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# An examination of a homework and organizational skills intervention for middle school students with attention deficit hyperactivity disorder

Kristy Mitchell

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**AN EXAMINATION OF A HOMEWORK AND ORGANIZATIONAL SKILLS  
INTERVENTION FOR MIDDLE SCHOOL STUDENTS WITH ATTENTION  
DEFICIT HYPERACTIVITY DISORDER**

by  
Kristy L. Mitchell

A Thesis

Submitted to the  
Department of Language, Literacy, and Special Education  
College of Education  
In partial fulfillment of the requirement  
For the degree of  
Master of Arts in Learning Disabilities  
at  
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Thesis Chair: S. Jay Kuder, Ed. D.

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## **Dedication**

*I would like to dedicate this thesis to my daughter, Madeline Avery Mitchell.*

## **Acknowledgments**

I would like to convey my appreciation to my professor Dr. Jay Kuder for guiding me through this process. I would also like to thank Dr. Sharon Davis for all of the wisdom she has instilled in me over the past two years. Most of all, I would like to express my sincerest appreciation to my husband and daughter for their patience and assistance throughout this journey.

## **Abstract**

Kristy L. Mitchell

### **AN EXAMINATION OF A HOMEWORK AND ORGANIZATIONAL SKILLS INTERVENTION FOR MIDDLE SCHOOL STUDENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER**

2014-2015

Professor S. Jay Kuder, Ed. D.

Master of Arts in Learning Disabilities

Homework and organizational skills can be problematic for any middle school student, but can be especially problematic for middle students with Attention Deficit Hyperactivity Disorder. An intervention called Homework, Organization, and Planning Strategies was implemented to four students in the middle school who are diagnosed with ADHD. Research questions were focused determining if an intervention that aims to improve homework and organizational skills effective and can improve academic performance and if that improvement can be maintained. Two seventh grade and two eighth grade participants were involved in this study, all of which had a diagnosis of one of the three types of ADHD, and some participants had additional diagnoses as well such as a seizure disorder or a visual impairment. During the eight intervention sessions, materials were provided, strategies to improve organization and homework completion were taught and reviewed, and rewards were given based on student success. These components were explained during parent meetings with the parents of all but one participant with the hope that the principles taught would transfer from school to home. As a result of the intervention, all students achieved some degree of academic progress in two or more subjects and as well as an increase in organization.

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## **Chapter 1**

### **Introduction**

The transition from elementary school to middle school can prove to be a challenging one for many students. Expectations are higher, academic demands are more rigorous and student responsibility highly increases. Many skills are needed for students to be successful at the middle school level, but three skills in particular are homework, organization, and planning skills. A population of students who occasionally lack mastery of these three important skills is students with attention deficits.

For some time, homework has been one of the most highly debated topics relating to American education. Those who are in favor of homework believe that it should be used to reinforce the concepts taught and provide a home-school connection. Those who are against it argue that homework holds no true value and is inequitable since the amount of home support varies so greatly amongst students. Though both sides make valid arguments, the assignment of homework continues to occur across grades in schools today.

Middle school students are typically held responsible for the recording, completion, and submission of homework assignments. Homework can include a variety of activities, including completion of a worksheet (or more than one), writing assignments, reading, and studying. A common practice is for students to write daily homework assignments in an agenda book, as well as record any important dates such as upcoming tests and due dates for long-term projects.

One of the concerns about homework is that students with exceptional learning needs may have particular difficulty successfully completing homework assignments. By

definition, these students struggle with understanding and using language in order to complete such tasks as listening, reading, writing, speaking, and mathematical processes; therefore, their ability to adequately complete homework is very likely to be effected.

The overall amount of homework assigned can be overwhelming for students with learning difficulties. Since more energy and time is needed for these students to fully understand what they are required to do and successfully complete tasks, the homework process can tend to be long and frustrating. Independent tasks such as homework can also be challenging because the guidance or assistance available in school may not be present in the home. An additional hurdle for children with exceptional learning needs, specifically those with attention deficits, is presence of poor working memory. Their lack of ability to recall information and apply it to new situations significantly impedes them from performing well on homework assignments.

As a result of these challenges, students with learning disabilities and attention deficits frequently are unable to maintain the workload and complete homework assignments. Ultimately, student's grades are impacted, since homework completion is taken into account. These students are also missing out on the additional practice to reinforce the skills taught. This can lead to frustration in these students as well as a decrease in motivation and effort over time.

Typically beginning in middle school, students attend anywhere from four up to eight classes a day, each in a different classroom and each requiring numerous materials. There is a much higher degree of organization required in order for students to be prepared for classes. Students must remember to bring specific materials to specific

classes; therefore materials need to be orderly. For individuals with attention deficits, managing and accessing materials can be challenging.

Some assignments assigned by teachers are due within a day and others need to be completed within a certain time period. Regardless, a certain degree of planning needs to be taken into account when completing these tasks. Students with attention deficits have a difficult time using their time wisely. Therefore, the amount of time to complete an assignment may be significantly longer. These students do not always account for this extra time, and frequently are unable to fully complete assignments.

In an attempt to improve the homework, organizational, and planning skills of middle school students with attention deficits, this study will examine the effectiveness of an intervention program known as the Homework, Organizational, and Planning Strategies intervention, or H.O.P.S. The National Association of School Psychologists published this intervention, developed by Dr. Joshua M. Langberg, in 2011. It contains six sessions that are conducted in eight for thirty minutes meeting that targeted the specific areas of homework completion and organization. Students included in the current study are those who have special needs, specifically Attention Hyperactivity Disorder and Specific Learning Disabilities, in grades seventh and eighth.

This topic is worth exploring since many middle school students with special needs are unable to remediate their lack of these skills on their own. Based on previous research, targeted interventions such as the H.O.P.S. intervention, that aim to improve homework, organization, and planning skills of students with special needs have been successful. It is predicted that similar results will be found in this study.

## **Research Questions**

The questions to be investigated in this study include:

1. Is a targeted intervention (i.e., H.O.P.S.) that aims to improve homework and organizational skills effective for 7<sup>th</sup> and 8<sup>th</sup> students with ADHD?
2. Can an intervention devoted to improving homework and organizational skills improve academic performance?
3. Was any improvement in skills and/or academic performance maintained when measured at an eight-week follow up meeting?

## **Key Terms**

For the purpose of this study, *Attention Deficit Hyperactivity Disorder (ADHD)* means a disorder which affects one's ability to stay focused on a task and pay attention for a sustained period of time. There are three subtypes of ADHD. The Predominantly Hyperactive-Impulsive subtype includes those individuals who have difficulty staying focused and display a high level of hyperactivity and impulsivity. The Predominantly Inattentive subtype includes individuals who have difficulty staying focused even when they appear to be attending to tasks. These individuals will display more of a "zoned out" look. The Combined Hyperactive-Impulsive and Inattentive subtype demonstrate characteristics from both subtypes previously described.

A *Specific Learning Disability* for the purpose of this study means a disorder in one or more of the basic psychological processes that results in an inability to complete such tasks as listening, thinking, speaking, reading, writing, spelling, or completing mathematical calculations.

## **Implications**

This study has potential implications for teachers, parents, and students. As a result of this study, teachers may see aspects of this intervention that can be adopted with other students in their classes who are struggling in the areas of homework and organization. It may also allow teachers to revisit their current practices related to material organization to make them more conducive to all students. When considering the parents in this study, these individuals may see the value and increased need for the involvement in their children's academic progress.

The students chosen for this study are ones whose lack of skills greatly impacts their ability to function successfully in school. With this intervention, these students should acquire the necessary skills. This acquisition will hopefully lead to the building of confidence and continuation of skill access to be applied throughout the remainder of the students' academic careers and lives.

## **Summary**

At the middle school level the academic demands increase, causing some students to struggle, including students with attention deficit disorder. Often these students are lacking the essential skills enabling them to be successful. Three specific skills this population may have difficulty with are homework, organization, and planning skills. This study will examine the effectiveness of a targeted intervention called the H.O.P.S. intervention on homework and organizational skills for students with ADHD. It will also examine the effectiveness this targeted intervention on homework and organizational skills for students with Specific Learning Disabilities. Last, it will determine in what area

(Homework, Organization, Planning) the H.O.P.S. intervention results in the most improvement.



## **Chapter 2**

### **Review of Literature**

Many middle school-age children with attention deficit hyperactivity disorder (ADHD) have difficulty finding academic success (Martin, 2014, p. 88). This is the case for various reasons, but two main factors that greatly contribute to this are struggles with homework and the lack of organization. Students who have attention deficits often struggle with every aspect of the homework process- from attending long enough to write down assignments in their entirety in their agendas to battling distractions during the actual completion of the homework, this is no easy feat for students with attention deficits.

In order to be organized, attention to detail is required. This may affect such tasks as knowing which books to bring to which class and figuring out where a particular paper belongs within a classroom binder. This type of discipline is one in which a child with ADHD might find challenging. In this literature review, research that documents these struggles for students with ADHD will be reviewed as well as why homework and organization are important to achieving academic success. Lastly, interventions that have been implemented in an attempt to improve the homework, organization, and planning skills of students with ADHD will also be discussed.

#### **The Importance of Homework**

Homework is a common and, in most cases, expected practice for most students attending middle schools today. It always has been and will continue to be one of the most debated elements about education.

