

# Assessing the Impact of “Belajar Membaca Lancar” and “Membaca Bersama Budi” Applications on Early Reading Proficiency: A Comparative Study

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## ABSTRACT

This study aims to determine the effectiveness of the application of *Belajar Membaca Lancar* and *Membaca Bersama Budi* on improving early reading skills and whether or not there are differences in learning outcomes of the two applications. This type of research uses comparative research with a quasi-experimental design. The data collection technique uses tests, observations, and documentation. The data analysis technique used Independent Sample t-test and Gained Score. The results of this study were that learning to read beginning with the application media for *Belajar Membaca Lancar* was more effective. It is proven by the comparison value of n gain of the two applications was  $1.25641 > 1$ . In this study, there was no difference in the results of the two applications with a calculation of  $0.50 > 0.05$ . It showed that the two applications, namely *Belajar Membaca Lancar* and to *Membaca Bersama Budi*, could be applied as an alternative learning media to improve the initial reading ability of students.

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## 1. INTRODUCTION

One of the areas studied in elementary school is the Indonesian language, consisting of listening skills, speaking, writing, and reading. For example, Tarigan et al., (2018) suggest that reading is an essential skill that every human being must possess. These skills are inseparable from human life. Therefore, reading skills are essential skills that are very important for human life. In addition, reading skills are a means to capture information in writing. Learning activities at school cannot be separated from reading. The reading ability of students in the early grades is their foundation or basis for achieving success in learning activities. Students will have difficulty in the next reading stage if their reading base is not strong in the early grades. Learning to read in elementary school is distinguished by low and high grades. Learning to read in low grades is usually called pre-reading learning, while in high grades, it is called advanced reading learning (Suriani and Efendi 2015). According to Dhieni 2005 in (Pertwi 2016), Beginning reading is an activity that includes several integrated activities such as recognizing letters and words, making sounds and meanings, and drawing conclusions about the purpose of reading.

According to Herlina (2019) and Simbolon (2019), early reading predominantly involves the visual interpretation of written symbols, where readers translate letters, syllables, and sentences into corresponding sounds. This view is somewhat echoed by Munthe and Sitinjak (2019), who attribute to Dewi the definition of early reading as an activity centered on the recognition of letters and their phonetic sounds, which are then interpreted into words. Extending this understanding, Herlina (2019) cites Baraja to describe beginning reading as the process of learning to recognize letter symbols, their appropriate forms, and inherent meanings. These perspectives collectively underline that early reading fundamentally entails the recognition and interpretation of symbols and sounds into meaningful language. Thus, it can be concluded that early reading is an integrative process of decoding and comprehension, pivotal for language acquisition and literacy development.

The acquisition of early reading skills is a multifaceted process influenced by various factors that extend beyond simple pedagogical techniques. Previous research by Lamb and Arnold (1976), as reviewed by Rahim (2018), delineates these influences into four primary categories: physiological, intellectual, environmental, and psychological factors. Physiologically, a child's physical health, neurological development, and even gender differences play a critical role in shaping early reading capabilities. Intellectually, while intelligence is a contributory factor, it does not solely predict the success or failure in early reading, indicating that other forces are at play. Environmentally, the context of a child's upbringing, including familial socio-economic status and the literacy practices at home, significantly impacts their reading development. Psychologically, the child's motivation, interest, and emotional and social maturity influence their engagement and proficiency in reading tasks. This study aims to explore these dimensions comprehensively, investigating their interplay and individual impacts on early reading success to better inform educational strategies and interventions.

Early reading indicators are based on the level of achievement of child development in the Regulation of the Minister of National Education (Permendiknas) of the Republic of Indonesia Number 137 of 2014 concerning National Standards for Early Childhood Education (PAUD) (Herman, Saleh, and Islami, 2017), indicators of early reading ability are Recognize symbols for vowels and consonants, Be able to distinguish words that have the same initial letter, Be able to distinguish words that have different initial syllables The same, and 4) Able to arrange syllables into a word.

