THE IMPACT OF USING E-BOOK AND P-BOOK IN STUDENTS' READING ACHIEVEMENT

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ARTICLE INFO	ABSTRACT
	This research aimed at finding out the significant different impact between using e-book and p-book in students' reading achievement at the third grade of MTSN 4 Jeneponto. The researcher used a quasi-experimental research with two group pretest-posttest which was carried out online during the covid-19 pandemic. The sample was class IX A and IX 18 students. The instrument of this research was reading test. The result of the research showed that the value of t-test in terms of accuracy was 3,509. It was higher than the t-table namely 2, 11991 at the level of significant (p) = 0, 05 with degree of freedom (df) = 16. The differences between t-test and t-table value was very significant. It means that the Null Hypothesis (H_0) was rejected and Alternative Hypothesis (H_1) was accepted. Therefore, it can be concluded that using P-book is giving more positive impact than using E-book in students' reading achievement at MTSN 4 Jeneponto. *This is an open access article under the CC BY-SA license.*

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INTRODUCTION

According to Szapkiw (2012) in her Doctoral dissertation and project under the title "Do students using electronic books display different reading comprehension and motivation levels than students using traditional print books?" has shown that there are no significant differences in either reading comprehension and motivation levels based on the book format. On the other hand, Reid (2016) in his Thesis "EBook and Print books can have different effects on literacy comprehension" has shown different English with previous researchers. He was shown that "EBooks contain engaging reading features that help students improve reading comprehension. Multiple implications will help teachers improve their curriculum with the used of eBooks along with professional development".

Based on the previous observation in teaching English at MTSN 4 Jeneponto, teachers used printed books (P-book) in their teaching activity. But as we know that in this pandemic situation, teachers should use electronic book (e-book) as a tool to help the learning process. So to solve the problem above the researcher wants to find out the impact of these tools. It was held in class IX of MTSN 4 Jeneponto, and the researcher intends to discuss "The Impact of using E-book and P-book in students' reading achievement at The Ninth Year Students MTSN 4 Jeneponto".

RESEARCH METHOD

This research used quasi-experimental research that consisted of pre-test, treatment and post-test in conducting the research. It is designed to know whether there was a change to the sample after giving treatment. The pre-test must be followed by students in experimental class and control class before giving treatment using E-book and P-book. The post-test was conducted to find out the change of the students after being treated.

In this study, the population was all of the third grade students of MTSN 4 Jeneponto that consisted of 4 classes with 60 students in academic year 2020/2021. The researcher used purposive sampling. The sample took from class IX A and IX B consisted of 18 students.

The instrument of the study was reading test. The researcher t-test to know the result of the study. It aimed to find out the significant different impact between using E-book and P-book in students' reading achievement at the third grade of MTSN 4 Jeneponto.

RESULT AND DISCUSSION

This chapter discusses findings and discussion of the research. The part of findings presented the students' reading achievement after giving treatment, the students' rate percentage and frequency, and hypothesis testing. While in discussion explained the result of the data analysis in details.

The Students' Rate Percentage and Frequency in Experimental Class

Table 1. The Students' Score of Experimental Class

Classification	Score	Pre-Test		Post-Test	
		F	%	F	%
Excellent	96 – 100	0	0	0	0
very good	86 – 95	0	0	0	0
Good	76 – 85	0	0	0	0
fairly good	66 – 75	0	0	0	0
Fair	56 – 65	0	0	0	0
Poor	46 – 55	6	66,67%	0	0
very poor	0 – 45	3	33,33%	9	100%
TOTAL		9	100%	9	100%

Based on the rate of percentage on the table 1, in pre-test it is found that there is not students got excellent classification, very good classification, good classification, fairly good classification, and fair classification. Students got poor classification 6 (66,67%), and students got very poor classification 3 (33,33%). Then, in post-test it was found that no one student got excellent classification, very good classification, good classification, fairly good classification, fair classification, poor classification. Students got very poor classification 9 (100%).

The Students' Rate Percentage and Frequency in Control Class

Table 2. The Students' Score in Control class

Classification	Score	Pre-Test		Post-Test	
		F	P	F	%
Excellent	96 – 100	0	0	0	0
very good	86 – 95	0	0	0	0
Good	76 – 85	0	0	3	33,33%
fairly good	66 – 75	7	77,78	2	22,22%
Fair	56 – 65	0	0	0	0
Poor	46 – 55	0	0	0	0
very poor	0 – 45	2	22,22%	4	44,44%
TOTAL		9	100%	9	100%

Based on the rate of percentage on the table 2, in pre-test it is found that there were not students got excellent classification, very good classification, good classification, fair classification, and poor classification. Students got fairly good classification 7 (77,77%), and very poor classification 2 (22,22%). Then, in post-test it was found that there were not students got excellent classification, very good classification, fair classification, poor classification. Students got good classification 3 students (33,33%), fairly good classification 2 students (22,22%), and very poor classification 4 students (44,44%).

Mean Score and Standard Deviation of Using E-book and P-book

Table 3. Mean Score and Standard Deviation

Group	Mean Score		Standard Deviation	
	Pre-test	Post-test	Pre-test	Post-test
Experimental Class	41,11	33,89	10,24	8,2
Control Class	60	61,11	21,36	21,78

Based on Table 4.4, indicated that in experimental class the mean score of pre-test and post-test was decreased. In the mean score of pre-test was 41,11 while the students' mean score of post-test was 33,89, and the standard deviation of pre-test was 10,24 while the standard deviation of post-test was 8,2. In control class the mean score of pre-test and post-test was improved. In the pre-test the students' mean score was 60 and in the post-test the students'

reading achievement was improved became 61,11. The standard deviation of pre-test in Control class was 21,36, while the standard deviation of post-test in Control class was 21,78.

