

Effects of Applying Repeated Readings Method on Reading Fluency and Passage Comprehension of Slow Learners

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Abstract

Children who are slow learners face difficulties with their reading fluency and passage comprehension. The purpose of this study is to investigate the importance of reading repetition for slow learners which reflects positively on their reading fluency and passage comprehension. For this purpose, twenty slow learners, whose ages ranged from 5.5 to 8.5 years and who are studying in grades 1, 2 and 3, were recruited from two private schools in Lebanon. Those students were divided equally into two groups, a control and an experimental group. The measuring instrument used in this study was the Woodcock-Johnson III Test of Achievement reading fluency and passage comprehension sections. A pretest was done on all 20 students during the first trimester of the 2016-17 school year. Then a repeated English readings program was applied for two trimesters on the experimental group. Descriptive statistics and independent samples t-test were used to analyze the findings. Results of this study showed significant statistical differences to the benefit of the experimental group over the control group regarding reading fluency and passage comprehension.

Key words: slow learners, reading fluency, passage comprehension, Woodcock-Johnson III test of achievement.

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Introduction

Although the definition of the slow learner varies, characteristics of slow learning children are quite similar. Slow learning children have difficulty in literacy, especially in reading (Borah, 2013), and are slightly slower when compared to their peers in the same age group (Sugapriya and Ramachandran, 2011; Pujar, 2006). Slow learners have an attainment level in all academic subjects that is equal to their actual intellectual ability. In other words, their attainment level in all academic subjects is as low as their IQ level. Because of their below average IQ, they are often being called intellectually disabled. Nevertheless, they may be good at other activities that do not involve academic learning, such as sports (Krishnakumar et al., 2006).

Fluency is viewed as an important goal of reading instruction in an ever increasing trend. The routes to fluency development seem reasonably clear. One route is to give students extensive practice reading books that are at their zone of reading development. By encountering high-frequency, common words in a variety of meaningful contexts, students acquire the ability to recognize the words automatically. The other route for building fluency is to use the many varieties of repeated readings (Rasinski et al., 2012).

Applying basic skills automatically is usually achieved through practice. In reading, decoding is a basic skill, one that is absolutely essential to success. Not only should students be able to decode words and phrases with a high degree of accuracy, they must also be able to decode them automatically with minimal attention or effort. Practice through repeated readings helps them get there (Rasinski, 2003). Readers transitioning into fluency learn to intone whole phrases at a time; they do not read haltingly or word by word, as novice readers do. And they do not have to point to the words. When reading text at their own instructional level, they slide along at an even pace because their sight vocabulary is large and they possess a number of strategies that help to keep them going. Unlike the word-by-word finger point readers, fluent readers barely glance at most common words and, according to eye movement detected in relevant research, they even skip highly predictable words (Cole, 2004).

When humans become fluent at a task, they can devote their attention to other related tasks. In reading, the most significant related task is comprehension (Rasinski, 2003). Reading comprehension is the act of meaning-making while reading. While this seems simple enough, understanding how readers make meaning is not so simple. Reading teachers often refer to this meaning-making as active comprehension. Reading researchers have developed various models of comprehension to help teachers not only understand the comprehension process, but also to help identify effective models of comprehension instructions. Comprehension, though not static, is the result of comprehending. During the initial phase of retelling, protocol readers recall as much about the text as they can without specific prompting. This is different from many classroom procedures where readers interact in directed reader response either through discussion or answering questions, or through specific written responses (Altwerger et al., 2007).

Advocates of high standards and expectations usually believe that gaps in reading achievement can be eliminated with good teaching, but slow learners need a specially designed reading curriculum. Functioning generally on a higher level than students with mental retardation, but on a lower level than average students, are a large number of students known as slow learners. They usually form around 14% of all students. Slow learners tend to be concrete in their thinking, need help with strategies and organization, and are eager for success. They need much guidance from the teacher to develop sequential skills in word recognition and in comprehension. By listening to stories read aloud and being engaged in successful reading experiences, the slow learner might well make reading a lifetime endeavor (Marlow, 2012).

