Study skills self monitoring for adolescents with ADHD

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STUDY SKILLS SELF MONITORING FOR ADOLESCENTS WITH ADHD

by

Rachel Lesse

A Thesis

Submitted to the
Department of Interdisciplinary and Inclusive Education
College of Education
In partial fulfillment of the requirement
For the degree of
Master of Arts in Special Education
at
Rowan University
May 1, 2016

Thesis Chair: S. Jay Kuder, Ed.D.
Abstract

Rachel Lesse
STUDY SKILLS SELF MONITORING FOR ADOLESCENTS WITH ADHD
2015-2016
S. Jay Kuder, Ed.D.
Master of Arts in Special Education

The purpose of this study was to how self-monitoring affected academic progress among high school aged students with ADHD. Students were monitored throughout their study skills class period, where they learned to monitor themselves by assessing a variety of factors, such as personal grades, missing assignments, and personal reflection. Of the three students monitored, two increased grades in most of their academic subjects, and all increased their homework production post intervention. The study did not go without various limitations, however future implications are discussed as to the importance of this study.
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Chapter 1

Introduction

Many students with disabilities struggle in achieving academic success for a plethora of reasons. One of the many reasons is the lack of organizational skills attained in order to promote this success. Study skills classes are intended to provide students with a structured setting in which skills, such as organization strategies, study strategies, and self-advocacy emphasized in order to effectively manage student course work so success is achieved. These study skills include writing in an agenda on a daily basis, organizing notebooks/book bags consistently, utilizing study strategies (ie. notecards or computer generated notecard programs like Quizlet), a self-monitoring individual progress, which includes students writing down what assignments and personal goals they complete while in study skills. Effectively utilizing organizational skills is particularly difficult for many students with Attention Deficit Hyperactivity Disorder (ADHD). Executive functioning skills are also affected by ADHD, which can cause students to be disorganized and have a hard time following schedules. Students with ADHD also have a tendency to lose focus easily. This, paired with a lack in organizational skills can lead to lower grades.

If students implement the self-monitoring process consistently while increasing study skills, higher grades on tests and other assessments may be the result. In this study, I will examine the relationship between self-monitoring strategies and academic performance among freshmen and sophomore students with ADHD. Success will be monitored through student performance within their major academic subject areas: math, english, history, and science. Self-monitoring of organizational skills will be modeled during the study skills class period, which meets three days a week for forty-three
minutes a session. Students will be required to write in their planner on a daily basis, as well as organize their notebooks to coincide with the specific subject area. As far as self-monitoring goes, students will keep a daily log of what study skills organizational goals they have accomplished which correlates to their IEP. My goal is to conduct research on a small group of students with ADHD, and who are members of my study skills class who display these behaviors lacking organization. Three students will be monitored over a period of time on how their self-monitoring will affect their progress. Variables contained within the self-monitoring process which will be modeled for them beforehand. These variables include homework/class assignment completion, and test and quiz grades at various intervals throughout the year (i.e. 1st marking period interim, 1st marking period final). When this research is concluded I hope to find a correlation between the utilization of self-monitoring with academic success. The baseline data that will be used will be their first marking period interims grades. During that time, I will assess their homework completion, and test and assignments grades in order to differentiate their progress at that time. After those initial variables are taken into consideration, it can then be determined if the utilization of self-monitoring will possess a positive or negative effect in academic performance as the school year continues.

If students complete these tasks on a consistent basis, it is hypothesized that student success will be enhanced leading to better grades. However, there are a variety of limitations pertaining to this. For starters, if students are not consistently self-monitoring or not performing these organizational tasks accurately, they may not achieve the success they would see if these skills were completed consistently. Other factors can play into these strategies working, such as amount of homework assigned, number of tests or
assessments given in an interim period, or amount of papers given in any given subject. These factors could lead to a negative impact on student success.

