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A Practical Application of Self-Management for Students Diagnosed with Attention

Deficit Hyperactivity Disorder

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### Abstract

Five 6th-grade students diagnosed with attention deficit hyperactivity disorder (ADHD), taking psycho stimulants for treatment of ADHD symptoms, and enrolled in a general education classroom participated in the study. Participants were taught self-management techniques to monitor academic performance, on-task behaviors, and disruptive behaviors. A multiple baseline design across students with intervention withdrawal embedded within each baseline was used to empirically assess the effectiveness of self-management. Self-management associated with increases of on-task behaviors and academic performance, and associated with a decrease of disruptive behaviors when compared to other phases. Implications for practical application of the strategy in general education classrooms are discussed.

## A Practical Application of Self-Management for Students Diagnosed with Attention Deficit Hyperactivity Disorder

Attention deficit hyperactivity disorder (ADHD) is the most commonly diagnosed neurobehavioral disorder in children today (Frazier & Merrell, 1997). Almost 3.8 million children are diagnosed with ADHD in the United States (“Treat ADHD,” 2002). Children diagnosed with ADHD exhibit impulsivity, hyperactivity, and difficulty in maintaining attention (American Psychiatric Association, 1994). These symptoms are problematic in classroom settings where teachers view self-regulation, sitting still, and consistent focus on specific tasks as necessary school readiness skills (Bussing, Gary, Leon, Wilson, & Reid, 2002; Clancy, 2002).

ADHD may be genetically linked with deficits in neurological functioning and impairment of neurotransmitters in the central nervous system (Ballard et al., 1997; Chatfield, 2002). As a result, the majority of children diagnosed with ADHD take psycho stimulants that mimic specific neurotransmitters to manage symptoms (Chatfield, 2002; Knight & Rappaport, 1999). Even with the use of psycho stimulants that may reduce symptoms, classroom teachers continue to see problem behaviors from students diagnosed with ADHD (Bussing et al., 2002).

The promise of controlled or reduced symptoms that psycho stimulants offer is often mediated by the realities of life (Thiruchelvam, Charach, & Schachar, 2001). Parents may forget to give the medication on occasion or children may forget to take the medication (Firestone, 1982; Thiruchelvam et al., 2001). Many psycho stimulants must or cannot be taken with food, either of which may cause nausea and other symptoms that affect behavior if not followed specifically (Perring, 1997). Depending on the dosage

prescribed, symptoms may begin to reappear at critical times of the day (Pelham, Aronoff, & Midlam, 1999). Some parents simply prefer to not give psycho stimulants to their children (Reichert, 2000). As educators, it is our responsibility to acknowledge these children's needs in our classrooms and identify strategies that can help them learn.

Educators may be able to help children with ADHD succeed in the classroom environment by providing behavioral interventions (Pelham et al., 2000; Turnbull, Wilcox, Stowe, & Turnbull, 2001). The American Academy of Pediatrics recently released recommendations for treating children diagnosed with ADHD. The guidelines recommend the use of both psycho stimulants and behavioral interventions to help control symptoms ("Treat ADHD," 2002). The combination of psycho stimulants with behavioral interventions provides more control of symptoms of ADHD than using psycho stimulants alone (Pelham et al., 2000).

Self-management is a behavioral intervention that teaches individuals to recognize their own behaviors, set behavioral goals including behaviors to increase and decrease, record their own behaviors, and reinforce their own behaviors (Koegel, Koegel, & Parks, 1995). Self-management requires that the individual focus on their behavior and monitor it accurately, or reinforcement cannot be earned. Slusarek, Velling, Bunk, and Eggers (2001) demonstrated the ability of children diagnosed with ADHD to overcome their lack of inhibitory control when under highly reinforced situations. The use of strong reinforcement in the behavior-consequence relationship embedded in self-management may offer children diagnosed with ADHD a way of overcoming some of the symptomatic behaviors associated with the disorder.