In 2007, the Metropolitan Life Insurance Company (MetLife) administered a survey to teachers, parents, and students regarding their feelings about homework. According to this survey, seventy five percent or more of teachers, parents, and students rated completing homework as either 'important' or 'very important.' The group that valued it as the most important, with eighty three percent, was the teachers. However, both parents and students also reported strong feelings about the importance of completing homework, with eighty one percent and seventy seven percent respectively (MetLife, 2007, p. 19).

The question then becomes what makes homework so important? What is the purpose of homework? According to the MetLife survey (2007), teachers provided numerous reasons for assigning homework to students. Eighty six percent of teachers reported assigning homework to students to allow for practice of learned skills and to prepare students for upcoming tests. Eighty percent of teachers felt that assigning homework would promote appropriate work habits. Homework was reportedly used for engaging critical thinking skills and motivating students to learn, by sixty seven percent and sixty five percent respectively, of teachers.

Fifty one percent of teachers stated that homework was used to develop students' interests. Homework was used as a way to assess student's knowledge and skills by sixty three percent of the teachers in the survey. Only sixteen percent of teachers used homework as a way for students to finish classwork in which they were unable to complete during the allotted class period (MetLife, 2007, p. 30). When examining all of the described reasons for assigning homework, one could conclude that homework can

and should contribute to fostering the learning of students as well as preparing them for the future.

According to Marzano and Pickering (2007), another compelling argument for the importance of homework is that homework allows learning to occur beyond the school day. With all of the distractions present in the home, students are much more likely to engage in nonacademic activities, such as texting or playing video games, as opposed to more academic activities, such as reading or studying, when the school day is through. Marzano and Pickering discuss the fact that U.S. students in general spend less time on academic studies when compared to other countries that outperform the United States (Marzano & Pickering, 2007).

Cooper, Robinson, and Patall (2006) discussed how homework is also a way to enhance the home and school connection. Homework is an aspect of school in which parents can insert themselves; therefore it promotes increased parent involvement. It allows for parents to have a heightened awareness and interest of their child's progress in school. Additionally through their studies, it was also suggested a correlation between homework completion and higher academic achievement (Cooper, Robinson, & Patall, 2006, p.7).

### **The Importance of Organization**

In addition to a greater emphasis on homework, in the middle school setting there are new expectations for and emphasis on student organization. The shift is often one that can be difficult for students with attention deficit hyperactivity disorder (ADHD). Gureasko-Moore, Dupaul, and White (2006), noted that some of the challenges for students are changing classes and reporting to various teachers for their academic

subjects, each of which require different materials. These materials no longer have a “home” per say, as students are responsible for carrying their belongings and storing them in lockers instead of housing them in a classroom desk like in their elementary school setting (Gureasko-Moore, Dupaul, & White, 2006, p. 162).

### **Homework, Organization, and Planning Skills of Students With ADHD**

Attention Deficit /Hyperactivity Disorder, or ADHD, is one of the most commonly diagnosed disorders among children (Langberg, Epstein, Urbanowicz, Simon, & Graham, 2008). Children with Attention Deficit Hyperactivity Disorder (ADHD) struggle with remaining focused for any sustained period of time due to inattentiveness, hyperactivity, impulsivity, or a combination of those three. By definition, children with ADHD are susceptible to difficulties with completing homework, maintaining organization and executing planning since all of these activities require a significant degree of attention (American Psychiatric Association).

According to a study conducted by Power, Werba, Watkins, Angelucci, Eiraldi (2006), issues with homework are often attributed to attention and learning problems and the occurrence of difficulties with homework is much higher with children with ADHD than with their peers. This observation was concluded by comparing the results of the Homework Problem Checklist completed by parents of children in the general education setting to children who have been referred for attention issues. The Homework Problem Checklist is a twenty-item assessment, which was developed by Anesko, Schoiock, Ramirez, and Levine (1987), that is said to measure the intensity and frequency of homework problems.

After administering the Homework Problem Checklist to parents, two factors or clusters were determined from the twenty items on the checklist. Factor I referred to items that were related to inattentiveness and homework avoidance and Factor II referred to items that were related to poor productivity and non-compliance with homework rules. When comparing the results of the general education sample and the referred sample, the referred sample demonstrated higher ratings for both factors (Power, Werba, Watkins, Angelucci, Eiraldi, 2006).

In the book *ADHD in the schools: Assessment and intervention strategies, second edition*, DuPaul and Stoner (2003) explained that behaviors associated with students with ADHD in regards to homework skills include difficulty remembering to complete assignments, difficulty turning assignments in to their teachers, and making avoidable mistakes on their assignments (cited in Langberg et al, 2008). Other homework difficulties of students with ADHD include failure to record homework assignments in agenda books, inability to stay focused on the task at hand, and rushing through homework in order to complete it (Power et al., 2006). Furthermore, the result of the above mentioned behaviors could cause a difficult working relationship between children with ADHD and their teachers and parents (Mautone, Marshall, Costigan, Clark, & Power, 2011, p. 601).

Mash and Barkley (2003) further described how students with ADHD also face challenges with organization and time management, which can result in not completing assignments on time, not allowing enough time to study for tests, and planning and organizing for projects or long term assignments (as cited in Langberg et al, 2008). Also

observed with children with ADHD is the misplacement or loss of school materials as well as forgetting materials (Abikoff et al., 2013).

Researchers have explored whether or not students with ADHD fail to meet these academic demands due solely to an inability to focus and attend or in conjunction with a lack of important executive functioning skills. Executive functions, such as working memory, response inhibition, planning and organization, and sustained attention, influence such behaviors as self-regulation, decision-making, and goal directedness. Therefore, an absence or deficit in one or more of these executive functions could greatly impact a child in middle school with ADHD (Langberg, Dvorsky, & Evans, 2013).

### **Interventions for Homework, Organization, and Planning Skills for Students With ADHD**

The following studies, which will be discussed and reviewed, are ones that collected data when interventions similar to the Homework, Organization, and Planning Skills intervention (H.O.P.S.) were implemented with students with attention deficits.

In a study conducted by Pfiffner, Villodas, Kaiser, Rooney, and McBurnett (2013), the independent variable was a collaborative school-home intervention called the Collaborative Life Skills Program and the dependent variable was to measure improvement of organizational skills and the reduction of ADHD symptoms.

Fifty-seven students in a public school setting in grades second through fifth participated in the study, all whom which met the screening criteria for ADHD. The students received the intervention over 12 weeks which included group behavioral parent training, classroom behavioral intervention, and a child social and independence skills group (Pfiffner et al., 2013). Students were screened using the results of the Child

Symptom Inventory and Impairment Scales as reported by teachers and parents., as well as a full scale IQ of 79 or greater. Forty nine percent of these students also met the criteria for Oppositional Defiant Disorder according to the Child Symptom Inventory (Pfiffner et al., 2013).

Learning Support Professionals implemented all components of the intervention. A school-home daily report card, which included two or three target behaviors, was rated up to three times per day and maintained throughout the course of the intervention. Parents received ten 1-hour group sessions, which outlined strategies for managing areas of difficulty commonly associated with ADHD such as homework time, organization, independence in completing daily routines, etc. These specifically included skills such as effective use of commands, rewards, discipline, etc. (Pfiffner et al., 2013, p. 28).

The children who participated in this study received ten 40 minutes group sessions in which the students attended during the school day (Pfiffner et al., 2013, p. 28). Both independent and social skills were taught during these sessions that covered skills such as good sportsmanship, self control, homework skills, completing tasks independently, establishing and following routines, etc.. To reinforce these skills and motivate and manage their behaviors, a reward based contingency management program was used (Pfiffner et al., 2013).

Student outcomes were measured for all participants pre and post treatment in following areas using the following instruments: ADHD symptoms (Child Symptom Inventory), academic functioning (Homework Problems Checklist, Academic Competence Evaluation Scale), organizational skills (Children's Organizational Skills Scale), school grades (Standards Based Report Card system), academic achievement

(Woodcock Johnson Tests of Achievement), and behavioral observations (Behavioral Observation of Students in Schools).

When examining the data in the study “Educational Outcomes of a Collaborative School-Home Behavioral Intervention for ADHD,” it was determined that a significant improvement was observed on across all measures when comparing baseline to post treatment (Pfiffner et al., 2013, p. 30). After completing the Collaborative Life Skills Program, 51% of the participants were found to be in the non-clinical range for ADHD at the post treatment time. It was also demonstrated that there was a strong correlation between the amount of improvement in ADHD symptom severity and the improvement of organizational skills and to a significant but lesser degree, the improvement of academic skills (Pfiffner et al., 2013, p. 32).

In a study conducted by Langberg et al. (2008), the independent variable was a pilot 8-week organization and homework management skills intervention for children with ADHD and the dependent variable was its effect on academic performance (Langberg et al., 2008). Thirty seven students in a public school ranging in grades fourth through seventh participated in the study which included curriculum teaching “physical organization of materials, accurate recording of homework and tests in a planner, and long term planning for tests and projects.” These students met the criteria of ADHD according feedback from parents and teachers on the Vanderbilt ADHD Rating Scale (Langberg et al., 2008, p. 408).

Two days a week, the participants received the organization and homework management interventions during an afterschool program for one hour and fifteen minutes. Undergraduate psychology students delivered the interventions with a 3:1



student to counselor ratio. Twenty minutes of individual intervention time and fifty-five minutes of group intervention time was implemented each session. A follow up evaluation was conducted 8 weeks after the completion of the intervention (Langberg et al., 2008). The wait list control students participated in the same 8-week intervention after children in the intervention group completed the intervention (Langberg et al., 2008, p. 409).

