The Effect of Sight Word Instruction

on the

Reading Fluency of First Grade Students

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Abstract

The purpose of this study was to investigate the effects of sight word vocabulary on fluency for first grade students. The participants in this study were enrolled in first grade at an elementary school in Baltimore County, Maryland in the 2014-2015 school year. All of the research subjects were divided into small groups. The treatment group received regular whole group instruction, read independent leveled texts 15 minutes per day as well as sight word instruction and repeated readings of texts. While both the control and treatment groups showed some improvement in their independent reading levels, the hypothesis that sight word instruction would improve reading fluency was not supported upon data analysis. Research in this area should continue to determine if increasing sight word instruction will improve oral reading fluency.

CHAPTER I

INTRODUCTION

Overview

Very few early intervention studies target fluency as an important outcome. Most of the research includes children in third grade or higher. According to the National Reading Panel (as cited in National Institute of Child Health and Human Development, 2000), "A great deal is known about the processes and instructional conditions that promote early decoding skills, but much less is known about factors that affect fluency" (p. 387). Kuhn and Stahl (2003) suggested the idea that researchers feel that fluency is a later developing skill. The challenge of reading fluency is that readers who have not yet achieved automaticity in word recognition must apply a significant amount of their cognitive abilities decoding words, resulting in limited comprehension of the text.

Reading fluency plays an important role in first grade because it represents a critical time period when a child integrates prereading and early reading skills to become a reader. Screening in early first grade should identify students at risk for failing to develop skills in accurate and fluent word recognition which are crucial for reading success in later grades (Clemens, Shapiro, & Thoemmes, 2011).

Statement of Problem

The purpose of this study was to investigate the effects of sight word vocabulary on fluency for first grade students.

Hypothesis

The use of sight word vocabulary will not have an impact on the fluency of first grade students.

Operational Definitions

The independent variable is the sight word instruction. The operational definition is the use of flash cards and the repeated readings of texts. The dependent variable is the improvement in reading fluency. The operational definition is the independent reading level score from Reading A-Z.

CHAPTER II

REVIEW OF THE LITERATURE

This literature review seeks to explore the topic of the effects of sight word vocabulary to improve reading fluency of first grade students. Section one defines reading fluency and its importance. Section two discusses problems associated with reading fluency. In section three, reading interventions are discussed.

Definition of Reading Fluency

According to Wolf and Katzir-Cohen (2001), reading fluency is a level of accuracy and rate where decoding is relatively effortless, where oral reading is smooth and accurate with correct prosody, and where attention can be allocated to comprehension. When students have a slow word processing speed, it interferes with automaticity and therefore comprehension, as well. The concept of reading fluency plays an important role in first grade because it represents a critical time period when a child integrates prereading and early reading skills to become a reader. Screening in early first grade should identify students at risk for failing to develop skills in accurate and fluent word recognition which are crucial for reading success in later grades (Clemens et al., 2011). There is a difference between reading words quickly that are in isolation and reading words in context. According to Carnine, Silbert, Kame'enui, and Tarver, (2004) "Automaticity refers to fast, effortless recognition of words in isolation or in lists. Fluency refers to fast, effortless reading of words in sentences or passages" (p. 232).

According to Speece, Mills, Ritchey, and Hillman (2003), first grade is a pivotal time in reading development. Students are learning to read words by sight and through decoding strategies. Children are expected to be able to accurately and quickly identify words in text resulting in reading fluency.

The National Reading Panel (as cited in NICHHD, 2000) includes fluency as one of the necessary elements of effective reading instruction. Reading fluency includes rate, accuracy, and automaticity when reading words. Many studies have explored the effects of word-level versus text-level in order to improve reading fluency of early readers. Word-level is reading the words separately in order to memorize them. Text-level is reading the words in context through repeated readings. Studies have shown that both word-level and text-level repeated readings have potential benefits for poor readers (Martin-Chang & Levy, 2005).

Fluency is generally thought of as an issue in the primary grades. Chall's (1983) model suggests that once fluency is achieved in the primary grades, other factors such as comprehension and vocabulary take on a more significant role in students' literacy development in the intermediate grades and beyond. Previous research shows that a significant number of students experience difficulties in reading fluency that are associated with reading comprehension beyond primary grades (Rasinski, Rikli, & Johnston, 2009).