Self-management has been implemented successfully for children with and without special needs (Smith & Sugai, 2000). Self-management interventions have been used for children with emotional and behavior disorders (Smith & Sugai, 2000), autism (Barry & Singer, 2001), mental retardation (Barry & Santarelli, 2000), and with children diagnosed with ADHD (Hinshaw & Melnick, 1992; Shapiro, DuPaul, & Bradley-Klug, 1998; Shimabukuro, Parker, Jenkins, & Edelen-Smith, 1999). The advantage of self-management is that it promotes independence and personal control over behavior by teaching students how to use behavioral interventions for self-treatment.

In sum, we know that drug therapy is effective at reducing symptoms of ADHD for many children (Chatfield, 2002). We also know that while taking psycho stimulants, these children may continue to exhibit behavioral needs in the classroom setting that likely affect academics and classroom management (Bussing et al., 2002). The combination of psycho stimulants and behavioral intervention is more effective, for most children, at controlling symptoms than the use of psycho stimulants alone (Pelham et al., 2000). Teachers need to know how to use strategies that can help students with ADHD be successful in their classrooms (Bussing et al., 2002). Self-management may be an effective strategy that teachers can use to help students diagnosed with ADHD especially if effective reinforcement is used.

The primary goal of this study was to demonstrate how a classroom teacher could implement self-management in a general education classroom setting with children diagnosed with ADHD. This study was designed to provide an application of research in practice by focusing on the reality of a classroom based intervention and the classroom teacher's role in implementation. The study includes assessment of behavior and

academic performance so that not only relationships between self-management and behavior can be assessed but also relationships between self-management and student academic performance can be assessed. In addition, this study offers an opportunity for demonstrating additional support for the possible benefits of self-management interventions for children diagnosed with ADHD.

## Method

### *Participants*

Participants were five 6th-grade male Caucasian students who were diagnosed with ADHD by independent physicians and were taking psycho stimulants for treatment of ADHD. Diagnosis by independent physicians was based on information from and in consultation with the school and families. Specific medical records were not made available consistently to the researcher beyond the diagnosis and medications taken by each participant. According to the parents of each participant, the children were not taking any medication during the study other than those listed in Table 1, nor were the children diagnosed with any additional psychiatric illness. The medication was reportedly taken consistently throughout the study.

### *Setting and Materials*

Observations took place at an elementary school campus in the classroom setting. There were approximately 28 students present each day. Five students were diagnosed with ADHD and were the participants for this study. Although self-management was implemented all day, teacher observations for data collection for this study occurred during the second two hours of the school day, just prior to lunch. Assignments and activities varied widely during this time and all day depending on the teacher's lesson

plans. Data collection was continuous for these two hours including transition times. Time was also spent at lunch calculating teacher recorded data and comparing teacher-recorded data to student recorded data so that rewards for student accuracy could be provided at the end of the school day.

Materials needed to carry out the intervention were paper, stickers, and a writing utensil to make recording charts for the students. In addition, the classroom teacher used reinforcers identified by the students as particularly reinforcing to them. Each student was asked to create a menu of reinforcers that they found motivating and that a teacher could reasonably provide. This task was given as a homework assignment so that the students had time to think about what they would find motivating. When the assignment was returned, the teacher reviewed each menu with each student during classroom center time when other students were occupied in individual activities. The menus were negotiated with each student to include only those items that the teacher could reasonably provide. Items that were costly or impossible to provide were excluded from the menus. The final student menus included edibles, such as specific snack foods or drinks, tangibles like small action figures, and preferred activities such as increased computer time and increased recreational time. Student choice of reinforcement was used in an attempt to increase the likelihood that the consequence would actually be reinforcing and therefore increase motivation for each individual student.

### *Design*

In this study, we used a multiple baseline design across 5 students with intervention withdrawal embedded within each baseline to empirically assess the effectiveness of self-management. Phases alternated between teacher-only monitoring of

behavior in A phases and student self-management of behavior in B phases. The B phases also included teacher monitoring to check for accuracy in student self-management and to provide inter-observer agreement. The ABABAB design was used to empirically assess effects of the self-management strategy across 5 participants on 3 dependent variables.