Throughout my nine years teaching in Southern New Jersey, the numbers of students with disabilities enrolled in my inclusive setting classes have increased each year. A large number of these students lack organizational skills, which in turn causes them to struggle in many academic areas. Teaching these skills is not only necessary, but also valuable for future successes. I find this problem to not only be intriguing, but also meaningful. I come in contact with students on a daily basis who are very intelligent, however their disability causes them to lack basic organizational skills causing them to fall behind academically. This often leads to a disconnect from their studies. This study has implications for both general and special education teachers. If students are shown how to apply organizational skills to their daily lives and are able to continue utilization of these skills, there can be success in many aspects of education. It is the job of educators to understand how to correctly model these strategies and scaffold the skills so students can be held accountable on their own to convey these skills in daily routines.
Chapter 2

Review of Literature

The Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 and the No Child Left Behind Act of 2002 have placed an increasing focus on student achievement in all academic areas, however students with disabilities, often display fewer strategies pertaining to academic success which puts them at risk for limited academic progress (Compton & Scott, 2007). The United States Department of Education (USDOE) (2009) reported that as many as 82% of students with disabilities spend about 40% of their day in general education classrooms, causing an increase in demands and expectations. It can be extremely difficult for students with disabilities to meet expectations, especially those with Attention Deficit Hyperactivity Disorder. Johnson & Reid, (2007) indicated students who are diagnosed with ADHD tend to display behaviors which cause them to be impulsive, disorganized, and often distracted, especially when in a classroom setting. Difficulties with organization can cause students to attend class unprepared. For example, students might negate to write down assignments or bring required materials to class or to their homes at the end of the day, which leads to zero or little assignment completion (Dupaul & Stoner (2003); Robin (1998), as stated in DuPaul & White (2007). These behaviors tend to lead to difficulties with academic studies, organizational skills, preparation, and inconsistency in completing assignments.

Executive Functioning Disorders

ADHD characteristics often have a lot to do with deficits of Executive Functions, which are cognitive processes necessary for complex goal-directed behavior. When a student displays executive function disorders, they often have trouble remembering,
planning, and self-monitoring. This can also have an adverse effect on academic performance. Because students with ADHD have a tendency to express impulsive behavior, they rarely take time to plan an activity or analyze tasks in order to determine appropriate behaviors needed to complete the task (Barkley (2006). In some cases, even when students are able to formulate a plan, they might have trouble carrying out the plan. This combined with impaired abilities to develop effective strategies for academic tasks tends to contribute to academic difficulties (Johnson & Reid, 2011). Because students are also often unaware of the progress on a given assignment or task, unrealistic appraisals of performance can result in frustration and negatively affect persistence (Johnson & Reid, 2011).

Barkley (1998) has claimed that students with ADHD display a deficit in self-regulation. This implies that ADHD promotes performance deficit rather than skill deficit, therefore is not a disorder of knowing what to do, but of doing what one knows. Students often lack persistence and tend to quit much more often than their peers who do not have ADHD when they have difficulty with a task (Johnson & Reid, 2011). Students’ work is often completed at lower rate than expected along with poorer quality than the student is capable of. This can contribute to the failure of maintaining on-task behavior or the inability to properly follow directions (DuPaul and Stoner (2002, 2003). Students with ADHD also tend to avoid strategies where effort in necessary, meaning that if they are given a choice of strategies, they will most likely choose the easiest, but in most cases, the least effective choice (Johnson & Reid, 2011). Because students are also often unaware of the progress on a given assignment or task, unrealistic appraisals of performance can result in frustration and negatively affect persistence (Johnson & Reid,
2011). Barkley (1997) concluded that students with ADHD display a deficit in self-regulation. This implies that ADHD promotes performance deficit rather than skill deficit, therefore is not a disorder of knowing what to do, but of doing what one knows (Barkley (1998).