The use of media in learning is essential. Learning media helps teachers achieve learning objectives or effectiveness at that time. Hamrlik said that using learning media can increase interest in learning, increase motivation, stimulate students in learning activities, and provide effects on students. In addition, learning media is highly effective for conveying messages and learning content to students (Wahyuningtyas and Sulasmono 2020). For all elementary school students, not all media used in early reading learning can run effectively. Because at their age, they tend to be more interested in fun and interactive learning media or audio and visual media, such as media applications on Android. At this time, children are more interested in playing games on Android than studying or reading books. Therefore, digital media assistance is needed in learning, namely applications that are fun, and interesting for students. The application makes learning fun because it has pictures, sounds, text, and an attractive display. Students are happier to learn while playing and will understand the material more easily. Researchers use the application *Belajar Membaca Lancar* and read with the mind. The application makes learning more fun because it is equipped with pictures, sounds, text, and an attractive display so that students are happier to learn while playing and will be easier to digest the material.

Various applications can help students learn to read from the beginning. The application for *Belajar Membaca Lancar* is an Android-based application released by Solite Kids on June 20, 2017. This application can be used for children aged three years and over. This *Belajar Membaca Lancar* application helps children learn to read the letters of the alphabet from A to Z in a fun way. This app also teaches children to read essential words in daily life. The material in this application is about learning to read one-syllable, two-syllable, and three-syllable, and learning vowels, and consonants. This *Belajar Membaca Lancar* application is designed interactively and accompanied by interesting games and sounds, so children do not get bored while playing (Efendi, I., & Annisa, S. 2018).

*Membaca Bersama Budi* is an application to learn to read letters, syllables, and complete sentences. Sriksetra Studio released this application on May 12, 2016. *Membaca Bersama Budi* application can be used by children aged three years and over. *Belajar Membaca Lancar* is an application specially designed to teach preschool and kindergarten-age children in an effective and fun way. By using the *Membaca Bersama Budi* application, children not only learn to recognize the alphabet but also learn to read syllables and learn to read complete sentences. (Studio 2016)

The author's observations on several kinds of literature, namely, the results of research by Wahyuningsih and Hamdun (2021) in their research on "Comparison of the Effectiveness of Small Application Media: Learning Arabic with Voice with Comic Strips in Mastery of Mufradat for Class IV Students Muhammadiyah Elementary School Banguntapan." This research is quantitative research with a comparative research type. The design of this study used a quasi-experimental, so this study did not use a control group due to the limitations of the research subject. Data collection techniques used interview, observation, and test techniques. The test technique was carried out twice: the pretest (students' initial ability test before being given a small application media: learning Arabic + Voice and comic strips) and the posttest (final ability test after being given the two media). Test instrument for mastery of mufradat correlation formula Product Moment with the help of Microsoft Excel 2016 and has been tested for reliability using the Cronbach Alphas with the help of Microsoft Excel 2016. The data from this study were analyzed with descriptive statistics to describe the distribution and description of the data from the variables. Moreover, parametric statistics were used to test the hypotheses. Based on the results of data analysis, it can be concluded that mufradat with small application media: Learning Arabic + Voice is more effective than comic strip media.

A similar study by Moraza and Nurhastuti (2021) in their research on "Reducing Early Reading Errors in Dyslexic Children (X) Through Learning Media Based on Small Game Applications." This research is a type of quantitative research using the SSR (Single Subject Research) method with an ABA design where there are three conditions, A1 is the condition of the child before the intervention is given in the form of a small game, B is the condition of the child when the intervention is in the form of the game and A2 condition after no longer given intervention. In the final data obtained in A1 of this study, children scored in the group of words containing the double consonant "ng" by 20% and in the group with the double consonant "ny" by 13%. In condition B, the final data obtained for the word group with the double consonant "ng" is 97%, and the word with the consonant "ny" is 100%. In the A2 condition, the data obtained stayed at the consonant "ng" by 97% and in the group with the consonant "ny" by 100%. application-based learning media can reduce early reading errors in dyslexic children.

