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Research Article

The Possible Effects of Combined Reading Activities on the Development of Silent Reading Rate

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Abstract

This study aims to find the effects of assisted and unassisted repeated reading activities (combined reading activities) on the development of beginner and pre-intermediate adult L2 learners' reading fluency and find out which proficiency level benefits more from the combined reading activities. The participants of the study are 16 beginner and 19 pre-intermediate L2 university learners. Sixteen reading passages (eight for beginner level and eight for pre-intermediate) were chosen for the study. The sessions lasted five weeks. The participants first read the text and recorded their time (unassisted reading). Then the passage was read along with the audiotape for the second, third, and fourth times (assisted reading). The participants read the text three times more and the last reading was again recorded (unassisted reading). The first and the last readings were used as pre and post-tests. The findings suggest that both groups developed their reading rate while pre-intermediate group benefited more from the treatment.

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Introduction

Reading fluency attracted the attention of researchers and teachers since 1970s, first in L1 setting followed by L2 mainly because lack of fluency is considered as an obstacle to develop good comprehension skills (Taguchi et al., 2012). "Reading fluency is the ability to read rapidly with ease and accuracy" (Grabe, 2009, p.291). It is also defined as an incremental process which is affected by many subcomponents such as word recognition, background knowledge and memory (Grabe, 2009) as well as automaticity. So, fluency in reading is considered to be a critical component of reading ability (Kuhn et al., 2010). In this study, reading rate is defined as the number of words read per minute. Today as Fielding and Pearson suggested, comprehension is seen as a complex process (1994). So, it wouldn't be misleading to say that comprehension does not involve a single dimension but many others. Lately, as a dimension of comprehension, the role of fluency in L2 gained importance (Grabe, 2009; Taguchi et al., 2012).

Assisted reading is a condition in which the participants read along with a text (Shany & Biemiller, 1995). Comparison between independent reading and assisted reading showed that assisted reading is more effective in fluency and comprehension (Grabe, 2009). The rationale behind repeated reading lies in automaticity theory (Dowhower, 1987). Second and foreign language reading researchers accept the importance of the role that automaticity in the word recognition skills of a reader plays in reading. If L2 readers' attention is spent on decoding words in print, their comprehension will be disrupted (Taguchi, 2002). Automaticity theory postulates that readers can direct their attention to higher order skills such as comprehension if they have automatic word recognition. Dowhover stated that read-along approach (assisted reading) contributes to comprehension (1987). Furthermore, it was stated that read-along approach also contributes to prosodic reading which underlines comprehension (Dowhover, 1987). Repeated reading, thus, has been employed by many teachers and researchers to increase word recognition skills to develop automaticity resulting in fluency and comprehension (Taguchi & Gorsuch, 2010). Researches have provided evidence for automaticity theory in L1 but in further research is still needed for L2 context (Taguchi, Gorsuch, Maass & Snipp, 2012).

Mainly, studies of reading fluency focused on the effect of repeated reading on fluency, comprehension and language development. Dowhower in her study with young readers found that repeated reading improved the rate, accuracy, and comprehension of the students (1987). Taguchi explored that repeated reading has significantly affected reading rate of the participants (1997). Gorsuch and Taguchi tested the effects of repeated reading procedure on reading fluency and comprehension and found that the participants' fluency improved significantly (2010). Shany and Biemiller found that assisted reading improved reading rates and comprehension of the participants (1995). Rasinski similarly found that both assisted and unassisted reading resulted in gains in terms of speed and word recognition accuracy (1990). Qualitative case studies also indicated improvement in readers' fluency development; it was found that repeated reading treatment improved adult immigrant's reading fluency at advanced level (Taguchi et al., 2012). Gorsuch and Taguchi analyzed reports of 30 EFL learners and found positive effects of repeated reading on reading fluency, comprehension, and general language development (2010). Reitsma tested the effectiveness of three ways of reading (guided reading, reading-while-listening, and independent reading with computer based feedback) and

found that both guided reading and independent reading are effective in terms of reading efficiency (1988).