According to Ehri (1992), reading fluency is accomplished by forming "connections between graphemes seen in spellings of specific words and phonemes detected in their pronunciations" (p. 107). Ehri believes that less skilled readers do not form these connections. In a longitudinal study of kindergarten students, it was reported that phonological awareness and letter-sound fluency were the best predictors of oral reading fluency in first grade (Speece et al., 2003). Similarly, Stage, Sheppard, Davidson, and Browning (2001) found that kindergarteners that demonstrated letter-name and letter-sound fluency showed growth in oral reading fluency in first grade. Bishop (2001) concurs, saying that "The relationship between phonological awareness and reading disabilities is compelling, and the ability of phonological awareness to predict future reading achievement cannot be ignored" (p. 237).

Problems Associated with Reading Fluency

Readers who have not yet achieved automaticity in word recognition must apply a significant amount of their cognitive abilities to decoding words, resulting in limited comprehension of the text. Rate is often measured for word recognition automaticity, but this does not always capture the prosody component of reading and this component connects comprehension to fluency. For students to read with the appropriate expression, they need to be cognizant of the meaning of what they are reading. Fast reading can sometimes be indicative of dysfluent reading. Even though their reading rate may be measured as fluent, their comprehension may be inadequate. Reading too slowly may also be an indicator of dysfluent reading (Rasinski et al., 2009). Rasinski et al. (2009) found that "greater proficiency in expressive or prosodic oral reading was associated with higher levels of silent reading comprehension" (p. 357).

When readers are working to keep up their speed, they are not taking time to figure out words they do not know automatically. They often speed past unknown words without looking back. When this takes place, readers may increase their rate and do well on a reading test, but that does not always show their true ability to comprehend the text. Some students today think that reading fluently is more about saying words quickly than focusing on meaning of what they are reading. At times, fluency practice seems to be driving instruction. Emergent readers, for example, may use the skip it approach when encountering an unknown word. They are also instructed to use prior knowledge or substitute another word in its place that makes sense (Levine, 1994). However, reading instruction needs to take in account the full picture of a fluent reader profile and examine the more difficult aspects of fluency (Hedrick, 2007).

Reading Interventions

Repeated oral reading, followed by feedback and effective instruction, promotes improvements in reading for students at all levels (NICHHD, 2000). In this approach, it is often claimed that practicing words in isolation does not transfer to text reading (Thaler, Ehner, Wimmer, & Latiderl, 2004). However, studies have shown that reading words in isolation does have an impact on reading fluency when reading the same words in a connected text. It has also been shown that an increase in sight word vocabulary leads to an increase in reading comprehension (Tan & Nicholson, 1997).

According to Bishop (2001), letter identification is one of the first steps in early literacy. Children focus on letters, then they identify sound patterns, and eventually, they put it all together and recognize whole words. Early intervention is best when helping beginning readers to succeed. A screening measure that includes letter identification, phonological awareness, and rapid automatized naming of words allows teachers to know which accommodations students need in order to become successful fluent readers. Teachers should consider using standardized measures that may be compared across populations over time and could drive and reflect instruction. Using multiple screening measures provides the most effective mechanism for predicting future reading proficiency. With the pressure of trying of creating a nation with skilled readers, teachers need the tools and knowledge to help struggling readers. Using valid screening measures and administering them to beginning readers is the first step in addressing the needs of students.

In some cases reading fluency problems become apparent at the same time that children are acquiring word attack skills. Fuchs, Fuchs, Hosp, and Jenkins (2001) indicated that word and text fluency components increased both fluency and comprehension skills of first-grade children.

Although a large amount of research with older grades has been conducted, very little fluency research has targeted first grade or examined the effects of combining word decoding and fluency instruction simultaneously in beginning readers. Development of reading fluency may need to be viewed as a related process in the early stages of learning to read words rather than as a product of learning to read. Early reading instruction many need to focus not only on word recognition but also on fluent word recognition (Speece et al., 2003).

