The effects that a cognitive behavior modification intervention can have on a child with behavioral disabilities

Kelly Courtney
THE EFFECTS THAT A COGNITIVE BEHAVIOR MODIFICATION INTERVENTION CAN HAVE ON A CHILD WITH BEHAVIORAL DISABILITIES

by
Kelly A. Courtney

A Thesis
Submitted in partial fulfillment of the requirements of the Master of Arts Degree of The Graduate School at Rowan University
May 1, 2010

Thesis Chair: Jay Kuder, Ph.D

© 2010 Kelly A. Courtney
Dedicated to:
Charles Hutchinson
and
Roxanne Courtney
ABSTRACT

Kelly A. Courtney
THE EFFECTS THAT A COGNITIVE BEHAVIOR MODIFICATION INTERVENTION CAN HAVE ON A CHILD WITH BEHAVIORAL DISABILITIES
2009/2010
Thesis Chair: Jay Kuder, Ph.D
Master of Arts in Special Education

This study is a focus on the effects that a cognitive behavior modification intervention can have on a child with behavior disabilities. Children with conduct disorder(s) frequently engage in aggressive and disruptive behaviors and often show and express their emotions in many different ways. Often these behaviors are controlled or managed through behavioral interventions. CBM aims to teach individuals to monitor their own behavior, pace or performance and to appropriately dispense self-reinforcement. A cognitive behavior modification program was implemented with one student. Through modeling, observation and then imitation, the child developed new behaviors. This intervention represents a viable alternative for addressing the need to remediate behavioral excesses and deficits. The child who received cognitive-behavioral therapy displayed fewer disruptive behavior problems than did children who did not receive the cognitive-behavioral intervention. Cognitive-behavioral therapy used in conjunction with teacher-implemented contingencies was not found to be more effective in reducing disruptive behavior than cognitive-behavioral therapy alone.
TABLE OF CONTENTS

List of Figures iv

CHAPTER PAGE
1. Introduction 1
2. Literature Review 4
3. Methodology 17
4. Results 25
5. Discussion 34

References 38
**LIST OF FIGURES**

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>Description</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1a</td>
<td>Outbursts/Aggressive Behaviors During Pre-Intervention</td>
<td>26</td>
</tr>
<tr>
<td>Figure 1b</td>
<td>Outburst/Aggressive Behaviors During Intervention</td>
<td>27</td>
</tr>
<tr>
<td>Figure 1c</td>
<td>Outburst/Aggressive Behaviors During Post-Intervention</td>
<td>28</td>
</tr>
<tr>
<td>Figure 2a</td>
<td>Percent of Daily Points Earned During Pre-Intervention</td>
<td>31</td>
</tr>
<tr>
<td>Figure 2b</td>
<td>Percent of Daily Points Earned During Intervention</td>
<td>32</td>
</tr>
<tr>
<td>Figure 2c</td>
<td>Percent of Daily Points Earned During Post-Intervention</td>
<td>33</td>
</tr>
</tbody>
</table>
Chapter 1
Introduction

Children show and express their emotions in many different ways. Anger and aggression are just to name a few. When something is difficult for a child and they are not able to complete specific tasks they might act out in an angry or aggressive manner. For some aggression could be the only way known to deal with a problem. Aggressive behavior could also be triggered by being in certain kinds of social situations such as a play time or by phobias such as talking and interacting with peers. Frustration can play a big role and may lead to a child throwing a tantrum or maybe even act out or expose some violent tendencies. Disruptive behaviors caused by such emotions can lead to embarrassment, if shown by the child in front of peers. Teachers and parents should be made aware of these feelings and emotions that are going on during such episodes or even beforehand.

Children should be taught early on how to control their anger and aggression. Strategies such as counting to ten when angry, or taking a deep breath before lashing out should be taught, so that behaviors don’t become controlling or dominant to one’s personality. These techniques fall under the general category of cognitive behavior modification methods. They help children learn to control their own behavior. Interventions on dealing with and improving the feelings of well being should be implemented at school and home in trying to decrease behaviors before they escalate. Children have the right to feel, show and express their own emotions, however controlling them is key.
In my research, I hope to find a plan that is motivating to young children in coping with their emotions. A tool that could be implemented at school or home in controlling behavior before it spirals to the level of aggression. Therefore, my research question is as follows: Does the use of cognitive behavior modification techniques reduce the aggressive behavior of a child with disabilities? In order to address this question, a behavior plan was developed that allows students to manage their behavior through a cognitive behavior modification method. The plan was individualized as needed.

With proper treatment procedures and techniques developed according to the behavior and age of child I believe that anger and aggression can be controlled and reduced in the classroom. My hypothesis is that the use of cognitive behavior modification techniques will reduce the aggressive behavior of a child with disabilities.

Key Terms: Aggression, Anger, Violence, Emotions.

Aggression – Hostile attitude or behavior: threatening behavior or actions.
Anger – A strong feeling of grievance and displeasure
Violence – Physical force; the use of physical force to injure somebody or damage something.
Emotions – Term frequently and familiarly used as synonymous with feeling.