Similar findings were obtained by Yolanda and Damri (2022) in their research on "The Effectiveness of Android-Based Marble Applications in Improving Beginning Reading Ability for Dyslexic Children in Elementary School." This study uses an experimental method with a single subject (SSR), with the design being ABA. ABA design is an SSR design that shows a causal relationship between the dependent and independent variables. The child's ability in each condition is to get a score of 0% in condition (A1). When given the intervention, the score obtained by the child at the beginning of reading in terms of pronouncing vowels increased to 40%, and in condition (A2), a score of 93% was obtained. The comparison of the results obtained from each data has increased. So it can be stated that the Android-based Marbel application effectively improves early reading skills in dyslexic children at SDN 157/III Pending Mudik, Kerinci Regency.

Also found by Ratu Afiyati and Iswara (2020) in their research on "Learning Reading the Beginning Using Educative Game Media Learning Current Android Versions." This study uses experimental research methods. Data collection techniques in this study were reading tests, observations, interviews, and documentation. This study began with a pretest to determine initial ability, and then students were given learning treatment with educational game media *Belajar Membaca Lancar*. After being treated with the media, students were given a posttest to determine the average difference between the pretest and the final test. Based on the results of the interviews, the five students stated that learning to read was easy

and fun. In addition, the reading test results showed that the posttest results improved significantly compared to the previous test results.

From some of the research findings above, it can be concluded that learning with application media can improve students' learning abilities. Researchers found research results on android-based applications from several searches on the themes raised. However, researchers did not find previous studies that compare two or more applications to help improve early reading skills. It just found that one application by games, or other learning media of reading skills. So, it was still do not comparison of two application that show which more effective to implement. As we know, in the digitalization era, there were so many interesting application of learning media that available in platform of android, we just need to download in Play store. We just choose the best one that appropriate with our learning topic or skill that we want to train to our students. Therefore, based on the explanation above, the researcher feels that it is essential to conduct comparative-based research by comparing the *Belajar Membaca Lancar* application and *Membaca Bersama Budi* application in early reading learning in order to find out which application is considered the most effective for students of class I MI Takhassus Al-Quran in improving reading skills. Beginning. From this background, the researcher will examine research on "Assessing the Impact of "Belajar Membaca Lancar" and "Membaca Bersama Budi" Applications on Early Reading Proficiency: A Comparative Study." The purpose of this study is to determine the effectiveness of the application of Belajar Membaca Lancar and Belajar Membaca Lancar on improving early reading skills and whether or not there is a significant difference between the learning outcomes of the *Belajar Membaca Lancar* application group and *Membaca Bersama Budi* application group.

## 2. METHODS

The approach used in this study is quantitative. This type of research uses comparative research with a *quasi-experimental* or quasi-experimental design. This research was conducted in May 2022 for the 2021/2022 academic year. The independent variables in this study were the application for *Belajar Membaca Lancar* and the application for *Belajar Membaca Lancar*. The dependent variable is the ability to read the beginning of class I MI Takhassus Al-Quran students. The population in this study were students of class I MI Takhassus Al-Quran, amounting to 16 people. From this number, the researchers divided into two groups, namely the *Belajar Membaca Lancar* application group and the *Membaca Bersama Budi* application group with the same amount. In this study, the control group was not used because of the limitations of the research subjects.

Data collection techniques using observation, test, and documentation techniques. Observation techniques are carried out directly or indirectly to obtain the data needed for research. Documentation is used to obtain data on the value of students during learning at school. The test technique was used to determine the extent of the initial reading ability of the first-grade students of MI Takhassus Al-Quran. The test was conducted twice, namely *pretest* and *posttest*. The *pretest* tests students' initial abilities before the application of *Belajar Membaca Lancar* and *Membaca Bersama Budi* is applied. Moreover, the *posttest* is the final ability test of students after the two media are applied. The test instrument grid for this research is as follows.

