



The Effect of Creative Apron Media on Numerical Literacy in Aba Limbung Kindergarten, Gowa

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Abstract. Numeracy literacy skills as knowledge and skills that are closely related to understanding numbers and symbols. Based on the results of initial observations conducted by researchers at ABA Limbung Kindergarten, Gowa Regency, early childhood in group B has a lack of numerical literacy skills, this can be seen from the low understanding of numbers and number symbols, especially in everyday life. To overcome the low numerical literacy of children, learning media is needed that can be interesting and fun, namely apron media. In accordance with the formulation of the problem posed, the purpose of this study is to find out: 1) Overview of children's numerical literacy 2) An overview of the implementation of creative apron media; 3) The effect of creative apron media activities on Numeracy Literacy of children aged 5-6 years. The type of research used in this study is Quasi Experimental Design research. The research design used is using the Nonequivalent Control Group Design model using two test groups with one group Then from the results of this study it was found that there was a significant influence before being given the treatment of learning activities to recognize and count images according to the theme through creative apron media with after being given treatment in children aged 5-6 years. The result of the asymp Sig (2-tailed) value obtained is 0.027 while the result of the calculation of the initial numerical ability of the control group obtained an asymp Sig (2-tailed) value of 0.

Keywords: numerical literacy, creative apron media, early childhood education

1 Introduction

Kindergarten education is a form of early childhood education that has a very important role in developing children's personalities and preparing them to enter the next level of education [1]. One of the lessons that seems interesting for kindergarten children is getting to know Numeracy literacy where this numeracy literacy activity children can find out about early mathematics and do early financial planning which must be introduced early so that children can apply it in real life [2]. Numeracy literacy skills as knowledge and skills that are closely related to understanding numbers, symbols and analyzing quantitative information (graphs, tables, charts, etc.), are very important for today's generation to learn, by having good numeracy literacy skills, students are able to apply their mathematical knowledge in real life [3]

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Based on the results of initial observations conducted by researchers in January 2023 at ABA Limbung Kindergarten, Gowa District, early childhood in group B has a lack of numerical literacy skills, this can be seen from the low understanding of numbers and number symbols, especially in everyday life.

The use of pictures and number cards in the implementation of learning in PAUD is very often done, so that learning media is needed that is interesting and can be done by children [4]. One of the media that is considered most suitable for the numerical literacy skills of children aged 5-6 years is the counting apron media which is one of the most appropriate media, because it can strengthen children’s imagination, fantasy, develop children’s ability to recognize symbols, randomize numbers, and connect number symbols [5]. With this apron media, it will be one form of media that teachers can use in creating pleasant learning conditions based on the characteristics and principles of learning that exist in kindergarten education education units . To overcome the low numerical literacy of children, learning media is needed that can be interesting and fun, namely apron media, so the authors conducted research on the effect of counting apron media on early childhood numerical literacy at ABA Limbung Kindergarten, Gowa District.

2 Method

The type of research used in this study used Quasi Experimental Design research [6]. This Pre Experiment research method is used to determine the effect of counting apron media on numerical literacy at ABA Limbung Kindergarten, Gowa Regency.

The research design used is using the Nonequivalent Control Group Design model using two test groups with one Experiment group and a comparison group which begins by conducting an initial test (pretest) given to both groups then given treatment [7]. Furthermore, the final test (postest) is given to both groups. The research design used is described as follows:

Table 1. Research Design

Class	Pretest	Treatment	Postest
Experiment	Q1	X1	Q1
Control	Q2	X2	Q2

Description

KK : Control Group

KE : Experiment Group

O1 : Measurement before treatment

X1 : Treatment using pictures

X2 : Treatment using apron media

O2 : Second measurement after the subject is given treatment.

The population for this research is students at ABA Limbung Kindergarten aged 5-6 years. Sampling is part of the number and characteristics of the population. This study used purposive sampling technique [8]. Data is collected through tests, observation and documentation. Data sampling techniques through tests were carried out to measure the abilities of both groups (experimental and control). The test used was a pretest conducted to determine the initial ability of children and the Posttest was conducted to determine the numeracy literacy of children after being given treatment.