Students who show aggressive behaviors need to learn techniques to control sudden outbursts before they lead to violent behavior. Instruction on breathing techniques and calming methods should be taught to students who have sudden outbursts of anger and aggression. Modeling of appropriate behaviors should be implemented at all times. Children need to be introduced and instructed and reinforced by an adult when learning to handle their emotions. They need to see good examples of appropriate behavior. Social
stories, role playing and scenarios can be used so that hands-on, visual learning and understanding of appropriate behaviors can take place. The more it is seen and exposed, the better chance children are able to adapt to it.

Teaching students to manage their behavior is vital in learning to control anger and aggression. By having an individualized goal card with expected behaviors, children can see upfront what is needed in order to earn rewards. When students comply with their behavioral goals during instruction time (no longer than 20 minutes) they have a chance to earn a reward for each goal met. In this way, students can see what is needed in order to earn rewards.
Suddenly, without any apparent antecedent, desks are flipped over and materials are scattered about the room. Students with emotional and behavioral disorders display a wide range of behavioral patterns, ranging from externalizing to internalizing behavior disorders, as well as behaviors that include features of (Walker, Ramsey, & Gresham, 2004). Externalizing tendencies include behaviors such as verbal and physical aggression, noncompliance, and delinquent acts (Stouthamer-Loeber & Loeber, 2002). In contrast, internalizing tendencies include depression, anxiety, somatic complaints and eating disorders (Morris, Shah, & Morris, 2002). Students with emotional and behavior problems have limited social skills that lead to impaired interpersonal relations with parents, teachers and students (Cullinan & Sabornie, 2004; Nowicki, 2003; Walker, Irvin, Noelle, & Singer, 1992).

Children with behavioral problems present the most difficult challenges faced by classroom teachers. Impulsivity, hyperactivity, verbal and physical aggression, tantrums, destruction of property, stealing, lying, and noncompliance create problems between student and teacher than often radiate and impact other students as well. Disruptive students can be defiant toward authority figures and classroom rules. They may also be inattentive and hyperactive. Many struggle academically either because they experience a co-existing learning disability or they slowly fall behind in subjects requiring practice and proficiency.

Teaching appropriate behavior skills is important when instructing young children who display disruptive behaviors. These skills can be taught at the preschool age.
Preschool curriculum and instruction focus on the cognitive, social and emotional development of children. Teachers are responsible for teaching academic and social skills. If children exhibit negative behavior which impedes their academic learning, teachers need to purposefully design opportunities and activities to guide the students’ development of appropriate behavior (Kostelnik, 2007). Young school aged children are just at the beginning of their journey to discovering their emotions. They need to be introduced and instructed and reinforced by an adult when learning to handle their emotions.

Aggressive and pro-social behaviors are affected not only by children’s affective judgments, but also by their moral judgments and moral reasoning. Structural developmental theory strongly emphasizes the link between undifferentiated moral reasoning and immoral, aggressive behavior (Kohlberg, 1976; Piaget, 1965). Children’s moral judgments represent more a cognitive than a motivational aspect of children’s morality. Understanding what others acknowledge as fair or unfair does not necessarily create a personal obligation to act accordingly. As the transition from kindergarten to elementary school age involves important changes in children’s emotion attributions and moral reasoning (Keller, 2004; Nunner-Winkler and Sodian, 1988).

Teachers who work with students who have emotional and behavioral problems have to rely on management techniques, to control aggressive behavior. Interventions that use a traditional behavior philosophy of behavior change along with cognitive components to increase student self regulation, can prevent aggressive behavior patterns and increase long term behavior change. Positive adult models are so important. Some children might imitate the aggressive behaviors they have seen or been exposed to, and
exhibit more severe behavior in the classroom. Specific interventions are needed by early childhood educators to manage more problematic behaviors in schools (Hemmeter, 2007). During these interventions, teachers are instructors of appropriate behaviors. Behavior management maintains that observable and measurable behaviors are good targets for change. All behavior is maintained, changed, or shaped by the consequences of that behavior. Although there are certain limits, such as the temperamental influence on behavior experienced by an impulse child, even this child functions more effectively under the right set of consequences. Behavior can be strengthened by rewarding it or weakened by no longer rewarding it. The latter may involve withdrawal of reward or presentation of an aversive consequence. The former can be as simple as attention. Teachers often learn to pay attention to misbehavior rather than appropriate behavior, which strengthens rather than weakens the misbehavior. Teachers need to attend to problem children when their behavior is appropriate. Reinforcers are consequences that strengthen behavior. Punishers are consequences that weaken behavior. What many are unaware of, however, is the third type of consequences that Bushell (1973) refers to as "noise." "Noise" is defined as a consequence that has no effect on the behavior it follows, neither strengthening nor weakening it. The pattern that Bushell points out is simple. The teacher is responsible for changing students’ behavior. Behaviors are changed by their consequences. Therefore, students’ behaviors are managed and changed by their consequences of classroom behavior. To manage behavior through consequences requires the teacher to use a multistep process. 1. The problem is defined by counting something. 2. A favorable situation is created to change the behavior. 3. An effective reinforce is chosen. 4. The reinforcer is used to shape or change behavior.
Consequences of behavior are directly related to the antecedent or consequent events to which they are temporally related. Consultants must help teachers productively employ praise and attention, reward and privileges, differential attention, time-out, and punishment. Teachers who do not understand how to use these interventions effectively can inadvertently contribute to student misbehavior (Kauffman, Pullen, & Akers, 1986). Common mistakes are using behavior management techniques inconsistently, inadvertently reinforcing undesired behavior, harboring unrealistic educational or behavioral expectations for students, presenting inappropriate subject matter, failing to respond to each child's individual needs and modeling negative behaviors. When teachers do not understand the importance of positive reinforcement, they may react to unwanted behavior in irritable ways, relying on punishment to manage the classroom. They may be unwilling to look at alternatives when standard interventions are ineffective, especially if they perceive the child's problems as stemming from within the child. A study done by Kendall, (1980) called the “Stop and Think” program applied one of the most complete self-control programs. The study was done to 16 out of 32 ADHD children. The other 16 children were instructed with the same program and anger control training. The interventions were carried out by two therapists with PHDs in psychology who are experts in the application of the “Stop and Think” program with ADHD children. These therapists treated four groups that included one of each of the following conditions: hyperactive with the Kendall et al. treatment; hyperactive with the combined treatment (Kendall et al. and anger control); hyperactive-aggressive with the Kendall et al. treatment; hyperactive-aggressive with the combined treatment (Kendall et al. and anger control). The therapists were not informed as to which groups contained aggressive
The “Stop and Think” intervention program (Kendall, 1980) was used with small modifications. This cognitive-behavioral self-control therapy included cognitive and behavioral techniques (self-instruction, modeling, and behavioral contingencies) that were applied to solve various kinds of problems. Its principle objective was to improve concentration and reflection. In essence, the children were trained to use self-instructional strategies through the process of problem solving in order to consider possible courses of action, to reflect on potential outcomes, and to make decisions about options. The content of self-instructions included five types of statements that break down the process of problem-solving into five stages.