A reward system was used to manage behaviors during the after school program in which the students would earn free time minutes for recording their homework assignments and getting their teacher's initials. The students also were awarded points according to the results of their Organization Checklist in which they could cash in for gift cards when they reached a certain number of points. Both of these reward systems were started in week two in order to collect baseline data on the Organization and Homework Management Checklists. Parents were offered two one-hour parent sessions in which the leader reviewed the program components, answered questions, and reviewed the appropriate forms, interventions, and rewards systems in order for parents to implement them at home (Langberg et al., 2008).

Student outcomes were measured for the participant's pre and post treatment in following areas using the following instruments: homework problems (Homework Problem Checklist), academic performance (Academic Performance Rating Scale), school related functioning (class grades), organization (Organization Checklist), and frequency of homework recording (Homework Management Checklist) (Langberg et al., 2008).

When looking at the study, “Efficacy of an Organization Skills Intervention to Improve the Academic Functioning of Students With Attention Deficit/Hyperactivity Disorder,” it was found that on measures that assessed physical organization and homework recording, children in the intervention group improved during the 8 week intervention and that these gains were observed to be maintained at 8 week follow up. As a result of the improvement in organizational skills, a significant improvement in parent ratings of academic functioning was also observed (Langberg et al., 2008, p. 414).

Gains in class grades were also noted. Organization skills showed significant improvement from the baseline. All areas of the organization checklist increased to above 90% after the intervention and 72% - 83% maintenance at the 8 week follow up. The intervention group received a 30% on the homework management checklist which increased to a 72% post intervention and was at 65% at the follow up (Langberg et al., 2008).

In a study conducted by Abikoff et al. (2013), the independent variables were two behavioral interventions that targeted organization, time management, and planning difficulties with children with ADHD. The dependent variable was the effects of these interventions on academic performance, homework, and family functioning. The study was conducted at two separate medical centers. One hundred fifty eight students in third through fifth grade participated in either a skills based intervention called Organizational Skills Training (OST=64 students), a performance based intervention called Parents and Teachers Helping Kids to Organize (PATHKO=61 students), or a wait-list control group (WL=33 students) Selection criteria included an IQ of 85 or greater on the Wechsler Abbreviated Scale of Intelligence, elevated rating for ADHD on the Conners parent and

teacher scales, and a diagnosis of ADHD according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, or DSM-IV (Abikoff et al., 2013).

Treatments were individualized and designed to target organizational skills and took place over a period of ten to twelve weeks. Twenty one-hour long sessions were implemented two days a week after school by psychologists with at least two years of behavior therapy experiences. The Organizational Skills Training assumes that children possess a skill deficit in the areas of organizing materials, keeping track of assignments, time management, and task planning.

In order to address these deficits, the participants were taught to use new tools and routines to record assignments, organize materials, and track time. Children received in-session rewards when successful application was noted. The children were the primary focus of the intervention, however, parents joined the last ten minutes of each session to receive training on how to maintain these skills as well as how to prompt, praise, and reward. Teachers and the parents monitored the each child's efforts with the implementation in order to reward accordingly (Abikoff et al., 2013).

The Parents and Teachers Helping Kids to Organize intervention focused on performance deficits in which specific goals are set for children by teachers and parents and the children's progress was then monitored and rewarded by the parents and teachers through the use of written charts. These sessions were more focused on training the parents and the children would get involved for a short time at the end of every session.

The three main components of PATHKO were daily report cards, a token economy system, and homework rules and structures. Report cards were used for teachers to communicate behaviors observed at schools and parents used these as a basis

for rewarding points at home. The token economy system was maintained at home and points were rewarded for achieving goals. These points could be exchanged for rewards and privileges daily and weekly. Homework rules and structure were established by parents and children were rewarded for their compliance (Abikoff et al., 2013).

Student outcomes were measured for the participants pre and post treatment in following areas using the following instruments: organizational functioning (Children Organization Skills Scales – Parent and Teacher), academic functioning (Academic Performance Rating Scale, Academic Proficiency Scale), homework behaviors (Homework Problems Checklist), family functioning (Family Environment Scale), attitude to school and teachers (Behavior Assessment for Children), global improvement and severity (Clinical Global Impression-Improvement Scale), treatment satisfaction (Consumer Satisfaction Questionnaire) and adverse behavioral events (questioning of parents in regards to behavioral events) (Abikoff et al., 2013).

In the study “Remediating Organizational Functioning in Children With ADHD: Immediate and Long Term Effects From a Randomized Controlled Trial,” Abikoff et al. noted that “sixty percent of OST and PATHHKO participants versus three percent of controls no longer met organizational, time management, and planning (OTMP) inclusion criteria. Significant maintenance effects were found for both treatments.” However, the OST seemed to produce better results than PATHKO (Abikoff et al., 2013, p.113).

In the another study conducted by Power et al. (2012), the independent variable was the Family – School Success intervention and the dependent variable was it effects on family and educational functioning for children with ADHD (Power et al., 2012). The study was conducted through an ADHD center, which was located at a pediatric

hospital. One hundred ninety nine students in second to sixth grade participated in this study. (Power et al., 2012, p. 613).

Inclusion criteria for this study included; children with any of the three types of ADHD according to the parent report on the Schedule for Affective Disorders and Schizophrenia for school age children, eighty five percent or higher rating for inattention and/or hyperactivity on the ADHD Rating Scale – IV or the Attention Problems or Hyperactivity Scales on the teacher ratings of the Behavior Assessment System – second edition, scores at or above 0.75 standard deviations above the mean on the Homework Problem Checklist, and an estimated IQ of 75 or higher on the Wechsler Abbreviated Intelligence Scales. (Power et al., 2012, p. 613).

The intervention was administered over twelve weekly sessions. The sessions included six group sessions, four individualized family sessions, and two school based consultations. Participants were assigned to one of two groups, the FSS group or a comparison control group in which clinicians controlled for non-specific treatment effects (Power et al., 2012, p. 611).

The Family – School Success intervention is developed to improve parenting skills, increase family involvement in education, family – school collaboration and promote student academic engagement and productivity” (Power et al., 2012, p. 615). Clinicians and clinical assistants conducted the group sessions. The initial group session was three hours long and every session thereafter lasted ninety minutes. The individualized family sessions were held for sixty minutes and the school sessions lasted for approximately forty-five minutes.

The three main components of the FSS were the Conjoint Behavioral Consultation (CBC), homework interventions, and Daily Report Cards (DRC). The authors described CBC as, “ a structured problem solving process in which parents and teachers work collaboratively through the stages of behavioral consultation” (Power et al., 2012, p. 612). Homework interventions involved the teacher’s observation of the actual recording of assignments and deciding the optimal time for homework completion. Positive reinforcement was be used for completion of assignments. Daily report cards were used to track student attainment of one or more target behaviors by the teachers. The DRC was taken home and parents reviewed this document to see if preset goals were met. If these goals were met, the child was then reinforced (Power et al., 2012).

A separate twelve-week program, Coping With ADHD through Relationships and Education (CARE) was implemented to control for the non-specific effects of intervention. This program did not focus on the same topics as FSS, but instead provided support and education the parents of children with ADHD. Topics such as progress at home and school and general information about ADHD were discussed and a context was developed for parents to offer support to one another with dealing with having a child with ADHD. The option of medication was offered for the children to the parents prior to the study. Forty three percent of the children were on medication at the start of the study (Power et al., 2012).

Outcomes were measured at baseline, mid-point, post treatment, and 3 month follow up in following areas using the following instruments: intervention acceptability (Treatment Acceptability Questionnaire, Intervention Rating Profile), family involvement in education (Parent as Educator Scale, Parent-Teacher Involvement Questionnaire),

homework performance (Homework Problems Checklist, Homework Performance Questionnaire – Teacher Version), parent child interaction (The Parent – Child Relationship Questionnaire), ADHD and ODD symptoms (MTA Swanson, Nolan, and Pelham Questionnaire), and academic performance (Academic Performance Rating Scale) (Power et al., 2012).

In the study, “A Family–School Intervention for Children With ADHD: Results of a Randomized Clinical Trial,” it was reported that “based on parent ratings on the HPC, at post intervention children in FSS showed a significantly greater decrease in homework inattention/task avoidance than did their counterparts in the CARE condition, but this effect dissipated at the follow up” (Power et al., 2012, p.614).

All four studies examined reported some amount of improvement in homework and organizational skills amongst children with ADHD using the independent variables specified. Using interventions that combined the home and school communities demonstrated that children who suffer from attention issues, whom ultimately have difficulty with homework and organization, could be more successful when taught specific strategies. Also, it was determined that when students were rewarded for complying with the demands of the intervention, the students were more motivated.

Positive outcomes were determined from these interventions and varied depending on the intensity of the intervention. Results included an observable decrease in ADHD symptoms, an increase in academic performance and grades, more frequent completion of homework, and a better understanding and representation of organizational skills. The Homework, Organization, and Planning Skills intervention is similar to the previous described intervention in that it is an intervention that connects the home and

school environments and uses a reward system to motivate students. The data collected on such interventions suggests that they can be effective and essential to improving the homework and organization skills for students with ADHD.