Mason and Hagaman (2012) stressed on the importance of reading comprehension intervention research for students with learning disabilities (LD). They added that reading comprehension is considered one of the most critical skills needed for success in school and the workplace in a modern society. The authors highlighted that many students with LD have difficulties in understanding what has been read and require explicit reading comprehension instruction to develop this valuable skill.

Repeated readings were devised by Samuels (1979). In repeated readings, readers read a simplified text repeatedly to help automatize word recognition, leaving more cognitive resources for higher order comprehension processes. Teachers use this reading strategy to help students who have less experience with reading fluently to develop fluency and comprehension and gain confidence in processing words (Kuhn and Stahl, 2003). This current study aims to investigate if repeated readings can help slow learners in grades 1, 2 and 3 to improve their reading fluency and passage comprehension.

Literature review

In a study on repeated readings effects, Yeganeh (2013) investigated how repeated readings can affect reading fluency and comprehension among English as Foreign Language (EFL) students. This study involved an 8-week quasi-experiment carried out on monolingual and bilingual university level Iranian students of English using improved reading comprehension testing procedures. Results suggested that the experimental group (ten monolingual and ten bilingual students) who were exposed to repeated readings, gained in reading fluency and comprehension significantly more than the control group ($n = 20$). At the same time, comprehension performance of bilingual students was significantly higher than that of monolingual students, although no significant differences in fluency have been found among monolingual and bilingual students.

Gorsuch and Taguchi (2008) studied the effects of repeated readings on developing reading fluency and reading comprehension among EFL students in Vietnam. The authors indicated that reading in a foreign or second language is often a laborious process, often caused, among other things, by underdeveloped word recognition skills. The authors added that developing fluency in foreign language reading has become an important pedagogical issue and one major component of reading fluency is fast and accurate word recognition. Their methodology involved an 11-week repeated readings quasi-experiment carried out on university-level Vietnamese learners of English using improved reading comprehension testing procedures. Results of this study suggested that the experimental group ($n = 24$) gained in reading fluency and comprehended significantly more than the control group ($n = 26$). The authors concluded that their results have implications for future uses of repeated readings in foreign language context, future reading comprehension test design, and the need for measurement of working memory during short- and long-term use of repeated readings.

Most of the conducted research concentrated on students without any disabilities or difficulties in learning. The current research study aims to fill in this gap. It aims to investigate the effects, if any, of repeated readings on improving the reading fluency and passage comprehension of children who are slow learners.

Methodology

A quantitative approach was used in this study where 20 slow learners, whose ages ranged from 5.5 to 8.5 years and studying in grades 1, 2 or 3, were recruited from two private schools in Lebanon. Those students were divided equally into two groups, a control and an experimental group. The experimental group experienced three 30-minute specially tailored repeated readings sessions per week over a period of two trimesters. In particular, each student in the experimental group was given a story based on his/her predetermined reading level. Then hard words were selected and explained. After that, the student

listened to the passage and was asked to repeat it as many times as necessary till he/she reached the required fluency level. If two students were almost of the same level of reading, they were asked to attend the same session and switch roles while reading. This repeated readings practice is similar to what is reported in the literature (Kuhn and Stahl, 2003). The control group went on with their regular curriculum activities over these trimesters.

The measuring instrument used in this study was the Woodcock-Johnson III Test of Achievement reading fluency and passage comprehension sections. A pretest was done on all 20 students during the first trimester of 2016-17 school year. Then an English repeated readings program was applied for two trimesters on the experimental group. Descriptive statistics and independent samples t-test were used to analyze the findings.

Results

Reading fluency results of all students in the control group are given in Figure 1 while those of students in the experimental group are given in Figure 2. Descriptive statistics of performance of both groups in reading fluency are presented in Table 1.