Self-Monitoring

A key way to promote persistence is through self-monitoring, which also increases organization, leading to help with academic performance (Johnson & Reid, 2011). Teachers can teach students how to self manage by using techniques to help them regulate their own academic and/or social behaviors (Rafferty, 2010). When students learn to self-monitor they also learn to monitor and reinforce academic skills (Langberg, Epstein, Urbanowicz, Simon & Graham, 2008). Self-monitoring encourages students to be conscious of their behaviors by observing and keeping track of when and if they occur, and also enables them to change the behaviors if need be (Maag; Rankin & Reid (1995) as stated in Ganz (2008). Self-monitoring usually consists of self-assessment and self-recording (Graham et al. (1992) as cited in Harris et al. (2005). A review conducted by Trout and Schartz (2005) investigated the use of self-regulation interventions for children with ADHD. These self-regulations included self-monitoring (SM), which records one's behavior; self-monitoring plus reinforcement (SM+R), which has elements of SM plus an award for a change in behavior; self-reinforcement (SR), where a behavior is performed in order to satisfy a predetermined performance standard and then comes in contact with a specific stimulus that will increase the probability of the behavior; and self-management (SMGT), which monitors, rates, and compares individual behaviors. Their results suggested SM, SM+R, SRF, and SMGT interventions can be a useful
component in intervention programs for children with ADHD. The strategies students use while self-monitoring facilitate an individual’s ability to manage his or her own behavior, which can increase independence (Shaprid, 1981).

Self-monitoring also provides students with prompt feedback on their behavior, which can be rewarding to both students and teachers. Students become actively engaged and can improve their behavior by increasing individual investment in the process (Blick & Test, 1987). Benefits of teaching students to self-manage include students learning to use appropriate help-seeking behaviors so they can learn how to complete a task independently instead of continuing a task helplessly or expecting someone else to complete it for them (Newman, 2002). The behaviors learned through self-management not only leads to success in their school careers, but after they graduate, as well (Lan, 2005).

Self-monitoring strategies have the potential to provide continuous and frequent feedback that coincide with target behaviors (Harris et al, 2005). Research does show that teachers need to carefully consider individual students needs, abilities, and goals before deciding the particular self-monitoring system they would like to implement, however regardless what type of self-monitoring strategy is used, they all seem to be efficient at enhancing the target behavior. (Harris, et al 2005).

Self-Advocacy

A main component of self-monitoring is self-advocacy, which can include a wide variety of skills, and behaviors to enable an individual to seek goals, make decisions and choices, and solve problems for themselves (Sebag, 2010). Students are also more
understanding of their own strengths and weaknesses, and are able to improve their communication and socialization skills, which will eventually lead to goal setting and an increase in academic performance (Sebag, 2010). One approach to teaching self-advocacy skills is to have students become more active in their Individual Education Planning. Research conducted by Konrad and Test (2004) has shown that when students are involved in planning their IEP goals, an increase in self-advocacy appeared.

Self-advocacy skills are also represented in homework. Axelrod, Zhe, Haugen, & Klein, 2009, conclude that self-monitoring and self-management of on-task behavior are effective tools for improving homework completion rates. Homework is directly related to overall academic achievement and skills of students with disabilities, which is also associated with improving student attitude, and may serve to promote better study habits and facilitate understanding of course material. Cooper, Robinson, and Pitall (2006) were able to display a positive correlation with homework completion and academic achievement for secondary students as opposed to primary school aged students.

Homework can also help students develop organizational skills, and promote self-management. Homework assignments can be an extension of school experiences for students with disabilities (Hampshire, Butera, Hourcade, 2014). When students individual learning goals are aligned with homework, students with disabilities benefit from this learning tool, especially those in inclusive settings, where many students with ADHD are placed (Hampshire et al. 2014). Even though homework is extremely beneficial, Hughes, Ruhl, Shcumake, and Deshler (2002) concluded students with disabilities often struggle with the organizational and motivational components (Hampshire et al 2014).
Learning Strategy Interventions

