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EFFECT OF EDUCATIONAL POSTER MEDIA ON THE ABILITY TO RECOGNIZE THE CONCEPT OF NUMBERS AND FINE MOTORICS IN GROUP A CHILDREN IN KINDERGARTEN

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ABSTRACT

The purpose of this research was to determine the effect of the effectiveness of educative poster media on the ability to recognize the concept of numbers and fine motor skills in group A Kindergarten children. The research was carried out through a quantitative approach with an experimental design. The experimental design used is a nonequivalent control group design. The research subjects were children of group A of Ar-Rasyid Islamic Kindergarten and TKM NU 04 Tambak Sumur Sidoarjo which were selected through random sampling technique. The research data was collected through observation techniques with observation sheet instruments for the ability to recognize the concept of numbers and children's fine motor skills. The research data were analyzed statistically through the t test technique. Hypothesis testing uses a significance level of 5%. The results of data analysis show that: 1) the use of effective educational poster media to improve the ability to recognize the concept of numbers in group A Kindergarten; 2) the use of effective educational poster media to improve the fine motor skills of children in group A Kindergarten. The implication of this research is that educational poster media can be used to support the completeness of learning activities by teachers as an innovative, effective learning medium, and can function as a learning strategy that increases enthusiasm, and increases the ability to recognize number concepts and fine motor skills in kindergarten children.

KEYWORDS: educational poster media, the ability to recognize the concept of numbers, fine motor skills



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INTRODUCTION

All parents want their children to develop optimally, seeing the 6 aspects of development that exist in Early Childhood Education, many parents still do not understand that early childhood is still at the stage of development. But in reality, there are parents who demand Early Childhood Education teachers, so that children enter PAUD institutions are able to write and read fluently. The reason for the parents is because they are afraid that when their children enter the next level, they are still not ready. This is also a concern for PAUD teachers so that in the future they have inspiration by providing the best service to parents and students according to their needs.

In learning, teachers try to use media in the hope of helping children to master skills in recognizing the concept of numbers, reading and writing before entering the next level of education. Facts on the ground show that children who have mastered these skills, but some of them have difficulty. Negative impacts can arise if the provision of learning materials is carried out on children before or after the readiness period. The skill of mentioning numbers, counting and writing has now become a hot polemic that is widely discussed by parents who have early childhood. This is because they are worried that their children will not be able to follow the lessons at school.

Often the activity of introducing the concept of numbers is done by the teacher writing the number on the blackboard and then mentioning the number. Then the child is asked to name and write the number in the notebook that has been distributed. In addition to writing according to the examples given by the teacher, number recognition activities are also carried out by connecting dotted lines that form a pattern of a number using children's worksheets and magazines in their learning activities. After completing the work, the teacher invites the children to mention the numbers that have been written by the child.

Based on field observations conducted by researchers on August 5, 2020 at Ar-Rasyid Islamic Kindergarten with a small group home visit learning model, that Kindergarten A children often experience difficulties, for example when asked to say one to ten, this can be seen from the results of children's work on the task of connecting numbers with objects. Of the total 16 students, only 7 children with a percentage of 43.75% were categorized as capable or achieving results in accordance with the Level of Developmental Achievement, while 9 other children with a percentage of 56.25% had not yet obtained results that were in accordance with the Level of Developmental Achievement. It was also found that children memorized the numbers from one to ten, but when asked to count their fingers or other objects they did not match the number. In addition, children are also often wrong in counting the numbers "six and nine", children do not know many numbers, so that in doing assignments from the teacher, children still have difficulty. For example, in doing the task of imitating numbers, there are still many mistakes, in connecting the symbols of numbers with objects, putting the = and # signs on pictures or objects, in writing the numbers are still upside down.



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Furthermore, children also have difficulty in recognizing colors. M There are still many children aged 4-5 years who are still unable to recognize colors. During learning activities, children are still hesitant and do not want to carry out the teacher's orders, namely children do not want to point, name, and classify colors so they still have to be persuaded and assisted by the teacher. Children in the ability to point to colors are still hesitant and alternate, such as when the teacher asks the child to show the color yellow, the child still shows 2 different colors, namely yellow and then changes to pointing to orange. In the ability to name colors, children cannot distinguish between red and orange, yellow and orange, green and blue, and so on. In addition, some children in grouping 3 red colors, took 2 red and 1 orange and what should have been 3 green took 1 green, 1 yellow and 1 blue.

The urgency of this research is based on observations of children's fine motor skills, there are still many group A students who still have difficulty in making vertical, horizontal, or curved scribbles, as well as in activities such as tracing according to the picture, sticking right in place, picking up without falling. squeezing and twisting well, so that the child has not been able to hold a pencil properly, which later this ability will have an impact on the ability to write well. This of course is also a concern for parents and teachers in general.