Being a fluent reader is crucial for learners as fluency is one of the main factors leading to good text comprehension and more input (Taguchi et al., 2012). However, it is important to note that fluent readers in L1 and L2 are quite different in terms of reading rate and abilities (Grabe, 2009). Naturally, unique demands on L2 learning and research distinguished studies in L2 reading focusing more on different variables such as proficiency level, task type, purposes of reading, background knowledge (Grabe, 2009). The distinctions between L1 and L2 reading encourage researchers to delve into L2 reading because the results of L1 reading studies cannot be simply practiced in L2 settings.

Reading rate is fundamental to reading-comprehension abilities and it is, therefore, also strongly associated with L1 reading-comprehension abilities (Grabe, 2009). Although many studies were carried on L1 reading which showed a strong correlation between reading fluency and comprehension, more studies on L2 reading fluency are needed to reach promising conclusions.

In L2 context there are not many studies conducted on oral reading-rate (Taguchi, 1997; Grabe, 2009). The report on National Reading Panel presented evidence that repeated reading improves accuracy, fluency, and comprehension. It was further stated that the combination of practice and feedback promotes reading fluency (NIH, 2013).

Statement of the Problem

In practice, it was suggested that repetition helps to develop fluency (Levy, 2001). As automaticity improves the rate of reading and accuracy improves as well. So, fluent readers do not struggle to recognize the common words in the text. On the other hand, less skilled readers as they have not been able to develop fluency, struggle with word recognition and cannot move to higher levels of comprehension. Furthermore, fluent readers can decode text and simultaneously understand what they are reading. (Kuhn et al., 2010). The development of fluency is also affected by age, proficiency level and the language in which reading is carried out (Grabe, 2009).

There is relatively little research in which repeated reading was supported by assisted reading. Studies conducted have shown effects of either repeated reading or assisted reading activities alone. In the course of this study, repeated reading procedure was supported by assisted reading. So, the study will attempt to shed light on the possible effects of combined

repeated assisted reading together. Considering the effects of background knowledge (linguistic or world knowledge) as Grabe states there is need for further research in reading for validation of previous studies or reading theories (2009). This study will also contribute to the field in terms of validation. Furthermore, for classroom practices teachers who want to increase their learners' fluency in L2 settings can arrange their courses to include repeated assisted reading activities. Another significance of this study is that in Turkey where students have little exposure to L2 reading may not develop reading fluency in accordance with their level of proficiency. Combined reading activities thus may provide students with more exposure to L2 reading and develop their L2 reading fluency. All in all, this study aims to test whether combined reading activities (assisted and unassisted repeated reading) increase reading fluency and to what extend proficiency level affects development of reading fluency.

Justification

Developing fluency is important because through fluency readers can move to higher level skills (Kuhn et al., 2010). This study aims to contribute to the field by focusing on adult L2 learners as the majority of the research conducted on reading rate mainly involved elementary school students (Grabe, 2009). Therefore, the data of this study coming from university-level students will help to provide a more clear view of the effects of repeated and assisted on reading rate in L2.

Significance

Grabe stated the importance of reading fluency by emphasizing the correlation between reading rate and L1 reading comprehension abilities (2009). It surprising that such an important issue has received little attention regarding L2 setting (Taguchi, 1997; Taguchi, Gorsuch, Maass & Snipp, 2012; Grabe, 2009). The findings of this study will contribute to understanding the effect of repeated learning on fluency which is an important aspect of reading that helps readers to move from learning to read to reading to learn. Furthermore, as Snow and Sweet noted fluency is not only an indicator of comprehension but also results in comprehension (2003).

When the literature is scrutinized, it can be seen that assisted and unassisted reading treatments were conducted separately. The current study will try to test the effects of combined reading on silent reading rate of L2 adult learners of different language proficiencies.

Method

Design

The study has a pre and posttest design. First, beginner group's pretest and post tests were analyzed to see whether there is a significant difference between the reading rates of the participants. Second, pre-intermediate group's pretest and post tests were analyzed. Last, an independent t-test was conducted to see which group benefited more from the treatment.

Participants

Participants of this study are 16 male adult beginner level and 19 male pre-intermediate students in a Vocational School in Yalova. They have been placed to beginner and pre-intermediate class following a placement test (English Comprehension Level) prior to the study. This test is used for measuring listening and reading proficiencies of the participants. The test consists of 100 multiple-choice questions and is scored from 0-100. 60 questions of the test aim to test the listening ability of the learners and 40 questions were designed to measure the reading ability. The mean score of the participants is 25. The participants took the test approximately two months before the study is conducted. Another proficiency test was conducted prior to the research (Cambridge Proficiency test).Two students were excluded from the beginner group as their proficiency test scores were high. The excluded students' results were not included in the study.

