



## The Effect of Alphabet and Picture Box Media (KOFABAR) on Early Literacy Skills

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### Abstract

The Alphabet and Picture Box Media (Kofabar) is one activity that can enhance early literacy skills in children. This study aims to determine whether the Alphabet and Picture Box Media (Kofabar) affects early literacy skills in children aged 4-5 years. The research method used is quantitative with an experimental design, specifically a one-group pre-test post-test design. The population for this study included all children at KB Kuntum Khaira Kota Padang Panjang Timur, totaling 18 students. The sample for this study was determined using purposive sampling, with the sample consisting of 8 children from the Mecca class. The instrument used is a checklist with assessment categories: Not Developed (BB), Starting to Develop (MB), Developing as Expected (BSH), and Developing Very Well (BSB). Data collection techniques include observation, and data analysis techniques involve normality tests, homogeneity tests, and hypothesis testing using the t-test. The result showed that before the treatment, the average early literacy skill score was 10.12, and after the treatment, the average score was 20.25, showing an increase of 10.12. Statistical analysis with a significance level of 5% indicates that  $t_0 = 22.48$  is greater than  $t_t = 2.36$  ( $t_0 = 22.48 > t_t = 2.36$ ), thus the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted, meaning the Alphabet and Picture Box Media (Kofabar) significantly affects early literacy skills in children. In conclusion, the Alphabet and Picture Box Media (Kofabar) has a significant effect on early literacy skills in children aged 4-5 years.

**Keywords:** Alphabet and Picture Box Media (Kofabar), Early Literacy Skills, Early Childhood

## **A. Introduction**

Early literacy is the ability to recognize vowels and consonants which is the basic ability of children for early reading and writing (Diana Natalia and Lia Kurniawaty, 2022). And children should be introduced to letters from an early age. The ability to recognize early literacy is the ability to recognize vowels and consonants which are classified as phonological (sound) abilities. Phonology is the sound system of language. So, early literacy is the ability of every child to recognize letters and language sounds. Then combine letters into simple words. Therefore, from an early age, children need to be introduced one by one to the letters of the alphabet which consists of twenty-six letters with five vowels and twenty-one consonants. The vowels include the letters a, i, u, e, o and the consonants are the letters b, c, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, w, x, y, and z (Purwati, 2021). Literacy for early childhood is one of the indicators to develop the ability to think and understand interact and communicate both with parents, peers and other people around them and the ability to believe in the existence of God and His creation (Anggraini, 2022). Early literacy in early childhood refers to the stage of development where children begin to understand and use written language. The introduction of letters, understanding sounds (phonemes), recognizing words, understanding the structure of language, and the ability to read and write simple.

According to Agustini & Masudah, (2020) the ability in the literacy aspect focuses more on words and writing that can be stimulated through fun play activities for children. Children's early literacy skills will develop when children are two to seven years old and begin to describe the world with words, displays and pictures. In addition, as cognitive development focuses on symbol development, it contributes to children's understanding of semantics (meaning of language), syntax (forming a sentence), and morphics (spelling/pronunciation). Literacy is a development that focuses on children's understanding of naming known letter symbols, recognizing the initial letter sounds of the names of objects around them, naming groups of pictures that have the same initial sound/letter, understanding the relationship between letter sounds and shapes, reading their own names, and finally writing their own names (Panca Wahyu kusumaningrum et al., 2021).

According to the Big Indonesian Dictionary, script comes from the word letter. All conditions related to letters can be called literacy, both reading and writing. Literacy is a child's ability to learn to read and write (Widyastuti, 2018). Kurniasih & Priyanti, (2023) state that the positive impact of developing early literacy skills for early childhood is very

important in their development. Improved reading skills in early literacy help children develop strong reading skills. This study shows that children who have good phonological skills at an early age tend to have better reading skills later in life.

Therefore, this literacy is the ability of a child who is focused on children's understanding of early literacy skills that distinguish letter shapes, distinguish sounds on letters, connect letters according to their names, mention groups of pictures that have the same initial sound / letter, imitate (write & pronounce) letters A-Z and connect pictures with letters. words and writing, such as the ability to mention known letter symbols, recognize initial letter sounds from the names of surrounding objects, understand the relationship between sounds and letter shapes, read their own names and write their own names (Nisa et al., 2021).