Paying attention to some of the importance of development that must be considered in early childhood, especially in the aspect of recognizing the concept of numbers and fine motor skills, at this stage the child shows a characteristic of thought called centration, namely focusing attention on one characteristic by ignoring other characteristics. The idea that some characteristics of an object remain the same even if the object changes its appearance. As well as children are able to recognize the concept of numbers 1-10 well. Hurlock (2016) suggests that children's fine motor development is a process of maturity related to the differential aspects of form or function, including social emotional changes. Motor processes are movements that directly involve muscles to move and process requirements that make a person able to move his limbs (hands, feet, and limbs). So that fine motor skills are considered very important in child development and are also needed for daily activities, such as buttoning clothes, brushing teeth or for learning activities such as pasting paper or writing.

Early childhood is an individual who is undergoing a very rapid growth and development process, even said to be a developmental leap. Early childhood has a very valuable age range compared to later ages because the development of intelligence is extraordinary. This age is a unique phase of life, and differs during the process of change in the form of growth, development, maturation and refinement.

Seeing from the explanation, this condition also occurs in several institutions in the group A of Cluster 08 children in Waru sub-district, there are some children's developmental abilities are still low. Children's cognitive development needs to be considered, because cognitive development is a thinking process, namely the individual's ability to connect, assess, and consider an event or events. Cognitive



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processes are related to the level of intelligence (intelligence) that marks a person with various interests, especially in ideas and learning. Furthermore, according to Witherington (in Sujiono, 2018) suggests cognitive is the mind, through the mind can be used quickly and precisely to overcome situations in solving problems. Cognitive development is the development of the mind,

According to Cameron & Baney (Mulyani, 2018), cognitive activity where in thinking uses the mind (cognitive). From the importance of developing cognitive abilities for early childhood, proper stimulation is needed, creativity in providing learning cognitive abilities must vary both from the model, media and tools used. So that in the future they are able to develop the cognitive abilities of early childhood well.

Seeing the importance of cognitive development, on the other hand, fine motor skills must also be considered. Fine motor skills are part of the realm of physical and motor development which is one aspect that must be developed in early childhood. At an early age the growth and development of children should be a concern of parents in particular and society in general. Early childhood is called the golden age because at an early age children absorb more quickly what they learn from the surrounding environment. Therefore, it is necessary to optimize the aspects of early childhood development.

Santrock (2018) suggests that fine motor skills involve finely regulated movements using coordination media between the eyes and hands so that hand movements need good development so that basic skills which include making horizontal lines, vertical lines, sloping lines to the right or tilting to the left, curved lines and circles can be continuously developed. Grasping a toy, buttoning a shirt, or doing anything that requires hands-on skills demonstrates fine motor skills. The development of fine motor skills in children includes the child's ability to show and master beautiful muscle movements in the form of coordination, dexterity and dexterity in using hands and fingers.

Referring to cognitive development in recognizing the concept of numbers and fine motor skills of children in group A who have not been able to develop well in Cluster 08 Waru District, the working group of teachers at each institution re-evaluated the failure of the development. The results of observations from group A teachers, it turns out that there is a lack of learning media, so it is not able to improve children's learning abilities, when learning takes place the teacher gives more assignments that come from Children's Worksheet books without any concrete media to convey the existing material, so that the child looks passive, only sees, hears and then does the task in the Children's Worksheet. Whereas early childhood curiosity is very high, starting to explore, try new things, ask questions, tell stories from what they see in real like learning media that presents concrete media.



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Media is a tool that can be used as an intermediary in stimulating all aspects of development in early childhood both aspects of moral and religious values, physical motor aspects, language aspects, social emotional aspects, cognitive aspects and artistic aspects. In stimulating aspects of early childhood development, it must be adjusted to the age and stages of development because every child, even though they are of the same age, sometimes has different stages of development. To stimulate all aspects of early childhood development cannot be separated from learning media because for early childhood learning is done through playing using learning media, both real media, audio media, visual media, environmental media and audio-visual media.

Learning media is a means of delivering direct learning messages, namely by the way the teacher acts as a transmitter of information using various appropriate media. Learning media is also a tool for teaching and learning process. Everything that can be used to stimulate thoughts, feelings, attention and abilities or skills so that it can encourage the learning process. According to Djamarah (2017) the media is a tool in the teaching and learning process and it is the teacher who uses it to teach students for the achievement of teaching goals. According to Arsyad (2016), the main function of learning media is as a teaching aid that also influences the climate, conditions, and learning environment that are arranged and created by the teacher. According to Munadi (2017) "Learning multimedia is a media that is able to involve many senses and organs of the body during the learning process".

Seeing the importance of media in learning, media are designed to develop children's ability to recognize the concept of numbers and fine motor skills in several institutions of Gugus 08 Waru subdistrict is an Educational Poster Media, the media is considered capable of developing the ability to recognize the concept of numbers and fine motor skills of children in group A. With this media, children are expected to be able to recognize the concept of numbers 1-10, matching numbers with the number of objects, and sorting number symbols with objects where the Educational Poster Media is designed to resemble the shape of a poster with numbers 1-10 and attractive colorful picture stickers. Next with Educational Poster Media It is also thought to be able to develop children's fine motor skills by playing pasting and removing images on stickers. From the child's ability to stick and remove the sticker, it is hoped that the flexibility of the hand muscles and fine motor skills will work well.