Hypothesis Testing

To know the level of significance of the pre-test and post-test, the researcher used *t*-test analysis on the level of significance (p) = 0.05 with the degree of freedom (df) = N-2 (18-2= 16), where the number of subjects (students) the value of the table is 2,11991 and the *t*-test value (3,509) It means that the null hypothesis (H0) was rejected and alternative hypothesis (H1) was accepted.

The used of E-book and P-book have been conducted investigated from various studies. Straiger (2012) reviewed 24 studies conducted in post-secondary institution between 2006-2011 on e-book used around the world. He found that roughly 50% of participants, on aggregate, had used e-books. E-books present several benefits to students to improve their reading achievement in this technology era. One study (Kiriakova, Okamoto, Zubarev, & Gross, 2010) found that 85,5% students preferred an e-book than p-book because e-book more portable, fun and easy to used.

On the other hand, there are some academic community who worry that adoption of e-books may lead to inferior scholarship. Staiger (2012) laments that students used, rather than read, e-books, making a distinction between the practice of reading and referencing. The closest students come to reading is the habit of power-browsing through e-texts, "they do not immerse themselves in them for extended periods of time in order to grasp their overall argument and point of view" (Staiger, 2012, p. 357). Given this, he votes strongly in favor of print books over their electronic.

Research by Weisberg (2011) discovered there was no significant different in learning outcomes between students who used e-book and P-book. In addition, Connell, Bayliss, and Farmer (2012) found that although e-book students more slowly to understand the content than p-book readers. The overall comprehension of both groups of students was the same.

Based on the previous findings above, the researcher would be present the result of the research that have been explained before. This research proved that using p-book was given more positive impact than using e-book in students' reading achievement. Amjad M in his journal College Students' Usage of and Preferences for print and Electronic Textbooks (2019) showed that the highest percentage of students spend between 1 to 3 hours a week on reading which used p-book. However, for e-textbooks, the highest percentage of students spend only less than 1 hour per week on reading concluded that. This part deals with the interpretation of the findings.

The pre-test was conducted on September 09th 2020 in control class and September 10th 2020 in experimental class. The topic was taken from syllabus that was Narrative text. The researcher asked the students to answer the question on multiple-choice and true-false test then conducted treatment during 6 meetings.

In the six meeting of treatment, the students using P-book had faster reading time than students using E-book. It deals with the previous finding Connell, C., Bayliss, L., & Farmer, W. (2012), in the thesis "Effect of E-book readers and tablet computers on reading comprehension" that indicated those reading Printed Materials had faster reading time than those reading from E-book readers and tablets. They also showed that participants found the tablet the most usable, followed by the E-book reader, and the printed material was considered the least usable.

1. The impact of Using E-book and P-book in Students' Reading Achievement

After analyzing the data, it was founded that the mean score of using E-book (experimental group) was 33, 89 and the mean score of P-book (control group) was 61, 11 after treatment of both. The students' pre-test's mean score was fair, it was 60. And the students' in post-test's mean score was fair, it was 60, 1. It means that the students' reading achievement had improved. The students' in pre-test's standard deviation was 21,36 and the standard deviation of students in post-test had improved become 21,78.

2. The significant difference of t-test and t-table

The result of the t-test statistical analysis showed that there was significant difference between the experimental group who got treatment by using E-book and control group who got treatment by using P-book. The statement was proved by the t-test value (3,509) which higher than t-table value (2,11991), at the level of significance 0.05 and degree of freedom (N1 + N2) – 2 = (9 + 9) – 2 = 16. It means that the null hypothesis (H0) was rejected and alternative hypothesis (H1) was accepted.

The data of the research showed that there was significant different impact of students' reading achievement before and after using e-book and p-book. Using p-book was given the higher score than using e-book. This p-book was beneficial for students because it can improve students reading achievement on reading test. The same thing was said to Jeong (2012), in his thesis "A comparison of the influence of electronic books and paper books on reading comprehension, eye fatigue, and perception" has found that there is compared to eBook, p-book appears to enable better in reading comprehension and has a significant effect on quiz scores. It also deals with the previous finding Mikayla N (2015) in her thesis "Printed books versus digital books" conclude that collage ages students that read for both school and pleasure prefer to read from printed books, and they are not likely to change the platform that they read on.

Kang, Y. Y., Wang, M. J. J., & Lin (2008) also support this using P-book in students' reading activity in their thesis "Usability evaluation of EBooks," have found that reading an EBook caused significantly higher eye fatigue than reading a Commercial Book (Cbook). They also found that reading a C-book generated a higher level of reading performance than reading an E-book. It means that by using this P-book, students can get some positive impact learning process especially in their reading achievement. From the discussion above, the students at the third grade of MTSN 4 Jeneponto have a good impact in their reading achievement by using P-book.

CONCLUSION

Based on the discussion proposed in the previous findings, the researcher concluded Using P-book is better and give positive impact than using E-book in students' reading achievement. It proved by the students' mean score of pre-test and post-test in experimental class and control class. The mean score in experimental class before and after treatment (41,11 becomes 33,89) and in control class before and after treatment (60 becomes 61,11) with t-test is higher that t-Table (3,509> 2,11991) that means there is a significance difference between using E-book and P-book in students' reading achievement.

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