According to the results of previous research, it was stated that to improve children's early literacy skills, it was carried out using flashcard board media researched by (Dwiana Sari & Dorlina Simatupang, 2017), besides that there was also the use of rotary dice media researched by (Agustini & Masudah, 2020). However, for this alphabet and picture box (kofabar) media can add its own charm, so that children will feel that early literacy is easy and fun (Hestinarini, 2021). Based on the results of observations made by researchers at KB Kuntum Khaira Kota Padang Panjang, in the school there are 3 teachers and 18 students, consisting of 8 girls and 10 boys. Children in the school range in age from 2 to 5 years old.

In the school, the author also saw directly that the literacy skills of children aged 4-5 years were still said to be low, this was shown that there were still children who were less able to write their own names, children were less able to distinguish letter shapes, less able to distinguish sounds on letters, and still difficult to connect pictures with letters. The school has implemented several play activities in the form of flashcards, letter posters and other media but not all children recognize literacy well. Therefore, a solution is needed to overcome these shortcomings by introducing media in learning, one of which is by applying the method of playing alphabet and picture box media (kofabar). Alphabet and picture box media (kofabar) is a learning media made of wood which contains 26 letters and several types of pictures along with the name that corresponds to the picture.

Therefore, in this study, the alphabet and picture box (kofabar) media is used in the hope that it can encourage children to read and write. So that children's concentration and interest in learning in understanding a concept can develop more optimally with the help of

this alphabet and picture box (kofabar) media (Hestinarini, 2021). According to Hestinarini, (2021) the alphabet and picture box media (kofabar) has several characteristics that can provide benefits in improving early literacy skills in early childhood. First, by combining pictures and letters, this media can help children recognize letters in a more visual way and attract their attention. Second, the use of pictures in the alphabet and picture box media (kofabar) can help children connect letters into words that have meaning, thus facilitating their understanding of the text. Third, this media can provide an interactive and fun learning experience for children, thus increasing their motivation and interest in learning to read and write.

Although the alphabet and picture box media (kofabar) shows potential in improving early literacy skills in early childhood, there is still a lack of research that specifically examines the effect of alphabet and picture box media (kofabar) on early literacy skills in early childhood at KB Kuntum Khaira Kota Padang Panjang. And alphabet box media and pictures (kofabar) also have a positive effect of using alphabet box media and pictures (kofabar) on early literacy skills of early childhood. With this research, it is hoped that it can provide valuable insights for educators and educational institutions in developing learning strategies that are effective and in accordance with early childhood development. The results of this study can be a reference to improve the quality of early childhood education and contribute to our understanding of the appropriate use of learning media in developing early literacy skills in early childhood. From the explanation above, it can be concluded that media is a method or tool specifically designed to stimulate activities aimed at improving aspects of early childhood development. The importance of the media lies in the child's interest in the props used, has an educational aspect and educates the child. Based on the background above, the researcher raised the title "The Effect of Alphabet and Picture Box Media (Kofabar) on Early Literacy Skills of 4-5 Year Old Children".

## **B. Research Methodology**

The type of research that researchers use in this study is quantitative research using experimental research methods with a research design Pre Experimental design type one group pretest and posttest design. This research was conducted at KB Kuntum Khaira in East Padang Panjang City. In this study, researchers used purposive sampling which is sampling based on certain criteria

Table 1. Research design

<b>Kelompok</b>	<b>Pretest</b>	<b>Perlakuan</b>	<b>Posttest</b>
Eksperimen	O <sub>1</sub>	X	O <sub>2</sub>

In this design there is no control group because it only uses one subject group. O1 is the result of researcher observation, X represents the action given, O2 is the result of the action given. O1 underwent a pretest to measure the level of children's early literacy skills at KB Kuntum Khaira Kota Padang Panjang before using the alphabet and picture box (kofabar) media. Treatment (X) was then applied to this subject group. The post-test (O2) is then given to measure children's early literacy skills after receiving or giving treatment (X).

