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# **EFFECTIVE STRATEGIES FOR MANAGING ADHD STUDENTS IN THE CLASSROOM**

by  
**Merri Owen**

## **A Thesis**

Submitted in partial fulfillment of the requirements of the  
Master of Arts Degree  
of  
The Graduate School  
at  
Rowan University  
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Approved by \_\_\_\_\_  
Dr. Stanley Urban, Ph.D., Professor

Date Approved May 3, 2001

## **ABSTRACT**

**Merri Owen**

### **EFFECTIVE STRATEGIES FOR MANAGING ADHD STUDENTS IN THE CLASSROOM**

**2001**

**Dr. Stanley Urban**

**Learning Disabilities**

With so many school-age children being identified ADHD or ADD, many teachers as well as administrators feel ill-prepared to handle these students in their classrooms. The purpose of this study was to determine procedures teachers use effectively to manage ADHD student's behavior in their classrooms. It was also used to determine if a differential relationship exists between the willingness of upper elementary teachers and lower elementary teachers to accommodate ADHD students in their classrooms.

Forty-five teachers completed a survey to determine how frequently specific strategies were used and their perception of the effectiveness of these strategies. The teachers identified how frequently they used a strategy by circling a number on a 3-point likert scale (1=almost or not at all to 3=very often). Then they identified how effective the strategy was by also using a 3-point likert scale (1=not at all effective to 3=very effective). The teachers were also asked to respond, by circling "Yes" or "No", to a statement about making accommodations for ADHD students with consultative assistance and specific intervention techniques.

The most frequently used and most effective intervention for managing the ADHD student's behavior was the use of structure (schedules, posted rules, and expectations). A greater proportion of upper elementary teachers would accommodate mild to moderate ADHD students in their classrooms when given consultative assistance and specific intervention techniques than lower elementary teachers.

## **MINI-ABSTRACT**

**Merri Owen**

### **EFFECTIVE STRATEGIES FOR MANAGING ADHD STUDENTS IN THE CLASSROOM**

**2001**

**Dr. Stanley Urban**

**Learning Disabilities**

The primary purpose of this study was to determine those effective procedures used to manage the behavior of ADHD students; second to determine if a differential relationship exists between the willingness of upper elementary teachers and lower elementary teachers to accommodate ADHD students in their classrooms. The use of structure in the classroom and teacher praise were found to be most frequently used and most effective by the majority of teachers surveyed. A greater proportion of upper elementary teachers is willing to accommodate the ADHD student in their classrooms compared to lower elementary teachers.

## **ACKNOWLEDGEMENTS**

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## **CHAPTER 1**

### **Introduction:**

Attention deficit hyperactivity disorder, or ADHD, affects individuals who present as neurobiologically different from the average person. This difference is characterized by three observable and involuntary behaviors: inattention, impulsivity, and hyperactivity. A common overlooked type of ADHD is the child who rarely displays hyperactivity, or commonly referred to as ADD. These children are often overlooked because they appear to be lazy or unmotivated. According to Robert Barkley, a foremost researcher on ADHD, the primary problem is one of inhibiting behavior or controlling the impulse to respond to a situation. ADHD children have problems stopping their response to behaviors or situations long enough to think and modify their responses in what they are saying or doing. They are not being willfully disobedient. Hyperactivity affects approximately two million children in the United States, and experts estimate, according to Sandra Rief, author of *How to Reach and Teach ADD/ADHD Children*, that three to ten percent of school-age children are affected by ADHD. However, more frequently cited in research, according to Rief, are the numbers three to five percent. ADHD is far more widely diagnosed in boys than in girls, with girls more commonly diagnosed ADD.

ADHD affects children and their school performance, both academically and socially. ADHD causes mild to severe impairments that can be so debilitating that the child may need to be accommodated in school under one of three federal statutes: (1) the



Individuals with Disabilities Education Act, Part B [IDEA]; (2) Section 504 of the Rehabilitation Act of 1973; or (3) the American with Disabilities Act of 1990 [ADA]. Children with ADHD, if untreated, have poor self-esteem and poor social adjustment. These children commonly experience peer rejection, interpersonal difficulties, and negative reactions and feedback from almost everyone. ADHD occurs across all levels of intelligence from the learning disabled to the bright or gifted child. Even gifted children, despite their natural ability, often experience failing grades, retention, suspension, and expulsion. The ADHD student's school performance can fluctuate from hour to hour and even day to day, which is often perceived as indifference or lack of effort. Because of their inability to control behavior or inhibit their impulses, the risk of school failure increases for these students. Many ADHD students have difficulty regulating their behavior, but are still required to sit still, remain quiet, work independently, be organized and keep track of materials, and follow rules and directions. ADHD children are held accountable to grading and discipline policies and punished when they do not comply even though it is out of the realm of their control. ADHD children do need to be taught they are accountable for their actions, but punishment for academic or social behaviors that are beyond their control is both unhelpful and inappropriate.

#### Need for the Study:

With so many school-age children being identified ADHD or ADD, many elementary teachers, as well as administrators, feel ill-prepared to handle these students in their classrooms or schools. These teachers are sometimes given suggestions or

possible interventions to try, and then left on their own to handle the child. Often they are told that medication is the only way to manage the ADHD or ADD student. The teachers frequently lack the support of administrators and/or the professionals who are knowledgeable on how to handle the ADHD student. Teachers who are handling these students need to know what interventions or strategies other teachers have implemented and found successful and what interventions are not as successful. Also, with so many new teachers coming into the classroom, and not having the training or the background to be successful with the ADHD student, this group needs to know what veteran teachers have found successful. This will make their first years of teaching more productive and ease the stress that comes with the first years of teaching.