**Table 1.** Grid of Initial Reading Test Instruments

Indicators	Sub Indicators	Form of Problems	Number of Questions
Recognizing symbols for vowels and consonants	1. Shows symbols for by and reads	1. The Learners are asked to name letters, vowel sounds designated the researcher - Example questions: Read aloud the names of the following letters: (a, i, u, e, o) 2. Students are asked to name the letters, the sounds of the consonants	1,2

	2. Shows symbols for consonants and reads	designated by the researcher - Sample questions: Read aloud the names of the following letters: ( b, d, m, n, p)	3
Able to distinguish words that have the same initial letter	Grouping words that have the same initial letter	1. Students are asked to place words that have the same initial letter. For example table and eat	4,
Able to distinguish words that have the same initial syllable	Grouping words that have the same initial syllable	1. Students are asked to place words that have the same initial syllable. For example lice and nails	5
Able to arrange syllables into a word	1. Able to arrange syllables into a word 2. Students are able to read words that have been compiled	1. Students are asked to arrange syllables into words. For example, the -me and -ja becomes a table 2. Students are asked to read the words that have been arranged into sentences	6,7 8, 9,10

Based on table 1 above, we can see the grouping of problem that we want to train of reading skills of students. There are 10 questions for testing on students reading skills. There are four indicators that divided into some sub indicators, each indicator have some unique questions. From the question that formed, so it need validity and reliability testing . To find out the extent to which a measuring instrument, in this case a research instrument, can measure what should be measured, a validity test is carried out or provides evidence of the validity of the research instrument.

### 2.1 Validity Test

Validity is an indicator to show how much the measuring instrument can be trusted. The higher the validity, the more accurate the instrument (Andini and Fitria 2021). In the validity test, if  $r_{count} > table$ , the instrument or question is said to be valid. Moreover, vice versa, if  $r_{count} < table$ , it can be said that the instrument is not valid (Amanda, Yanuar, and Devianto, 2019). The initial reading ability test instrument in this study has been tested for validity using the *Product Moment 5%* significance with the help of *Microsoft Excel 2010*. Based on the test validity test, it was found that all questions obtained arithmetic of more than the table, so it can be concluded that all questions were valid.

### 2.2 Reliability Test

The reliability Test is an indicator test that shows the extent to which you can trust or rely on a measuring instrument (Amanda et al., 2019). Reliability tests are used to determine whether the measuring instrument is consistent if the measurement is repeated (Janna 2020). This test instrument has been tested for reliability using *Cronbach's Alpha* with the help of *Microsoft Excel 2010*. Ghazali (2013) describes *Cronbach's Alpha* value as if *Cronbach's Alpha*  $> 0.60$ , then it is said to be reliable, and if *Cronbach's Alpha*  $< 0.60$ , then it is declared unreliable (Nurjaya et al. 2021). Based on the reliability test, it was found that *Cronbach's Alpha* was  $0.937 > 0.60$ , so it can be concluded that all questions can be declared reliable.

## 3. FINDINGS AND DISCUSSION

### 3.1. Findings

It is known that the total population taken by all students of class I MI Takhasus Al-Quran is 16 people. Due to subject limitations, the entire population was used as research subjects and was divided

into two small groups, with eight students in each group. The following is the data from the *pretest* and *posttest* from the two groups: the Learning Application for *Belajar Membaca Lancar* and the Application for *Membaca Bersama Budi*. The research data were then analyzed based on the prerequisite test and hypothesis testing results. The prerequisite test consists of a normality and homogeneity test on the result *pretest* and *posttest* of the students' initial reading ability in grade I. After that, they tested the hypothesis or the effectiveness test.

In this study, the normality test on the data was carried out with the help of *Microsoft Excel 2010*. The normality test aims to determine whether the data obtained in the study are normally distributed or not. In research, the correct data is data that is typically distributed (Gunawan, 2020). The normality test adapts the *Kolmogorov-Smirnov* by adjusting the results of the calculation of  $L_{count}$  at a significance level of  $\alpha = 0.05$ . Therefore, the data obtained in this study is said to be expected if the value of  $L_{count} < L_{table}$ . Normality testing was carried out on the *Belajar Membaca Lancar* Application group and *post-test* *Belajar Membaca Lancar* Application group, *pretest* for the *Membaca Bersama Budi* group, and *post-test* for the *Membaca Bersama Budi* Application for the Group. The calculation results show that the test data for the *Belajar Membaca Lancar* Application and the *Membaca Bersama Budi* are typically distributed.