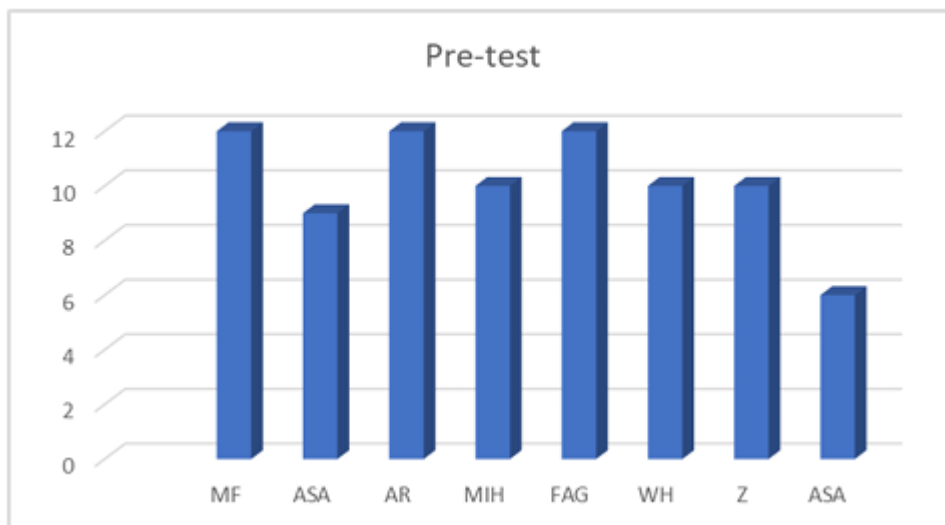
### C. Results and Discussion

Based on the formulation of the problems described above, the researchers conducted data collection which aims to determine the effect of the Alphabet and Picture Box Media (Kofabar) on the early literacy of children aged 4-5 years at KB Kuntum Khaira Kota Padang Panjang. The results of this study were obtained from taking pretest and posttest data where the pretest data collection was carried out before giving treatment or treatment, then after treatment then taking posttest data.

#### Data Description

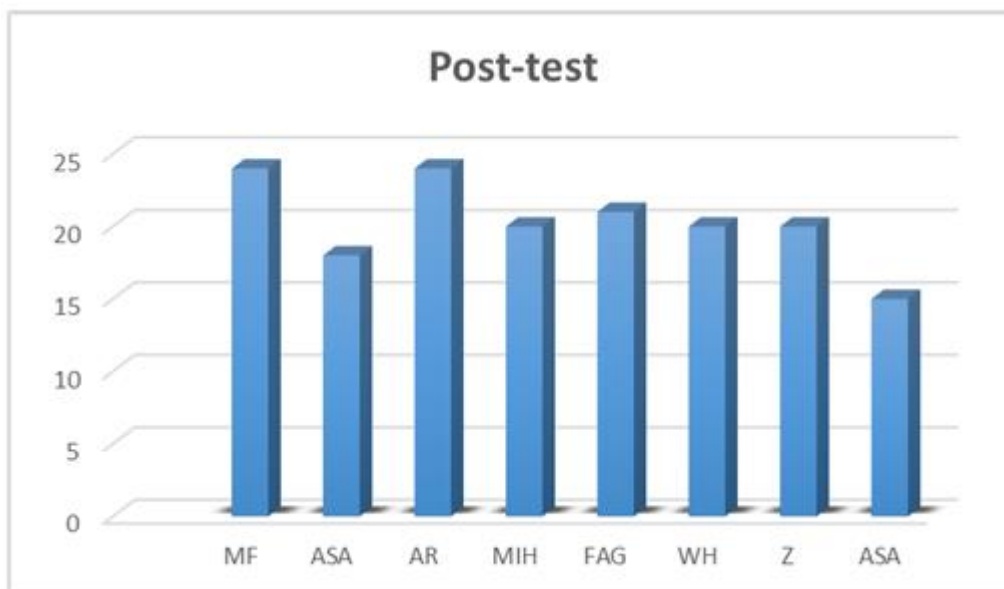
This research was conducted for 6 meetings, where the research activities consisted of 1 pretest, 4 treatments and 1 posttest. The pretest was conducted on May 27, 2024 within 60 minutes of each activity. The results of the pretest data can be seen as follows:

Table 2. Pre-test data



Based on the table and graph above, the highest score is 12, while the lowest score is 6. The data shows that children who have early literacy skills that begin to develop are 3 children, and children who have not developed are 5 children. This shows that the ability of early literacy in children at KB Kuntum Khaira Kota Padang Panjang Timur has not developed. After obtaining the data from the pretest results, a graph of the posttest results can be presented as follows:

Table 3. Post-test Data

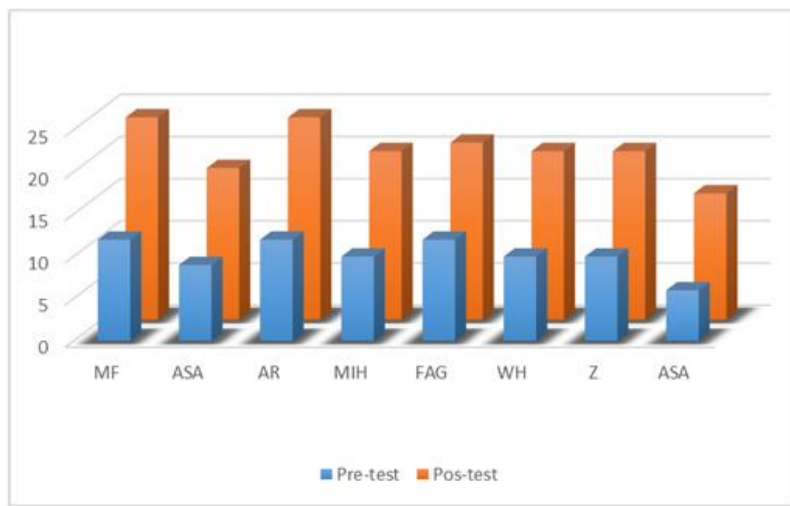


Based on the table and graph above, the highest score is 24, while the lowest score is 15. The data shows that children who have very well developed early literacy skills are 3 children, developing as expected 4 children, and children who are starting to develop are 1

child. This shows that the ability of early literacy in children at KB Kuntum Khaira Kota Padang Panjang Timur is developing as expected.

To see the comparison of the pretest and posttest results after being given treatment or treatment can be seen in the following graph:

Table 3. Comparison of Early Literacy Pre-test and Post-test of 4-5 years old children at KB Kuntum Khaira Kota Padang Panjang



From the table and graph above, it can be seen that children's initial literacy skills have increased, before treatment it is clear that the average initial literacy skills of children are 81 and after treatment children's literacy skills have increased to 162.

**Data Analysis**

**Normality Test**

In this study, researchers used data that had a normal distribution. The normality test was conducted to evaluate whether the data from each variable had a normal distribution. The formula used for the normality test is Shapiro-Wilk, because the sample used only has 8 children. Through statistical data processing using SPSS version 29 computer software, the results of the normality test can be found in the following table:

Table 4. Normality Test

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest Kemampuan Keaksaraan Awal	.225	8	.200 <sup>*</sup>	.842	8	.078
Posttest Kemampuan Keaksaraan Awal	.216	8	.200 <sup>*</sup>	.919	8	.423

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The results of the normality test on the experiment showed that by using SPSS, the pre-test data results obtained were 0.78 greater than 0.05. The same thing also happened to the post-test data, where the value was 4.23 greater than 0.05. This indicates that the data has a normal distribution.

**Homogeneity Test**

To find data that has a homogeneous distribution, researchers used SPSS statistical software version 29. Information related to the homogeneity test can be found in the following table:

Table 5. Homogeneity Test

**Tests of Homogeneity of Variances**

		Levene Statistic	df1	df2	Sig.
Hasil_Treatment_Kemampuan_Keaksaraan	Based on Mean	.595	1	14	.453
	Based on Median	.499	1	14	.492
	Based on Median and with adjusted df	.499	1	12.334	.493
	Based on trimmed mean	.594	1	14	.454

The homogeneity test results in the table above show that the significance of 0.454 is greater than 0.05. This explains that the data is homogeneously distributed.