#### Value of the Study:

This study will be a valuable resource for all educators who have children with ADHD or ADD in their classrooms. The information obtained will make their experience in managing the student successful, as well as, promoting a more successful and enjoyable experience for that student. Teachers will have a source that ranks the interventions from most effective to least effective, so that they know which intervention to try first. And if an intervention is not effective, the educator will have other interventions that have been ranked in terms of effectiveness to implement in the classroom.

### Research Questions:

The data obtained in this study will answer the following questions:

1. What strategy or intervention do elementary classroom teachers find most effective for managing students with ADHD or ADD?
2. Are lower (kindergarten to third grade) elementary teachers more willing to accommodate ADHD or ADD students than upper (fourth to sixth grade) elementary teachers?

### Definitions:

*Attention Deficit Hyperactivity Disorder (ADHD)*- a disorder, according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), that has three primary characteristics: inattention/distractibility, impulsivity and disinhibition, and hyperactivity; maladaptive and inconsistent with child's developmental level; evident in two or more settings; present for at least six months; and appeared before age seven.

*Attention Deficit Disorder without Hyperactivity (ADD)*- a disorder, according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), that has the primary characteristics of inattention/distractibility, and impulsivity and disinhibition; maladaptive and inconsistent with the child's developmental level; evident in two or more settings; present for at least six months; and appeared before age seven.

*Intervention/Strategy-* intervening into the affairs of others; or a plan or action to some end.

*Elementary Education Teacher-* an individual who is certified by a state board to teach the basic subjects (reading, math, language arts, social studies, and science) in grades kindergarten to sixth.

*Special Education Teacher-* an individual who is certified by a state board to teach children eligible for special education according to the Individuals with Disabilities Education Act, Part B, in grade kindergarten to sixth.

#### Limitations:

Many veteran teachers are not willing to make accommodations in their classrooms. They state that all the students should be held accountable at the same level without any special considerations. Every student in their class is treated exactly the same. The student is expected to meet the teacher's expectation level and demands.

Some children are often not identified as ADHD or ADD by a professional because parents are not willing to have the child identified as ADHD. They feel that having their child labeled will hinder the child academically, or cause other concerns for the child, such as being blamed for any behavior problems in the classroom. The ADHD student is often the scapegoat for the classroom problems. They also associate the term

ADHD with medication and the parents do not want their child on medication. There are also those parents who perceive their child as being overactive and not ready to focus on the tasks that a classroom demands of the student, rather than ADHD or ADD.

## **CHAPTER 2**

### **Review of the Literature:**

#### **Behavioral Characteristics:**

There are many behavioral characteristics displayed by ADHD children. One should keep in mind that not all characteristics apply to every child and the degree of the characteristics will also vary. It is also important to recognize that many of these behaviors are present in children and will vary in degree at specified developmental stages. When a child displays numerous characteristics at a significantly high rate and these behaviors are also developmentally inappropriate, then further assessment is needed to determine if the child is manifesting ADHD.

ADHD children display a high activity level. They appear to be in constant motion, fidget with their hands or feet, and find nearby objects to play with, and roam around the classroom because they have great difficulty remaining in their seats. They also display impulsivity and lack self-control. This lack of self-control and impulsivity is shown by blurting out verbally, often inappropriately, not waiting for their turn, and often interrupting or intruding on others. They also display a lack of self-control by talking excessively, getting in trouble because they do not stop and think before acting, and often engaging in physically dangerous activities without considering the consequences.

ADHD children have difficulty making the transition from one activity to another and display aggressive behavior because they are easily overstimulated. It appears that these

children are socially immature, have a low self-esteem, and a low tolerance for frustration.

A different type of ADHD, ADD without the hyperactivity has its own cluster of behavioral characteristics, quite different from ADHD. The ADD child is easily distracted by extraneous stimuli has difficulty listening and following directions, and also difficulty focusing and sustaining attention. The ADD student has difficulty concentrating and attending to tasks. Inconsistent performance on schoolwork is a characteristic of ADD, one day able to complete the task and the next day they cannot. This child may appear to be oblivious to what is occurring around him or tuning out what is happening. The ADD child is disorganized, loses or cannot find belongings, has poor study skills, and cannot work independently. ADD can cause a child in the classroom to underachieve and experience low self-esteem.

#### Assessing ADHD:

There are several instruments that can be used to assess if the child is ADD or ADHD. A parent, a teacher, or a clinician can complete these instruments. Many clinicians use the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), published by the American Psychiatric Association, because it has narrowed the criteria and tightened the diagnostic procedures. It required the characteristics to be clinically significant, evident in two or more settings, must have been present for at least six months, and appear before the age of seven. The child must display at least six of the nine criteria for either Attention Span or Hyperactivity/Impulsivity. For attention span criteria, the list includes: pays little attention to details, has short attention span, does not

listen when spoken to directly, does not follow instructions, has difficulty organizing tasks, avoids tasks that require sustained mental effort, loses things, is easily distracted, and is forgetful in daily activities. The hyperactivity/impulsivity criteria list includes: squirms in seat, leaves seat in classroom when expected to be seated, often runs or climbs excessively at inappropriate times, has difficulty playing quietly, talks excessively, blurts out answers before questions are completed, has difficulty waiting turn, often interrupts or intrudes on others, and participates in unsafe activities.