3 Result and Discussion

From the results of the research on children's numeracy skills, it shows that learning activities to recognize numbers and count with counting aprons are very effective in developing children's early numeracy skills so that it can be said that there is an effect of learning activities to recognize numbers and count with counting aprons on children's early numeracy skills. This statement is reinforced by the results of hypothesis testing using descriptive statistical test calculations and non - parametric statistical tests, the results of which show that the average score of children's numerical abilities in the experimental group after being given the treatment of learning activities to recognize numbers and count pictures with counting aprons there is a significant increase or change compared to the numerical abilities of children in the control class. Thus it can be seen that there is an effect of the Learning Method of recognizing numbers and counting pictures with Counting Aprons on the Early Numerical Ability of 5-6 Year Old Children at ABA Limbung Kindergarten.

3.1 Child's Primary Numerical Ability before the application of Learning to Recognize numbers and Counting with Counting Aprons.

It can be seen that the children's initial numerical abilities in the control group during the pretest in the category of Not Developing there were 3 children, the category of Starting to Develop there were 3 children and in the category of Developing as Expected and the category of Developing Very Well there were no children whose initial numerical abilities reached these categories. In the experimental group during the pretest in the category of Not Developing there were 4 children, the category of Starting to Develop there were 2 children and in the category of Developing As Expected and the category of Developing Very Well there were no children whose initial numerical abilities reached that category.

3.2 Child's Early Numerical Ability after implementing Learning to Recognize Numbers and Counting with Counting Aprons

It can be seen that the children's initial numerical abilities in the experimental group in the category of Developing Very Well were 4 children, in the category of Developing as Expected were 1 child, and in the category of Starting to Develop were 1 child, in the category of Not Developing there were no children. The implementation of the posttest in the control group in the category of Developing Very Well there were 2 children,

Developing As Expected there were 3 children, Starting to Develop there was 1 child, in the category of Not Developing there were no children.

Based on the results of the calculations carried out, the value in the experimental group after treatment appeared higher than the control group before being given treatment, a pretest was first carried out on the two groups. The posttest results show that the average posttest of the experimental group is higher than the average posttest of the control group.

Table 2. Descriptive Statistics

	N	Max	Min	Mean	std. Deviation
Pretest	6	7	14	11.00	3.286
Posttest	6	14	28	22.83	5.307
Valid N (listwise)	6				

4 Conclusion

From the conclusions of the research that has been carried out, it can be concluded that Children’s initial numerical abilities at ABA Limbung Kindergarten before being treated with learning activities to recognize numbers and count pictures according to themes with Creative Aprons averaged 11.00 in the experimental group and 9.67 in the control group. Meanwhile in the experimental group Not Developing as many as 4 people with a percentage of 66.67%, Starting to Develop as many as 2 people with a percentage of 33.33%, Developing As Expected with a percentage of 0%, Developing Very Well with a percentage of 0%. In the control group Not Developing as many as 3 people with a percentage of 50%, Starting to Develop as many as 3 people with a percentage of 50%, Developing as expected with a percentage of 0%, Developing Very Well with a percentage of 0%.

Children’s initial numerical abilities at ABA Limbung Kindergarten after being treated with learning activities to recognize numbers and count pictures according to themes with Creative Aprons averaged 22.83 in the experimental group and 12.17 in the control group. Meanwhile in the experimental group Not Developing with a percentage of 0%, Starting to Develop as many as 1 person with a percentage of 16.67%, Developing As Expected as many as 1 person with a percentage of 16.67%, Developing Very Well as many as 4 people with a percentage of 66.66%. In the control group Not Developing with a percentage of 0%, Starting to Develop as many as 1 person with a percentage of 16.67%, Developing as expected as many as 3 people with a percentage of 50%, Developing Very Well as many as 2 people with a percentage of 33.33%.

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