1. Problem definition. 2. Problem approach. 3. Focusing attention. 4. Selecting an answer. 5. Self-evaluation/self-reinforcement for correct performance or correction of mistakes.

The program also included the use of behavioral contingencies such as the token system, social reinforcement, and self-reinforcement for successful performance and appropriate behaviors to improve the children’s motivations toward the task. The objective of this study was to analyze the effects on children with ADHD of two intervention programs of the cognitive-behavioral orientation: the self control program adapted from Kendall (1980) and a combination of this and the anger control technique. It was assumed that the general procedures taught in both programs (self-instruction, modeling, problem-solving, role-playing, and behavioral contingency management) would contribute considerably to rectifying the self-regulatory deficiencies in hyperactive children. Both interventions produced considerable improvements in the children with ADHD, whether there was evidence of aggression or not. The positive effects were observed not only in the basic symptoms of ADHD but also in other difficulties frequently associated with this disorder,
such as school problems and antisocial behavior. That is, the combination of self-
management procedures with reinforcement contingencies can be a powerful intervention
to enhance behavioral control in children with ADHD. On the other hand, neither of the
programs increased social adjustments or school grades in hyperactive children.

Based on teacher responses, Martens and Meller (1989) reported that teachers
prefer interventions that reinforce appropriate behavior and consider them to be more
acceptable in the classroom than those that punish inappropriate behavior. Shea and
Bauer (1987) described the following multistep process to effectively apply positive
reinforcement: 1. Select a target behavior to be increased, define the behavior, and choose
a reinforcer. 2. Observe the child, closely watching for behavior. 3. Initially reinforce the
target behavior after it is exhibited. 4. Comment in a positive way about the behavior
when providing reinforcement. 5. Be enthusiastic and interested. 6. Offer assistance.
7. Vary the reinforcer.

Positive reinforcement should follow immediately after good behavior. It should
be specific and initially continuous, slowly changing to an intermittent schedule. An
important aspect of positive reinforcement is the choice of a target behavior. Should it be
one that the child has not exhibited or one that the child already possesses but does not
perform at a frequent enough rate? The latter is referred to as maintenance reinforcement,
the former as acquisition of new behavior. It is easier to increase behavior than decrease
it (D.P. Morgan & Jenson, 1988). When choosing a target behavior, it is preferable to
focus on behaviors to be increased rather than on those to be decreased. Preparation,
expectation, and data collection are critical. Often teachers comment that they have
attempted a particular behavior management strategy and it has not been effective. More
often than not, it is not the strategy that is ineffective but the way in which it has been applied. Behavioral contingencies work for everyone when the differences between students and teachers are identified and the program adjusted to fit those differences. When choosing positive reinforcers, teachers should select rewards that are age appropriate, offer natural reinforcers, use rewards that are appropriate to the child’s level of functioning, and make certain that parental and administrative support are available for those rewards. Tangible rewards should not be used for activities that already hold intrinsic interest for a child. In such cases, the child’s attention may shift away from the activity that is already rewarding to the new reinforcer. Behavior modification is not a substitute for good teaching or an interesting curriculum. Activities often make good tangible reinforcers because rather than providing an object that the child may take away and deal with individually, the activity often promotes interaction with teachers and other students.

Punishment can involve presentation of an unpleasant consequence or the loss of a pleasurable consequence following the occurrence of the target behavior. Punishment reduces the probability that the behavior that precedes it will recur. Some punishers are aversive to most people, although even extreme punishments such as those that cause pain or restraint have been found to be reinforcing to some. Punishment is an efficient way of changing behavior. However, it is tempting because it can be quite reinforcing to teachers and then be overused. Punishment usually provides an aversive stimulus (something the child does not like) each time an undesirable behavior occurs, but it can also involve the loss of pleasurable stimulus. Punishment does not provide a good model of acceptable behavior and for many teachers is accompanied by emotional outburst.
Most commonly used punishments by teachers include depriving students of participation in enjoyable activities, loss of snack, verbal reprimands and time out. If punishment is to be used effectively in school, the following guidelines should be used: All students are aware of which behaviors will be punished and how they will be punished. Appropriate models for acceptable behavior are provided. Punishments are given immediately, consistently, and fairly.