**Table 2.** Normality Test Results

Class	Variable Assessment	Learning To Read	Membaca Bersama Budi
<i>Pretest</i>	Average	61,25	63,75
	L-count	0,169	0,123
	L-table 0.05	0,454	0,454
<i>Posttest</i>	Average	87,5	82,5
	L- count	0,200	0,196
	L-table 0.05	0,454	0,454

Based on table 2. Normality test that the  $L_{calculated}$  from *Belajar Membaca Lancar* and read with mind  $< L_{table}$  is  $0.169 < 0.454$  and  $0.123 < 0.454$  it can be concluded that the variance is normally distributed. A homogeneity test is to find out whether the research data is homogeneous or not. The homogeneity test in this study used the homogeneity test of variance or *the Fisher F test* with the help of *Microsoft Excel 2010*. By drawing conclusions based on a significance level of 5% (0.05),

Based on the homogeneity test of the pretest group for *Belajar Membaca Lancar* and the Application *Membaca Bersama Budi*, it was obtained that the P value (2 tailed)  $>$  critical limit/significance level (0.05). It is homogeneous, and vice versa. By the above formula, the sample data is homogeneous because the P value (2 tailed)  $= 0.71 > 0.05$  significance level..

**Table 3.** Results of the Homogeneity Test

Variables	Results
Group 1	383.93
Variant Group 2	512,5
P Value (2 tailed)	0.71
	Homogeneity

Homogeneity test results obtained P Value (2 tailed) is 0.86. Then the sample data is homogeneous because the P Value (2 tailed)  $= 0.86 > 0.05$  (significance level) can be concluded that it is homogeneous. Hypothesis testing in this study was conducted to test whether there was a difference between the effectiveness of the *Belajar Membaca Lancar* Application and the *Membaca Bersama Budi* on the initial reading ability of the first-grade students of MI Takhassus Al-Quran Sintang. This hypothesis test uses *the Independent Sample T-Test*, *N-Gain Score*, and *Effectiveness test* techniques with the help of *Microsoft Excel 2010*. Criteria and assumptions for concluding *the Independent Sample T Test*  $H_0$  are

accepted: If the P-Value > Sig. 95% (0.05) or T count < Ttable then it shows there is no significant difference between the levels of effectiveness of the use of the Belajar Membaca Lancar Application with Membaca Bersama Budi Application on the initial reading ability of the students of class I MI Takhassus Al-Quran, and Ha is accepted: If the P-Value < Sig. 95% (0.05) or Tcount > Ttable, it shows that there is a significant difference between the levels of effectiveness of the use of the Application for Belajar Membaca Lancar with the *Membaca Bersama Budi* on the initial reading ability of the first-grade students of MI Takhassus Al-Quran.

**Table 4.** Independent Sample T Test Pretest

Variables	Result of Test	
	<i>Belajar membaca lancar</i>	<i>Membaca bersama budi</i>
Mean	61.25	63.75
P(T<=t) two-tail	0.82	P Value
t Critical two-tail	2.14	T <sub>table</sub>

Based on Table 4. results of hypothesis testing on *Pretest* obtained P Value (P two-tail) > Significant level (0.05) ie P Value = 0.82 > 0.05 (significance). Likewise, if viewed from Tcount (t stat) = - 0.24 < Ttable (t critical two-tail) 2.14 then Ho is accepted and Ha is rejected. Based on the results of the test scores, it can be concluded that there is no significant difference between the *pretest* level effectiveness of the use of the Application for Belajar Membaca Lancar and *Membaca Bersama Budi* on the initial reading ability of the first graders of MI Takhassus Al-Quran Sintang. The calculation of this hypothesis test can be seen in the table.

Then, based on the results of the *post-test* Application of Belajar Membaca Lancar and *Membaca Bersama Budi* uses the *Independent Sample T-Test*, *N-Gain Score*, and Effectiveness test techniques with the help of *Microsoft Excel 2010*. Criteria and assumptions for concluding the *Independent Sample T Test* Ho are accepted: If the P-Value > Sig. 95% (0.05) or T count < Ttable then it shows there is no significant difference between the levels of effectiveness of the use of the Belajar Membaca Lancar Application with *Membaca Bersama Budi* Application on the initial reading ability of the students of class I MI Takhassus Al-Quran, and Ha is accepted: If the P-Value < Sig. 95% (0.05) or Tcount > Ttable, it shows that there is a significant difference between the levels of effectiveness of the use of the Application for Belajar Membaca Lancar with the *Membaca Bersama Budi* on the initial reading ability of the first-grade students of MI Takhassus Al-Quran.