Researchers have found that certain classroom interventions designed to enhance academic behavior have positive outcomes in lieu of only medication (Purdiee al. (2002); DuPaul & Stoner (2003). There are ways teachers can help students with ADHD overcome these deficits by demonstrating various strategies combining planning, organization, and self-monitoring while simultaneously setting a goal. Harris, Friedlander, Saddler, Frizzelle, and Graham (2005) conducted a study on six third, fourth, and fifth graders with ADHD. The six children were identified by their teachers as having difficulty staying on task. Research was conducted during the students’ language arts period Monday through Thursday mornings. Before gathering baseline data, students were taught a version of the Fitzgerald spelling study procedure, which included the following six steps; looking at the word, close eyes and spell the word aloud, study the word again, cover the word, write the word three times, and check to see if the word is spelled correctly. Dependent variables included on-task behavior and academic performance. During the final ten minutes of each fifteen minute spelling period students were required to wear headphones. A bell would go off at three second intervals and the observer would observe if the student was displaying on task behavior. As the experiment became more frequent, off-task behavior become less frequent. Students were also taught self- monitoring strategies of attention and performance. Students were taught to monitor if they were on task upon hearing the bell go off through their headphones at an interval of about 45 seconds. As the bell went off students would keep track of their own behavior by marking yes or no on a sheet provided for them. During the performance based research, students were taught to count the number of times
spelling words were practiced correctly. The researched proved the self-monitoring strategies of performance and attention had a positive effect on the students’ on task behavior, and dramatically increased with the self-monitoring interventions.

Axelrod, Zhe, Haugen, and Klein (2009) conducted research on students with ADHD displaying behavior problems during the school day and/or at home, leading to inefficient completion of homework. Four males students, aged 13 to 16 were participants where the application of a self-management homework intervention was conducted. The primary dependent variable for the analysis was on-task behavior. During this study, the number of incomplete assignments was monitored, and outcomes of on task behavior, academic productivity, and grades were measured through a 15 second interval recording system implemented by a handheld personal digital assistant observational software program. Data was collected consecutively for 30 minutes beginning at the start of the homework period. Similar to the research study conducted by Harris, et. al (2005), the participants for this study were provided a tape recorder with a beep-tape and self-monitor log, where they could record data after the three and ten minute fixed interval. A staff member would simultaneously write down what they observed in reference to on task behavior, as well, after the beep sounded. Compared to baseline data, each participant displayed higher levels of on task behavior during the two scheduled intervals. Participants also had fewer incomplete assignments during the self-monitoring intervention as opposed to baseline. Improvements in on-task behavior during homework time suggests that students may be more likely to complete and turn in homework. The outcomes of this intervention suggests that self-management intervention can be effective with adolescents experiences attention/and or behavior problems.
Another intervention pertaining to homework performance was conducted by Falkenberg and Barbetta (2013) based on four elementary school aged children who displayed behaviors of poor homework completion. This study was conducted four times a week in school, at home, and/or the special education teacher’s classroom. The self-monitoring portion took place at home Mondays through Thursdays and during the school mornings Tuesday through Friday. Brief meetings with the special education teacher were held Tuesdays through Fridays, as well. Each day, students had access to KidTools, which is a computer based electronic performance software program intended for elementary aged students with disabilities that included research based supports to assist children in gaining control of target behaviors. The dependent variables were the completion and accuracy of spelling and math homework. Prior to baseline, homework tip training was provided by the special education teacher. Each participant was given homework tip sheets to facilitate homework completion so they would know how homework should be completed. Each participant would meet with the special education teacher and discuss the tip sheet along with a “homework quiz” consisting of yes and no questions, along with receiving training on KidTools software, where students would answer questions pertaining to homework accountability. This software would be used each morning where students could fill out the software’s self-monitoring sheet and hand it to the teacher. During the second and third phase of intervention, the number of teacher conferences was reduced. Results provided strong evidence for the effectiveness of self-monitoring in improving the completion and accuracy of homework, which were maintained after intervention concluded.
Epstien, Urbanowicz, Simon, and Graham (2008) studied and evaluated the efficacy of a multicomponent organization intervention to improve the academic performance of children with ADHD. The study was conducted on thirty-seven students in grades 4-7 with ADHD who were identified by their teachers and school counselors having high levels of inattention and hyperactivity/impulsiveness combined with lack of organization and homework completion. The intervention took place two days a week for eight weeks, taking place at the after school program. The students received 1 hour 15 minutes worth of intervention each day, with 20 minutes of individual intervention time and 55 minutes spent in group intervention. Organization intervention included establishing a system of book bag, locker, and binder organizational strategies, which includes an organizational checklist, which was completed by the designated counselor providing intervention after each session. Homework intervention was implemented by the counselors checking the participants’ agenda book for homework and upcoming assignment accuracy. Each participant was to write assignments from their core subjects in their planner with their teachers’ initials signing off on it. The counselors would then count the number of initials and meet with the individual teachers to ensure accuracy. Group intervention incorporated homework completion, math worksheets, and outlining chapters from textbooks. There was also a reward system based on the accuracy of writing in their homework planners and meeting the organization checklist criteria. This system, however, was not introduced until the second week of intervention, so baseline data could be collected.