#### Cause of ADHD:

The cause of ADHD is not known at this time. It is usually attributed to heredity or other biological factors. Parents should not feel guilty or blame themselves for the child's problem, it is no one's fault the child has ADD or ADHD. One possible cause of ADHD could be genetic. It is known that ADHD tends to run in a family. There will frequently be a parent, sibling, grandparent, or other family member who was known to have similar school or behavior problems during their childhood. There could be a biological or physiological cause for ADHD. ADHD is described by many doctors as a neurological inefficiency in the brain in the areas that aid in screening sensory input, focusing attention, and controlling impulses. Some studies point to the chemical dopamine, which transmits neurosensory messages, as being imbalanced or lacking. Apparently when a normal person focuses, their brain releases extra neurotransmitters, which enables the person to focus on one thing and block out any extra stimuli. A shortage of neurotransmitters appears in people with ADHD. Complications or trauma in pregnancy or birth, or lead poisoning has also been suggested as possible causes of



ADHD. A controversial cause of ADHD in the medical community is the link to diet and food allergies. Current research does not support the connection, but perhaps future research will be more conclusive. Finally, prenatal alcohol and drug exposure has been suggested as a possible cause of ADHD. Many of these children exhibit numerous ADHD behaviors and have sustained neurological behaviors. Scientific research, however, has not yet proven the casual relationship between ADHD and prenatal drug exposure.

#### Intervention Strategies:

Intervention strategies can be grouped into four different categories: antecedent manipulations, consequent manipulations, cognitive-behavioral interventions, and medications. Antecedent manipulations of the learning environment refer to the setting and structure of the classroom, while antecedent manipulations of the task refer to the specific characteristics of the task such as color, texture, and novelty. The ADHD student's classroom needs to have an established structure by providing them with a daily schedule along with posting the classroom rules. Classroom rules should be stated in clear, concise descriptions and reviewed regularly. Physical arrangement of the classroom should be given careful consideration. Close proximity to the teacher, such as the student's desk next to the teacher's desk, and being next to the ADHD student when giving important directions can help promote and maintain the attention of the ADHD student and facilitate positive behavior during transitions. The presentation formats and task materials should be varied and use different modalities to increase and maintain the ADHD student's interest and motivation. Greater task structure, novelty, and increased

use of stimulation through the addition of color, shape, and texture facilitates increased student attention as shown by the research (Zentell, 1989; Zentell & Dwyer, 1989). Also indicated by the research (Zentell & Lieb, 1985) is a decreased level of activity in hyperactive children in a structured situation, demonstrating that structure can reduce activity level in students. Varied formats include videos, overheads, posters, and models. Also suggested to increase and maintain the attention of the ADHD student is a brisk instructional pace. Scheduling a preferred activity after a non-preferred activity would be another way to motivate the ADHD student to finish an activity. Research has shown that alternating an active task (e.g., making a model of the solar system) with a passive task (e.g., completing a worksheet on the solar system) enables the ADHD student to productively channel their energy (Zentell & Meyer, 1987). To help focus the ADHD child's attention on the assigned task, use short verbal cues, subtle non-verbal prompts such as pointing to the eyes for look, to the ears for listen, and to the chin for watch may face and pay attention, and attention checks. Research studies (Marten & Kelly, 1993) found that presenting lessons in a fast-paced manner, using signals or cues to alert the student to important information, making eye contact, sitting in close proximity to the teacher, or providing numerous opportunities for the student to respond are associated with increased student achievement. These techniques are also found to be effective in managing and fostering appropriate classroom behavior. The whole class can repeat directions to help the ADHD student remember directions. The student with ADHD may need intermittent feedback while completing an assignment, rather than when the task is completed, therefore make academic tasks brief and give immediate feedback about the

accuracy of the assignment. Another strategy to foster attention is to try to use peer tutoring, which also help the ADHD student who is struggling academically.

A study was conducted on desk arrangement and its effects on pupil's classroom behavior (Rosenfield, Lambert, & Black, 1985). Three experimental classrooms of fifth and sixth graders were observed with three other classrooms being used as the control group. The desks in the experimental classrooms were arranged in one of three different configurations, rows, clusters, or circle, for three different lessons. The control classrooms were arranged in one configuration the entire time. Each desk configuration was observed during three separate lessons for a total of 180 minutes. The control classroom was observed three times also for a total of 180 minutes. The results showed that desk arrangement did not affect listening, joining in the discussion of the common problem or issue, or behaviors that disrupt the activities of the classroom or the individual student. However, circles produced a greater number of students attempting to join in the discussion without following proper procedure such as raising the hand and being called on before answering than did rows. The cluster arrangement produced more on-task behaviors, which include verbal or physical actions that contribute constructively to the classroom academic task, and more hand raising than did rows. The row configuration produced a greater number of withdrawal responses, disassociation from all ongoing activity than the circle or cluster arrangement, and more off-task responses than the circle configuration. This study shows that desks arranged in a circle can control off-task behavior of pupils as well as facilitate interaction. Desk arrangement as suggested by the results can influence participation, thinking, and appropriate comments, which can have a positive effect on learning.

Consequent manipulations refer to the response or application of consequences by the teacher after a specific student behavior. One consequent manipulation is teacher attention. Teacher attention can be positive by praising the appropriate behavior or negative by reprimanding the inappropriate behavior. This frequently employed classroom management technique can be effective in facilitating positive changes in behavior. However, teacher attention and social praise used by itself is frequently insufficient in producing the consistent improvement in ADHD student's academic and social behaviors. The research (Barkley, 1990) suggests that a combination of interventions improves the probability of improvement of the behavior. Abramowitz, O'Leary, and Rosen (1987) researched the effects of reprimands on ADHD students and compared the influences of teacher reprimands, teacher encouragement, and no feedback on these students. The results showed significantly lower levels of off-task behaviors were observed with reprimands. Research by Pfiffner and Barkley (1990) suggests that reprimands in a firm, brief, and consistent fashion are most constructive when delivered near the onset of the behavior.