#### *Problem Behaviors in the Classroom Setting*

The classroom teacher identified behavior problems for each of the five participants. After the classroom teacher identified behavior problems, the researcher and classroom teacher described the problems in terms of behavioral excesses and deficits. All students were described as having limited attention spans and rarely completing their in-class assignments.

*Student 1.* This student exhibited loud oral outbursts throughout the school day and occasionally would exhibit physical behaviors such as running in the class and “wrestling” with other students. He exhibited these physical disruptive behaviors on “bad days” according to the classroom teacher. He completed most of his assignments and his academic grades varied between low “A’s” and high “B’s”. The teacher reported that he would leave his seat often and she felt that he had a very short attention span.

*Student 2.* This student was described as always loud and always in a fight although often it was play fighting. There were few days that this student was not in trouble for being too active. He was described as never in his seat, and was so often out of his seat that he rarely completed an entire assignment. The teacher felt that he was bright but his grades reflected a “C+” average that she felt was due to his inability to sit still long enough to finish his work.



*Student 3.* This student was described as exhibiting loud and disruptive noises often in class. He was rarely physically disruptive. He would leave his seat to talk to friends or sharpen pencils often. He maintained a “C+” to “B-” average in class. The teacher described his classroom behavior as frequently off-task.

*Student 4.* This student was reported to always be in trouble for being loud and for exhibiting disruptive behaviors. He would play games with other students, make loud and inappropriate noises in class, and often try to involve his peers in his activities. The teacher described him as the class clown. He rarely had what the teacher would describe as a good day in school. His grades reflected a “C” to “D” average according to the classroom teacher.

*Student 5.* This student rarely initiated disruptive physical behaviors, and was more likely to laugh loudly in class. When he was physically disruptive it was typically due to playing with a peer. He was described as “a wanderer”. The teacher reported that he was rarely in his seat and always seemed distracted when he was in his seat. Despite his perceived inattention, this student maintained a “B” average in the class.

#### *Dependent Measures*

The behaviors described above were consolidated into specific definitions of behaviors that could be used to measure behaviors for all five participants. This was done to simplify data recording in the classroom setting in that one data collection sheet and one set of definitions could be used for all participants. For instance, the classroom teacher described behaviors that were excessive such as physical play and fighting, physical contact with other students, and loud outbursts such as yelling, laughing, or talking in the classroom. Each participant exhibited these behavioral excesses at different

rates and in slightly different manners as indicated above. These behaviors across participants were consolidated into two definitions in terms of disruptive physical behaviors and disruptive loud noises (see specific definitions below). Consolidation would not be appropriate if the participant's behavioral problems had widely varied topographies.

Specific dependent variables were measured using percentages of whole and partial intervals to ease the strain on the classroom teacher and students. In the classroom setting, it was far easier to note if behaviors happened or did not happen over an interval of time rather than having to record each instance or specific duration of each behavior. Fifteen-minute intervals were used in this study because the teacher felt that she would be able to focus on her teaching with only brief interruptions for marking off whole or partial intervals at the fifteen-minute mark. In practice, teachers may be overwhelmed with this interval and may wish to use longer intervals such as twenty or thirty minutes that would ease the burden of data collection. Another option is to ask a teacher's aide or other adult present in the classroom to collect data.

*On-task behavior.* On-task behaviors were described in two ways. First, *seated* behavior was described as sitting appropriately in the assigned seat or physically being at the appropriate place in the classroom for a specific assignment or staying focused on walking to a new position if a transition was appropriate. Second, *attention* behavior was described as paying attention to or actively working on the task at hand. Both behaviors were measured by the classroom teacher using percent of 15-minute whole intervals recorded over a two-hour period per day. Whole interval recording requires that the

students exhibit the described behaviors for the entire interval in order to record it as an occurrence.