Students with ADHD need goals to increase productivity and drive their behavior because without them, students might struggle to direct their behaviors in appropriate
manners (Konrad, Fowler, Walker, Test, & Wood, 2007). This study also included parental involvement. Parents underwent training on how to implement and monitor the organization and homework management so the children were able to continue displaying these methods in their home settings. They were given checklists and intervention materials which could be maintained at home. At baseline, the students were displaying difficulties with homework recording and organization. These findings show that these behaviors are directly related to those diagnosed with ADHD. During the eight week intervention period the data collection of the organizational methods and homework recording proved that the participants organizational skills were improved and maintained during the eight week follow up. Participants also showed a slight increase in overall GPA. The study suggests that the targeted interventions in homework management and organizational skills can improve overall academic performance.

Many students with ADHD also attend classes unprepared, which includes failing to write assignments down and bringing the correct materials. In a study conducted by Gureasko-Moore, DuPaul, and White (2007), the specific areas were targeted for intervention. There were six participants ages 11 or 12 years old with ADHD. These students lacked classroom preparation and homework completion skills, which served as the dependent variables. The overall percentage completion of behaviors coinciding with preparedness were calculated daily through a checklist completed by the teacher. Students were able to self-monitor homework behaviors through a checklist, as well. Students were trained how to self manage by meeting with a school psychologist after school for a period of 15 minutes for three consecutive days. During these sessions, the psychologist provided students insight to the purpose of self-monitoring as well as the
self-management procedures where the student log would serve the purpose of their self-evaluation. Self-evaluation required students to calculate the number of behaviors they had followed on the self-monitoring forms and write a brief self-evaluation in their students logs. The findings of the two multiple base line designs showed that the implementation of self-management strategies was also successful in improving students’ organizational skills related to classroom preparation and homework completion. This proves Zentall’s (2006) claim that interventions focusing on organizational skills can produce positive outcomes for students with ADHD.

Summary

The purpose of the present study is to examine whether instruction in the use of self-monitoring and self-advocacy strategies can improve the learning of students with attention deficit disorder (ADHD). The research reviewed above shows homework recording and displays of organizational methods increased overall academic performance. Self-management/monitoring strategies were also successful in improving organizational skills of students with ADHD related to classroom preparation and homework completion and maintained after intervention. Self-monitoring strategies also have a positive effect of students’ on task behavior.
Chapter 3

Methodology

Setting and Participants

This research was conducted with three high school students classified as having Attention Deficit Hyperactivity Disorder (ADHD), ranging from ages 14-16. Each student was enrolled in a study skills class three times a week for a forty-five minute period. There were nine students total in the class receiving special education services. Of the three students being studied, two were males in their sophomore year, and one was female in her freshman year. The study takes place in a public school within a small town of about 12,000 residents, made up of mostly Caucasian residents. Most residents average middle to high socioeconomic status. The high school is made up of about 100 staff members, nine of which are special education teachers.