**Hypothesis Test**

After obtaining the treatment results, the next step is to analyze the treatment result data using statistical tests. The aim is to see whether children's early literacy skills improve significantly after using kofabar media. In this case, t-test analysis is used and to calculate the t value, calculations are made based on the table that has been prepared. Before doing the t-test, the first step is to make a calculation table to get the t value as shown in the table below:

Table 6. Alternative Hypothesis (Ha) Correctness Test



No.	Child Code	Pre-test	Post-test	D	D2
1	MF	12	24	12	144
2	ASA	9	18	9	81
3	AR	12	24	12	144
4	MIH	10	20	10	100
5	FAG	12	21	9	81
6	WH	10	20	10	100
7	Z	10	20	10	100
8	ASA	6	15	9	81
<b>Total</b>				<b>81</b>	<b>831</b>
<b>Average</b>				<b>10,12</b>	<b>103,87</b>

1. Find the Mean of the

$$MD = \frac{\sum D}{N} \text{ thus obtained } MD = \frac{81}{8} = 10,12$$

2. Find the standard deviation of the

$$SDD = \sqrt{\frac{\sum D^2}{N} - \left(\sum \frac{D}{N}\right)^2}$$

$$SDD = \sqrt{\frac{831}{8} - \left(\frac{81}{8}\right)^2}$$

$$SD_D = \sqrt{103,87 - (10,12)^2}$$

$$SD_D = \sqrt{103,87 - 102,41}$$

$$SD_D = \sqrt{1,46}$$

$$SD_D = 1,2$$

3. Find the standard error of the mean of

$$SEMD = \frac{SDD}{\sqrt{N-1}}$$

$$SEMD = \frac{1,2}{\sqrt{8-1}} = \frac{1,2}{\sqrt{7}} = \frac{1,2}{2,64} = 0,45$$

- 4.

5. Find the price of  $t_0$  with the formula:

$$t_0 = \frac{MD}{SEMD} = \frac{10,12}{0,45} = 22,48$$

6. Df =

$$Df = 8-1$$

$$Df = 7$$

The next step is to give an interpretation of the value of  $t$ , before that  $df$  (*degree of freedom*) or  $db$  (free degree) is calculated by the formula  $df = N-1$  where  $N$  is the number of samples,  $df = 8-1 = 7$  is obtained and then the value of  $t_0 = 22.48$ . Compared with the value  $t_t$  at a significant level of 5% which is 2.36. The results show that  $t_0$  is greater than  $t_t$  which is  $22.48 > 2.36$ .

## **Discussion**

Based on the data above related to the effect of alphabet and picture box media (kofabar) on the early literacy skills of children aged 4-5 years at KB Kuntum Khaira, East Padang Panjang City, the problems found in early childhood as stated in the *Introduction*. The main purpose of this study was to determine whether the alphabet and picture box media (kofabar) had an effect on children's early literacy skills. This study found that alphabet box and picture (kofabar) media can affect children's early literacy skills. The research sample consisted of 8 children from KB Kuntum Khaira, East Padang Panjang City.

The method used includes experimental research with a pre-experimental design, namely the type of one group pretest-posttest design. The results of hypothesis testing calculations using the t-test show that  $t \text{ count} = 22,48 > t \text{ table} = 2,36$ . So that  $H_0$  is rejected and  $H_a$  is accepted, meaning that the use of alphabet and picture box media (kofabar) can affect early literacy skills in children at KB Kuntum Khaira Kota Padang Panjang Timur. In the early days of a child's life, the child's brain and body experience very rapid development. In other words, early childhood is experiencing the fastest stage of growth and development in terms of physical and mental. Their development develops quickly and requires appropriate encouragement. One of them is language development or early literacy. Aspects of language development such as reading and writing, which in general can improve children's development to think logically, and critically. Children are able to solve problems, recognize, distinguish, connect, compare, and understand the world around them. One of the developments that can be developed in children is language development in early literacy skills. Early literacy is the basic ability to read and write, as well as the introduction of vowels and consonants in young children.