During self-management phases students also recorded these behaviors using the same measures but self-recorded these behaviors throughout the entire day rather than only during the two hour period prior to lunch in which the teacher also recorded behaviors.

*Disruptive behavior.* Disruptive behaviors were defined in two ways. First, disruptive *physical* behavior was described as physical play or fighting involving physical contact with other students. Second, disruptive behavior that took the form of *loud noise* was described as speaking loudly, yelling, or making noises including laughing loudly without permission in class. The classroom teacher used the percent of 15-minute partial intervals over a two-hour period each day to measure these disruptive behaviors. Partial interval recording requires that the student exhibit the described behavior at least once during the entire interval in order to record it as an occurrence.

During self-management phases students also recorded these behaviors using the same measures but self-recorded these behaviors throughout the entire day rather than only during the two hour period in which the teacher also recorded behaviors.

*Academic performance.* The classroom teacher designed a point system for daily recording of academic performance that considered both completeness of assignments and correct answers on assignments separately. Classroom assignments that were due throughout the entire day were assigned specified numbers of total points possible for each assignment. Further, assignments were broken down into specific points available for each portion of the assignment. For instance, on a work sheet, two points may be

available for each question. Each incorrect response and each answer left without a response would result in a deduction of two points either for being incorrect or for being incomplete. In writing assignments, rubrics with points assigned were used for the same purpose. Only assignments to be completed in class were included in the total possible for academic performance.

The classroom teacher measured academic performance based on the described point system in two ways. First, *complete* answers were measured by the percent of total points earned for completing answers, regardless of being correct, per day divided by the total possible points available per day on all assignments. Second, *correct* answers were recorded by the percent of total points earned for correct answers per day divided by the total number of points available per day on all assignments.

During self-management phases, students recorded if they completed their assignments during each 15-minute interval. The student simply recorded if any assignments had been completed during the past 15-minutes. This self-assessment was used in an attempt to keep students focused on completing their work. Students had no way of grading their own assignments and therefore did not self-assess their points earned for correct responses. The classroom teacher provided this information in the form of feedback after assignments were graded. Student's correct responses were therefore not self-managed but were used as an outcome measure that may associate with self-management of specific behaviors.

#### *Phase A*

In all A phases, the participants' on-task behaviors, academic performance, and disruptive behaviors were recorded by the classroom teacher and teachers aide only. The

teacher provided verbal praise during the A phases when discrete on-task behaviors occurred, when continuous on-task behaviors occurred and were sustained for at least 15-minutes, and the teacher would provide verbal praise at the end of the school day if a student exhibited academic success by achieving an 75% in completeness and/or correct responses for academic performance.

*Initial student conference and self-management training*

In the B phases, the classroom teacher implemented self-management procedures with all five participants. The teacher used a self-management parent-training manual developed by Koegel et al. (1995) as a guide to teach the participants how to correctly use self-management strategies including self-assessment, self-recording, and self-selected and self-administration of reinforcers. The manual was written in simple terminology that is easy for individuals without behavioral science education and with limited reading ability to understand. The basic elements of the manual were used to construct the following procedure.

*Identify and define behaviors.* In the morning of the first day of phase B1 for each participant, the classroom teacher met the student individually for approximately 20 minutes for an initiating conference. The conference was held during classroom “center time” in which students worked independently at centers around the classroom. During this conference, the teacher and student defined the targeted behaviors that the student needed to increase and decrease. During these individual discussions, the teacher asked each student to help describe their problem behaviors and then helped create descriptions of how they should behave in the classroom setting instead. This was done to help insure

that students understood and could recognize which behaviors were being targeted to decrease and what behavior would be expected of them to increase.