Participant #1: MT was a 15 year old white male who is categorized as having Emotional Disturbance. He was diagnosed with Severe Social Difficulties, and Attachment Disorder in addition to ADHD. Counseling services were provided through the school and outside of school. MT had difficulties relating to peers, which often caused anxiety and the tendency to shut down. This also caused lack of homework and assignment completion, as well as difficulties with organization. Comprehension was a strength for MT.

Participant #2: JB was a 16 year old white male categorized as Other Health Impaired. JB performed in the average range and was at grade level for reading and writing. His weaknesses were in organization, preparation, and the ability to complete
homework and other assignments on time. JB was also known to doodle while lectures were given in class instead of taking notes.

*Participant #3:* SW was a 14 year old Caucasian female who was also categorized as Other Health Impaired. Like JB, she had difficulty with organization and completing assignments and homework. SW was also distracted easily which caused her to lose the ability to focus for long periods of time.

**Procedure**

For this study, a single subject, multiple baseline design was used. Baseline information was gathered by analyzing grades midway through the first marking period (interim period 1). After the baseline was established the independent variables were implemented. Each of the three students completed a self-monitoring the sheet at the end of the week (or their third day in class). The sheet required each student to self-assess their progress throughout the week. Planner usage, homework completion, sought out help from teachers, organization of binders or notes, utilization of study methods, and current grades were determined. There is also a self-assessment section where students wrote what they can improve upon for the following week (see Appendix 1).

Throughout the study, data was collected through a computer program called Genesis, where student grades were calculated throughout the year for students, teachers, and parents to utilize. Personal information about students was also available, such as IEPs, attendance, contact info, and student schedules. This data allowed for extraneous variables to be determined, such as absences, failure to attend class, or other information negatively impacting the outcome of the study.
Once all data was collected from genesis after the end of each interim and end of the marking period quarters, it was analyzed against the weekly student monitoring sheets to see if there were changes in student performance following introduction of the study sheet.
Chapter 4

Results

This research was conducted by using a single subject design to measure the effect of a self-monitoring procedure on student progress throughout two marking periods. Three students with Attention Deficit Hyperactivity Disorder were studied throughout their study skills class for a period of 24 weeks. The research questions were

1. Will students who self-monitor on a weekly basis have better success in academic subjects?

2. Will students become better at managing/organizing themselves without prompting?

3. Will students hand in assignments/ and advocate for themselves more frequently with self-monitoring?

A baseline was conducted by gathering data from the first marking period interim grades and assignment breakdown by subject area. Intervention took place during the second half of the first marking period and the entire second marking period.

Individual Results

Table 1 and figure 1 show the results for JB. During the baseline phase he completed five assignments. His grades during this period are shown by subject area. During intervention, the average of his grades from the second half of the first marking period and the second marking period averaged slightly higher than the baseline average of and 88%. During intervention, JB’s scores averaged to 90% and then 92% during post-intervention.
Table 1

Results for JB

<table>
<thead>
<tr>
<th>Participants</th>
<th>Baseline</th>
<th>Intervention</th>
<th>Post Intervention</th>
</tr>
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<tbody>
<tr>
<td>missing assignments</td>
<td>5</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>grades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English 90</td>
<td></td>
<td>1st MP grades</td>
<td></td>
</tr>
<tr>
<td>Spanish 96</td>
<td></td>
<td>English 89</td>
<td>English 98</td>
</tr>
<tr>
<td>Geometry 78</td>
<td></td>
<td>Spanish 95</td>
<td>Spanish 88</td>
</tr>
<tr>
<td>History 86</td>
<td></td>
<td>History 88</td>
<td>History 89</td>
</tr>
<tr>
<td>Chemistry 90</td>
<td></td>
<td>Geometry 89</td>
<td>Geometry 91</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemistry 89</td>
<td>Chemistry 96</td>
</tr>
</tbody>
</table>

|                      |          | 2nd MP grades|                   |
|                      |          | English 90   |                   |
|                      |          | Spanish 96   |                   |
|                      |          | History 86   |                   |
|                      |          | Geometry 91  |                   |
|                      |          | Chemistry 90 |                   |