It is important to have behavioral support systems for individuals with challenging behaviors as well as for the entire class (Murphy, 2007). In their research, (Hemmeter, 2007) explains a program wide behavior plan. A program-wide behavior model includes three tiers of prevention and intervention. The first tier of prevention is directed towards the behavior management of all students. Students should be made aware of the rules, rewards, and consequences.

Pictures can be a concrete representation of the rules to assist young students understanding of the appropriate behavior displayed in school (Benedict, 2007). The second level of prevention focuses on students whose behavior needs to be monitored on a more regular basis and is considered to be at-risk (Hammeter, 2007). The third level of prevention is for students who exhibit challenging behavior on a consistent basis.

Individualized behavior plans are designed for students on the third level of prevention (Hemmeter, 2007). By combining behavior management techniques, educators teach and reinforce appropriate behaviors while infusing certain skills that some students might have missed due to exhibiting negative behavior. Teachers could chose to implement all three management techniques in their classroom or just one. They could also choose
to implement the management techniques with one student or with a small group of students.

What's wrong with behavior modification if it works? There are some limitations. For example, it takes a lot of teacher time and attention. Also, students may not change the way they think about their behavior. Cognitive behavior modification should be used to help students to recognize destructive or harmful thought patterns or behaviors, then replace them with helpful or constructive thoughts and behaviors.

Many teachers are reluctant to implement behavior-management systems with students that have emotional and behavioral problems because these systems appear to be time intensive and dependent on consistent implementation.

Cognitive Behavior Modification (CBM) represents a viable alternative for addressing the need to remediate behavioral excesses and deficits. CBM refers to techniques that provide individuals with necessary tools to control their own behavior. The self regulation of behavior is accomplished by providing individuals with a cognitive framework to address a myriad of self-control, academic and interpersonal problems (Meichenbaum & Burland, 1979).

Teachers can implement self management in the classroom. Cognitive Behavior Modification aims to teach students to monitor their own behavior, pace, or performance, and to appropriately self-reinforcement. As such, it emphasizes modifying thinking as a means of changing feelings and behavior. Teachers need to activate the child's cognitive processes using a behavior change system to alter his/her thinking as well as his behavior. When this is done with fidelity, undesirable student behaviors can be replaced with more desirable student behaviors. Self management includes three components: self-
monitoring, self-evaluation, and self-reinforcement. Students can benefit from self-management, but they need to consider reasons students will perceive as beneficial (King-Sears & Bonfils, 1999). Self management including self-monitoring, self-assessment, self-observation, self-recording, self-evaluation, self-instruction, and self-reinforcement is particularly well suited for its transportability and generalizability (Baer, 1984; Browder & Shapiro, 1985; McDougal, 1991, 1998), and there is general consensus that these methods are potentially useful tools for learners with disabilities (Bieberich & Morgan, 2004; McDougal, 1998) including children with disabilities. Self-management may facilitate the successful inclusion of students in general education classrooms by permitting teachers to spend more time on instructional tasks rather than on behavior management (McDougal, 1991, 1998). In self-management, individuals learn to discriminate the occurrence of target response; reliability self-record one or more elements of the target response in accordance with some standard or scale; evaluate their behavior relative to an agreed upon standard; and subsequently deliver contingently self-selected rewards and reinforcement (Maag, 2004; McConnell, 1999; Myles & Simpson, 2003; Reid, Trout, & Schartz, 2005).

Students with emotional behavior disorders commonly demonstrate great difficulty using self-management strategies in school settings. With training and support, students can learn to independently use self-management strategies (Atkinson, 2002; Landrum, 2003; Lane, 2006; Mason, Harris & Graham, 2002; Mooney, Ryan, Uhing, Reid, & Epstein, 2005; Patton, Jolivette, & Ramsey, 2006; Weaster, 2004). The positive results of teaching students to use proactive self-management strategies are reported for students with and without disabilities. Therefore, the investment in instructional time
devoted to teaching students to use self-management strategies benefits all students, not just those with emotional and behavioral problems. The most common self-management strategies include the following: self-monitoring, self-evaluation, self-instruction, goal setting, and strategy instruction (Mooney) and Self-reinforcement (Lane; Patton). Each of these strategies is associated with an increase in desired student behavior and achievement, self-monitoring is reported as the most widely implemented self-management strategy for students with emotional behavioral disorders.

In self-monitoring, students can learn procedures for observing, evaluating, and recording their own behavior during specific times (Landrum, 2003). Self-evaluation is surrounded in the process of self-monitoring. Appropriate and inappropriate behaviors should be discussed. The teacher should introduce the self-management system using a self-monitoring form. Practice is provided in both the desired behavior and how to complete the self-monitoring form. During a difficult transition, the student can complete the self-monitoring form, checking off the steps completed successfully.