*Define behavioral goals and negotiate reinforcement.* The classroom teacher, who assessed how other students in the classroom typically behaved for each dependent variable, used that information to establish goals for the participants. Goals were set at the approximate classroom average for each dependent variable for each participant. Goals were set at greater than or equal to 75% of 15-minute whole intervals on-task, 75% of possible academic assignments completed and correct per day, and less than or equal to 12.5% of 15-minute partial intervals of disruptive behaviors. Children earned reinforcement at the end of each day for those goals that were met and for accuracy of self-assessment. Also, during the initial conference, the menus of reinforcement that had been started as a homework assignment were negotiated with each student (see *Setting and Materials* section).

Students were told through the informed consent form, during this initial meeting, and again at the beginning and ending of each B phase that they were participating in a project that was designed to find out if the self-management process of recognizing, recording, and rewarding their own behavior would help them in increasing both appropriate behavior and academic performance while decreasing inappropriate behaviors. The classroom teacher explained to them that it was necessary to begin and then stop using the strategy several times throughout the project in order to test the effects. They understood that the intervention provided was designed to help them succeed in the classroom environment and they volunteered to participate in the study knowing this premise.

*Model, practice, and feedback on data recording.* After the targeted behaviors were identified and goals defined, the data collection sheet and corresponding recording process was demonstrated for each participant by the classroom teacher during the initial meeting. The behavioral descriptions discussed were related to the specific questions listed on the data collection sheet. Recording of the participant's performance consisted of the student asking himself a series of questions written on a data collection sheet and then responding to each question by placing a sticker on the chart in a dichotomous response for each dependent measure at the end of each interval. Questions written on the data collection sheet included the following, "Was I in my seat or where I need to be to complete my class work? Was I paying attention by working on the assignment or listening to the teacher? Did I complete my assignments? Did I play or fight with my classmates in the classroom? Did I talk loudly or make noise in class?"

The teacher read each question on the data collection sheet with the student and asked the student to describe an example of his behavior that would warrant a check mark indicating an occurrence or non-occurrence. The teacher also modeled the on-task behaviors that were described and also pointed out other students in the classroom who were exhibiting behaviors that were indicative of the disruptive or on-task behaviors described. Then the teacher demonstrated how the data-recording sheet should be filled out according to the behaviors observed.

Training in recording continued by asking the student to practice recording data by watching students during the rest of center time. The teacher checked in with the student at least twice during the rest of this hour to provide feedback. Then, students practiced recording their own behavior for the next hour prior to the initiation of the first

data collection time actually documented for phase B1. On this first day, the teacher checked the students recordings for accuracy at least twice during the hour of independent practice. Fluency in accurate recording was achieved in this one hour of practice just prior to the first day of phase B1 for all five participants. The use of modeling, practice, and feedback is an important practice in teaching students to self-manage.

Fifteen-minute intervals were used for self-recording for each student initially. These intervals could have been longer for some students as they were able to control their behaviors for periods of thirty minutes or more. The classroom teacher felt that it would be easier to implement the strategy for her if the intervals were standardized across participants. With this in mind, fifteen minutes was determined to be the minimum interval needed based on the students who exhibited the highest rates of problem behaviors. In application, teachers may wish to set individualized interval lengths to suit current student ability rather than applying a blanket approach as done here. The extra data collection that occurred as a result may be viewed as a waste in terms of student time for those who could control their behavior for longer periods.

### *Phase B1*

During phase B1, students continued to practice self-recording and the teacher provided a verbal prompt every 15-minutes and pointed to a written prompt schedule that was on the black board to remind students who were in the study to record their behavior. At the end of the school day, the teacher compared her data over the two-hour period that she collected data to the data that the student had collected all day. Students were reinforced from their reinforcer menus for achieving any behavioral goals for each day.



Students were also reinforced if they had been 100% accurate in their recordings as compared to the teacher's recordings for that day. This method of reinforcement continued throughout all B phases of the study.

#### *Phase B2*

In the second B phase, the teacher and each participant had an initial conference that allowed the participants to review the self-management procedures and re-establish desired goals. Then, self-management was re-introduced in the classroom. In the second B phase of self-management, the teacher faded her prompting from verbal prompts at each 15-minute interval to a written prompt schedule that was written on the black board only.