Figure 1. Scores for JB
Table 2 and figure 2 show the results for MT. The mean of baseline scores were much lower than at intervention. Prior to intervention, the mean of MT’s grades was a 67.5%. During intervention, his scores increased to 80.5%, and during post-intervention.

Table 2

*Results for MT*

<table>
<thead>
<tr>
<th>missing assignment</th>
<th>Baseline</th>
<th>Intervention</th>
<th>Post Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>missing assignment</td>
<td>7</td>
<td>1 (2nd half od 1st MP)</td>
<td>6</td>
</tr>
<tr>
<td>grades</td>
<td>English  72</td>
<td>1st MP grades English  71</td>
<td>English  84</td>
</tr>
<tr>
<td></td>
<td>History   41</td>
<td>History      70</td>
<td>History   78</td>
</tr>
<tr>
<td></td>
<td>Geometry  70</td>
<td>Geometry     96</td>
<td>Geometry  78</td>
</tr>
<tr>
<td></td>
<td>Chemistry 87</td>
<td>Chemistry    85</td>
<td>Chemistry 100</td>
</tr>
</tbody>
</table>

...
Table 3 and figure 3 shows the individual scores of SW. Her mean scores indicate her baseline average to be higher than her average scores at intervention. During baseline, the mean score of SW’s grades was a 90.2%. At intervention the mean was 85.6%, and during post intervention her scores averaged out to an 82%.
Table 3

Results for SW

<table>
<thead>
<tr>
<th>missing assignment</th>
<th>Baseline</th>
<th>Intervention</th>
<th>Post Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>missing assignment</td>
<td>4</td>
<td>4 (2nd half of 1st MP)</td>
<td>0</td>
</tr>
<tr>
<td>grades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>85</td>
<td>1st MP grades</td>
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<td>Spanish</td>
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<td>91</td>
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</table>

1st MP grades
- English 88
- Spanish 92
- Algebra II 90
- History 85
- Biology 83

2nd MP grades
- English 86
- Spanish 93
- Algebra II 87
- History 74
- Biology 78

Figure 3. Scores for SW
Chapter 5

Discussion

Review

This study examined the effects of self-monitoring of academic progress among high school students in a small middle-upper class community in New Jersey. The three students studied were eligible to receive special education services and classified as having Attention Deficit Hyperactivity Disorder (ADHD). Two students were classified under the category of Other Health Impaired and one student was classified as Emotionally Disturbed. All three students had difficulties with executive functions.

After the intervention was conducted on each student, results showed some inconsistencies. By the end of intervention, two of the three students’ grades increased in three of their four content classes. The other student showed improvement in only one of her classes at the end of intervention. During post intervention two students increased their grades in all subject areas but one, and the third student increased in two areas and decreased in two areas. One consistency during post intervention was that all three students had fewer incomplete homework assignments than they previously had a baseline.

The results of this study in comparison with previously research on the use of self-monitoring methods varied in results. In a self-monitoring study conducted with 3rd, 4th, and 5th graders with ADHD, Harris, et. a. (2005) concluded that self-monitoring interventions dramatically increase on task behavior. Because this study showed inconsistencies, it was difficult to determine if the students studied increased their on task behavior other than during the study skills period. Axelrod, et. al. (2009) determined that
the adolescent participants had fewer incomplete assignments during intervention, which suggested self-monitoring interventions have a positive effect on students with ADHD. The results for the present study were similar to this study, however had some differences. While homework completion did improve, this did not take place until after intervention. There were still many missing assignments during intervention, especially during the first half. A study by Falkenberg and Barbetta (2013) proved that homework accuracy and completion was maintained when students with ADHD implemented self-monitoring. This was also the case for the current study, where post intervention, student homework completion was increased. Gureasku-Moore, et. al. (2008) determined interventions conducted by students with ADHD focusing on organizational skills can produce positive outcomes. This is true to an extent. Because the results of the current study were so inconsistent it was hard to determine what factors led to positive outcomes during intervention and post intervention.