## **Chapter 3**

### **Methodology**

#### **Setting and Participants**

This study included four middle school students, two students in seventh grade and two students in eighth grade. The students attend a middle school in a suburban southern New Jersey school district. The school district contains only two schools, an elementary school and a middle school, and one administration building. There are a total of approximately 650 students in the district. The elementary school includes students in preschool through third grade and the middle school includes students in grades fourth through eighth. The typical school day at the middle school runs for six hours and twenty minutes. The amount of actual instructional time is five hours and forty minutes.

According to the New Jersey School Performance Report (New Jersey Department of Education, 2014), 62.9% of the students in the middle school are white, 17.5% of the students are black, 14.3% of the students are Hispanic, 4.1% of the students are Asian and 1.7% of the students are two of more races. English is the primary language spoken in the community and a small percentage speaks Spanish. When examining the middle school population, 21% of the students are students with disabilities, 43.5% of the population is considered economically disadvantaged, and 2.5% of the population is limited English proficiency students.

All of the students chosen for this study have a documented diagnosis of Attention Deficit Hyperactivity Disorder. Teachers and the middle school principal recommended these students receive the intervention due to their difficulty with

homework completion and poor organizational skills. All students have either a 504 plan or an Individualized Education Plan for their diagnosis of ADHD and/or other disabilities or disorders.

**Participant 1.** AB is a seventh grade Caucasian, female student who is currently receiving special education and has an Individualized education plan. AB is eligible for special education services under the category “Visually Impaired.” She has a documented nystagmus as well as a diagnosis of ADHD-combined type. AB receives instruction for English Language Arts and Mathematics in a resource room setting and receives in class support for Science and Social Studies. Even in the small group setting, AB has difficulty keeping her belongings orderly. Her most significant struggle is with her ability to complete her classwork and homework on a consistent basis.

**Participant 2.** TC is a seventh grade Caucasian, female student who currently receives accommodations from a 504 Plan. TC has a 504 plan to address her symptoms of ADHD inattentive type. TC does not receive special education services. She is instructed in general education English Language Arts, Mathematics, Science and Social Studies classes. TC’s parents were particularly concerned with her organization of her school materials. She frequently forgets what is needed for homework at school. TC completes most of her classwork and homework and only had a few missing assignments at the start of the intervention.

**Participant 3.** MH is an eighth grade Caucasian, male student who is currently receiving special education and has an Individualized education plan. MH is eligible for special education services under the category “Other Health Impaired.” He has a documented seizure disorder as well as a diagnosis of ADHD-inattentive type. MH

receives in class support in English Language Arts, Mathematics, Science and Social Studies. MH's mother was very concerned with both his organization and work completion. Every night she compared what MH wrote in his agenda with the online homework calendar and most nights there was missing information. This resulted in inconsistent homework completion. MH also struggled with completing classwork, which would then become homework and not be completed.

**Participant 4.** TL is an eighth grade Caucasian, male student who is currently receiving special education and has an Individualized education plan. TL is eligible for special education services under the category "Other Health Impaired." He meets the criteria under this category due to a diagnosis of ADHD combined type. TL also has a specific learning disability in the areas of basic reading and reading comprehension. TL is instructed in a resource room setting for English Language Arts and Mathematics and receives in class support in Science and Social Studies. TL does fairly well with his completing his classwork and homework, however, he finds it difficult to keep his materials organized.

### **Procedure**

The intervention was implemented over an eight-week period from October 2014 to January 2015. The Learning Disabilities Teacher Consultant met with two groups of students once a week for thirty minutes each from 2:05 p.m. to 2:35 p.m.. The students were pulled from their advisory core to receive the intervention. Group 1 consisted of two seventh grade female students and Group 2 consisted of two eighth grade male students. Typically, Group 1 met on Monday and Group 2 met on Thursday, unless there

was a scheduling conflict or school closing. The meetings took place every week in classroom 15 of the middle school building in which the students attended.

The intervention was delivered with the use of the Homework, Organization, and Planning Skills manual (Langberg, 2011). Six sessions of the intervention took place over the course of eight meetings per group. Following instructions in the manual, the sessions were divided into two sections, pre-session reading and session content. The instructor discussed the intervention components and responsibilities were discussed with the teachers. Two meetings were held, one with the seventh grade teachers and one with the eighth grade teachers, to review the intervention as well as their role, and answer any specific questions.

In session 1, some baseline data was collected on the students. This data included grades earned at the start of the intervention, an initial score on the organization checklist, and the number of missing assignments at that time. The organization checklist is a tool that is divided into three sections, which include binder, book bag, and locker. Each session, this checklist was used to collect data on the organizational state of those three areas. Students received either a Yes or No for each criterion on the checklist and the total was calculated each session into a percentage.

Also in session 1, the intervention was explained at length to the students and rapport was established. Questions were posed to evaluate current homework and organization procedures. A discussion was also started about a rewards menu and possible incentives the students would be interested in earning. Rewards were based on a point system. Students received points for each criterion met on the organizational checklist and the points were tallied each session. (Langberg, 2011, p. 17 – 21).

At the beginning of session 2, another evaluation of skills was obtained using the organizational skills checklist. The appendix displays the organizational skills checklist used in this study. It is made up of three categories; binder, book bag, and locker. Under the binder section there are seven binder criteria that need to be met. There are four book bag criteria and three locker criteria. There are a total of fourteen criteria the participants were evaluated on using the organizational skills checklist. The participants were evaluated at the start of each of the eight meetings. Each percentage was calculated by adding up the amount of criteria met and dividing that number by the total number of possible criteria. The Organizational Skills Checklist can be found in the appendix (Langberg, 2011, p. 26).

The students were shown how their progress will be monitored using the organizational skills checklist and how they can earn rewards. The H.O.P.S. binder system was introduced and the H.O.P.S. binder and materials were given to the students. The materials included pencils and a pen pouch, planner or homework tracking sheet, a homework folder, dividers with one tab for each class, one folder for each class, and loose-leaf paper. All materials for all classes were to be kept in the H.O.P.S. binder. The rest of the session was spent going through the students' materials, throwing out unnecessary papers and filing existing papers into the new binder (Langberg, 2011, p. 22 – 27).

During session 3, the organizational skills checklist was used to evaluate the students, who were using the new H.O.P.S. binder system. Also, the teacher initial system was explained to students. Students were directed to obtain teachers initials for every class once they have recorded their homework in their agenda. If there was no

homework, students were instructed to write “no homework” and still obtain teacher signatures. Teachers should also be recording the number of missing assignments when signing the students’ agendas.

One student was given a Homework Assignment Tracking Sheet, as the agenda was too overwhelming for her. This sheet included a weekly chart for the student to record her homework. It also included spaces for teacher signatures and the number of missing assignments for each class. This sheet was kept in the homework folder and replenished each week. Students also earned points for retrieving teacher signature and this was discussed in this session. The rewards menu was finalized and agreed upon as well. (Langberg, 2011, p. 27 – 32).

The fourth meeting was the first time students received rewards by cashing in points earned. The remainder of the time was spent reviewing how to place documents into the correct place in the new established binder system and assisting with this task.

At the beginning of Session 4, the organizational checklist was used to assess the students and teacher signatures were tallied. These items were recorded on the points tracking sheet and students were rewarded. The students spent the rest of session 4 creating visual reminders for them to obtain teacher signatures and reviewing previously discussed components of the intervention.

Session 5 began with evaluating the students and recording the points on the tracking sheet. The first part of the meeting the students used points to redeem various rewards. The second part of the session was spent explaining the parent meeting component and preparing that meeting. This meeting was scheduled with each parent of each student and was designed so the students and instructor could review the

intervention with the parent, discuss each student's progress with the intervention, and review how it could be utilized at home. Three parents were able to schedule and attend meetings. One parent was unable to be reached, despite many attempts. The three meetings occurred within a two-week period.

The groups met a seventh time to assess using the checklist, tally the signatures, and reward the students accordingly. The rest of the time of the time was spent on maintenance activities, such as going through papers, repairing folders, reorganizing lockers, etc. Session 6, which was the final session, was held once all of the parent meetings had occurred. Students were assessed one final time using the checklists, grades were documented at this time, and the parent meetings were reviewed. Discussions were had with students regarding the intervention and its effectiveness.

Eight weeks later, the groups met once more. An evaluation using the organizational checklist was completed, students' grades were reviewed at that time, and the number of missing assignments for each student was reported by teachers. The students' teachers were briefly interviewed about how they believe the students' were managing since the intervention was completed and the responsibility had shifted to the home.

### **Variables**

The independent variable in the study was the Homework, Organization, and Planning Skills intervention. This intervention aimed to increase students' homework completion and improve students' organizational skills.

The dependent variables in the study were the students' grades and the organizational checklist scores.

## **Experimental Design**

The H.O.P.S. intervention consists of a total of sixteen sessions. For the purpose of measuring the specific aspects of homework and organization, only the first six sessions, which cover the target areas for this study, were implemented. Eight meetings took place, six focusing on the assigned session content and two focusing on set up and maintenance of the intervention. At the beginning of each of the sessions, the organizational skills checklist was filled out for each student and teacher initials were counted and recorded.



## **Chapter 4**

### **Results**

#### **Summary**

In this study, an intervention targeting organization and homework skills was implemented with four students who have been diagnosed with a type of ADHD and in some cases other disorders as well. The following research questions were examined:

1. Is a targeted intervention (i.e.. H.O.P.S.) that aims to improve homework and organizational skills effective for 7<sup>th</sup> and 8<sup>th</sup> students with ADHD?
2. Can an intervention devoted to improving homework and organizational skills improve academic performance?
3. Was any improvement in skills and/or academic performance maintained when measured at an eight-week follow up meeting?