Pfiffner and O'Leary (1987) examined the efficacy of an all-positive management system in the absence of a history of negative consequences. The subjects were five boys and three girls in grades first through third. Six of the eight children were reported by their teachers to have behavioral problems. Child behaviors were observed and recorded as on-task (engaged in appropriate task-related activities during the interval, such as sitting quietly, working on task assigned, or attending to the teacher) or off-task (calling out, being out of seat without permission, daydreaming, aggression, or any activity not approved by the teacher). Teacher behaviors were also observed as positive (physical,

e.g., hugs, or verbal, e.g., praise or privileges) or negative (verbal reprimands or sending a child out of the room). The experimental conditions were regular positives alone in which the teacher issued only positive consequences, enhanced positives alone in which the frequency and quality of the positive consequences were increased with no negative consequences, enhanced positives and negatives in which negative consequences were added to the enhanced positives, and enhanced positives and fading negatives in which a combination of reprimands and enhanced positive consequences with a minimum rate of one reprimand and six praise statements per hour were issued. The results of this study showed that the enhanced positive approach with the absence of negative consequences was not effective. When no negative consequences were used, the student's behavior was highly disruptive. The implication of these results is that when learning new rules, negative consequences are necessary for children. Once the inappropriate behavior has been controlled through negative consequences, then the use of primarily enhanced positives is sufficient.

For some ADHD children, behavioral change may not be maintained unless powerful contingencies are in place. Contingency management procedures include token reinforcement systems, response cost, group contingencies, contingency contracting, home-based contingencies, and time-out from positive reinforcement. Token reinforcement systems produce a high level of on-task behavior as well as increased academic achievement as indicated by research. Robinson, Newby, and Ganzell (1981) examined the use of a token system with an eighteen-member class of third grade hyperactive boys on reading and vocabulary performance. The basic program involved having each student learn seven words of a unit, help teach a second student those words,

learn to use the words in a sentence, and teach a second student to use the words in sentences. Each time the student completed a task a different color token was awarded to the student. When the student earned all four tokens, they could be exchanged for fifteen minutes of play on a pinball machine. The results showed that the number of tasks completed rose during the intervention and the average completion rate for weekly reading examinations also rose. All eighteen students increased their academic performance through the token program.

Combining positive reinforcement with mild punishment, response cost systems, has been effective in producing desired behavior change (DuPaul, Guevremont, & Barkley, 1992; Rapport, Murphy, & Bailey, 1982). Response cost systems reward positive behaviors while losing privileges for negative behaviors to control a child's behavior in a classroom setting. DuPaul et. al. Found that a combination of token reinforcement system and a response cost system resulted in significant improvements in on-task behaviors, productivity, and accuracy of ADHD students.

Group contingencies, home-based contingencies, and contingency contracting are also effective intervention in modifying classroom behavior. A group contingency is one in which the behavior of an individual in the group, the behavior of part of the group, or the behavior of the entire group determines the presentation or loss of a reinforcer. This method allows the teacher to rely on peer influence and peer monitoring in eliciting the appropriate behavior. Home-based contingencies involve the delivery of pre-determined consequences in the home, which is based on a teacher's daily report. The advantage of this system besides being economical and efficient, it enables the classroom teacher to establish contact between the home and school with no alteration to his or her teaching

style. The success of this intervention relies on the consistent delivery of consequences and the teacher's commitment to provide accurate daily reports to the parents.

Contingency contracting involves an agreement between two parties, for example a teacher and a student, which specifies a desired behavior and a conditional reward.

Time-out, a brief period of time during which no reinforcement is available whether exclusionary where the student is removed from the classroom or nonexclusionary where the student remains in the classroom, can also be an effective technique to manage behavior. Time-out has several potential disadvantages such as loss of instructional time, resistant behavior, and scarce resources for implementing the procedure properly. Time-out from positive reinforcement should be brief and used with ongoing positive procedures.

Teachers can use a variety of consequent manipulations to manage the behavior of ADHD student's effectively. The teacher should deliver frequent and descriptive positive reinforcement immediately following the desired behavior and deliver consequences immediately and consistently following the undesired behavior. Appropriate social behavior as well as academic effort and performance should be given reinforcement by the teacher. To promote appropriate classroom behaviors, tangible rewards such as stickers or edibles and token economies seem to be effective. Also, teachers should use peer-mediated interventions. Peer influence can serve as a useful resource for ADHD students through modeling and reinforcement. For ADHD students, the teacher may need to use mild punishment such as reprimands, loss of privileges, response cost systems, and time-out to reduce inappropriate and disruptive behavior.

Cognitive-behavioral interventions appear to be another approach when working with ADHD students. Cognitive-behavioral interventions emphasize the development of self-control and problem solving skills. Several studies' findings support the use of cognitive-behavioral strategies such as self-monitoring, self-reinforcement, and self-instruction for ADHD students. Consequently, proper implementation of these interventions requires an exorbitant amount of time and resources. Numerous early studies investigated the impact of task-oriented cognitive problem solving training on behavior (e.g., Eastman & Rasbury, 1981; Friedling & O'Leary, 1979; Moore & Cole, 1978). It was through that training ADHD students to reduce their impulsivity when responding on cognitive tasks would carry over with decreases in behavior impulsivity also. Investigations that were controlled using this treatment provided little evidence of improvement in behavior of ADHD students. Several investigators have used strategies that appear to change behavior such as training in interpersonal or social problem solving, based in large part on the model described by Spivack, Platt, and Shure (1976). The model focuses on teaching the student to recognize and define interpersonal problems when they come up, generate several alternative solutions to the problem, consider and evaluate the consequences of the alternatives, consider the means by which the solution that was chosen can be implemented and then follow through on the chosen solution to verify the utility of the choice. Only one study yielded a positive finding in utilizing this procedure (Kirby, 1984). The children were instructed in this strategy during a seven-week summer program and found that the parents rated their children's behavior improved on a self-control rating scale. However, Abikoff and Gittelman (1985) found no evidence of improved behavior with children trained with this procedure for eight



weeks as part of a four-month cognitive training program. Brown, Borden, Wynne, Schleser, and Clingerman (1986) also reported similar results. It appears that the students can be taught this intervention, but do not generalize the skills to real-life settings. Several studies also suggest that on-task behavior of ADHD students can be improved using self-monitoring and self-reinforcement procedures (Barkley, Copeland, & Sivage, 1980; Cameron & Robinson, 1980; Varni & Henker, 1979). Once again, the improvement on on-task behavior does not generalize to the real-life setting (Barkley, et. al., 1980).