**Limitations**

This study posed many limitations. To start, two and a half marking periods was not sufficient time to gather enough research to make a valid conclusion. It would have been more conducive to start the baseline data after the first marking period and end the study after the fourth marking period. The study skills class in which research was conducted met three times a week. What was not accounted for at the start of the study was how often participants would be absent from class. Reasons for this included students going to other teachers to make up tests or gain additional help, field trips, vacation, and long term sickness. One participant was out for an extended period of time due to illness, which might have accounted for inaccurate results.
Implications

Determining if self-monitoring has an effect on student progress can be extremely useful in various educational settings. Because students with ADHD display a lack in executive functions, self-monitoring could become beneficial throughout all levels of education. Students have the potential to become more independent and take more responsibility for their own education and success when they are introduced and eventually master self-monitoring strategies. These strategies can be used in various types of classrooms, like resource, inclusive setting, and even general education settings. General education and special education teachers who are trained in producing these self-monitoring strategies can determine the goal and outcome of self-monitoring for their specific class. Students with a variety of learning abilities have the potential to gain more motivation when they are consistently monitoring themselves and the outcome they produce in school and even outside of school. When a student notices a positive trend in their behavior and/or output, they will most likely want to strive to increase or maintain this behavior. If self-monitoring starts early on in education, success will likely ensue in the future within college and in future careers. These strategies hold students accountable and eventually lead to an increase in independence.

Future Studies

Self-monitoring studies should be researched throughout the day and when the student leaves school. Because this study was only researched for one-forty minute period three times a week, it did not give as precise info as I had hoped it might. Other studies might also combine self-monitoring strategies of students with and without disabilities in order to compare results and see if more than one group can benefit from
these strategies. Research within the ADHD population also needs further investigation when correlating deficiencies with how self-monitoring can be effective and beneficial to this population. This has the potential to be extensive given the age range and various learning abilities of children with ADHD in educational settings.

Conclusion

This study aimed to answer whether or not self-monitoring will lead to student success in academic achievement, and if there will be an increase organization which would lead to a higher rate of homework completion. The study had good intentions as so many students with ADHD have deficits in executive functions and self-monitoring seems to be a key component in aiding in this. Studies have generally found that when self-monitoring is implemented, success is achieved. This seemed to be the case in this study, as well, however it is hard to determine the exact effect that self-monitoring plays on academic success because there were so many variables occurring that were not accounted for. This study, however, feel short in accurateness due to unexpected occurrences throughout the study. Students also seemed very aloof when completing their weekly self-monitoring sheet. I would have liked to see them take on a bit more responsibility and care for what they were accomplishing. It is hard to determine if that was because of the age of students, or because they were not being completing honest when completing the self-monitoring sheets.
References


Appendix

Study Skill Weekly Self-Monitoring Sheet

Week: ____________________________________________

AGENDA
  • I wrote in my agenda everyday                     yes  no
    • If no, what day did I miss? __________________________

HOMEWORK
  • I handed in all homework on time                   yes  no
    • If no, what assignments did I not turn in?
        __________________________________________________________

EXTRA HELP
  • Did I seek out assistance from other teachers?    Yes  no
    • If yes, who and what subject/reason
        __________________________________________________________

ORGANIZATION/STRATEGIES
  • Did I organize my binders or notebooks?           Yes  no
    • Did I use a study method (ie. notecards, quizlet, ect.)   Yes  no
o If Yes, which method and for what subject?

________________________________________________________
________________________________________________________

Current Grades:  Math:  Science:
Language:       English:  History:

What can I improve next week: