Effectiveness of Silent Sustained Reading in Middle School

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Abstract

The purpose of this study was to determine whether silent sustained reading would have a positive impact on reading performance in middle school. Reading performance was measured using a district unit assessment for language arts. This study was conducted using a quasi-experimental design. The students in the treatment group were consistently given 20 minutes per class period for silent sustained reading. The control group students were not given 20 minutes per class period for silent sustained reading. This study found that there was not a statistically significant difference in reading scores between middle school students reviving SSR and those not receiving SSR.
CHAPTER I
INTRODUCTION

Overview

Literacy is the cornerstone of a student’s education. Without the development of strong literacy skills, students will likely struggle in many areas of education and life. Middle school reading levels are known to be predictors of future success such as high school graduation. Middle school students are often overlooked during the development, implementation, and evaluation of strategies used to promote literacy. Therefore, middle school teachers are tasked with pulling resources and data from elementary and upper secondary sources that support literacy.

A literacy strategy used by many teachers, schools, and districts is silent sustained reading (SSR). The research related to silent sustained reading demonstrates that elementary students benefit from these programs. These benefits include improving reading stamina and reading performance and an increase in positive feelings toward reading. On the other hand, the research is limited with regard to the impact of SSR on middle school students.

Statement of the Problem

There is a need for more research into the benefits of silent sustained reading programs for middle school students. More specifically, research is needed to determine the connection between silent sustained reading programs and reading performance for middle school students. This study seeks to determine whether implementing a silent sustained reading program will result in increased levels of reading performance in middle school students as measured by district unit assessments.
Hypothesis

The null hypothesis is that the implementation of a silent sustained reading program will have no impact on middle school reading performance as measured by district unit assessments. The alternative hypothesis is the implementation of a silent sustained reading program will result in higher levels of reading performance in middle school as measured by district unit assessments.

Operational Definitions

Reading performance: a student’s ability to read, comprehend, and apply grade-level texts.

Silent Sustained Reading (SSR): time when students self-select and independently read (Kelly & Clausen-Grace, 2006).

District unit assessment: an end of unit assessment that measures reading performance using Maryland State Standards.
There are various topics that have been revealed in the review of the literature relating to structured independent reading opportunities. While reading stamina is not the primary focus of existing studies, the related areas that have been researched include silent sustained reading (SSR) and independent reading (IR). With that, a connection between an increase in reading stamina may be supported by both silent sustained reading and independent reading. Additionally, the research presents various conclusions about the effectiveness of SSR and IR including the impact on reading growth and attitudes toward reading. Further, student engagement and motivation are both important factors when examining the effectiveness of SSR and IR programs. This is important because when trying to increase reading stamina through SSR/IR programs, students must actively read to see the benefit. Much of the research focuses on the effectiveness of strategies and practices relating to the implementation of SSR and IR programs. While much of the existing literature focuses on elementary school there is still application in middle school. The research reveals best practices in the creation and implementation of a structured reading programs.

Section one of the review of the literature will examine practices that support reading engagement. Section two will examine how the benefits of SSR take time. Section three will examine teacher practices. Section four will examine silent reading programs for secondary students.

Practices That Support Engagement

Kelly and Clausen-Grace (2006) explain various issues with traditional SSR. SSR is typically described as time when students self-select and independently read. Kelly and Clausen-
Grace found that many students lack the skills necessary to monitor comprehension which then has a negative impact on the effectiveness of what they refer to as the SSR block. With this problem in mind, the researchers developed a structured SSR block that would be engaging and lead to a gradual release of responsibility. While the researchers found that current practices do not support reading comprehension they did find that providing students with structured time to independently helps to develop a culture of literacy. They examined successful SSR programs and developed R5 which stands for read, relax, reflect, respond and rap. Before reading, teachers provided a purpose for reading through minilessons. Students then reflect and respond using a reading log. Finally, they talk about what they have read with a partner. After implementing the R5 program the researchers found that student engagement had increased.

Kelley and Clausen-Grace (2009) also found that disengagement is a major barrier to successfully implementing any SSR program. They identify different types of disengaged readers that range from fake readers to compliant readers. Further, a student simply appearing to read is not necessarily engaged in reading. For example, both fake readers and compliant readers will mimic the outward signs of reading such as looking at an open book, reading words and turning pages. Kelly and Clausen-Grace assert that to increase engagement teachers must present clear expectations, monitor readers, provide choice and create a predictable structure.

Walker (2013) suggests that educational institutions should provide students with opportunities to independently read during the school day. Much like Kelly and Clausen-Grace (2006) Walker believes that there are many challenges to traditional SSR programs and recognize the need for more structured programs. Walker created a program called Scaffolded Silent Reading (ScSR) to fill the void created by traditional SSR programs. ScSR increases
accountability through guidance, monitoring and structure. More specifically, Walker presents the needs for leveled classroom libraries, book conferences and reading response logs.

Siah and Kwok (2010) look at the connection between student attitudes’ toward reading and their behavior during SSR. They found that students who actively engaged in the SSR program showed an increase in positive attitudes toward reading. They also found that students who report a low value of reading struggled to stay motivated during SSR. On the other hand, students who value reading at a higher level reported being very motivated during SSR. This shows that for a student to see the benefit of reading they must also value reading. There are great implications for how SSR programs are created and implemented. Siah and Kwok’s study shows a need for SSR programs to focus on helping students see the value of reading. With that, just giving students the opportunity to read is not enough for students to experience the benefits of SSR the student must be fully engaged.

The Benefits of SSR Take Time

Garan and DeVoogd (2008) analyze the way in which SSR has been researched. The focus of the article is scrutinizing the findings of the National Institute of Child Health and Human Development (NICHD) regarding silent sustained reading. NICHD released a study that claimed that SSR was an ineffective practice. Garan and DeVoogd found many problems with the methodology of the study and maintains support for SSR programs. A key issue that is presented is that NICHD miscategorized SSR as a fluency program, but SSR is more commonly regarded as a comprehension program. NICHD gathered evidence that used oral reading as a dependent variable. Garan and DeVoogd note that the effectiveness of a SSR program cannot be determined using oral reading as a dependent variable. Another challenge to studying SSR is that the benefits take time and that any study of SSR should allow for a substantial amount of time to
pass. Due to the flaws in the research, Garan and DeVoogd still believe that to build a community of life-long readers, educators must provide time for students to read at school.

Chua (2008) examines the connection between SSR and positive attitudes toward reading. Chua’s study also supports a claim made by Garan and DeVoogd’s (2008) study that the benefits of SSR evolve and grow over time. The time commitment needed to successfully implement a SSR program must be considered.

**Teacher Practices**

Sanden (2012) found that successful IR programs have high levels of teacher support. She also found that teachers who successfully implement an IR program have great classroom management, use scaffolding, have high expectations and encourage students to self-regulate. The author found that a balance must be achieved between student choice and teacher oversight. The author also found that successful programs support reading behaviors such as reading stamina.

Trudel (2007) makes clear the difference between SSR and IR. When planning for any type of reading program a teacher must look critically at the difference between SSR and IR because the differences will have a great impact on the outcome or success of the program. Trudel explains teachers are opting for structured independent reading rather than traditional silent sustained reading programs. The author has found that structured independent reading programs can have a positive impact on the development and refinement of reading behaviors, for example, increased engagement and attitudes toward reading. Trudel supports the belief held by many who research and write on the topic, that structure and accountability is necessary. Trudel’s recommendation echoes others in the field, for instance, the needed for teacher guidance in book selection and the presentation of mini lessons. According to Trudel, traditional
SSR may have a negative effect on reading attitudes. Conversely, when a structured independent reading program was implemented, attitudes toward reading continued to positively grow throughout the duration of the study. Finally, teachers have many options when planning for silent reading in the classroom. As such, teachers are urged to review the best practices when creating and implementing a structured independent reading program.

**Silent Reading Programs for Secondary Students**

While much of the research is focused on elementary students, similar practices and benefits are found when implementing a silent reading program in secondary classrooms. Similarities include the need for accountability, structure, choice and the role of the teacher. The research also shows that secondary students benefit from structure silent reading programs.

