. (2000). Teacher perceptions of the incidence and management of Attention Deficit Hyperactivity Disorder. *Education*, 121, 412.
- Higgins, J. W., Williams, R. L., & McLaughlin, T. F. (2001). The effects of a token economy employing instructional consequences for a third-grade student with learning disabilities: A data-based case study. *Education and Treatment of Children*, 24, 99-106.
- Jones, K. M., Drew, H. A., & Weber, N. L. (2000). Noncontingent peer attention as treatment for disruptive classroom behavior. *Journal of Applied Behavior Analysis*, 33, 343-346.
- Kauffman, J. (2005). *Characteristics of emotional and behavioral disorders of children and youth* (8<sup>th</sup> ed). Upper Saddle River, NJ: Prentice Hall, 326.
- Luiselli, J. K. (1991). Assessment-derived treatment of children's disruptive behavior disorders. *Behavior Modification*, 15, 294-309.
- Marron, J. A. (2002). Way to go: Positive reinforcement programs for your child with Attention Deficit/Hyperactivity Disorder. *The Exceptional Parent*, 32, 68-71.

McGee, G., Daly, T. (1999). Prevention of problem behaviors in preschool children. *Functional Analysis of Problem Behavior*, 178-179.

Repp, A. (1999). Naturalistic functional assessment with regular and special education students in classroom settings. *Functional Analysis of Problem Behavior*, 240.

Robinson, P. W., Newby, T. J., & Ganzell, S. L. (1981). A token system for a class of underachieving hyperactive children. *Journal of Applied Behavior Analysis*, 14, 307-315.

Romaniuk, C., Miltenberger, R., Conyers, C., Jenner, N., Jurgens, M. & Ringenberg, C. (2002). The influence of activity choice on problem behaviors maintained by escape versus attention. *Journal of Applied Behavior Analysis*, 35, 349-362.

Shimabukuro, S. M., Prater, M. A., Jenkins, A. & Edelen-Smith, P. (1999). The effects of self-monitoring of academic performance on students with learning disabilities and ADD/ADHD. *Education and Treatment of Children*, 22, 397-414.

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