One study by Conley, Derby, Roberts-Gwinn, Weber, and McLaughlin (2004) was performed by comparing the copy, cover, and compare method to a picture-matching method for teaching sight word recognition. The copy, cover, compare method involves students tracing a sight word, writing the sight word on their own, and then reading the sight word. The picture-matching method has students with cards with sight words and cards with pictures; they needed to match the picture with the corresponding sight word. Results of this study showed that the copy, cover, and compare method resulted in increased word recognition and that this skill was maintained a week later, even though the words were presented in isolation. Although the picture-matching technique improved word recognition, performance was not maintained. Using word-level strategies to teach sight words has better long-term effectiveness than matching pictures to sight words (Conley et al., 2004).

Early readers are often taught sight words, but the extension of reading individual words to reading connected text is often missing. In teaching readers, connected text should be included as a basic element of early literacy instruction (Alberto, Waugh, & Fredrick, 2010). When students are working on sight word vocabulary, continuous exposure to the same words is often beneficial (Mesmer, Duhon, & Dodson, 2007).

Summary

Fluency is crucial to overall success throughout life, especially in academic settings. With the use of early intervention, teachers can help to narrow the gap in reading fluency among students. Teachers must understand strategies that can help dysfluent readers so the end result is that students are reading for meaning and understanding. Early intervention is key to success in reading fluency.

CHAPTER III

METHODS

The purpose of this study was to investigate whether the effects of sight word vocabulary improved fluency for first grade students.

Design

The design that was used for the study was quasiexperimental with a pretest, treatment, and posttest format. There was a control group and a treatment group used in the study. The independent variable was the sight word instruction, while the dependent variable was the improvement in reading fluency. The null hypothesis proposes that the improvement of first grade students who are instructed using sight word vocabulary will not differ significantly from the gains made by students receiving general reading instruction.

Participants

The participants were first grade students who were tested using the Reading A-Z program. The class was divided in half to create a treatment and a control group. The treatment group received explicit sight word instruction and repeated readings of leveled texts three times a week in a small group setting. The treatment group was 61% female and 39% male. The control group received regular whole group instruction. The control group was 68% female and 32% male. The students were six and seven years old. The school is located in a middle class area of Baltimore County.

Instrument

The instrument used to assess students' reading fluency was Reading A-Z. The assessment included a timed reading passage as well as a comprehension check. The students continued to read several leveled passages until they reached their independent reading level. As

students read, their words per minute, accuracy rate, error rate, and self-correction rate were recorded. This assessment is used to get students reading on their independent reading levels for a sustained amount of time.

Reading A-Z follows the recommendations of the National Reading Panel and other research findings when developing its reading resources for teachers and students. The resources available have been created from a wide variety of resources that are supported by research findings. In 2000, the National Reading Panel published its research-based findings on the reading strategies and instructional practices that demonstrated the best results for reading achievement. Reading A-Z has organized its instructional resources around the five key areas of reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension.

Procedure

This study was intended to determine whether the effects of sight word vocabulary improved fluency for first grade students. First, students were tested using the Reading A-Z assessment in order to identify their independent reading level by using a running record. Each student read a reading passage, retold the text in his or her own words, and answered comprehension questions. Students continued to move to more difficult reading passages until their independent reading level was determined. The class was then divided into two groups, the control group and the treatment group. The control group received regular whole group instruction and read independent leveled texts for 15 minutes each day. The treatment group received regular whole group instruction, read independent leveled texts 15 minutes per day, and participated in sight word instruction and repeated readings of texts. Over the course of six weeks, students in the treatment group worked in small groups three times a week. At the end of

the six weeks, all students were reassessed using Reading A-Z to identify their independent reading levels.

CHAPTER IV

RESULTS

This study was designed to determine whether the use of sight word vocabulary improves reading fluency of first grade students. Two groups were randomly divided; one group was the control group and the other group was the treatment group. The control group received regular whole group instruction. The treatment group received explicit sight word instruction and repeated readings of leveled texts three times a week in a small group setting.

Table 1 details the mean and standard deviation of the posttest scores for each group. The treatment group and the control group both received a pretest and a posttest in order to identify their reading levels.