This ability is very important to build from an early age because it will affect the development and personality of the child. Children will be excited if the learning activities are interesting (Mandasari et al., 2021). Moreover, learning is carried out using media that can increase children's enthusiasm for learning. One of them is through the alphabet and picture box (kofabar) media, which will make children more interested in participating in the learning process. In table 4 regarding the comparison between the data on the increase in the comparison of children's early literacy skills between the pre-test and post-test as a whole, it can be seen the comparison of the developmental scores of children's early literacy skills between the pretest and posttest. Based on the statistical calculations above, it can be seen that the results after the treatment of children's scores increased in the posttest results compared to the pretest. Therefore it can be understood that the hypothesis stating that the alphabet box media and pictures (kofabar) have no significant effect on the development of early literacy skills in children and the hypothesis (ha) stating that the alphabet box media and pictures (kofabar) have a significant effect on early literacy skills in children aged 4-5 years at KB Kuntum Khaira Kota Padang Panjang Timur is accepted. This means that the alphabet box media and pictures (kofabar) have a significant effect on early literacy skills in children aged 4-5 years at KB Kuntum Khaira Kota Padang Panjang Timur at the significance level. Based on the results of the pretest and posttest above, it shows that the development score of early literacy skills in children at KB Kuntum Khaira Kota Padang Panjang Timur increased after treatment using alphabet box media and pictures (kofabar) using experiments. And the results of the Posttest showed that all aspects of the development of early literacy skills in children increased. The results of this study in general that before the treatment the average score of the development of children's early literacy skills was 10.12 (Pretest results) after being given treatment the average score of the development of early literacy skills in children increased to 20.25 (posttest results), the increase that occurred proved that the alphabet box media and pictures (kofabar) had an effect on early literacy skills in children. So after the researchers applied the influence of the alphabet box media and pictures (kofabar) on early literacy skills, there was an increase in the implementation of indicators of early literacy skills for children aged 4-5 years. The success of the research seen in the results of the study, shows that there has been a match between the results of the study. This can be seen in the learning process of children in using the alphabet and picture box media (kofabar) at KB Kuntum Khaira Kota Padang Panjang Timur. Based on the description above, it is concluded that the implementation of using the alphabet box media and pictures (kofabar) can improve early

literacy skills in children aged 4-5 years as seen from the calculations described above, it is evident that  $t_0$  is greater than  $t_t$ .

#### D. Conclusion and Suggestion

Based on the results of research and analysis conducted on the effect of alphabet and picture box media (kofabar) on the early literacy skills of children aged 4-5 years at KB Kuntum Khaira Kota Padang Panjang Timur. This is based on learning activities that have been carried out 6 times, namely 1 pretest, 4 treatments, 1 posttest and have compared the average value, namely the pretest of 10.12 and the posttest of 20.25 by using the alphabet box media and pictures (kofabar).

Researchers can conclude that  $t_0$  is greater than  $t_t$ , namely  $(22.48 > 2.36)$ . Then these results, if  $t$  count ( $t_0$ ) is greater than  $t$  table ( $t_t$ ), then the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted, meaning that the alphabet box media and pictures (kofabar) have a significant effect on children's early literacy skills. In conclusion, the alphabet and picture box media (kofabar) can have an effect on children's early literacy skills.

Based on the above findings, in the results of research conducted at KB Kuntum Khaira, East Padang Panjang City, several suggestions can be given that can affect the early literacy skills of children aged 4-5 years when using the alphabet and picture box media (kofabar) as follows:

1. PAUD institutions should add learning media facilities so that children are interested in .
2. For teachers, it is hoped that teachers can use this alphabet and picture box (kofabar) media to improve children's early literacy skills so that children can develop even better.

For future researchers, the results of this study are expected to be a source of reference for developing similar research and overcoming problems that arise in children and for future researchers.

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