Baseline data on students' academic achievement was collected at the start of the intervention to determine student performance prior to receiving the intervention. All of the students' grades were recorded prior to starting the intervention. For the purpose of this study, only the grades in academic areas, which include English Language Arts, Mathematics, Social Studies, and Science, were recorded initially and throughout the intervention. A baseline evaluation of the students' organizational skills was obtained using the organizational skills checklist.

#### **Group Results**

Using the district's student database, grades were documented for each participant. Baseline grades were documented for all participants prior to starting the intervention. After the eight meetings, which included six H.O.P.S. sessions and two

maintenance meetings, grades were once more documented after the completion of the intervention. About eight weeks later, all participants' grades were documented once more.

Table 1 shows numerical grades at the start of the intervention (baseline), at the end of the intervention (post intervention), and at the point of the eight week follow up for all four participants. Percent of increases and decreases of grades are listed between the baseline and the post intervention as well as between the post intervention and eight week follow up.

Table 1

*Baseline, Post Intervention, and 8 Week Follow up Student Grades*

<b>Participants</b>	<b>Academic Areas</b>	<b>Baseline Grades</b>	<b>Post Intervention Grades</b>	<b>Difference Between Baseline and Post Intervention</b>	<b>8 Week Follow Up Grades</b>	<b>Difference Between Post Intervention and 8 Week Follow Up</b>
AB	ELA	64	78	21.9%	72	-7.7%
	Math	78	75	-3.8%	74	-1.3%
	Social Studies	52	82	57.7%	89	8.5%
	Science	65	87	33.8%	82	-5.7%
TC	ELA	86	83	-3.5%	90	8.4%
	Math	81	83	2.5%	92	10.8%
	Social Studies	68	71	4.4%	87	22.5%
	Science	71	60	-15.5%	82	36.7%
MH	ELA	72	77	6.9%	81	5.2%
	Math	66	72	9.1%	76	5.6%
	Social Studies	74	80	8.1%	70	-12.5%
	Science	64	73	14.1%	64	-12.3%
TL	ELA	75	82	9.3%	79	-3.7%
	Math	78	76	-2.6%	82	7.9%
	Social Studies	43	81	88.4%	72	-11.1%
	Science	59	83	40.7%	75	-9.6%
<b>MEAN</b>		68.5	77.7	16.9%	79.2	2.6%

The means of the baseline, post intervention, and eight-week follow up grades were calculated. When examining all participants' grades at the start of the intervention,

the baseline grade according to the mean was 68.5. After receiving the intervention, the post intervention grade according to the mean was a 77.7. At the time of the eight-week follow up, the mean of all the participants' grades was 79.2. Though the mean of the eight-week follow up grade suggests an improvement in academic performance after the intervention was implemented, it is best to examine the individual participant's grades to determine the effect for each of them.

The percentage of increase or decrease was found between the baseline grades and the post intervention grades and between the post intervention grades and the eight-week follow up grades. There was a 16.9% increase of all of the participant's grades from the start of the intervention to the completion of the intervention. At the eight-week follow up, there was a mean grade increase of 2.9% increase in between the post intervention period and the eight-week follow up period. However, there was a decline in student performance after the completion of the intervention.

Table 2 shows the percentage of criteria met on the organizational skills checklist for each participant for all eight meetings. It lists the percentage of criteria met at the eight-week follow up meeting. Differences from session 1 to session 6 are documented as well as the mean percentage for each participant of all eight meetings.

Table 2

*Organizational Skills Checklist Percentages of Criteria met*

Meetings	Participants				MEAN (Per Meeting)
	AB	TC	MH	TL	
Session 1	7%	29%	21%	36%	23%
Session 2	27%	64%	40%	70%	50%
Session 3	50%	70%	64%	73%	64%
4 <sup>th</sup> Meeting	100%	100%	60%	90%	88%
Session 4	80%	100%	55%	82%	79%
Session 5	55%	100%	80%	90%	81%
7 <sup>th</sup> Meeting	90%	71%	55%	64%	70%
Session 6	50%	86%	50%	71%	64%
8 Week Follow Up	29%	86%	29%	57%	50%
<b>Difference From Session 1 to Session 6 in percentage points</b>	<b>43%</b>	<b>57%</b>	<b>20%</b>	<b>35%</b>	<b>41%</b>
<b>MEAN (Per Participant)</b>	<b>54%</b>	<b>78%</b>	<b>50%</b>	<b>70%</b>	

At the beginning of the intervention phase the mean rating on organizational skills across student was 23%. By the last meeting, session 6, the mean of the criteria met was 64%, increasing by 41 percentage points from the start to the end of the intervention. At the eight-week follow up meeting, the participants met 50% of the criteria on the checklist, a decrease from the session 6 but still an improvement from session 1.

**Individual Results**

Figure 1 represents the numerical grades for participant AB at the beginning of the intervention (baseline), at the completion of the intervention (post intervention), and at the eight-week follow up meeting in all four academic areas. At the baseline, AB was receiving the following grades; 64 in English Language Arts, 78 in Mathematics, 52 in Social Studies, and 65 in Science. At the completion of the H.O.P.S. intervention, AB was receiving the following grades; 78 in English Language Arts, 75 in Mathematics, 82

in Social Studies, and 87 in Science. AB's grades increased significantly in ELA, Social Studies and Science and slightly decreased in Math.

At the eight-week follow up meeting, AB's grades were documented once more. At this point, AB was receiving the following grades; 72 in English Language Arts, 74 in Mathematics, 89 in Social Studies, and 82 in Science. When compared to her post intervention performance, AB's grades had decreased in ELA, Math, and Science and increased in Social Studies.

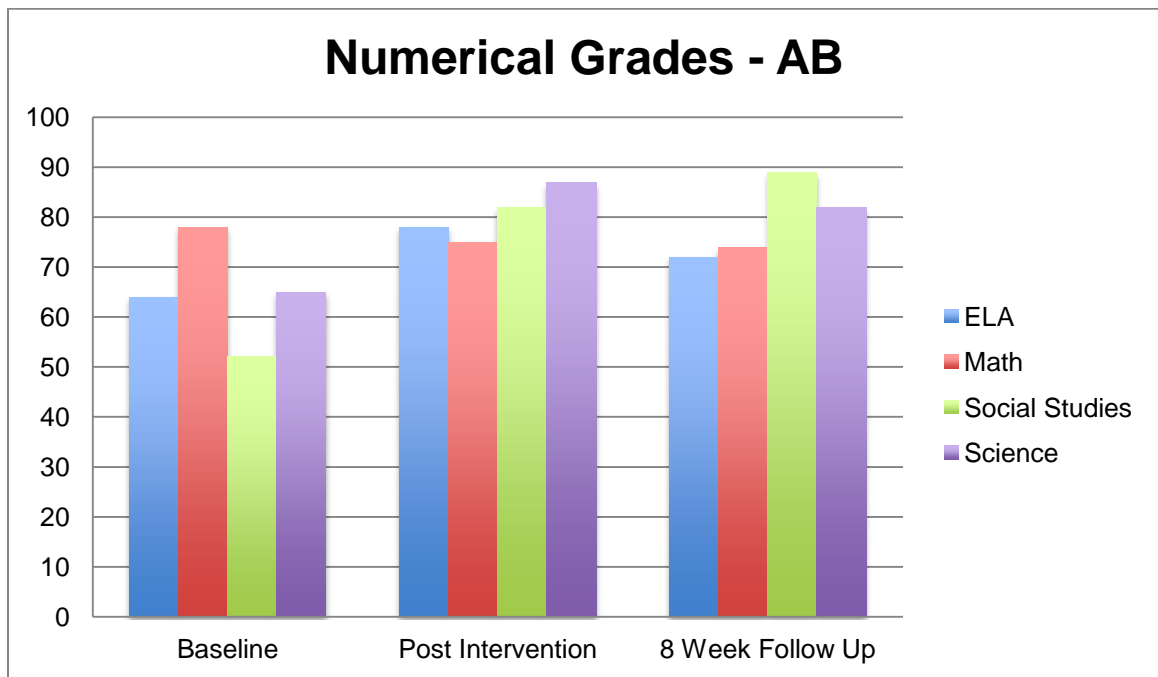


Figure 1. Numerical Grades for AB Throughout Intervention

Figure 2 illustrates AB's individual achievement on the Organizational Skills Checklist from the H.O.P.S. intervention. AB only met 7% of the criteria on the checklist during session 1 of the intervention. Following session 1, criteria met increased to 100% by the 4<sup>th</sup> meeting. Her performance thereafter was a bit inconsistent, meeting 80%

during session 4, only 55% during session 5, and 90% at the 7<sup>th</sup> meeting. At the last meeting, session 6, AB met 50% of the criteria and at the follow up meeting eight weeks later she met only 29% of the criteria.