**Table 5.** Independent Sample T Test Posttest

Variable	Results of Test	
	<i>Belajar membaca lancar</i>	<i>Membaca bersama budi</i>
Mean	87.5	82.5
P(T<=t) two-tail	0.50	P Value
t Critical two-tail	2.14	T <sub>table</sub>

Based on table 5. *Independent Sample T Test Posttest*, the P-Value (P two-tail) of the two posttest data is 0.50. This value indicates that 0.50 > 0.05 (95% significance level) or Tcount (t stat) = 0.69 < ttable (t critical two-tail) = 2.14, it means Ho is accepted and Ha rejected. The amount of the test value shows no significant difference between the effectiveness of the application of Belajar Membaca Lancar and *Membaca Bersama Budi* on the initial reading ability of the first-grade students of MI Takhassus Al-Quran Sintang.

**Table 6.** Independent Sample T-Test Gain

Variables	Results of Test	
	<i>Belajar membaca lancar</i>	<i>Membaca bersama budi</i>
Mean	75.83	60.36
P(T<=t) two-tail	0.23	P Value
t Critical two-tail	2.14	T <sub>table</sub>

Based on Table 6. *Independent Sample T Test* gain of the Belajar Membaca Lancar Application and the *membaca bersama budi* obtained the P-Value of the two data gains of 0.23. This value indicates that  $0.23 > 95\%$  significance level or Tcount (t stat) = 1.25 < Ttable (t critical two tail) 2.14 means Ho is accepted and Ha is rejected. The coefficient test's magnitude shows no significant difference between the effectiveness of using the Belajar Membaca Lancar and *membaca bersama budi* on the initial reading ability of the first-grade students of MI Takhassus Al-Quran Sintang. The calculation of this test can be seen in the following table.

Hake's theory of Gain can also be seen to find out the difference in the effectiveness of a learning media in addition to using the *Independent Sample T Test*. Hake said the *gain score* is the difference between the *posttest* and *pretest* scores. The effectiveness of the application can refer to Hake's theory of normalized Gain. The Gain value formula is as follows. (Sumardi, Umami, and Azizah 2018)

**Table 7.** N-Gain Score Application Learning to Read

Pretest	Posttest	N - Gain Score	Percentage	Description
80	100	1	100	High
20	60	0,5	50	Medium
60	90	0,75	75	High
70	100	1	100	High
70	90	0,66	66,6	Medium
50	70	0,4	40	Medium
60	90	0,75	75	High
80	100	1	100	High
Total		6,066666667		
Average		0,758333333	75,83333333	
Description		High	Fairly Effective	

**Table 8.** N-Gain Score Application Membaca Bersama Budi

Pretest	Posttest	N - gain score	Percentage	Description
90	100	1	100	High
50	70	0,4	40	Medium
30	60	0,428571429	42,85714286	High
90	100	1	100	High
40	80	0,666666667	66,66666667	Medium
60	80	0,5	50	Medium
80	90	0,5	50	High
70	80	0,333333333	33,33333333	High
Total		4,828571429		
Average		0,603571429	60,35714286	
Description		Moderate	Quite Effective	

After that to determine the difference in the effectiveness of two applications by making decisions with the following criteria. If the value is  $> 1$ , then there is a difference in the level effectiveness between the two applications, namely the effectiveness value of the Belajar Membaca Lancar application is more effective than the effectiveness value of the *membaca bersama budi* application, if the effectiveness value = 1, then there is no significant difference between the effectiveness of the Belajar Membaca Lancar with *Membaca Bersama Budi* application, if the effectiveness value is  $< 1$ , then there is a difference in effectiveness, namely the effectiveness value of *Membaca Bersama Budi* application is more effective than the *Belajar Membaca Lancar* application.

$$\text{Effectiveness} = \frac{N-\text{Gain Group 1}}{N-\text{Gain Group 2}} \quad \text{Effectiveness} = \frac{6.066666667}{4.828571429} = 1.25641$$

Based on the above calculation, it is found that the practical value of the comparison of the two applications is 1.25641. This indicates that the effectiveness value is  $1.25641 > 1$ , and it can be concluded that the level of effectiveness of the *Belajar Membaca Lancar* application is more significant or influential than the *Membaca Bersama Budi* application.

