

EFFECTIVENESS OF USING MEDIA GAMES TO IMPROVE READING FLUENCY OF ELEMENTARY SCHOOL STUDENTS

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ABSTRACT

Primary school students aged 9-10 years or grade IV of primary school are generally fluent in reading. However, there are still students who are not fluent in reading at elementary school X in Sijuk village. For this reason, the researcher conducted a study with the aim of knowing the effectiveness of reading fluency through a game intervention model. The intervention model used is in the form of game media such as picture cards, hand puppets, and letter alphabet boards arranged for 7 meetings. This study used a quantitative approach, namely the quasi-experimental method with a research design (one group pretest-posttest design) on 3 elementary school students in Sijuk village. The data collection technique in this study used a measuring instrument called the Early Grade Reading Assessment (EGRA). the number of participants who took part in the pretest was 8 students of SDN 01 Sijuk village aged 9-10 years. In the implementation of the intervention 5 students did not attend regularly, and when the posttest was carried out only 3 students. The EGRA test consists of 7 sections, but this study used 6 sections. The sections consist of letter recognition, distinguishing initial sounds, reading groups of letters that are not meaningful, fluency in reading aloud, reading comprehension, and listening comprehension. The data analysis technique used Wilcoxon non-parametric. The results of hypothesis testing show that there is a significant difference between pretest and posttest scores, which means that the intervention has an impact on reading fluency. Thus it can be concluded that the intervention is effective.

Keywords: Reading, model, intervention, EGRA

1. PREFACE

The process of receiving and absorbing information is carried out by individuals through an activity called reading. According to Tarigan (1994), the ability to read is one of the important things in communicating to express ideas. In line with Tarigan, reading activities also have a major impact on the progress of a nation (Krismanto et al., 2015). This is in line with the opinion of Neumann et al. (2008) who attribute fluency and reading comprehension to children's language development. A number of other studies have also reported the same conclusion that there is a relationship between reading fluency and reading comprehension in children (Veenendaal et al., 2015). Thus, reading comprehension and fluency have been applied early in elementary school students.

Various studies show that students' reading skills in Indonesia have decreased. This is evidenced by the results of the 2018 Program Student International Assessment (PISA) test in Indonesia which received an average score of 371 in the reading category. This figure has decreased because previously Indonesia received an average of 402 in 2009 (Kemendikbud, 2022). Another assessment was also conducted by the Progress in International Reading Literacy Study (PIRLS) 2011 which showed that reading skills in grade IV elementary school students were in the low category (Mullis et al., 2007). Based on the findings in the field through observations and

interviews at SD X Sijuk, Belitung Regency supports the results of the study. One of the teachers we interviewed said that in this school there are still many students who have difficulty reading, totaling 13 people. Many teachers have difficulty in teaching them because the information or learning materials delivered are not well understood (B. Prebiyanto, personal communication, March 15, 2023).

The difficulty of reading according to Logan (1997) is due to the symbols or codes that must be completed to understand the words in the reading. In addition, there are also other causes that underlie children's difficulties in reading, one of which is the lack of early reading skills (NICHD, 2000). Based on research from USAID in using the Early Grade Reading Assessment (EGRA) measuring instrument found elements of early reading, namely: (a) letter recognition; (b) distinguishing initial sounds; (c) reading groups of letters that are not meaningful; (d) reading aloud; (e) reading comprehension; (f) listening comprehension; (g) Indonesian vocabulary; and (h) dictation.

Based on a search for previous research on reading skills interventions, Abbas (2020) conducted a study of an intervention program using hand puppets and there were differences between pretest and posttest scores. Added to the Hasmi study (2017), through an intervention program using picture cards. The results showed a significant difference in beginning reading skills before and after the intervention. There was an increase in scores from 56% at the beginning of the test then to 68% for the final test. Furthermore, research from Retaminingrum (2018) using the EGRA measuring instrument produced findings if reading fiction and non-fiction reading is significant to reading comprehension skills.

The explanation of previous studies can be concluded if the use of game media can improve early reading fluency in elementary school students. Therefore, researchers are interested in testing the effectiveness of reading fluency by combining various game media in elementary school students aged 9-10 years.

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2. RESEARCH METHOD

This research was conducted on 8 participants at X Sijuk Elementary School with the following characteristics: (a) participants were students in grade 3 or grade 4 of elementary school; (b) participants' age was between 9 - 10 years old; and (c) participants had limitations in reading page.

This study used a quasi-experimental method with a one group pretest-posttest design to see the results of the treatment given with the same measuring instrument. This design only uses one group to see the results of treatment (Hastjarjo, 2018). The dependent variable of this study is reading fluency while the independent variable is game media. The purpose of this study is to see the effectiveness of the intervention prepared by the researcher on reading fluency. There is additional data in the form of observation and interview results.

This research was conducted at Primary School X Sijuk in Belitung Regency. School X Sijuk is a public school that has 6 classes with 9-15 students. The school has facilities such as classrooms,

ceremonial and sports fields, library, teachers' room, and toilets. There is also a simple canteen that sells food and drinks made by SD X Sijuk teachers. Lessons taught in each class include Mathematics, Indonesian Language, Natural Science, Social Science, Islamic Religion, and Sports.

The researcher collected data from the participants based on the results of an interview with one of the teachers at X Sijuk Primary School on March 14, 2023 totaling 13 people. Then we conducted a pretest using the EGRA measuring instrument on March 27, 2023 and continued the intervention from March 28, 2023 to April 3, 2023. After completing the intervention, it was followed by a posttest on April 4, 2023.