Akmal (2002) confirms much of the research regarding methods that increase engagement during the silent reading block. The author presents the human development explanations of why these methods work specifically for middle school students. As previously mentioned, conferencing with students about what they are reading has positive benefits. According to Akmal, middle school students learn from talking and when conferences are built into a silent reading block they have time to process and reflect on what they have read. Further, middle school students often need support with social interactions. Because of that, reading conferences not only support the student as a reader, but are also developmentally important and appropriate. The author shares strategies not seen elsewhere in the research such as reading contracts. A reading contract is created through conferencing about goals regarding the amount a student will read. This is to support engagement and increase accountability. As seen previously, accountability is very important to successfully implementing a silent reading program.
Cuevas, Irving and Russell (2014) studied the implementation of an independent silent reading (ISR) program with high school students. The ISR is like other programs that have a high level of accountability. The ISR program used in the study also incorporated assigned reading. While many other programs highlight choice, the researchers found the cognitive functions during reading were the same regardless of the text. Cuevas found that students in the ISR group demonstrated improvements in their overall reading abilities.

**Summary**

A review of the literature makes clear that there are strategies that create an effective SSR program. These include book choice/options, reading logs, book conferences, structured time and teacher support. These strategies have been found to increase engagement and the effectiveness of SSR programs. Additionally, the research reveals that the benefits of SSR take a significant amount of time to be fully seen. Also, the research reveals that just giving students time to read is not enough. A SSR program must involve practices that seek to engage all students. Students must be actively engaged in reading to experience the benefits of SSR. There also needs to be an increase in accountability while still retaining the freedom of choice and the cultivation of a culture of literacy. Within education silent sustained reading (SSR) is also referred to as independent reading (IR). Both require highly skilled teachers, training, planning and consistent implementation.

Much of the research also presents the role of the teacher has on successfully implementing an independent reading program. To successfully implement SSR and IR programs the practicality and reality of a program must be explored and considered. A theoretical understanding of SSR and IR programs is not enough. An understanding of the practice in real classrooms is also necessary. With those components must also come an
understanding of how SSR and IR programs are currently used by teachers. Many teachers are even distancing themselves from the language associated with traditional SSR programs. The research supports a need to provide more support and accountability measures to any independent reading practice.
CHAPTER III

METHODS

The purpose of this study is to determine whether silent sustained reading will have a positive impact on reading performance in middle school.

Design

The independent variable is silent sustained reading (SSR). The dependent variable is reading performance. Reading performance was measured using a district unit assessment for language arts. This study was done using a quasi-experimental design. Students were placed into treatment and control groups by evenly splitting four sections of sixth grade language arts into two groups. The students in the treatment group were consistently given 20 minutes per class period for silent sustained reading. The control group students were not given 20 minutes per class period for silent sustained reading. This study took place over the course of 18 weeks. At the end of the 18 weeks, the district unit assessment was used as the posttest to assess the impact of SSR on reading performance. The results of the posttest for the treatment and control groups were then compared to determine whether the treatment group earned higher scores.

Participants

The study was conducted at a Title I middle school in a large school district in the mid-Atlantic. Students were placed into treatment and control groups by evenly splitting four sections of sixth grade language arts into two groups. Students in the morning sections were put into a group and students in the afternoon sections were put into another group. The treatment group was made up of 46 sixth grade students. The control group was made up of 45 sixth grade students. All of the students have the same teacher for language arts.
The treatment group contained 20 female students and 26 male students. Further, the group was made up of 13 African American students, 14 Hispanic students and 19 white students. The control group contained 19 female students and 26 male students. The group was comprised of one Asian student, eight Hispanic students, 12 African American students and 24 white students.

**Instrument**

The instrument used in the study was a district unit assessment called ELA Grade 6 Unit 2 Periodic Assessment. The assessment measures reading performance using Maryland State Standards. The assessment included four reading passages and 14 multiple choice questions. Of the four reading passages two were nonfiction and two were fiction. The assessment was given and scored using a district online platform.

The assessment was developed by a team of teachers from the district in partnership with Strategic Measurement & Evaluation (SME). The items on the assessment were reviewed and revised with input from SME. The revised items were put together to form six different assessments. These versions were then piloted by various schools. After the items were piloted, SME gathered the results and did a psychometric analysis of each item. Teacher teams met again to review the data and adjust questions/answer choices as needed by completing a line by line analysis of each part of an item.