Data Collection Procedure

The reading texts are chosen from the textbook "Prime Time 1" and "Prime Time 3" (Evans & Dooley, 2013) which are also used for English instruction in the institution. Eight reading texts for beginner and eight reading texts for pre-intermediate students were chosen for the study. The researcher made sure that the passages were not read prior to the study. As can be seen the number of words per reading passage in each group were controlled. The texts chosen for the study were also controlled by the researcher in terms of their appropriateness in proficiency level. The texts' proficiency levels were measured by Raygor Readability Estimate (1977) and the texts were found to be appropriate for the study.

Table 1. Selected reading passages and word counts

ELEMENTARY GROUP READING TEXTS	PRE-INTERMEDIATE GROUP READING TEXTS
• Mall of America (136 words)	• Take a deep breath (205 words)
• Weekend Markets (109 words)	• John's travels (197 words)
• Climate (128 words)	• The story of Google (180 words)
• Pompeii (101 words)	• Lady Gaga (195 words)
• Ancient Egyptians (107 words)	• Chinese Opera (200 words)
• The Groovy 1960s (123 words)	• Matt of the Antarctic (200 words)
• Machu Picchu (144 words)	• The Appalachian Trail (210 words)
• Native Americans (133 words)	• Caves (215 words)

In general, repeated reading procedures follow two directions; the text is either modeled by the teacher or by an audiotape (assisted) or the text is read without modeling (unassisted). The benefit of assisted reading was discussed by Reitsma; reading while listening helps beginner learners to decode uncommon words. Provided that readers are presented with immediate correct spoken form, they may improve fluency (1988). Most of the studies focused on either on assisted or unassisted reading. The current study will integrate the two models to see if combined repeated reading helps to develop the fluency of readers in different levels of proficiency. The texts were controlled for the vocabulary difficulty, length and grammar structures. The mean word length of beginner level text is 122 words whereas the mean word length of pre-intermediate level text is 200 words.

It was ensured that the participants know at least 98% of the words in the given text. Prior to reading sessions, the participants were instructed on the new vocabulary. The new vocabulary was explicitly taught making use of their L1. Furthermore, "The Raygor Estimate Graph" (Raygor, 1977) was applied to the texts to confirm the difficulty of the texts.

Procedures

The procedure of the treatment is shown below;

Table 2. Procedures

Measure	Sequence of Treatment	Description
Pre-test		
	Reading 1 (unassisted reading)	Participants read silently and record time.
	Reading 2,3,4 (assisted reading)	Participants read the passage with the audiotapes.
	Reading 5,6,7 (unassisted reading)	Participants read the text silently and record their time in reading 7.
Post-test		

Data Analysis Procedure

For this study, the combined reading sessions started towards the middle of the term and lasted for five weeks. About 30 minutes were spent on the procedure. All the students in the class participated in the combined reading activity except for those who were absent in some sessions. The participants were told to maintain their comprehension while reading and asked to keep a record of their readings. Reading rate was measured by timing the participants' oral reading and was checked by timing an audiotape of their performance. Oral reading rate was represented in words per minute (wpm) for each test passage. The first and the last readings were evaluated as pre and post-tests. T-tests were used for beginner and pre-intermediate groups in order to understand whether the treatment had effect on their reading fluency. Following the t-tests, to understand which group of learners benefited more from the treatment, difference between the two groups was analyzed.

Findings

The purpose of the study was to find whether combined reading treatment helps to develop reading rate of learners with different levels of proficiency and to see which group of learners benefit more from the treatment. Reading rate was defined as the number of words read per minute.

Table3. Results of T- tests of Beginner Group

	t	df	Mean Difference
Pre-test	11,457	15	45,563
Post-test	8,680	15	89,688

The table above shows that there is a significant difference between pre-test and post- test scores of the beginner group *(p=.00).* This results shows that participants improved their reading rate.