Self-instructions follow the steps coached by oneself in a given activity or assignment. Teaching students to use self-instructions requires the teacher to model self-statements to direct behavior within a specific activity. Modeling of self-instruction can be easily incorporated throughout the day in all content areas. Students with behavioral problems benefit from writing a list of specific self-instructions. Students can then independently refer to the list throughout various activities. Strategy instruction is the process of teaching students to identify key steps to follow in solving a problem or achieving an outcome. Students can set goals for completing or mastering the individual steps. Students can monitor, evaluate, and reward their own behavior independently.
Teachers of students with significant behavioral problems are faced with enormous challenges. Students who exhibit behavioral problems frequently engage in behavioral deviancy including aggression, hyperactivity, and impulsivity, lack of self control, inattention, and disrespect toward authority. Researchers have used cognitive behavior modification (CBM) as one method for mediating behavioral excesses and deficits. CBM is a common remedial approach used in behavior therapy to modify various classes of disorders such as anxiety, fears, phobias, aggression, and disorders of conduct. Behavior therapists view assessment and treatment practices as reflecting a cognitive orientation; however (Powers and Franks, 1998) carefully state that behavior therapy does not represent a single or unified concept. The techniques of behavior therapy are sound because simple overt behaviors (e.g., hitting) could be altered successfully, but to change broader, more complex behavior patterns such as impulsivity or aggression, it was recommended that the techniques of behavior therapy be expanded to include underlying cognitions. By completely ignoring cognitions as a vital component of overt behavior, behavior therapy techniques only temporarily change behavior and fail to maintain lasting change or to teach strategies to address future problems (Hughes, 1993).

Children with behavioral problems present the most difficult challenges faced by classroom teachers. Disruptive students can be defiant toward authority figures and classroom rules. Many struggle academically either because they experience a co-existing learning disability or they slowly fall behind in subjects requiring practice and proficiency. Teaching appropriate behavior skills is important when instructing young children who display disruptive behaviors. Teachers who work with students who have
emotional and behavioral problems have to rely on management techniques, to control aggressive behavior. Positive reinforcement should follow immediately after good behavior. It is important to have behavioral support systems for individuals with challenging behaviors as well as for the entire class. Cognitive Behavior Modification should be used to help students to recognize destructive or harmful thought patterns or behaviors, then replace them with helpful or constructive thoughts and behaviors. Cognitive Behavior Modification (CBM) represents a viable alternative for addressing the need to remediate behavioral excesses and deficits. CBM refers to techniques that provide individuals with necessary tools to control their own behavior. Teachers can implement self management in the classroom. Cognitive Behavior Modification aims to teach students to monitor their own behavior, pace, or performance, and to appropriately self-reinforcement. With training and support, students can learn to independently use implement self-management strategies to improve and control behavioral problems.
The subject for this study was one student with special needs. GS is a six year old Kindergarten Caucasian boy who is diagnosed with hyperactivity and oppositional behavior. His extended family history is positive for a male relative with attention/deficit/hyperactivity disorder and a female relative who is described as "slightly autistic." GS has an IEP and his classification is "Other Health Impaired." GS is generally a healthy child. His medical history is positive for frequent ear infections which have been treated with medication. GS exhibits difficulties following directions and displaying aggressive behaviors, resulting in the disruption of the classroom and children and staff being harmed. His behaviors include hitting and kicking children and teachers, biting children, threatening physical harm to teachers and students and disrupting activities. GS has trouble keeping his hands to himself and sitting still in a group setting. He is described as impulsive and as getting in peoples faces. He becomes frustrated easily when things don't go his way.

GS lives in a middle class suburb in southern New Jersey and attends public school in the district. He is in a self contained (BES) behavior emotional support class. The class consists of six students, all of whom are classified as "Emotionally Disturbed." The classroom consists of a teacher and two educational assistants. The room is set up very basic. The desks are spaced far enough apart and posters and things on the walls are high above out of reach. Scissors, pencils and crayons are in containers and stored in the closet. All manipulatives, games and toys are stored in another room and used as a reward.
The following summarizes the behavior of GS as recorded throughout a two-day observation. Behaviors recorded include compliance (with concise commands and with commands stated as requests), on-task behavior, interfering behaviors (aggression, darting/dropping, yelling/threats, disruption, spitting, tip-toe walking, and hand flapping/vocalizations), and appropriate requests. In addition, a descriptive assessment was conducted to help determine the most likely triggering antecedents and maintaining consequences of a sample of interfering behaviors (25 occurrences) observed.

The rate of interfering behaviors per hour was based on observed occurrences. Interfering behaviors include Aggression (hitting, kicking, biting, grabbing, throwing objects at others), Darting/Dropping (running away from or leaving the designated program area, flopping on the floor, as well as placing his head on his desk during instruction), Yelling/Threats (yelling at others to protest/reject an activity or other and threatening to harm others), Disruption (throwing, swiping, tearing, destroying objects or work materials, tipping furniture), Spitting (directly at others).