**Procedure**

The students in the treatment group were consistently given 20 minutes per class period for SSR in language arts. These opportunities were given over the course of 18 weeks. The study school operates using an A day and B day schedule meaning that students have language arts every other day. This led to students being given 20 minutes for SSR two-three times per week. The study school has 90 minutes periods and the 20 minutes for SSR were always the last 20
minutes. At the beginning of each 20 minute SSR block the expectations were reviewed for the students. The students had one minute to pick out a book, had to remain at their assigned seat, had to remain silent, and read the entire 20 minutes. If students lost their place or became distracted they were instructed to regain focus as quickly as possible. The teacher and the additional adult assistant would circulate around the room during SSR. If needed, they would redirect students or help students find a different book to read. Students self-selected their books. Students could read both print and digital books. The classroom had a classroom library and students were taken to the school library once a month. On the other hand, the students in the control group were given 20 extra minutes of instruction. The students in the control group were not given SSR time.

At the end of the 18 weeks, students took a district unit assessment that is given to all students in the district. The assessment was used to measure reading performance and is aligned to reading Maryland State standards. The students were given 90 minutes to complete the assessment. Students with testing accommodations were given those accommodations. The assessment was administered and scored using a district online platform.
CHAPTER IV

RESULTS

The purpose of the study was to determine whether SSR would have a positive impact on student reading performance in middle school. The independent variable is SSR. The dependent variable is reading performance. Reading performance was measured using a district unit assessment for language arts.

As shown in Table 1, the group mean for the SSR group was 30.83. The standard deviation was 11.74. The range was 59. Also, the minimum score was eight and the maximum score was 67.

Table 1

*Silent Sustained Reading (SSR) Group Descriptive Statistics*

<table>
<thead>
<tr>
<th>Group Name</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Minimum Score</th>
<th>Maximum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSR Group</td>
<td>46</td>
<td>30.83</td>
<td>11.74</td>
<td>59</td>
<td>8</td>
<td>67</td>
</tr>
</tbody>
</table>

As seen in Table 2, the group mean for the non-SSR group was 29.71. The standard deviation was 11.38. The range was 53. Also, the minimum score was ten and the maximum score was 63.

Table 2

*Non-Silent Sustained Reading (SSR) Group Descriptive Statistics*

<table>
<thead>
<tr>
<th>Group Name</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Minimum Score</th>
<th>Maximum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-SSR Group</td>
<td>45</td>
<td>29.71</td>
<td>11.38</td>
<td>53</td>
<td>10</td>
<td>63</td>
</tr>
</tbody>
</table>
Table 3 shows that in this study, there was not a statistically significant difference in student reading scores between students receiving SSR and those not receiving SSR. The mean for students receiving SSR was 30.83 with a standard deviation of 11.74. The mean for students not receiving SSR was 29.71 with a standard deviation of 11.38. The significance level for this t-test analysis was $p>.05$ at .647, and therefore the null hypothesis is retained.

Table 3

*Independent Groups t-Test Analysis for SSR and Non-SSR Groups*

<table>
<thead>
<tr>
<th>Group Name</th>
<th>N</th>
<th>Mean Score</th>
<th>SD</th>
<th>$t$</th>
<th>df</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSR</td>
<td>46</td>
<td>30.83</td>
<td>11.74</td>
<td>.460</td>
<td>89</td>
<td>.647</td>
</tr>
<tr>
<td>Non-SSR</td>
<td>45</td>
<td>29.71</td>
<td>11.38</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

While the SSR group did outperform the non-SSR group there is no statistical significance in the findings. The findings and implications will be discussed in further detail in Chapter V.
CHAPTER V
DISCUSSION

The purpose of the study was to determine whether SSR would have a positive impact on student reading performance in middle school. The independent variable was SSR. The dependent variable was reading performance. This study was conducted using a quasi-experimental design. Reading performance was measured using a district unit assessment for language arts. The null hypothesis was that the implementation of a silent sustained reading program would have no impact on middle school reading performance as measured by district unit assessments. In the case of this study, the null hypothesis was retained.