Then improvement in reading fluency test scores of all students within the control group were compared to those of the experimental group using an unpaired single-sided t-test. The test showed that the experimental group showed significantly better performance in reading fluency test score than the control group ($p=0.00$).

To calculate the effect size of the t-test, Cohen's d value was used. This value is calculated using the formula $Cohen's\ d = (M2 - M1) / SD_{pooled}$ where M2 is the mean improvement value of experimental group and M1 is the mean improvement value of control group. SD_{pooled} was calculated using the formula $SD_{pooled} = \sqrt{((SD1^2 + SD2^2) / 2)}$. SD_{pooled} in this case is found to be equal to 0.75 and Cohen's d value to be equal to 3.99. This reflects that repeated readings lead to significant improvement in reading fluency of students with learning difficulties.

The same procedure was then applied for passage comprehension and the results of all students in the control group are given in Figure 3 (page 236) while those of students in the experimental group are given in Figure 4. Descriptive statistics of performance of both groups in reading fluency are presented in Table 2.

Like reading fluency test, improvements in passage comprehension test scores of all students within the control group were compared to those of the experimental group using an unpaired single-sided t-test. The test result revealed that the experimental group showed significantly better performance in passage comprehension test score than the control group ($p=0.00$).

To calculate the effect size for t-test, Cohen's d value was used again in a similar way to reading fluency test results.

SD_{pooled} in passage comprehension case is found to be equal to 1 (one) and Cohen's d value to be equal to 4.36. This again reflects that repeated readings lead to significant improvement in passage comprehension of students with learning difficulties.

Conclusion

Repeated readings intervention was applied on a group of ten (grades 1-2-3) students with learning difficulties who formed the experimental group over two trimesters. It was not applied on another ten students of the same conditions and levels who formed the control group. Results clearly show that repeated readings intervention did help slow learners in developing their reading fluency and passage comprehension skills based on Woodcock-Johnson III Test of Achievement. It is recommended, therefore, that school authorities embed repeated readings within their curriculum for slow learners to help them in improving their reading fluency and passage comprehension skills. It is also recommended here to conduct more research in this area to explore other ways that would help in teaching slow learners.

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Figure 1: Reading fluency results of control group.