Calculations using Test Independent, the N-Gain Score Test, and the effectiveness test show that the two applications are quite effective in improving the initial reading ability of first-grade students of MI Takhasus Al-Quran Sintang. However, the *Belajar Membaca Lancar* application is more effective in enhancing Beginning reading skills than the *Membaca Bersama Budi* application.

### 3.2. Discussion

Based on the formulation of the problem that has been described above, there are two objectives of this research, namely to determine the effectiveness of the *Belajar Membaca Lancar* application and *Membaca Bersama Budi* application in improving early reading skills and to determine whether or not there is a difference between the learning outcomes of the *Belajar Membaca Lancar* Application Group with *Membaca Bersama Budi* application group.

The calculations carried out have obtained results from comparing values and data analysis. It is known that there is no significant difference between student learning outcomes in the initial reading ability of the *Belajar Membaca Lancar* application group and the *Membaca Bersama Budi* application group. This is evidenced by the results of the average *pretest* and *posttest* of the two groups: the

average *pretest* and *posttest* for the Belajar Membaca Lancar application group were 61.25 to 87.5. The average *pretest* and *posttest* for the Membaca Bersama Budi application group were 63.75 to 82.5. In the *Independent Sample T Test* calculation, the result is  $0.50 > 0.05$ , which means  $H_0$  is accepted and  $H_a$  is rejected. The amount of the test value shows no significant difference between the effectiveness of the application of Belajar Membaca Lancar and *membaca bersama budi* on the initial reading ability of the first-grade students of MI Takhassus Al-Quran Sintang.

After conducting research and analyzing the data obtained, the researcher concludes that the application of *Belajar Membaca Lancar* is more effective in early reading learning for students than the application *membaca bersama budi*. It was obtained during the implementation of the two applications in the classroom. During the application of the Learning Reading Fluent application media in the classroom, the students were very enthusiastic and enthusiastic about the application. This result, in line with research result of Ken Nee Chee (2017), he said that from implementing mobile learning of reading skill so the students were easier, and more prefer to learn the skills of reading with the use of smartphone applications in teaching and learning process if compared to traditional method. Furthermore, integration of smartphone application can leverage motivation and interest, but not confidence. And in addition Ken Nee Chee discuss the implications of this study on the perspective of the potential of mobile learning especially for Chinese language skill.

Students learn by reading at the beginning. The display of this application is very interactive (audiovisual), and this application has many reading features and some fun and interactive game features. The learning atmosphere becomes fun, and the purpose of the initial reading learning can be achieved. This is intended when learning some students are given direct reading orders by the researcher, and students can read correctly and precisely. In this application, various kinds of learning-to-read features can be played by children, namely (1) Learning to read the letters AZ; (2) Learning to read AIUEO vowels; (3) Learning to read one syllable; (4) Learning to read two syllables; (5) Learn to read three syllables; (6) Learn to read Nge and Nya; (7) Learn to read consonant prefixes; (8) Learn to read words with consonant endings; (9) Learn to read the names of family members; (10) Learn to read the names of parents, brothers and sisters; (11) Learn to read animal names; (12) Learn to read fruit names; (13) Learn to read colours (Kids 2017).