Self-evaluation and teacher matching strategies can have the potential for changing the behavior of disruptive ADHD students (Hinshaw, Henker, & Whalen, 1984). Children rate their behavior on a pre-determined rating scale, and teachers rate the child's behavior also. The ratings are then compared and the child earns points based on the ratings. Gradually the teacher support is faded until it is no longer needed. Also, to be used in the classroom to encourage appropriate responses or discourage inappropriate behavior are self-monitoring techniques. The student records on a piece of paper when the desired behavior occurs. Along with self-monitoring, self-reinforcement can be used. The child is told to reinforce themselves with praise or a token whenever the desired behavior is given within a specified time span. Finally, a very motivating strategy as well as enjoyable for children with ADHD is creating goals and measuring the progress towards those goals. The teacher and the student decide the goals together, and then a chart is kept on a daily basis of the child's progress, with the goals being modified when necessary. ADHD cannot be cured, but with education and treatment the individual with ADHD can be taught to cope with the disorder.

A treatment that addresses the presumed organic basis of ADHD is medication. Many children diagnosed with ADHD take medications such as Ritalin, Dexedrine, or Cylert. Sixty to ninety percent of students with ADHD, or two to six percent of the elementary school population, are treated with one of these medications. For most children medications provide a short-term improvement in characteristic behaviors – inattention, impulsivity, and hyperactivity. However, this treatment has not shown any long-term improvements such as improved academic achievement, social adjustments, or higher-order thinking processes. Cautions from the United States Department of Education are that medication does not replace effective classroom practices aimed at improving learning and achievement. Children with ADHD, whether receiving medications or not, benefit most from proper instruction, accommodations, and interventions.

Studied extensively has been the short-term clinical effectiveness of stimulant medication and a recent report (Elia, Bocherding, Rapoport, & Kayser, 1991) concluded that more than 90% of ADHD students respond favorably to Ritalin or Dexedrine. Most ADHD children become more attentive, less impulsive and disruptive, and less overactive in situations in which they need to manage their behaviors when on medications (Abikoff & Gittelman, 1985c). Also, the productivity and accuracy of their academic work improved (Carlson, Pelham, Milich, & Dixon, 1992; Douglas, Barr, O'Neill, & Britton, 1986), and when treated with stimulants, parents and teachers interacted more positively with ADHD children (Barkley & Cunningham, 1979; Whalen, Henker, & Dotemoto, 1980). These youngsters can be maintained in regular classes and not require special education placement due to dramatic improvements with medication.

There is some support for the effectiveness of behavior therapy in conjunction with stimulants. This combination appears more useful than either treatment alone for managing the ADHD child's classroom behavior (Gittelman, Abikoff, Pollack, Klein, Katz, & Mattes, 1980). The overall clinical usefulness of this treatment is limited because of the absence of maintenance effects following the termination of treatment. Also, it fails to address all the academic, social, and emotional problems associated with ADHD. Further examined was the usefulness of cognitive-behavioral interventions with medication. Once again, the results were disappointing. The combination of medication with cognitive-behavioral therapy has not produced any improvements in cognitive functioning, academic performance or behavior (review by Abikoff, 1987; Hinshaw & Erhardt, 1991).

#### Treatment Approach:

There are many ways to help the child and the family, once a child has been identified and diagnosed with ADHD. The most effective approach is a multifaceted treatment approach. The program should include behavior management and behavior modification at both home and school in conjunction with family and individual counseling. Family counseling can help with an ADHD child in the house because the whole family is affected by ADHD. Also included should be individual counseling to teach coping techniques, problem-solving strategies, and how to deal with stress and self-esteem. Cognitive therapy to give the child skills to regulate his or her own behavior as well as "stop-and-think" techniques should also be included. Social skills training and numerous school interventions (environmental, instructional, and behavioral) may be

included in an effective approach to managing ADHD. The ADHD student should be provided with a physical outlet for the ADHD such as swimming, martial arts, gymnastics, running, or any non-competitive sport. The ADHD student should receive medical intervention, stimulant medications, as part of the approach. And finally, parents should be provided education to help them learn as much as they possibly can about ADHD. The parents should also be given support while dealing with their ADHD child until they become an effective advocate for that child.

### **CHAPTER 3**

#### **Instrumentation:**

In reviewing the literature on ADHD and the studies of interventions and strategies, no surveys have been developed to determine teachers perceptions regarding the most effective techniques and approaches in managing the disorder. All the studies examined the effectiveness of a certain strategy or intervention, such as room arrangement, token reinforcement, or reprimand in a controlled setting. The teacher's opinion of the effectiveness of the strategy in the classroom was never taken into account. Once the study was concluded, there was no follow-up to see if the strategy was still effective at managing the ADHD.