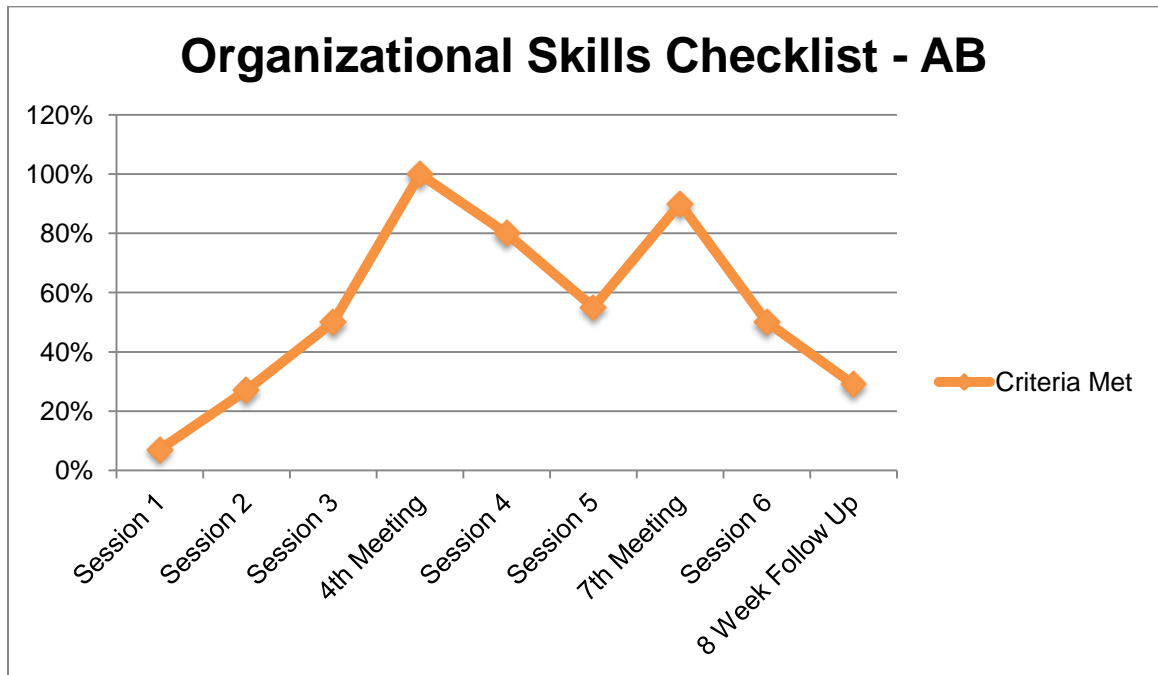


Figure 2. Organizational Skills Checklist Percentages of Criteria met for AB

Figure 3 represents the numerical grades for participant TC at the beginning of the intervention (baseline), at the completion of the intervention (post intervention), and at the eight-week follow up meeting in all four academic areas. At the baseline, TC was receiving the following grades; 86 in English Language Arts, 81 in Mathematics, 68 in Social Studies, and 71 in Science. At the completion of the H.O.P.S. intervention, TC was receiving the following grades; 83 in English Language Arts, 83 in Mathematics, 71 in Social Studies, and 60 in Science. TC’s grades increased slightly in Math and Social Studies. Her grade decreased slightly in ELA and significantly in Science.

At the eight-week follow up meeting, TC's grades were documented once more. At this point, TC was receiving the following grades; 90 in English Language Arts, 92 in Mathematics, 87 in Social Studies, and 82 in Science. When compared to her post intervention performance, TC's grades continued to increase in all four academic areas following the intervention.

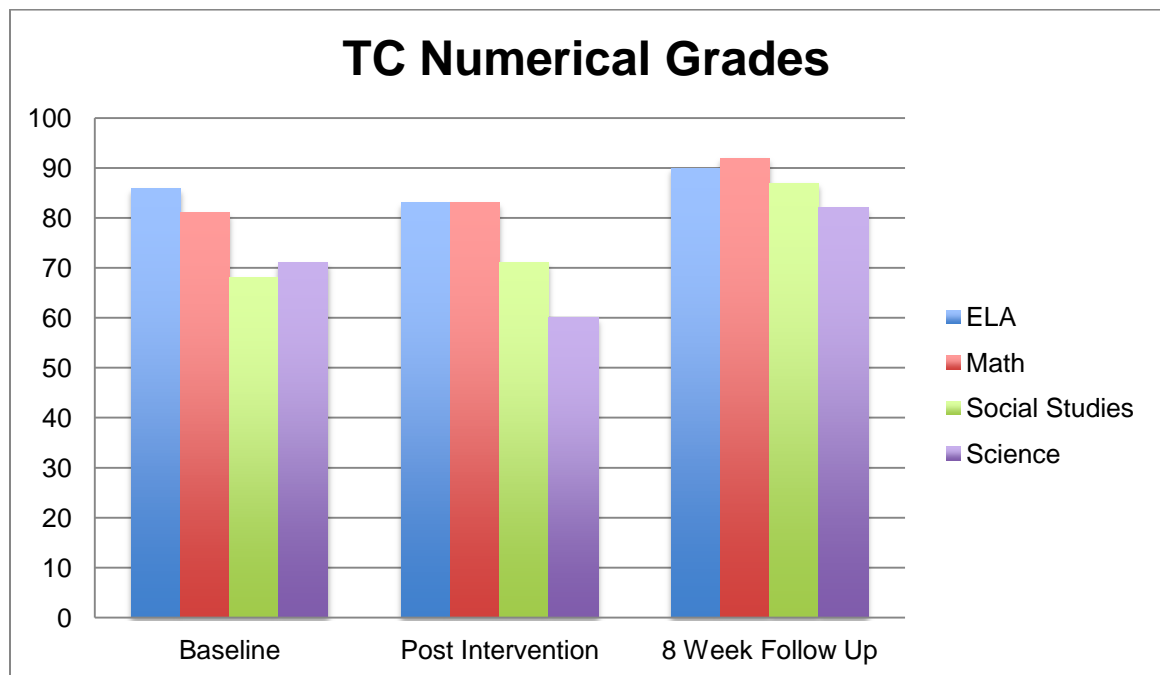


Figure 3. Numerical Grades for TC Throughout Intervention

Figure 4 illustrates TC's individual achievement on the Organizational Skills Checklist from the H.O.P.S. intervention. TC met 29% of the criteria on the checklist during session 1 of the intervention. TC continued to increase the number of criteria she met on the checklist. During the 4<sup>th</sup> meeting, session 4, and session 5, TC met 100% of the criteria on the Organizational Skills Checklist. During the 3<sup>rd</sup> meeting, TC only met 71% of the criteria, a decrease when compared to her prior evaluations. However, she

increased the amount of criteria met to 86% by session 6 and did well maintaining the criteria met by earning 86% criteria met at the eight week follow up.



Figure 4. Organizational Skills Checklist Percentages of Criteria met for TC

Figure 5 represents the numerical grades for participant MH at the beginning of the intervention (baseline), at the completion of the intervention (post intervention), and at the eight-week follow up meeting in all four academic areas. At the baseline, MH was receiving the following grades; 72 in English Language Arts, 66 in Mathematics, 74 in Social Studies, and 64 in Science. At the completion of the H.O.P.S. intervention, MH was receiving the following grades; 77 in English Language Arts, 72 in Mathematics, 80 in Social Studies, and 73 in Science. MH's grades increased a favorable amount in all four academic areas.



At the eight-week follow up meeting, MH's grades were documented once more. At this point, MH was receiving the following grades; 81 in English Language Arts, 76 in Mathematics, 70 in Social Studies, and 64 in Science. When compared to his post intervention performance, MH's grades continued to increase in ELA and Math but decreased in Social Studies and Science.

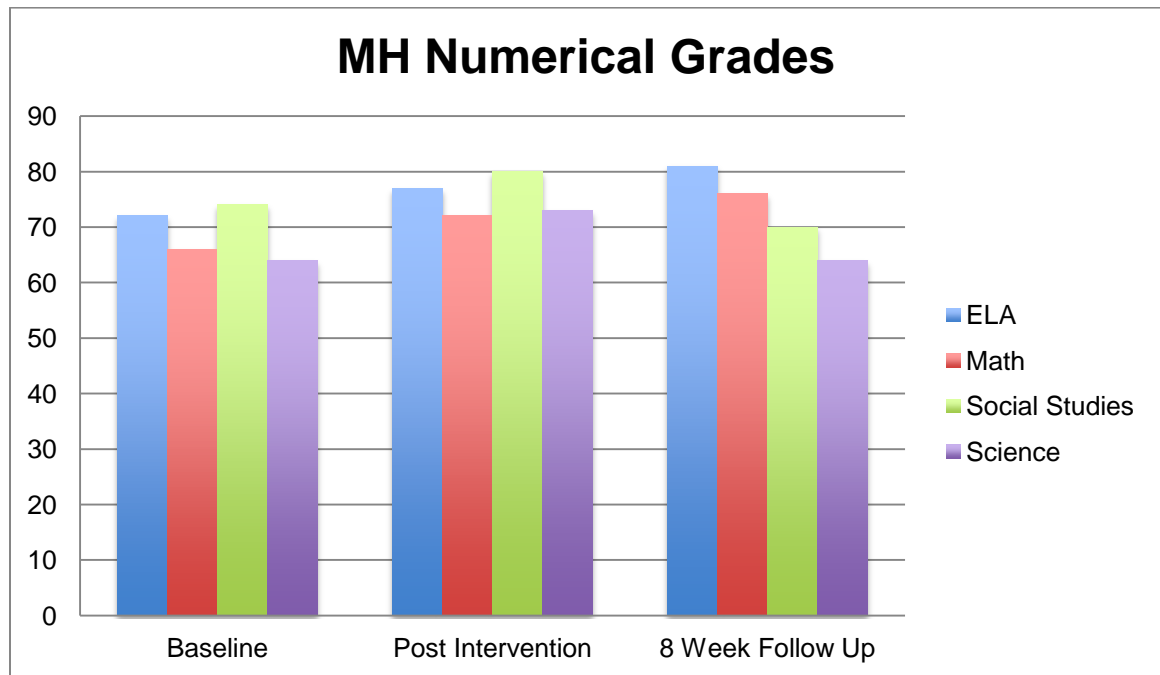


Figure 5. Numerical Grades for MH Throughout Intervention

Figure 6 illustrates MH's individual achievement on the Organizational Skills Checklist from the H.O.P.S. intervention. MH met 21% of the criteria on the checklist during session 1 of the intervention. Following session 1, criteria met increased to 64% by the session 3. His performance thereafter was a bit inconsistent, meeting 55% during session 4, only 80% during session 5, and 55% at the 7<sup>th</sup> meeting. At the last meeting,

session 6, MH met 50% of the criteria and at the follow up meeting eight weeks later he met only 29% of the criteria.