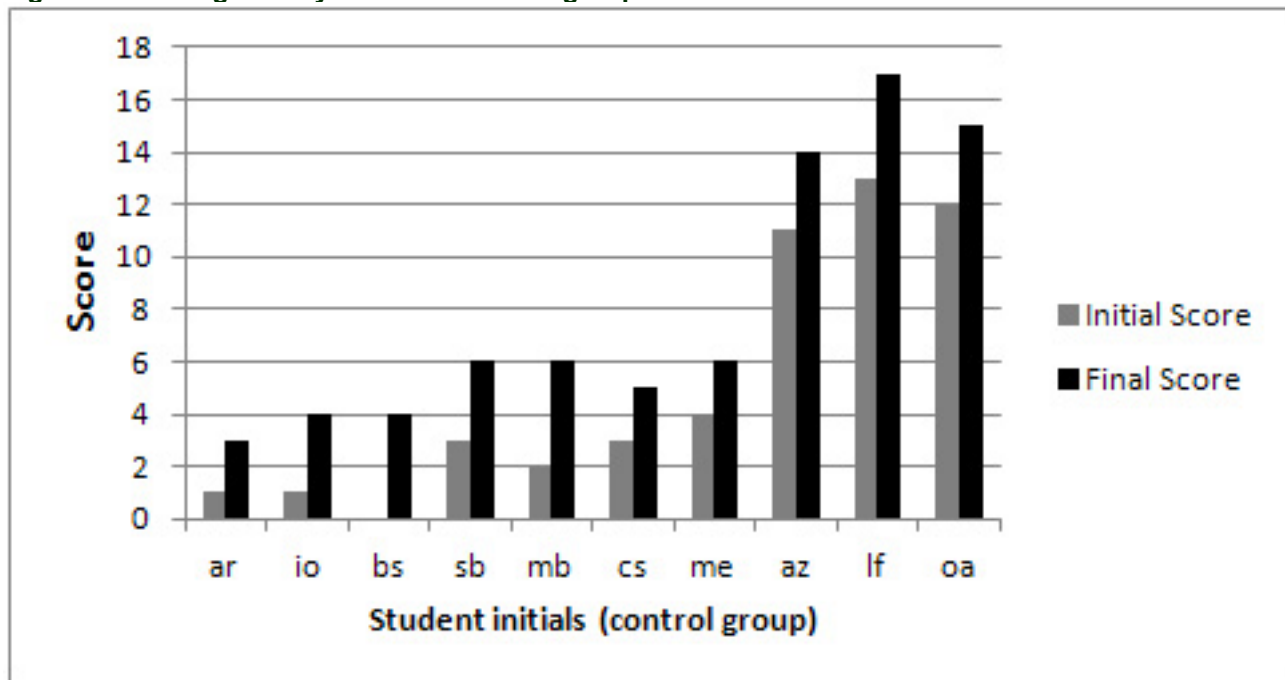


Figure 2: Reading fluency results of experimental group.