The survey contained in Appendix A was constructed by the researcher for this study since no surveys have been developed to assess the teacher's opinion of effective strategies. The interventions or strategies described in the survey were found in the review of literature and have been used with ADHD students and proven to have some effectiveness with these students in the classroom. A total of twenty strategies were specified in the survey and when necessary explanation was given to describe each strategy. Two, three point likert-style scales were attached to each item; the first scale asked how frequently the teacher used the strategy, and the second scale asked the teacher's opinion of the effectiveness of the strategy. The points on the first scale were as follow: One = "almost or not at all", Two = "sometimes", and Three = "very often" to describe the frequency of use of the strategy. To assess the teacher's opinion of

effectiveness of the strategy the following scale was used: One = “not at all effective”, Two = “sometimes effective”, and Three = “very effective”.

The teacher was asked to first fill in the grade they taught and then whether they taught regular education or special education. The teachers circled first their response to how frequently they use the strategy for managing the behavior of the ADHD student in their classroom. Then the teacher would circle their response to how effective they found the strategy to be in managing the ADHD student’s behavior. The teachers were also asked to circle yes or no in response to a statement asking if they would make accommodations in their classroom for the ADHD students, if given consultative assistance and specific intervention techniques.

#### Procedure:

This study was conducted in three school districts: Gloucester Township, Camden County; Paulsboro, Gloucester County; and Upper Pittsgrove Township, Salem County. Gloucester Township Elementary School is located in Gloucester Township, Camden County with an elementary population of approximately 320 students and thirteen classroom teachers. There are twelve regular education classrooms (K-5) and no self-contained special education classrooms, but a resource center program is available.

Two elementary schools in Paulsboro, Gloucester County participated in this study, Loudenslager and Billingsport Elementary School. Loudenslager Elementary School houses grades kindergarten to third and fifth to sixth grades, with an approximate student population of 405 and twenty-two classroom teachers. There are seventeen regular education classrooms and five special education classrooms. Billingsport

Elementary School houses pre-school through fourth grade with an approximate student population of 310 and nineteen classroom teachers. There are fourteen classrooms (K-4) and two special education classrooms.

Upper Pittsgrove School is located in Monroeville, Salem County with an approximate students population of 330 in grades K-6. There are thirteen classroom teachers. Eleven classrooms are grades K-6 and two classrooms are special education classes.

The surveys were distributed to 64 teachers in all three school districts. Only full-time classroom teachers, both regular education and special education, received the survey. The surveys were distributed during the months of December and January, and teachers were asked to return them as soon as possible. A second survey the end of January was distributed to the teachers in Paulsboro due to very few surveys being returned. Thirty-seven surveys were returned in the first distribution and eight more surveys were received from the second distribution. Forty-five surveys were returned for a total return rate of 70%.

## **CHAPTER 4**

### **Results**

The purpose of the survey is to determine the strategy or intervention that elementary classroom teachers find most effective for managing attention deficit disorder students. It is also being used to determine if more lower elementary teachers or upper elementary teachers accommodate attention deficit disorder students.

The survey required the teachers to rank the frequency of use of the strategy and then rank its effectiveness. The strategies were from four different categories: antecedent manipulations, consequent manipulations, cognitive-behavioral interventions, and medication/classroom aides. The teachers were also asked to respond by circling “Yes” or “No” to a statement about accommodating attention deficit disorder children in the classroom if provided with consultative assistance and specific intervention techniques. A space was given for any additional strategies to be listed and ranked that the teachers have used and were not listed in the survey.

The results from the survey were tallied together (see Table A). The survey from the teachers ranked the use of structure such as schedules, posted rules, and expectations as the most frequently employed strategy for managing ADHD students and they also ranked it as the most effective. Also ranked as being frequently used was teacher attention, praising appropriate student behavior and reprimanding inappropriate behavior. However, this strategy was ranked as being sometimes effective to very effective. Another strategy that was ranked as being used frequently by the majority of the teachers



surveyed was using classroom aides to manage ADHD students. It was also ranked very effective as a strategy for managing these children.

The strategies ranked as being least frequently used by the teachers was self-monitoring and self-reinforcement. These strategies were also ranked as least effective to not effective at all. Many teachers responded to not having used these strategies at all and therefore, could not rank their effectiveness.

A strategy that was ranked as being used sometimes and ranked as sometimes effective was goal setting. Two other strategies to be ranked as being used sometimes and sometimes effective by the classroom teachers were contingency contracting, contracting for a desired behavior, and interspersing passive tasks with brief academic tasks.

Other strategies or interventions that were listed as having been used by teachers to manage ADHD children and found to be sometimes effective were changing the environment briefly for the student by taking a walk with the classroom aide and giving the child additional jobs or responsibilities in the classroom to allow the child to move. Also written down by the teachers was having a daily behavior chart signed by the parents. One teacher listed using an in-class support teacher to help manage the ADHD student, as long as the two teachers have a cooperative relationship, as an effective strategy. Another strategy used by a teacher was putting a no-skid mat on the student's chair. When the mat gets balled up on the chair, it indicates how fidgety the child has been to the child and the teacher at a glance. The child can use this to help him or her control sitting in his or her seat without moving.

The lower elementary teacher's response was compared to the upper elementary teacher's response on the statement of accommodating ADHD children in their classroom (See Table B). The upper elementary teachers all responded "Yes" with no exceptions. All the lower elementary teachers responded "Yes" except for two. One lower elementary teacher responded "No" to the statement, while one other lower elementary teacher responded "Yes" but only accommodating mild ADHD students, not the moderate ADHD students. Therefore, the upper elementary teachers accommodate ADHD students more than the lower elementary teachers.