Implications of Results

While the SSR group did outperform the non-SSR group there was no statistical significance to the findings. Further, SSR did not appear to have a negative impact on reading performance. This study could have been more informative if students had been more engaged in the process. There was not enough “buy in” from students. This study did not contain methods for tracking engagement and participation. This means that some of the posttest results are from students who did not actively participate in SSR.

Silent sustained reading could still be used by interested teachers and schools, but the impact should be monitored. Teachers should monitor their students reading levels, reading performance and reading growth. If a teacher does not see significant improvement, then he or she should consider discontinuing the use of SSR. The current study used a very basic form of SSR. Students did not have to maintain reading logs or complete graded assignments related to their reading. The lack of accountability could have impacted the results of this study. The researcher would recommend that any teacher or school that wants to implement an SSR program create an
accountability system for students. This could be a log, before/during/after reading activity or student conferences/check ins.

**Threats to Validity**

**Internal Threats**

The SSR group was comprised of morning classes and the non-SSR group was comprised of afternoon classes. Due to scheduling constraints, the afternoon group was not able to participate in SSR. While making the groups, this scheduling constraint supported the formation of the groups, but might have influenced the results because many students seem to be more focused in the morning.

Student motivation and participation were also factors. Throughout the 18 weeks of this study, the students in the SSR group demonstrated varied levels of motivation to read and participate in the SSR block. There were numerous students who regularly refused to read during the SSR block. On the other hand, there were other students who were highly motivated to read and participate in the SSR block. There were also students in both groups who had very poor attendance and regularly missed at least one class per week. This means that some students in the SSR group may not have received the full potential benefits of SSR.

The groups were not created randomly. The researcher is also the teacher of the students in the study and knows their strengths, challenges, and personalities. The researcher created groups by combining two morning sections and two afternoon sections. The morning groups have fewer behavior problems. There is a potential that selection bias may have occurred.

Some students in the SSR group also received additional services that may impact reading performance. There are 14 students in the SSR group who were a part of a Title I reading
intervention group. These students were pulled from class two-three times a week for skill building in reading. These sessions could have interfered with the results of this study.

**External Threats**

The study was conducted in one school and with students who have the same language arts teacher. With that, many of the students are significantly below grade level. This means that the sample may not be representative of the larger population.

**Relationship to the Existing Literature**

Kelley and Clausen-Grace (2009) also found that disengagement is a major barrier to successfully implementing any SSR program. The researcher also believes that disengagement impacted this study. Throughout the course of the study, disengagement became an issue that impacted the SSR group. Due to disengagement, the full benefits of SSR might not have been observed.

Garan and DeVoogd (2008) presented the findings of the National Institute of Child Health and Human Development (NICHD) regarding silent sustained reading. The National Institute of Child Health and Human Development released a study that claimed that SSR was an ineffective practice. The purpose of the current study was to determine the effectiveness of SSR and the findings from this study cannot rule out the assertion made by NICHD.

Cuevas et al (2014) studied the implementation of an independent silent reading (ISR) program with high school students. The researchers wanted to determine whether SSR would have a positive impact on overall reading ability. They created two groups with an ISR and non-ISR group. They found that students in the ISR group demonstrated improvement in overall reading ability. The difference between this study and the current study is that the current study did not find a positive impact on reading performance. Also, their study focused on high school
students and the current study focused on middle school students. High school students are typically better at self-regulation compared to middle school students. The difference between middle and high school students may also explain the dissimilar results.

Implications for Future Research

Future research could be done on the topic, but should incorporate a pretest level, and should consider how to control for reading level and student participation in the SSR block. The pretest would allow for more data regarding reading growth due to SRR. The absence of a pretest led to a limited understanding of the impact of SRR. The study was limited because the results of the posttest could not be separated from current reading levels. If reading level could be accounted for during the collection of data the results might be more meaningful. For the future, a way to account for student participation in the SSR block should be established. Some students in the SSR group did not regularly participate in SSR. The results of the posttest collected for these students could have skewed the results.

Conclusions

This study found that there was not a statistically significant difference in reading scores between middle school students receiving SSR and those not receiving SSR. While the SSR group did outperform the non-SSR group there was no statistical significance to the findings. There were also some issues with validity of the study. Ultimately, there is still more research needed regarding SSR and student reading performance in middle school.
References