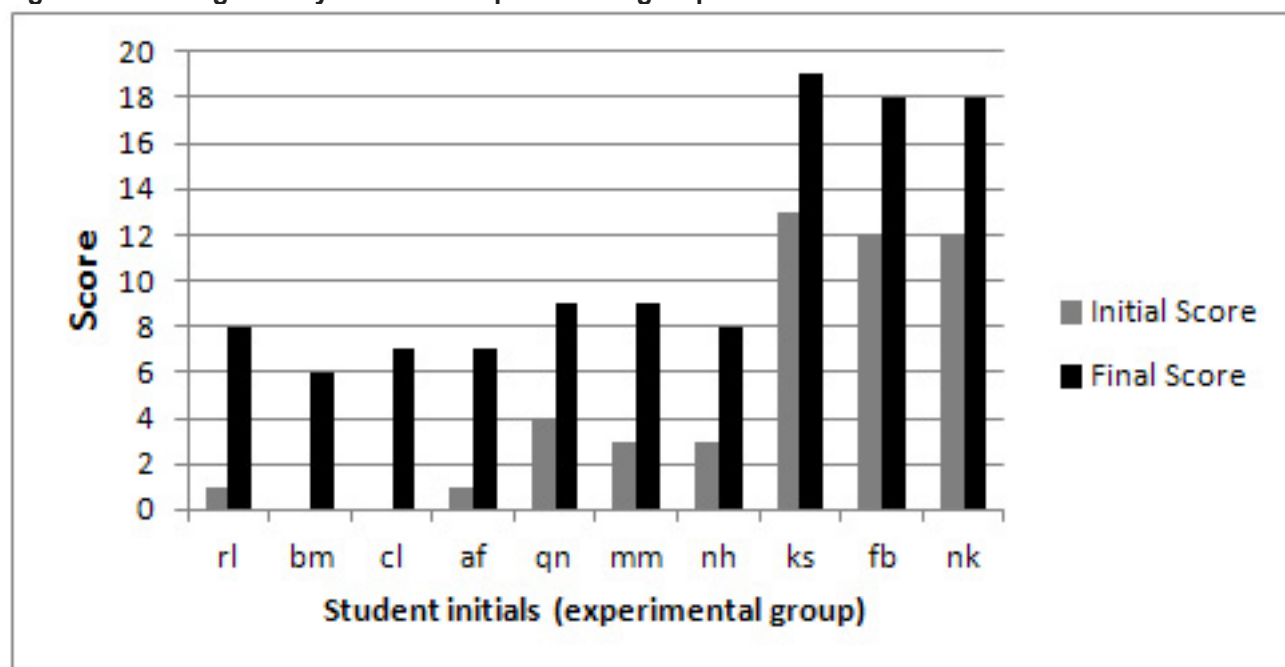


Table 1: Descriptive statistics of reading fluency test

| | Beg. of year average | St dev | End of year average | St dev | Average improvement | St dev |
|--------------------|----------------------|--------|---------------------|--------|---------------------|--------|
| Control Group | 5 | 5 | 8 | 5.2 | 3 | 0.8 |
| Experimental Group | 4.9 | 5.3 | 10.9 | 5.2 | 6 | 0.7 |

Table 2: Descriptive statistics of passage comprehension test.

| | Beg. of year average | St dev | End of year average | St dev | Average improvement | St dev |
|--------------------|----------------------|--------|---------------------|--------|---------------------|--------|
| Control Group | 9.2 | 5.1 | 12.8 | 4.2 | 3.6 | 1.3 |
| Experimental Group | 9.2 | 4.2 | 17.2 | 4.2 | 8 | 0.7 |

Figure 3: Passage comprehension results of control group.