**TABLE A**  
**RESULTS OF SURVEY OF EFFECTIVE STRATEGIES FOR MANAGING**  
**ADHD STUDENTS (N=45)\***

1=almost or not at all 2=sometimes 3=very often				1=not at all effective 2=sometimes effective 3=very effective		
How frequently do you use:				How effective do you find it?		
1	2	3		1	2	3
0	2	43	1. Structure (e.g., schedules, posted rules, and expectations)	0	12	30
2	13	30	2. Physical arrangement of the classroom	2	19	24
1	15	29	3. Varied presentation of formats and materials	1	19	25
3	29	13	4. Brisk instructional pace	7	23	15
3	10	32	5. Use of cues, prompts, and attention checks	5	12	28
7	24	14	6. Brief academic tasks interspersed with passive tasks	5	25	15
17	19	9	7. Peer tutoring	12	18	12
0	3	42	8. Teacher attention(e.g., praising appropriate behavior and reprimanding inappropriate behavior)	1	22	22
7	21	17	9. Token reinforcement system	6	24	12
5	16	24	10. Response cost systems(reward positive behaviors while punishing negative behaviors)	6	21	18

14	23	8	11. Group contingencies(reinforcer is contingent on individual, part of the group, or entire group behavior)	14	23	5
23	15	7	12. Contingency contracting(contract for desired behavior and then deliver reinforcer)	17	25	3
15	22	8	13. Home-based contingencies(reinforcer given at positive school behavior)	12	21	5
11	20	13	14. Time-out	10	20	9
23	20	2	15. Self-evaluation(student rates behavior along with teacher)	15	17	5
34	11	0	16. Self-monitoring(student taught to record desired behavior to improve own behavior)	18	11	1
31	10	3	17. Self-reinforcement(student gives own reinforcers for positive behavior)	19	12	3
9	26	10	18. Goal setting(student and teacher set goals and measure progress toward goals)	7	28	8
7	18	10	19. Medication	2	13	19
11	13	19	20. Classroom aides	4	7	29

\*Some totals do not add up to 45 due to teachers not circling any number to go with frequency and/or effectiveness.

**TABLE B**  
**RESULTS TO STATEMENT REGARDING ACCOMMODATION OF ADHD**  
**STUDENTS IN THE TEACHER'S CLASSROOM**

In most cases, I could accommodate mild to moderate ADHD children in my classroom if provided with consultative assistance and specific intervention techniques.\*

Lower Elementary Teachers

**YES      NO**

28\*\*      1

Upper Elementary Teachers

**YES      NO**

14      0

\*Two surveys could not be included because the teachers did not fill in the grade they taught.

\*\*One survey had yes circled with the word mild circled also.

## **CHAPTER 5**

### **Summary:**

With so many school-age children being identified ADHD or ADD, many teachers as well as administrators feel ill-prepared to handle these students in their classrooms. The purpose of this study was to determine procedures teachers use effectively to manage ADHD student's behavior in their classrooms. It was also used to determine if a differential relationship exists between the willingness of upper elementary teachers and lower elementary teachers to accommodate ADHD students in their classrooms.

Forty-five teachers completed a survey to determine how frequently specific strategies were used and their perception of the effectiveness of these strategies. The teachers identified how frequently they used a strategy by circling a number on a 3-point likert scale (1=almost or not at all to 3=very often). Then they identified how effective the strategy was by also using a 3-point likert scale (1=not at all effective to 3=very effective). The teachers were also asked to respond, by circling "Yes" or "No", to a statement about making accommodations for ADHD students with consultative assistance and specific intervention techniques.

The most frequently used and most effective intervention for managing the ADHD student's behavior was the use of structure (schedules, posted rules, and expectations). A greater proportion of upper elementary teachers would accommodate

mild to moderate ADHD students in their classrooms when given consultative assistance and specific intervention techniques than lower elementary teachers.

### Conclusion:

The teacher's response to the survey indicated that they use structure including schedules, posted rules, and expectations as an effective means of managing the behavior of ADHD students. Also, teacher attention was identified as a frequently used method by the majority of the teachers responding. However, the teachers were split in ranking the effectiveness of this intervention for ADHD students. The strategies ranked as being almost or not at all frequently used and also not at all effective were self-monitoring and self-reinforcement.

The responses of the upper elementary teachers showed a greater willingness to accommodate mild to moderate ADHD children in their classrooms when provided with consultative assistance and specific intervention techniques than the lower elementary teachers. One lower elementary teacher responded to only accommodating mild ADHD students, while another lower elementary teacher responded as not willing to accommodate any ADHD students in their classroom.

### Discussion:

There are many interventions available for educators when managing an ADHD student's behavior. Very few classroom teachers are frequently using any of these interventions. The implication of this survey shows the majority of classroom teachers use interventions that are easy to implement and do not require daily maintenance by the

teacher. There has to be consistency with the interventions and with the workload required of the teachers, it is sometimes nearly impossible to monitor interventions unless an allotted period of time is set aside every day. Also noted of the strategies that were less frequently used was the requirement of a reinforcer. Many teachers do not have the resources to purchase reinforcers or there may not be time during the day to allow the ADHD student to do a special activity as a reinforcer.

Teachers felt that some of the strategies suggested used infrequently or not at all by the teachers. This could possibly be due to lack of knowledge or teacher training regarding the strategies or it could be that these strategies require a very time consuming process of training the student and the teacher on how to implement the intervention. Teachers need to be given extensive in-service training on the availability of numerous techniques for managing the ADHD student's behavior as well as how to implement and monitor the interventions.

Furthermore, in response to the statement of willingness to accommodate ADHD students in their classroom, I feel many teachers were not truthful in their response. I have heard comments about how the ADHD student should be classified. Many teachers feel these students do not belong in a regular education classroom. They also feel that their expectations for these students are just the same as every other students, no special accommodations. If so many teachers are willing to make accommodations for ADHD students then why are so few of these children being successful in school today. Further study to determine the true attitude of the teachers towards ADHD/ADD students and the range of potential interventions and accommodations is warranted.