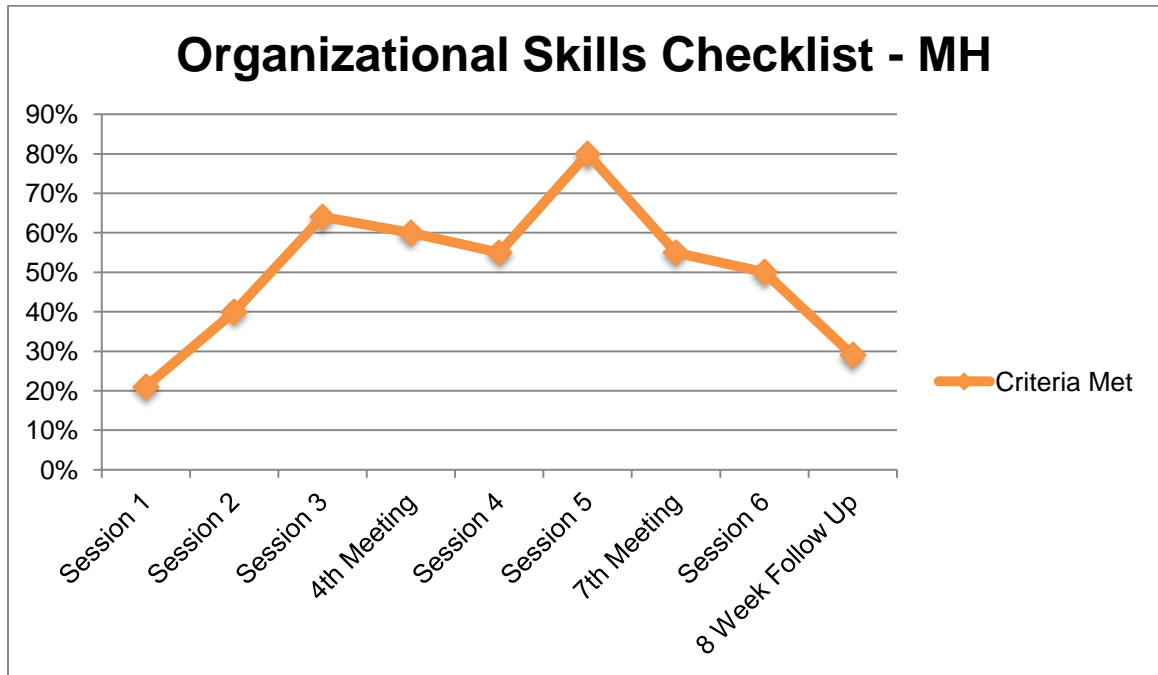


Figure 6. Organizational Skills Checklist Percentages of Criteria met for MH

Figure 7 represents the numerical grades for participant TL at the beginning of the intervention (baseline), at the completion of the intervention (post intervention), and at the eight-week follow up meeting in all four academic areas. At the baseline, TL was receiving the following grades; 75 in English Language Arts, 78 in Mathematics, 43 in Social Studies, and 59 in Science. At the completion of the H.O.P.S. intervention, TL was receiving the following grades; 82 in English Language Arts, 76 in Mathematics, 81 in Social Studies, and 83 in Science. TL's grades increased a favorable amount in ELA and significantly in Social Studies and Science. His grade in Math only slightly decreased.

At the eight-week follow up meeting, TL’s grades were documented once more. At this point, TL was receiving the following grades; 79 in English Language Arts, 82 in Mathematics, 72 in Social Studies, and 75 in Science. When compared to his post intervention performance, TL’s grades decreased in ELA, Social Studies, and Science and increased a small amount in Math.

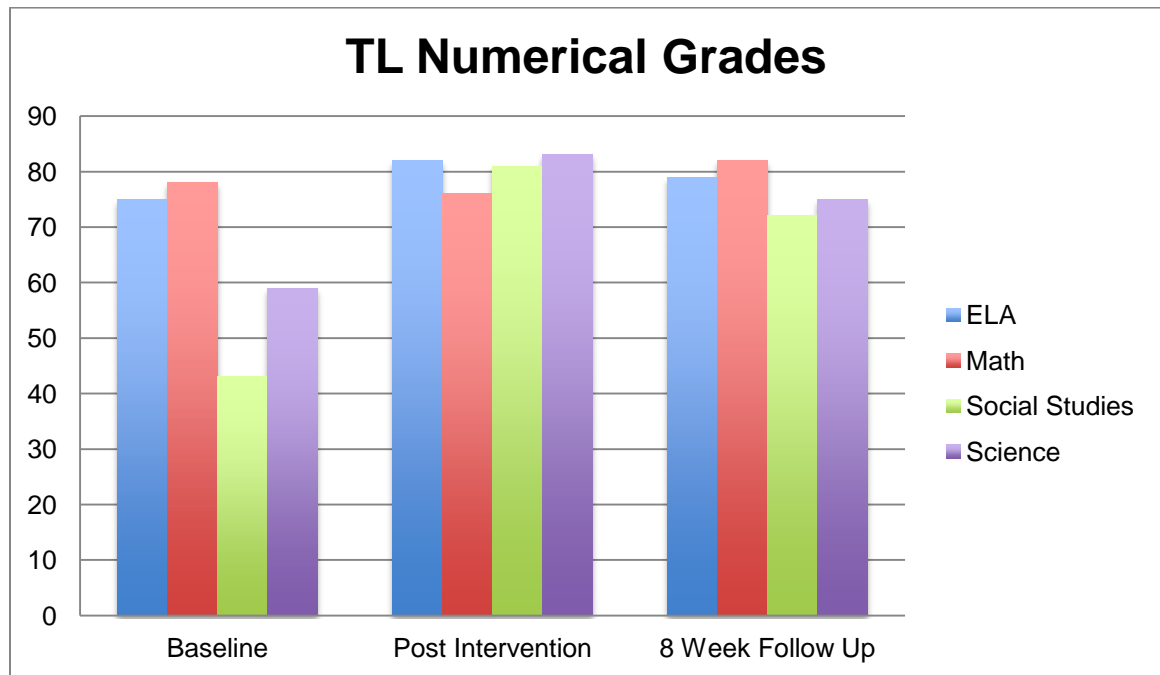


Figure 7. Numerical Grades for TL Throughout Intervention

Figure 8 illustrates TL’s individual achievement on the Organizational Skills Checklist from the H.O.P.S. intervention. TL met 36% of the criteria on the checklist during session 1 of the intervention, which was the most amount of criteria met in session 1 when compared to the other participants. Following session 1, criteria met increased to 90% by the 4<sup>th</sup> meeting. His continued to meet a favorable amount of criteria, meeting

82% at session 4 and 90% at session 5. At the last meeting, session 6, TL met 71% of the criteria and at the follow up meeting eight weeks later he met only 57% of the criteria.