- Aggression (21 total occurrences recorded across two days) = 3/hour
- Darting/Dropping (74 total occurrences recorded across two days) = 10.6/hour
- Yelling/Threats (80 total occurrences recorded across two days) = 11.4/hour
- Disruption (7 total occurrences recorded across one day) = 1.9/hour
- Spitting (2 total occurrences recorded across one day) = .5/hour

During my observations, several occurrences of escalated behavior were observed. These incidents were most commonly associated with restricted access to a desired item or activity, during transitions, downtime, or academic instruction. Several incidents began with GS requesting an item or activity, or transition from a desired item or activity. A few instances involved GS persistence of holding onto objects or placing items in a specific location. When access was denied, GS began yelling – typically
maintaining the request for the desired item/activity. When attempted to redirect GS to
the next activity, or when attempted to remove the item or activity, GS became disruptive – swiping other objects, tipping furniture, running about the room, or spitting at staff. Once his behavior escalated, attempts to redirect or motivate GS to engage in the next or a more appropriate activity were unsuccessful. At that point, compliance decreased and interfering behaviors increased. Further attempts to redirect GS typically resulted in verbal threats to physically harm staff and physical aggression toward staff (including punching, kicking, biting, head-butting). Verbal prompts were almost always followed by additional yelling, threats, or aggression. When left alone (without further prompting), GS typically ran to a secluded area of the room and remained there until he regained his composure.

On several occasions, at the end of an activity (academic or otherwise) and/or during downtime, GS became visibly excited. When attempted to redirect GS to the next or more appropriate activity, his behavior escalated similar to the above noted incidents. Again, attempts to de-escalate his behavior were unsuccessful. Once he regained his composure, however, GS was compliant, on-task, and able to comprehend his actions.

Although GS’s problem behaviors are relatively high when calculated across the two-day observation, the majority of the recorded aggression, disruption, spitting, and threats occurred during escalated behavioral incidents and typically revolved around restricted or denied access to a denied item or activity. Darting and yelling occurred relatively consistently throughout the day across settings and activities. These behaviors, however, also increased in frequency during escalated behavioral incidents.
Behaviors are most likely to occur when GS is denied access to desired items or activities and, to a lesser extent, when expected to transition from a desired activity and to initiate an academic task/activity. If not able to be quickly redirected, GS’s behavior can quickly escalate to include aggression, threats, and disruption. The nature of GS’s behavior typically results in continued access to desired activities and/or escape from non-preferred tasks/activities. Attempts to redirect GS and/or block access to restricted items/activities can quickly escalate to the point where he can present a danger to himself or others.

GS does have an ability to interact appropriately with both peers and adults when calm. He does not demonstrate an inability to make appropriate requests. However, when denied access to desired items or activities, GS’s behavior escalates well out of the proportion to what a typical reaction would be. Additionally, GS engages in rigid, even compulsory, patterns of behavior (e.g., lining up chairs, arranging trash in trash can, specifically rearranging play items or classroom materials, touching items repeatedly, etc.). He also demonstrates a tendency to hold onto specific items, become visibly upset if those items are removed or rearranged.

Although GS exhibits appropriate functional communication skills he typically lacks the ability to use those skills when excited or agitated. He is severely limited in his ability to regulate his emotional responses when agitated.

GS was observed for two days using an instrument designed by the investigator. Behaviors that were observed included physical aggression toward staff, non-compliant behavior, disruptions, and refusal to complete tasks and hyper activity. GS was not responsive to redirection. Behaviors escalated from hyper to explosive. Following the
initial observation period, a behavior modification program was designed for GS. The program consisted of classroom rules that were stated positively, describing what should be done:

- Follow directions
- Keep hands and feet to yourself
- Walking feet (No Running)
- Respect school property
- Ask if you want or need something

At the start of the day, the first academic lesson/activity included an extended review of classroom rules. During extended reviews, I explained each classroom rule in detail using examples and non-examples. I modeled appropriate behavior(s). For example, when teaching Keep hands and feet to yourself, ask, while placing hands on a student or staff member to model the non-example. I asked, “Is this keeping my hands and feet to myself?” while modeling the appropriate behavior. Prompted responses were used to quiz and check for understanding. The above list of classroom rules does not exhaust all possible positive behavior expectations. Others included paying attention, working quietly, sitting at desk, etc. During brief reviews of behavior expectations/classroom rules prior to start of academic tasks/activities, a review of behavior expectations that specifically pertain to the task/activity at hand were given. A review of specific behavior expectations pertaining to arrival, recess, lunchtime, hallway transitions, and departure were also done.

A visual schedule which was easily manipulated and changed was posted in a visible location within the classroom to be reviewed at the start of the day and between
each scheduled task/activity. Among scheduled tasks/activities, representations of preferred activities and scheduled earn times was noted. Academic tasks/activities were limited to no more than 15 to 20 minutes in length. All tasks/activities had specific goals established in order to assess student progress. Transition warnings were given several minutes prior to the end of a task/activity. A timer was used to signal and maintain consistent task/activity time. Downtime and transition time was limited to prevent extended opportunities to engage in inappropriate behaviors. Brief movement breaks between scheduled tasks/activities were used, especially following extended tasks and activities, as well as visual and tactile-kinesthetic materials/activities within academic tasks/activities.

Prior to the start of each scheduled task/activity, a review of classroom rules/behavior expectations were given. GS had the opportunity to earn up to 5 tokens per scheduled task/activity. Token delivery began following the first demonstration of positive behaviors (immediately upon arrival and even during preferred activities). When GS met his specific reward criteria for that scheduled task/activity, he earned access to a chosen reinforce. Access to earned items/activities was timed (e.g., 5 minutes). The timer was used to signal, keep track of, and deliver consistent earned access time. Lots of verbal praise was used when GS demonstrated positive behavior(s) during both preferred activities and scheduled tasks/activities. Verbal praise was given enthusiastically at a rate of at least 1 to 2 times per minute, especially during lesser preferred tasks/activities.