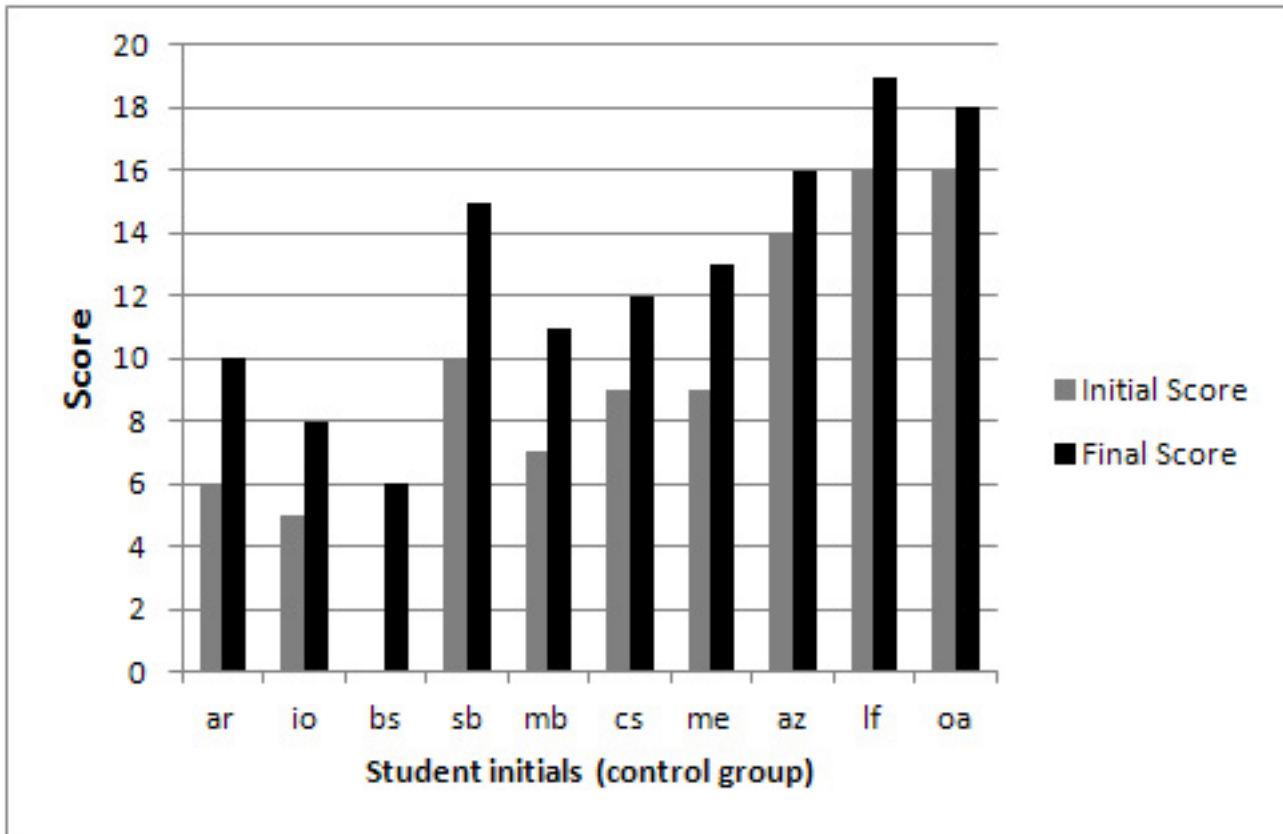
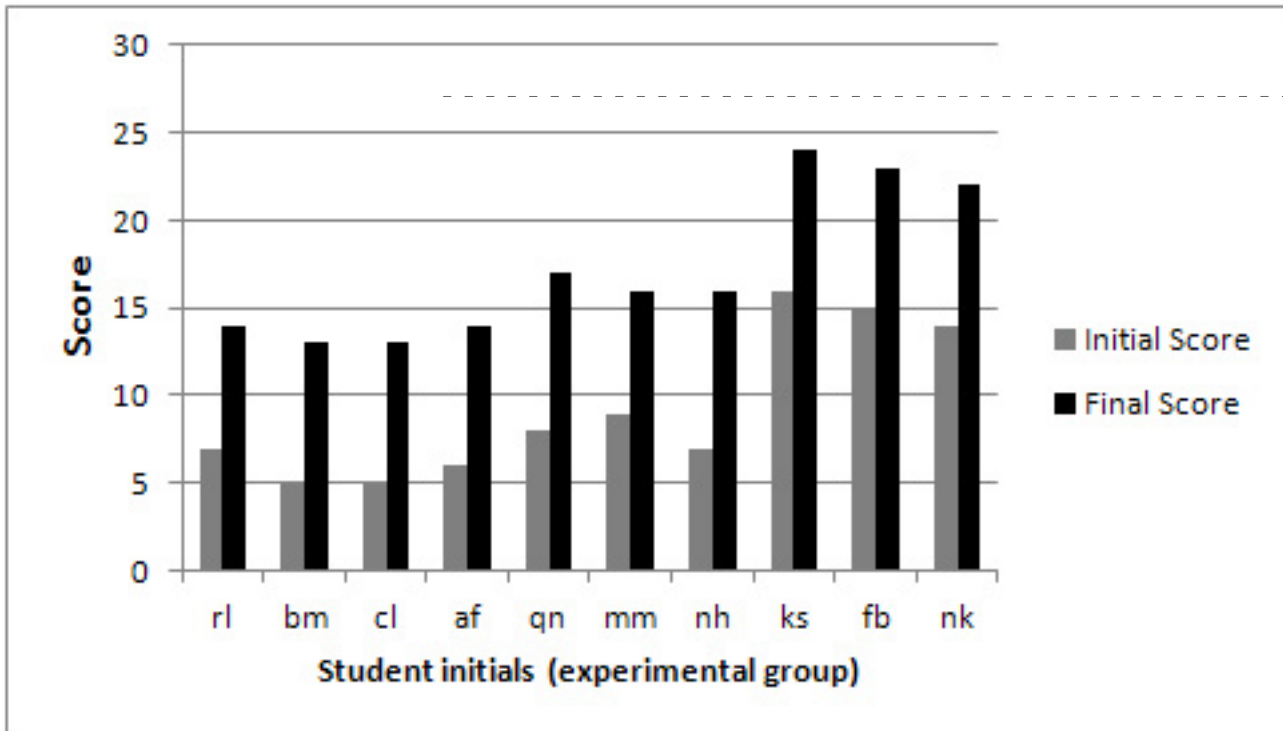


Figure 4: Passage comprehension results of experimental group.



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