Table 4. Results of T-Test for Pre-Intermediate Group

	t	df	Mean Difference
Pre-test	55,280	18	96,526
Post-test	81,965	18	195,105

Pre-intermediate group's analysis show that pre-intermediate group also improved their reading rate significantly *(p=.00).*

The second research question of this study aimed to explore which proficiency group of learners' benefits more from combined repeated reading activities. When the results of the both groups were analyzed, it can be seen that the difference between means of the both groups show that the pre-intermediate group benefited more from the treatment (p>.05).

Discussion

Restatement of the Problem

Fluency is an important part of reading ability. It can also be considered as one of the indicators of comprehension. In order to help L2 learners develop their comprehension, automaticity in the word recognition skills is required. Combined reading (assisted and unassisted repeated reading) activities may help learners develop their reading fluency and comprehension as readers move from learning to read to reading to learn. Studies showed that repeated reading activities may contribute to comprehension (Taguchi & Gorsuch, 2010; Dowhower, 1987; Rasinski, 1990; Levy, 2001). Nonetheless, research in reading in L2 still needs further evidence to reach stronger claims on the effects of repeated reading on the development of reading rate.

Interpretation of the Findings

The results obtained from independent t-tests clearly indicate that combined reading activities increased both group of learners' reading rates. Based on the duration of the treatment, it can also be suggested that combined reading activities can be conducted in limited periods of time. The findings of this study support the findings of earlier research (Gorsuch & Taguchi, 2010; Reitsma, 1988; Rasinski, 1990; Shany & Biemiller, 1995; Dowhower, 1987).

Furthermore, the fact that pre-intermediate participants benefited more from the combined reading activities support the finding of Dowhover who found that reading along approach has been more beneficial for transitional learners (1987). Another reason for advantage of pre-intermediate group can be explained by the fact that the group had more exposure to English compared to beginner group. That is, pre-intermediate group might have started building automaticity in reading.

Applications

This study will have implications particularly for L2 classroom. Teacher may use assisted repeated sessions to improve their learners' reading rate and fluency. Allington stated that lack of fluency is an indicator of poor reading which is seldom treated (1983). The issue is important as mentioned before as the lack of fluency affects comprehension. In countries like Turkey where L2 learners have limited input sources, reading comprehension is an important medium for developing L2 proficiency (Gorsuch & Taguchi, 2010). Combined reading in that sense may help learners to gain a better understanding of the text and improve their comprehension skills. Teachers can start repeated assisted reading

activities in pre-intermediate group so that students benefit more from the treatment. Furthermore, combined reading is easy to adopt in different curricula (Dowhower, 1987) which is not expected to pose any burden to language teachers.

Conclusion

In this study with university students in Turkey, a five-week combined reading activities (assisted and unassisted repeated reading activities) were found to be effective in increasing reading fluency. Previous studies conducted so far have also shown that combined reading activities or assisted and/or unassisted reading activities contributed to reading fluency of the learners (Dowhover, 1987; Levy, 2001; Taguchi & Gorsuch, 2010; Taguchi, Gorsuch, Maass & Snipp, 2012).Pre-tests and post- tests of the beginner and pre-intermediate groups indicated that there is a significant difference between the reading rates of the participants. Following combined reading activities the reading fluency of the both groups increased. Regarding the second research question, it was found that participants in pre-intermediate level benefitted more from combined reading activities. The reason behind this can be due to the fact that they had been exposed more to the target language. So, the research hypothesis of the study is confirmed. So it can be suggested that combined reading activities seem to be effective in increasing readers' fluency. Considering the fact that the study lasted for five weeks and there is a significant effect of combined reading activities. Teachers can make use of combined reading activities in their classrooms to increase their students' fluency which may also help their comprehension abilities.

Suggestion for Further Research

As the study was conducted in a period covering a five-week period, future research may adopt longitudinal perspective to see long term effects of combined reading. Furthermore, studies employing a larger number of participants may show more significant effects of treatment. What's more, further studies with different texts and higher level of proficiency may help to highlight the importance of combined reading. Finally, the ability to transfer can also be measured in the following researches.

Limitations and Delimitations

The results of the study should be viewed in light of its limitations; the treatment was limited to five weeks. Furthermore, the number of the participants was limited due to institutional constraints.

Throughout the treatment due to absenteeism, some participant's reading times were not recorded. Two students in the beginner group had to be excluded from the study as their proficiency test scores indicated a higher proficiency level.

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