## **APPENDIX A**

## Survey of Effective Strategies for Managing ADHD Students

Grade Teaching: \_\_\_\_\_

Regular Education: \_\_\_\_\_

Special Education: \_\_\_\_\_

Please mark each strategy by circling the number indicating how frequently you have employed the strategy when managing the behavior of ADHD students: 1=almost or not at all; 2=sometimes; 3=very often. Then mark how effective you feel the strategy is when managing the behavior of ADHD students: 1=not at all effective; 2=sometimes effective; 3=very effective.

**1=almost or not at all**  
**2=sometimes**  
**3=very often**

**1=not at all effective**  
**2=sometimes effective**  
**3=very effective**

How frequently do you use:

How effective do you find:

1	2	3	1. Structure (e.g., schedules, posted rules, and expectations)	1	2	3
1	2	3	2. Physical arrangement of the classroom	1	2	3
1	2	3	3. Varied presentation of formats and materials	1	2	3
1	2	3	4. Brisk instructional pace	1	2	3
1	2	3	5. Use of cues, prompts, and attention checks	1	2	3
1	2	3	6. Brief academic tasks interspersed with passive tasks	1	2	3
1	2	3	7. Peer tutoring	1	2	3
1	2	3	8. Teacher attention(e.g., praising appropriate behavior and reprimanding inappropriate behavior)	1	2	3
1	2	3	9. Token reinforcement system	1	2	3
1	2	3	10. Response cost systems(reward positive behaviors while punishing negative behaviors)	1	2	3

1	2	3	11. Group contingencies(reinforcer is contingent on individual, part of the group, or entire group behavior)	1	2	3
1	2	3	12. Contingency contracting(contract for desired behavior and then deliver reinforcer)	1	2	3
1	2	3	13. Home-based contingencies(reinforcer given at positive school behavior)	1	2	3
1	2	3	14. Time-out	1	2	3
1	2	3	15. Self-evaluation(student rates behavior along with teacher)	1	2	3
1	2	3	16. Self-monitoring(student taught to record desired behavior to improve own behavior)	1	2	3
1	2	3	17. Self-reinforcement(student gives own reinforcers for positive behavior)	1	2	3
1	2	3	18. Goal setting(student and teacher set goals and measure progress toward goals)	1	2	3
1	2	3	19. Medication	1	2	3
1	2	3	20. Classroom aides	1	2	3

Please circle **YES** or **NO** in response to the following statement:

In most cases, I could accommodate mild to moderate ADHD children in my classroom if provided with consultative assistance and specific intervention techniques. **YES** **NO**

Please list any other strategies you may have tried and rank their effectiveness and tell how often you have used the strategy in the space below.

## **APPENDIX B**

Fellow teachers,

I am a graduate student at Rowan University completing my thesis as the final requirement for my Masters Degree in Learning Disabilities. I am surveying teachers to get their opinion on handling ADHD students in their classroom and what they have found to be effective. Please complete the attached survey and return it to Mike Urban as soon as possible. Thank you for your cooperation in helping me with this matter.

Merri Owen

Fellow teachers,

I am a graduate student at Rowan University completing my thesis as the final requirement for my Masters Degree in Learning Disabilities. I am surveying teachers to get their opinion on handling ADHD students in their classroom and what they have found to be effective. Please complete the attached survey and return it to my mailbox as soon as possible. Thank you for your cooperation in helping me with this matter.

Merri Owen

Fellow teachers,

I am a graduate student at Rowan University completing my thesis as the final requirement for my Masters Degree in Learning Disabilities. I am surveying teachers to get their opinion on handling ADHD students in their classroom and what they have found to be effective. Please complete the attached survey and return it to Mr. Richard Morris as soon as possible. Thank you for your cooperation in helping me with this matter.

Merri Owen

## **BIBLIOGRAPHY**

- Abikoff, Howard. (1991). Cognitive Training in ADHD Children: Less to it Than Meets the Eye. *Journal of Learning Disabilities*, 24:4, 205-208.
- Abikoff, Howard B.; Hechtman, Lily. (1996). Multimodal Therapy and Stimulants in the Treatment of Children with Attention Deficit Hyperactivity Disorder. In E. Hibbs and P. Jensen (Eds.), *Psychosocial Treatments for Child and Adolescent Disorders: Empirically Based Strategies for Clinical Practice* (pp. 341-369). Washington, D.C.: American Psychological Association.
- Abramowitz, Ann J.; O'Leary, Susan G.; Rosen, Lee A. (1987). Reducing Off-task Behavior in the Classroom: A Comparison of Encouragement and Reprimands. *Journal of Abnormal Child Psychology*, 15:2, 153-163.
- Gardill, M. Cathleen; DuPaul, George J.; Kyle, Kara E. (1996). Classroom Strategies for Managing Students with Attention-Deficit/Hyperactivity Disorder. *Intervention in School and Clinic*, 32:2, 89-94.
- Pfiffner, Linda J.; O'Leary, Susan G. (1987). The Efficacy of All-Positive Management as a Function of the Prior Use of Negative Consequences. *Journal of Applied Behavior Analysis*, 20:3, 265-271.
- Rief, Sandra F. (1993). *How to Reach and Teach ADD/ADHD Children*. West Nyack, N.Y.: The Center for Applied Research.
- 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*, 14:3, 307-315.
- Rosenfield, Peter; Lambert, Nadine M.; Black, Allen. (1985). Desk Arrangement Effects Pupil Classroom Behavior. *Journal of Educational Psychology*, 77:1, 101-108.
- "Teaching Children with Attention Deficit/Hyperactivity Disorder". (1998). Reston, VA: The Council for Exceptional Children.
- "Understanding and Identifying Children with ADHD: First Steps to Effective Intervention". (2000). <http://www.ldonline.com>.