In addition to the features of learning to read, the application for *Belajar Membaca Lancar* is also equipped with playing features, namely (1) Playing guessing to read words; (2) Playing word balloons; (3) Playing guess the vowels; (4) Play word puzzles. The appearance of the application is as follows:



**Figure 1.** Initial view of the application for *Belajar Membaca Lancar*



Figure 2. Features of Learning Applications *Belajar Membaca Lancar*



Figure 3. Features of Playing Applications *Belajar Membaca Lancar*

The learning atmosphere in the *membaca bersama budi* application is also fun because students like learning using android applications. Students also have high enthusiasm and enthusiasm in participating in early reading learning. In line with Herman (2017), stated that implementation of learning media especially in this thing about games, can improving students reading skills especially in kindergarden. Because of the features and interesting display from the application making students more spirit to study and improving the reading skills. The display of this application is also interactive (audiovisual), but the learning features and game features are not as much as in the *Belajar Membaca Lancar* application. Furthermore, the games in the *membaca bersama budi* application are not as interesting as those in the *Belajar Membaca Lancar* application. This application is equipped with features (1) Learn letters; (2) Learn to spell open syllables; (3) Learn to spell closed syllables; (4) Learn to read complete sentences; (5) Game looking for letters; (6) Word search game (Guntur, M., et al. (2023)). In addition to the above features, the *membaca bersama budi* application has extra features, namely (1) Learning to read the clock; (2) Learning colours; (3) Learning numbers; (4) Learning English letters; (5) Zoo.



Figure 4. Initial view of the application *membaca bersama budi*



Figure 5. Features of Learning Applications Reading with Budi



Figure 6. Features of Playing Applications *Membaca Bersama Budi*

Learning is said to be effective if it can achieve one of the desired learning objectives. To see whether or not the learning objectives have been achieved, students' responses during the learning process can be seen. For example, when asked by the teacher about the material provided at that time, whether students could answer well or not. Based on these questions, the two applications, namely the *Belajar Membaca Lancar* application and the *Membaca Bersama Budi* application, were practical because all students in the two groups were able to answer the initial reading questions given. Therefore, both applications had a good effect on both groups. However, learning the *Belajar Membaca Lancar* application is slightly more effective than the *Membaca Bersama Budi* application. It is proven by the results of the effectiveness test that has been described previously, which is  $1.25641 > 1$ , which means that the application media for *Belajar Membaca Lancar* is more effective than the application media for *Membaca Bersama Budi* in learning to read early.

#### 4. CONCLUSION

Based on the results of the data analysis described above, it can be concluded that early reading learning with the *Belajar Membaca Lancar* application media is more effective than the *Membaca Bersama Budi* application. It is proven by the comparison value of  $n$  gain of the two applications is  $1.25641 > 1$ , which means the practical value of the *Belajar Membaca Lancar* application group  $>$  *Membaca Bersama Budi* application group. Furthermore, in the calculation of the Independent Sample T-Test, the result is  $0.50 > 0.05$ , which means  $H_0$  is accepted and  $H_a$  is rejected. The amount of the test value shows no significant difference between the effectiveness of the application of *Belajar Membaca Lancar* and *Membaca Bersama Budi* on the initial reading ability of the first-grade students of MI Takhasus Al-Quran Sintang.

From the results of observations, while applying the application media for *Belajar Membaca Lancar* and *Membaca Bersama Budi*, all students in both groups looked enthusiastic, enthusiastic and

interested and could answer initial reading questions so that the learning objectives could be achieved. It is just that because of the difference in the content of the features in the two applications, namely the features in the *Membaca Bersama Budi* application, it is not as much as the Belajar Membaca Lancar application. Therefore, the learning that is carried out is not optimal because it only has a few learning materials. Then based on the results of the Independent Sample t-test, it showed that the two applications, namely Belajar Membaca Lancar and to *Membaca Bersama Budi*, could be applied as an alternative learning media to improve the initial reading ability of the first-grade students of MI Takhassus Al-Quran Sintang.

The research's limitation is that it only compares two reading and writing learning applications *Belajar Membaca Lancar* and *Membaca Bersama Budi* without doing a thorough analysis of the content. As a result, it is challenging to pinpoint specific elements that reduce each application's effectiveness. Additionally, MI Takhassus Al-Quran Sintang's test population is smaller than the national average for seventh-grade pupils, making it challenging to extrapolate learning outcomes to a wider community. Additionally, the current study did not change the long-term impacts of its deployment; it only assessed the short-term effects. Therefore, more study is advised to address the issues brought up in this research. This will be accomplished by doing a more thorough analysis of the content, collaborating with a larger group of students, and using a long term to provide more thorough explanations about the efficacy of the present study's methodology in a variety of educational contexts.

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