#### *Phase B3*

In the third B phase, the teacher handed out the self-management data collection sheets and explained to each participant that they would again use the self-management program. Written prompts on the black board were faded from 15-minute intervals to 30-minute intervals for student recording. Teacher recording remained at 15-minute intervals.

#### *Fading of intervention one month later*

One month after phase B3, the classroom teacher and a teacher aid collected data to provide a follow-up probe. The students were still using self-management in their classroom as described in the B3 phase, but were now using a 45-minute interval with written prompts on the black board. In addition, their behavioral goals had increased from 75% to 87.5% for on-task behaviors and for completed assignments.

## Results

Results from the classroom teacher's data across the eight phases are presented in Figures 1, 2, and 3. The Figures illustrate the changes in on-task behaviors, disruptive behaviors, and academic performance by each phase for each student. In the ABABAB comparison, percent of whole intervals of on-task behaviors were higher for each participant in each B phase than in the comparison A phases. Academic performance as measured by complete and correct responses for each participant were higher in each B phase than in each comparison A phase. Finally, the percent of partial intervals of disruptive behaviors were lower for each participant in each B phase than in any comparison A phase.

Data points are provided in a follow-up session to assess the efficacy of the self-management intervention over time in the classroom setting and the ability of the teacher to fade some of the reinforcement provided, as well as the time interval for self-assessment, and increase behavioral goals. The data points obtained in the follow-up session in which intervals were faded and goals were increased indicate stable results consistent with data collected in phase B3.

### *Inter-observer Agreement*

A classroom teacher's aide collected data on student behavior during 33% of the observations for on-task and disruptive behaviors. The number of agreements between the data collected by the teacher's aid and the data collected by the classroom teacher was divided by the opportunities the two observers had to agree and multiplied by 100 to yield 95% inter-observer agreement over all observations for on-task and disruptive behaviors with a range of 93% to 99% agreement for each variable.

### *Student Accuracy*

Student accuracy was assessed daily during each self-management phase of the study by comparing the number of agreements between the student collected data and the classroom teacher collected data to the total number of opportunities they had to agree during each day of data collection for appropriate behaviors, disruptive behaviors, and completed assignments. Students were highly accurate in recording disruptive behaviors with rates of 100% agreement across all participants for all phases with one exception. Participant number four did not record one instance of physical contact during the first B phase. Participants were accurate in their recording of appropriate behaviors with a range of 81.25% to 100% each day. Students were 100% accurate in recording completed assignments.

### *Fidelity*

The researcher reviewed the student's data recording sheets for adherence to the intervention directions to assess fidelity. All five students completed daily recording sheets during the B phases of the study. The recording sheets were complete with recordings for each measure of on-task behavior and disruptive behavior for each interval throughout the day. The students did not leave any of the possible intervals that they could have recorded blank. It is unknown, however, if the students always recorded at the precise interval that they were supposed to.

## Discussion

The present study provides additional support for the use of self-management with the population of children diagnosed with ADHD. The use of self-management was effective in increasing on-task behavior while reducing disruptive behavior, and

increasing the academic performance of five 6th-grade boys diagnosed with ADHD who were also taking psycho stimulants to control symptoms.

In viewing the data, it should be noted that the participants returned to baseline levels across behaviors when self-management was withdrawn in A phases. At first glance, this may appear to indicate that self-management was not useful because the benefits did not carry over into A phases when the strategy was withdrawn. As the self-management B phases progressed, however, the supports of teacher prompts, intervals for student self-management, and behavioral goals for reinforcement were altered to slowly fade these supports. Throughout the B phases of the study, teacher prompts were faded to a simple schedule that was left on a blackboard, student self-management intervals gradually increased from 15-minute intervals to 45-minute intervals by follow-up, and student goals for academic achievement and on-task behaviors were increased for reinforcement to occur. Data points across the B phases remained consistent over the study, even as these supports were faded. These results indicate that the self-management intervention was effective, but supports must be faded slowly with constant monitoring to be sure benefits are not compromised.