Table 1

Means and Standard Deviations of Reading Fluency for the Groups

Group	Pretest Fluency	Posttest Fluency
Treatment	73.17 (14.18)	85.75 (21.21)
Control	76.62 (23.75)	83.46 (24.14)

An independent t-test was run to examine if any significant differences in reading fluency existed between the control and intervention groups. Results showed that there was no significant difference between the groups at pretest [$t(23) = -.436$, $p > .05$]. At posttest, results also showed no significant differences, [$t(23) = .295$, $p > .05$]. The null hypothesis was supported. Students in the intervention group did not demonstrate a significantly greater increase in fluency when compared to students in the control group.

CHAPTER V

DISCUSSION

The purpose of this study was to investigate whether the effects of sight word vocabulary improved fluency for first grade students. The null hypothesis, that there would be no significant difference between performance of control group students and students in the treatment group, was proposed. Results demonstrated that there was no significant difference between the groups at pretest compared to the posttests.

Implications of Results

Results seem to indicate that if the study were completed over a longer period of time the results may have been more significant. Most students in the control group and treatment group made progress and increased their independent reading levels.

Theoretical Consequences

According to Alberto et al. (2010), early readers are often taught sight words, but the extension of reading individual words to reading connected text is often missing. In teaching readers, connected text should be included as a basic element of early literacy instruction. The current study involved sight word instruction as well as connected text. Students need to learn the words in isolation but need to also be able to apply them when reading. In the current study, treatment groups worked on the same 15 sight words for three days. Studies have shown that repeated exposure helps with automaticity which leads to fluency. When students are working on sight word vocabulary, continuous exposure to the same words is often beneficial (Mesmer et al., 2007).

Reading fluency is a level of accuracy and rate where decoding is relatively effortless, where oral reading is smooth and accurate with correct prosody, and where attention can be

allocated to comprehension. When students have a slow word processing speed, it interferes with automaticity and therefore comprehension, as well (Wolf & Katzir-Cohen, 2001). Early readers need to learn sight words in order to read fluently which results in comprehension. When readers have to decode each word, they have little or no comprehension of what they read.

Threats to Validity

The treatment group students were pulled three times a week at different times during the language arts block, during the Daily Five time when kids were moving about the room completing various reading activities and during 100 Book Challenge time. During the Daily Five, students are engaged in activities, but it can be noisy. The 100 Book Challenge time is very quiet and students read quietly to themselves or silent read. This may have affected the students' ability to focus while doing sight word activities as well as repeating readings of texts.

Connections to Previous Studies and Existing Literature

According to Tan and Nicholson (1997), studies have shown that reading words in isolation does have an impact on reading fluency when reading the same words in a connected text. This increase in sight word vocabulary leads to an increase in reading comprehension. In their study, primary students who were struggling in reading were taught ten new words until they could recognize them automatically. The students then read passages containing the words and answered comprehension questions about the text. The results showed that the development of fluent word recognition skills made a difference in students' understanding of the text. Although there was not a significant difference in the current study, reading words in isolation and then connecting it to text has shown an increase in reading fluency.

The National Reading Panel (as cited in NICHHD, 2000) reported that repeated oral reading, followed by feedback and effective instruction, promotes improvement in reading for

students at all levels. This is similar to the current study because these students read repeated readings of on-level texts after given sight word instruction. These same students were also given whole group instruction.

Implications for Future Research

The current study indicates that there is no significant difference between treatment and control groups when performed over a six-week period. Recommendations for future research include using Reading A-Z starting at the beginning of the year and including all the pieces to the program with continued use of this program throughout the school year. Providing instruction in this way may lead to a more significant increase in students' independent reading levels. By providing additional resources to use at home, the students would be getting a lot of exposure to leveled text.

Conclusions

The current study shows that students in the treatment group did not demonstrate a significantly greater increase in fluency when compared to students in the control group. Even though the treatment group received sight word instruction in addition to repeated readings of texts, whole group instruction, and 15 minutes of reading on-level texts, their results were not significantly different than those of the control group. Most students in both groups showed an increase in their independent reading levels.

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