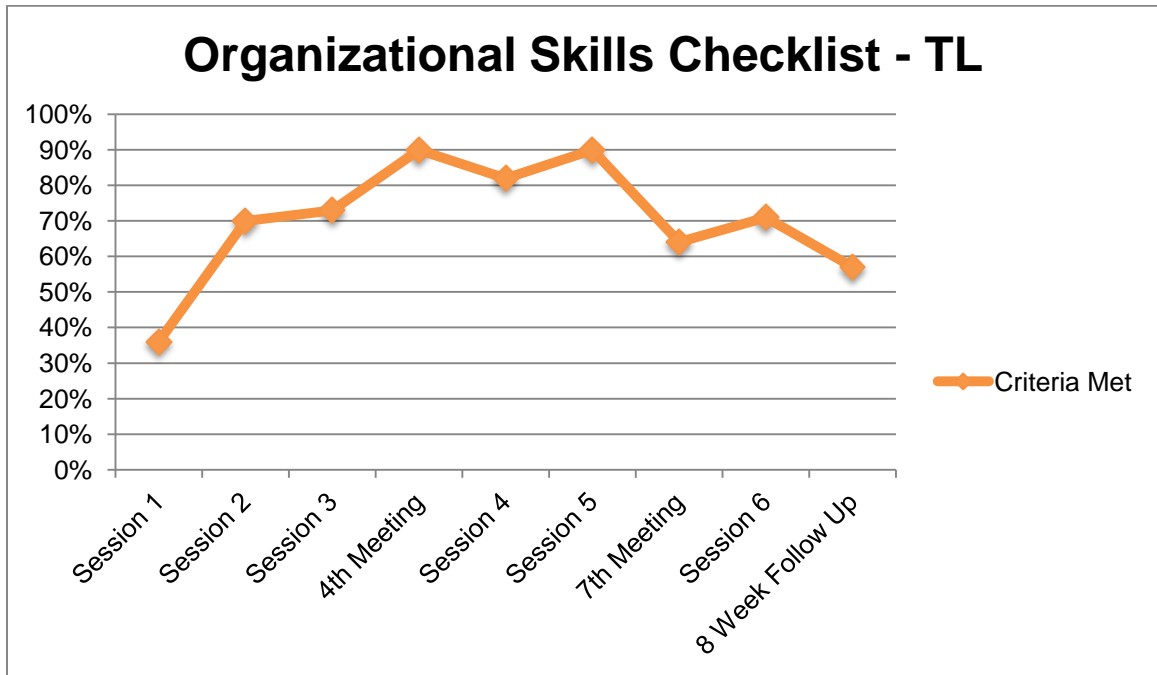


Figure 8. Organizational Skills Checklist Percentages of Criteria met for TL

## **Chapter 5**

### **Discussion**

#### **Review**

This study examined the effectiveness of a targeted intervention, known as H.O.P.S., on homework and organizational skills for students with ADHD. Four participants were included in this study, two female students in seventh grade and two male students in eighth grade. All four students were diagnosed with one of the subtypes of attention deficit hyperactivity disorder, or ADHD. Three of the other students also had additional disorders including visual impairment, seizure disorder, and a specific learning disability. The students were selected due to significant parent and teacher concerns with their homework completion and organizational skills.

The intervention was implemented over the course of eight meetings. Six meetings were devoted to session content outlined in the H.O.P.S. manual and two meetings were used for review and maintenance. The students involved in this study were given specific materials to use to keep them organized. The participants also learned how to organize materials and use this skill to assist with the homework process. Materials needed were more frequently located and brought home resulting in more homework completion.

Tracking student organizational success using the Organizational Skills Checklist resulted in improved conditions of binders, lockers, and book bags. An increase in criteria met on the checklist was observed from the first session to the last session for all students. Rewarding students kept them motivated and increased the likelihood of homework completion and organized materials.

To increase the chances of the students' success continuing, parents came in for a parent meeting. During the parent meeting, each student and the clinician discussed the intervention in detail and how it can transfer into the home environment. Three parent meetings took place and one parent meeting did not. To determine if the intervention continued to be effective once the intervention was no longer implemented in school but instead monitored by parents, an eight-week follow up meeting was held to collect data.

At the eight-week mark, all students' results on the Organizational Skills Checklist decreased to varying extents. However, every participant's percentage at the eight-week follow up was still higher than the percentage of criteria met in session one. When examining academic performance, all participants continued to make progress in at least one academic subject area.

Previous studies on interventions that target and homework and organizational skills with children with ADHD indicates that students can be more successful in these areas with assistance. In one study students' academic performance was recorded and organizational skills were assessed using a checklist, similar to this study. At the conclusion of the intervention, academic performance improved according to the students' grades and students organizational skills increased on the checklist when baseline data was compared to the post intervention data (Langberg et al. (2008).

In another study, students were taught to use new tools and routines to record assignments and organize materials. Sixty three percent of the students by the end of this intervention no longer met the inclusion criteria on the instruments used to measure organizational, time management, and planning (Abikoff et al., 2013). Rewarding

students to reinforce the learned skills proved to be motivating in another study in previous research as well.

### **Limitations**

A few limitations were present in this study. One limitation of this study was the amount of participants, as it was conducted with only four students. Though all students found some degree of success using this intervention, effectiveness with a larger number of participants would increase this intervention's appeal and effect size.

Teacher participation, at times, was a limitation for this study. The amount of effort and follow through varied amongst the teachers involved in this study. Most teachers, but not all, were very supportive and completed the tasks required for the intervention such as signing the students' agendas and reminding the students if they forgot to obtain a signature. This task contributed to the reward component of the intervention, which increased student motivation. Reporting the number of missing assignments on a daily basis for each student and for all teachers was inconsistent. This impacted the data collected on the increase or decrease of missing assignments.

Parent involvement was also a limitation in this study. Only one out of the four parents were actively involved in the homework and organizational process on a daily basis. One student's mother required the student to present her agenda on a daily basis and would check to make sure all assignments were complete. This resulted in a more successful experience for this student when compared to the other students in the intervention. The other parents were involved in varying degrees and one parent was not involved at all; therefore, this limited the interventions effectiveness and continuation of the intervention for those students.

The intervention was only completed with students in seventh grade and eighth grade. Offering the intervention to students in lower or higher grades may have yielded different results.

### **Practical Implications**

This study was conducted using an intervention focused on homework and organization for students with ADHD. The participants who received this intervention demonstrated that students that struggle with organization and homework completion could benefit from having a point person in which they check in with on a weekly basis. Students would likely be more accountable if they knew they had to report to an adult. Many students with homework completion issues are not completing their homework because they are not recording it in their agenda and bringing home the appropriate materials. Those students would be more likely to complete the homework if a teacher signature in the agenda is required to ensure proper homework recording.

The intervention focused on demonstrating to students how to physically organize, appropriately file papers, and arrange materials. Though educators often assume these are skills that students have acquired by seventh and eighth grade, this is not always the case, especially for those students with ADHD. Teaching students how to be organized and possessing an organized class wide system will most likely lead to less organizational issues.

The intervention also demonstrated that tracking progress and rewarding students for their successes could be very motivating and increase the likelihood of changing behaviors. When teachers know that these areas are difficult for students, especially



those with ADHD, rewarding them for the completion of their homework and maintaining organized materials could be beneficial.

### **Future Studies**

With the amount of students who are diagnosed with ADHD that experience difficulty completing homework and keeping organized, significantly more research should be conducted on possible strategies to help these students. Interventions that involve individual and small group implementation, such as H.O.P.S., should be reviewed. Studies may also focus on specific strategies that teachers can implement within their classrooms for specific students who are suffering. Researchers may want to focus on class wide organizational plans for special education students with ADHD and other disabilities as well.

### **Conclusion**

At the beginning of this study, the following questions were asked: Is a targeted intervention (i.e.. H.O.P.S.) that aims to improve homework and organizational skills effective for 7<sup>th</sup> and 8<sup>th</sup> students with ADHD? Can an intervention devoted to improving homework and organizational skills improve academic performance? Was any improvement in skills and/or academic performance maintained when measured at an eight-week follow up meeting?

After examining the results of the intervention, it can be determined that a targeted intervention that aims to improve homework and organizational skills for 7<sup>th</sup> and 8<sup>th</sup> students with ADHD can be effective. As measured by the Organizational Skills Checklist, the students' organizational skills improved throughout the course of the

intervention. At session one, the mean of the criteria met on the checklist was 23%. By session six, the mean of criteria met increased to 64%.

In terms of academic growth, all students experienced an increase in grades in at least two or more academic areas from the start of the intervention to the end of the intervention. The percentage of increase ranged as low as 2.4% and as high as 88.5% across the four academic areas. The mean of percentage increase for all students was 16.9%.

When considering the maintenance of organizational skills and academic performance after eight weeks, these results varied for each participant. The mean of the criteria was met on the checklist was 50% at the eight-week follow up meeting, which demonstrates a decrease in skills for the groups as a whole. The mean of percentage increase for academic performance for all students was 2.6%, which demonstrates a decrease in academic performance for the groups as a whole.

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# Appendix

## Organizational Skills Checklist

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### ORGANIZATIONAL SKILLS CHECKLIST

Binder	HOPS Session Number									
Student brought binder to session (if no, student gets binder and mark <i>N</i> for criterion; if student cannot get binder, mark <i>N</i> for all binder criteria).										
The student's planner/assignment notebook or the Homework Assignment Tracking Sheet is secured by three rings in the binder.										
There is a section for each subject the student is taking (e.g., math, science, etc.) and a homework folder in the student's binder.										
All homework to be completed is in the left side of homework folder and all homework to turn in is in the right side of folder.										
There are no loose papers in the binder.										
All papers are in the appropriate class folder/section (e.g., math worksheets are in the math section).										
No old class papers are in the binder (e.g., no papers from a previous quarter that should be thrown away or filed).										
<i>Number of binder criteria met (# of Ys/7)</i>										
Bookbag										
If session is late in day: Books needed for homework are in bookbag. If session is early in day: Books needed for class are in bookbag.										
There are no books in the bookbag that are not needed for class or to complete homework assignments.										
There is no loose paper in the bookbag.										
There are no loose objects in the bookbag (pencils, pens, toys, etc.).										
<i>Number of bookbag criteria met (# of Ys/4)</i>										
Locker/Desk										
The books are neatly stacked (or shelved) with the spines facing out so that the student can easily grab one in between classes or after school.										
There are no loose objects (papers, pencils, pens, toys, magazines, etc.).										
There is no unnecessary clothing.										
<i>Number of locker/desk criteria met (# of Ys/3)</i>										

*Note.* Enter the HOPS session number at the top of the column and then go down the checklist and evaluate the student on each criterion. Record Y (for yes) if the student meets the criterion fully or N (for no) if the student does not meet the criterion fully.