The use of the self-management intervention not only helped the teacher manage classroom behavior but also influenced academic performance for her students as well. Students with ADHD improved both their percentage of completed assignments as well as their correct responses. Although correct answers were not self-monitored by the individual students, data from Figure 3 indicate that the student's correct academic responses varied consistently as self-management was implemented and withdrawn. This

collateral effect of academic improvement is an important contribution to what is known about the benefits of the self-management strategy for this population.

The self-management strategy was implemented in this study as an addition to physician prescribed psycho stimulants to help control symptoms of ADHD. We do not know if the psycho stimulants were necessary for these participants because we did not use a no-drug condition. The effectiveness of the strategy when combined with psycho stimulants confirms previous knowledge that the combination of drug therapy and behavioral intervention is more effective than drug therapy alone (Pelham et al., 2000). Future research could further address the effects of each intervention alone and in combination. It is imperative that educators understand that they can make a difference for these children, even those already being treated by a physician, through behavioral interventions such as the strategy implemented here.

#### *Practical Applications for Teachers*

This study provides an example of how a classroom teacher could implement a self-management strategy to help students diagnosed with ADHD be successful in a general education classroom setting. By focusing on the reality of a classroom-based intervention, this study provides an application of research in practice. The study was conducted within the confines of a general education classroom and the researcher aimed to engage the classroom teacher and her needs as extensively as possible.

The classroom teacher's need for easy and quick data recording were addressed by consolidating variable definitions across participants for recording data and adjusting the timing of intervals to fit what she could reasonably do with her teaching schedule. The intervention took a relatively short amount of time with approximately twenty

minutes devoted to the initial individual meetings with each student and some additional minutes spent checking for accuracy and providing feedback to students as they learned how to record their own behaviors. This initial investment likely paid off when behavior problems were reduced and appropriate behaviors were increased. The classroom teacher was then free to teach rather than discipline her students. Future studies ought to assess the variable of teacher time devoted to disciplinary action and behavioral interventions in the classroom between phases in addition to student performance variables. Findings that confirm time benefits for teachers may provide further incentives for teachers to attempt such strategies in the future.

Implications for implementation in the classroom include the need for slow fading of supports. Initially, teachers implementing a self-management strategy will need to invest time with each targeted student to identify needs, establish goals, find reinforcers, and teach each student how to recognize, record, and reinforce their behaviors. Once the intervention is in place, teacher time can be freed by gradually fading teacher prompts, recording intervals, and reinforcement. The data collected in this study reflect the need for slow fading of these supports in order for the intervention to remain effective. Teachers need to be aware of this need for slow fading of supports and the importance of continuous assessment of effects in order to determine if benefits continue, as supports are faded.

The efficiency of self-management combined with the demonstrated effectiveness of the strategy when paired with reinforcement makes it an ideal strategy for the classroom environment. This study offers an example of how the strategy can be implemented by classroom teachers.

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Table 1

*Participant drug therapy information*

	Age	Weight	Drug	Dose	Time
1	12	103 pounds	Adderal Time Release	20mg	7:00am
2	12	96 pounds	Ritalin 1.5 tablet	15mg	8:45am & 12:00pm
3	12	98 pounds	Adderal Time Release	20mg	7:00am
			Melboutrine	10mg	8:00am & 3:00pm
4	12	111 pounds	Dexdrine Regular	5mg	7:30am & 11:40am
			Dexdrine Time Release	10mg	8:00am
			Clodine (for sleep)	0.5mg	Before bed
5	12	120 pounds	Ritalin 1.0 tablet	10mg	8:00am & 11:40am

Figure Captions

*Figure 1.* Percent of 15-minute whole intervals in which participants were on-task.

*Figure 2.* Percent of 15-minute partial intervals in which participants were disruptive in class.

*Figure 3.* Daily percentage of points earned for complete and correct assignments out of the total possible points available on all assignments per day.