Table 1
Intervention Schedule of Reading Fluency

Intervention	Training	Materials	Time (minute)	Tools
	Pretest	EGRA	20	Pencil
first	Get to know the letters of the Alphabet consisting of 26 letters	Provide activities by giving examples of letter names through voice and singing and drawing letters	60	Letter board
second	Recognize letter sounds through words	Learn to read (how to quickly learn to read) Good at reading and thorough and fluent in reading	60	Use consonant book that is “ <i>Cara Cepat Belajar Membaca Pandai Membaca</i> ”
third & fourth	Repeating recognizing letters of thlne alphabet as well as, identifying consonant sounds	Sound (thorough and fluent reading) repeating Recognizing Letters (I Know Letters and flashcard	60	Using book “ <i>Teliti dan lancar membaca dan Aku Mengenal Huruf</i> ” and our flashcard
fifth	Repeating the material recognizes 26 letters. Continue reading the storybook	Using Animal storybook	60	Flashcard and Hand puppet
sixth	Reading storybook	Using Animal storybook	60	Hand Puppet
seventh	Reading storybook	Using Animal storybook	60	Hand puppet
	Posttest	EGRA		Pencil

Researchers used the Early Grade Reading Assessment (EGRA) research instrument which consists of 7 parts, namely: letter name identification, segmentation (phoneme or syllables), non-word reading, oral reading fluency, reading comprehension, listening comprehension, vocabulary, and dictation. The EGRA measuring instrument is used to see the basic reading ability of a child according to his age stage.

This study used the Wilcoxon non-parametric data analysis technique. The reason for using the Wilcoxon non-parametric analysis technique is that the results are visible because the sample

used is small, totaling 3 students. The reduction in the number of participants from 13 students to 3 was due to the habit of not going to school on certain days so that those who did not go were declared absent.

3. RESULT AND DISCUSSION

This section will discuss the results of the reading fluency intervention research after the intervention. Researchers use the Early Grade Reading Assessment (EGRA) as a reference in assessing the success of the intervention with 6 parts, namely letter recognition, distinguishing initial sounds, reading groups of letters that are not meaningful, reading fluency, reading comprehension, and listening comprehension. The following scores obtained before the reading fluency intervention are compiled into a table 2.

Table 2
EGRA Score

Section	Pretest			Posttest		
	Am	Zk	Dk	Am	Zk	Dk
Letter Recognition	52	13	52	40	38	65
Distinguishing Initial Sounds	50	0	50	50	60	40
Reading Non-meaningful Letter Groups	26	0	26	7	0	17
Read Aloud Fluency	43	0	43	62	16	76
Reading Comprehension	3	0	5	4	5	5
Listening Comprehension	67	0	100	67	100	100

Based on the EGRA pretest and posttest score table 2 it shows the difference in scores between before and after the intervention in each section. Participant 1 experienced score differences in letter recognition, reading meaningless letter groups, reading fluency, and reading comprehension. In participant 2 almost all experienced score differences, but only Reading Meaningless Letter Groups were the same. While in participant 3 experienced score differences and only 2 parts were the same, namely reading comprehension and listening comprehension.

After collecting data from the pretest and posttest results, the researcher conducted an analysis test using SPSS with the Wilcoxon non-parametric analysis technique. This technique is used for small samples so that the results will be seen. The first participant has a score of $Z = -0.184$, $p > 0.05$ which means that there are no significant results on the intervention provided, but there is a difference in scores between before and after the test. Likewise with the third participant with a score of $Z = -0.730$, $p > 0.05$. While in the second participant with a score of $Z = -2.023$, $p < 0.05$ indicates that the intervention results are significant and there is a change in scores between before and after the test.

Table 3
Wilcoxon Match Pairs Test

Participant	Z score	Sig.(2-tailed)
Am	-0,184b	0,854
Zk	-2,023b	0,043
Dk	-0,73b	0,465

The intervention used game media such as letter boards, hand puppets, storybooks, and picture cards coupled with consonant letter material. The arrangement was carried out for 7 days with different materials to create a variety of interventions. On the first day the researcher focused on

the basis of reading, namely the introduction of letters such as shapes and sounds. Then on the second to third day, researchers began to introduce consonant letters through the books "How to Quickly Learn to Read Good at Reading" and "Thorough and Fluent Reading and I Know the Letters". While introducing consonants, researchers began to remind students' alphabetical understanding through picture cards. Picture cards contain letter shapes and words that begin with alphabetical letters and pictures of the word. Furthermore, the fifth and seventh days began to use hand puppets as props in visualizing the contents of storybook reading. This is done to train the mention of words in a sentence.

4. CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the research conducted related to reading fluency intervention using game media, it can be concluded that there is a change in scores between before and after the EGRA test. This shows that the intervention is successful and can be applied to elementary school students.

It is recommended that there should be sufficient time to carry out the intervention so that it does not interfere with student activities at school X in Sijuk village. In addition, further research can add more participants to represent the population related to reading fluency intervention.

As a theoretical suggestion in this study, hopefully it can be strengthened again regarding the understanding of the Early Grade Reading Assessment (EGRA) measuring instrument, especially its parts.

A suggestion for participants is to be committed to the intervention. Teachers can assist them in maintaining their attendance during the intervention time period. Suggestions for parents are that the interventions taught can be applied in learning activities at home and get full support from both of them. In addition, further research can add more participants to represent the population related to reading fluency intervention.

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