Progress regarding GS’s behavior goals/reward criteria was always reviewed throughout each scheduled task/activity and at the end of each scheduled task/activity. In addition to implementing the individualized token system, GS’s behavior progress was
monitored and displayed in a visible location within the classroom and incorporated with the visual activity schedule. When GS met his individual behavior goal during an activity/interval, a visual display (e.g., smiley face, check mark, etc.) was placed within that designated interval. When GS met his goals for 3 scheduled tasks/activities, he earned extended access to preferred activities (e.g., 10 to 15 minutes). A timer was used to signal, keep track of, and deliver consistent earned access time.

Dividers and designated work stations were used to limit distractions during individualized instruction/tasks. Materials and other items that distracted GS or which he fixated on were removed from the proximity of designated work locations. GS was taught to appropriately request a break from a task/activity in order to replace the accompanying inappropriate behavior(s). Teaching GS the appropriate requests included reviewing and modeling the appropriate request, prompting practice of appropriate request, reinforcing successful practice attempts, and reinforcing appropriate requests during scheduled tasks/activities. When GS would appropriately requests a break without engaging in inappropriate behavior(s), he was given verbal praise for making the appropriate request and allowed a brief break.

GS had difficulty transitioning from preferred activities to academic tasks/activities, and was taught to appropriately request continued access to the preferred activity. Teaching GS appropriate requests included reviewing and modeling the appropriate request, prompting practice of the appropriate request, reinforcing successful practice attempts, and reinforcing appropriate requests during transitions.

Social skills’ training was incorporated into the classroom curriculum. Social skills pertaining to GS emphasized taking turns, making appropriate requests (to peers
and adults), responding to teasing, communicating anger or frustrations, asking for help, etc. Review of skills components, modeling appropriate behaviors, role playing/practice, engaging activities, feedback (peer/adult monitoring), reinforcement of role play/practice attempts, and reinforcement of positive social skills was demonstrated throughout the day.
Chapter 4
Results

This study examined whether the use of cognitive behavior modification techniques can reduce the aggressive behavior of child with behavioral disabilities.

The cognitive behavioral approach assumes that individuals have both the capacity and preference for monitoring and managing their own behavior. CBM aims to teach individuals to monitor their own behavior, pace, or performance, and to appropriately dispense self-reinforcement. It emphasizes modifying thinking as a means of changing feelings and behavior. The idea is for individuals to develop the ability to notice how they are feeling, thinking, and behaving and the impact their behavior has on others as a prerequisite to behavior change.

A cognitive behavior modification program was implemented with one student (GS). Through modeling, observation, and then imitation, GS developed new behaviors. By watching good behaviors modeled, GS learned new behaviors, inhibited other behaviors, and strengthened previously learned behaviors (e.g. saying "thank you").

A token system was used for motivation. It was associated with positive events that were accompanied by praise and encouragement for successful performance and appropriate behaviors. This was not associated with unpleasant events, except in the case of the response cost model. One thing GS learned quickly was, what was earned could be lost. GS worked on understanding and setting individual goals and learning how to use the program goals sheet. He then learned about the use of self-talk, distraction, and relaxation skills as a means of managing his feelings, particularly anger.
Figure 1a presents the number of aggressive behaviors exhibited by GS during the pre-intervention phase of the study. They ranged from a low of 0 to a high of 12, with a mean of 6 a day.
Figure 1b presents the number of aggressive behaviors during intervention. The range was from 0 to 7. The mean number of aggressive behaviors was 3.
Figure 1c presents the number of aggressive behaviors during post-intervention. The range was from 0 to 3. There was a mean of less than one (.68) outbursts per day.
In addition to examining the rate of aggressive behaviors, data on the percentage of points earned by GS each day was gathered. Total points that GS could have earned daily was 100. GS was put on a highly structured plan. Classroom rules were established and posted in a visible location within the classroom and reviewed at the start of the day and frequently throughout the day. GS was expected to: Follow directions; Keep his hands and feet to himself; Use quiet feet; Respect school property; Respect his teachers and classmates; Ask when he wanted or needed something. The above list of classroom rules does not exhaust all possible positive behavior expectations that were expected of GS. Others included paying attention, working quietly, sitting at his desk, etc. A review of specific behavior expectations pertaining to arrival, recess, lunchtime, hallway transitions, and departure was conducted daily as well.

GS had the opportunity to earn up to 5 tokens per scheduled task/activity. Token delivery began following the first demonstration of positive behaviors (immediately upon arrival and even during preferred activities). When GS met his specific reward criteria for that scheduled task/activity, he earned access to a chosen reinforce.

Progress regarding GS’s behavior goals/reward(s) criteria was reviewed throughout each scheduled task/activity and especially at the end of each scheduled task/activity. In addition to implementing the individualized token system, GS’s behavior progress was also monitored and displayed within the classroom. The display had GS’s name and each activity/interval. When he met his behavior goals during an activity/interval, he placed a token within the designated interval. A chart was made with designated time frames and GS was monitored for performance of behaviors. At the end
of each time frame, points ranging from 0 to 2 were added to the chart. At the end of the day, a total percentage score was determined.
Figure 2a presents data on the percentage of points earned during the pre-intervention phase of the study. The percentage ranged from a low of 20% to a high of 70% with a mean of 45%.
Figure 2b presents data on the percentage of daily points earned by GS during the intervention phase of study. The percentages ranged from a low of 50% to a high of 80% with a mean of 62%.
Figure 2c presents data on the percentages of daily points earned by GS during the post-intervention phase of the study. The percentages ranged from a low of 70% to a high of 95% with a mean of 78%.
Chapter 5
Discussion

The primary objective of this study was to analyze the effects that a cognitive behavior modification intervention can have on a child with behavioral disabilities.

In the classroom setting, GS responded to modeling as influenced by three factors: 1) the characteristics of the models (e.g. students whom GS and the other students liked and respected?), 2) the characteristics of the observed (e.g. observing and imitating the behavior), and 3) the positive or negative consequences associated with the behaviors. GS was more likely to imitate behaviors that resulted in positive consequences. Children consistently model someone whom they value or look up to.

When GS observed a friend/model that was being reinforced or punished for certain behavior, he was influenced by that model and that behavior. A visual schedule which was easily manipulated was posted in a visible location within the classroom and reviewed at the start of the day and between each scheduled task/activity. Academic tasks/activities were no more than 15 to 20 minutes in length. GS was provided transition warnings such as cues several minutes prior to the end of a task/activity. A timer was used to signal and maintain consistent task/activity time. Downtime and transition time was limited so that GS would not engage in inappropriate behaviors. Brief movement breaks between scheduled tasks/activities, especially following extended tasks/activities were given. GS had difficulty transitioning to lesser preferred tasks/activities and it was necessary to begin the task/activity with a brief access to a preferred activity in order to motivate persistent engagement in the task/activity.
The token system used for GS, for appropriate behavior(s) during specific times of the day was effective. Teacher must identify appropriate target behaviors and define them, have backup reinforcers and consequences, and most importantly, design a system to monitor the program. Verbal rewards appeared to impact GS’s outcome. Teachers should always not only reinforce but describe the behavior being reinforced as well. Developing motivation in a child can set the stage for appropriate behavior. Cuing was a good strategy to use in the classroom, and was a simple signal used between the student and the teacher. It was effective in reducing interruptions and providing GS with a minimally disruptive means of managing his behavior.

For any token system to be effective, we as teachers must identify appropriate target behaviors and define them, have backup reinforcers and consequences and most importantly, design a system to monitor the program. Verbal rewards appeared to impact GS’s outcome. Teachers should not only reinforce, but describe the behavior being reinforced as well. Developing motivation in a child can set the stage for appropriate behavior.

The limitations of this intervention resides in the fact that GS was not referred in this study for any other reason than his stand out high percentage of aggressive behaviors and outbursts, compared to the other children in the classroom. If this study would ever to be attempted to be done with other children in the same classroom, I can assume the results and improvements in behavior would be similarly observed.

Specific interventions are needed by early childhood educators to manage more problematic behaviors in schools (Hemmeter, 2007). Cognitive Behavior Modification should be used to help students to recognize destructive or harmful thought patterns or
behaviors, then replace them with helpful or constructive thoughts and behaviors.

Cognitive Behavior Modification (CBM) represents a viable alternative for addressing the need to remediate behavioral excesses and deficits.

The child who received cognitive-behavioral therapy displayed fewer disruptive behavior problems than did children who did not receive the cognitive-behavioral intervention. Cognitive-behavioral therapy used in conjunction with teacher-implemented contingencies was not found to be more effective in reducing disruptive behavior than cognitive-behavioral therapy alone. There was some difference in disruptive behavior found relative to treatment administered in the school setting. A difference in level of disruptive behavior was found as far as severity of aggression. Cognitive behavior approaches have the purpose of justifying aggression as well as other disruptive behavior problems by building appropriate social competencies in children before aggression becomes a recognized way of problem solving. Cognitive-behavioral procedures present interventions to control disruptive behavior. The self-regulation of behavior is accomplished by providing children with experiences that help them develop more adaptive problem solving strategies. Such strategies help provide a cognitive framework to address a series of complex problems, including self-control difficulties, interpersonal problems, behavioral problems, and academic problems.

Some studies have found that cognitive behavior approaches decrease disruptive behavior, while other studies have found that it has limited effects. The present study assessed the effectiveness of CBT in decreasing disruptive behavior by conducting such research.
The results of the study found that cognitive-behavioral therapy is an effective form of treatment for school-age children with disruptive behavior. This study found that overall, cognitive-behavioral interventions were associated with improvements in GS’s behavior. The data from this study shows that when a child chooses to change his/her behavior, they can indeed self regulate specific behaviors in settings of choice. GS was able to take an upturn by assuming responsibility for all his behaviors. The findings from this study support the idea that interventions based upon CBM may be an effective treatment approach for such behavior. It is not surprising that CBM is effective in the treatment of conduct disorder. Cognitive-behavioral therapy approaches are designed to alter the cognitions of the child and, in the process, change the affect of the behaviors of the child. The findings of this study are in line with other studies, which promote the CBM approach as an intervention strategy in helping children with aggressive conduct disorders.

Even though with this intervention study, little in the research literature enables people to predict which specific method will be successful with a specific adolescent. The chance of being successful with adolescents with major conduct disorders is increased of course, by using multisystem interventions.
REFERENCES