The results of Ayu's research (2016) Based on the results of the analysis and discussion as presented in chapter IV, it can be concluded that the cognitive ability of children in activities to recognize the concept of numbers increases with the media of number cards for children aged 4-5 years in Taqifa Bangkinang Kindergarten, in more detail as follows: Ability children's cognitive before the action with a percentage of 46% with a low category, then getting a percentage of 58% is also considered not maximal in the sufficient category or while at the next stage it gets a percentage of 87% with a very high category and is considered to have been maximized.



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Likewise with the results of Sitepu's research (2016). Based on the results of research conducted in Raudhatul Athfal Nurul Huda, Sunggal District, Deli Serdang Regency, it was concluded that activities through mosaic techniques (sticking and removing pictures or stickers) can improve children's fine motor skills. The improvement of this child's fine motor skills through the mosaic technique (sticking and removing pictures or stickers) is growing greatly. With the first result of 42.5%, both children's fine motor skills increased to 66.25% and the final result showed a significant increase to 82.50%.

From some of the facts that have been described, there are important things that show the importance of increasing cognitive abilities in recognizing the concepts of numbers and fine motor skills of children using media. Seeing the importance of media used in learning, the researchers used Educational Poster Media which is expected to be effective for institutions in Cluster 08 Waru District in an effort to improve the ability to recognize number concepts and fine motor skills of children in group A kindergarten which is considered capable of meeting the needs and development child to the maximum.

The purpose of this research is to collect data to test the effectiveness of using Educational Poster Media in learning to improve cognitive abilities in recognizing number concepts and fine motor skills in group A Kindergarten children.

THEORETICAL FRAMEWORK

Educational Poster Media

Educational Poster Media is a visual media in the form of a rectangular modified with a variety of interesting images such as numbers, pictures and stickers with various attractive colors. The stickers or images used are made very attractive in the hope that children will be interested in the media. This understanding agrees with Mustaji (2016: 14) which states that visual media is media that in its use uses the sense of sight more, for example: pictures, films, posters, billboards, photos and so on.

Researchers use Educational Poster Media This is with the aim that children can improve cognitive abilities in recognizing number concepts and fine motor skills easily. Use Educational Poster Media In cognitive development, it is expected that children can choose and match numbers according to the number of objects or pictures, while in fine motor development it is expected that children can pair pictures and take them back by sticking (such as stickers), it is also expected that children can write well. Both of these activities were carried out with the teacher in the hope of increasing the cognitive ability to recognize the concept of numbers and fine motor skills of children.

Educational Poster Media created and designed by the teacher himself according to the needs of the child by modifying it according to the learning needs that will be developed because the Educational Poster Media is a simple medium that is quite easy to make by teachers in developing children's



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cognitive abilities, children will choose and pair numbers according to the number of objects or pictures. with various student creations and needs. As for how to make Educational Poster Media, it is very easy and very cheap in materials, this media can be made from asturo paper, used cardboard and duplex paper or banners, while stickers or pictures can be made from paper / banner material that has been designed with attractive pictures with printed out. These pictures or stickers can be easily put on and removed, so that children can take turns playing with their friends and can be used over and over again.

Development of Recognizing Number Concept

The ability to recognize the concept of numbers is included in the concept of cognitive development which is the basis for the development of intelligence in children. Intelligence is a continuous process that produces the necessary structures for interaction in the environment. From interactions with the environment, individuals will gain knowledge by gaining assimilation, accommodation and being controlled by the principle of balance (Saputra, 2015).

Cognitive development according to Gagne (in Sukardi 2013:1) is a process that occurs internal in the nerves when a person thinks. In the stage of cognitive development in early childhood, in the age range of 4-5 years, there is a preoperational stage where early childhood at this stage can use symbols and internal thoughts in solving problems and children develop their language skills. Cognitive processes have a lot to do with various concepts that children have and regarding their thinking ability in solving a problem (Mulyasa, 2014: 25).

Children will get to know and understand a lesson better through fun activities or playing, as well as when applying children's understanding of the concept of numbers. In line with what was expressed by Hurlock (in Ahmad, 2016) understanding the concept of numbers through games is very important because with games children will be able to quickly understand the meaning of the learning. In addition, Alexander (in Amelia, 2017) reveals that the concept of numbers is a way of introducing the concrete and fun for children, through everything that is in the child's environment, in this case the child can use and count the number of toys that the child likes the most.

Children learn to group and structure mathematics in the same way, they learn from their surroundings by manipulating real objects and constructing new knowledge after practicing in children's physical actions and mental activities. Knowing the concept of numbers and number symbols is very important to be mastered by children, because it will be the basis for mastering further mathematical concepts at the next level of education. To improve this ability, a teacher must understand the child's way of thinking, appreciate the experience and understand how the child overcomes a problem.



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Fine Motor Development

Hurlock (2016) suggests that children's fine motor development is a process of maturity related to the differential aspects of form or function, including social emotional changes. Motor processes are movements that directly involve muscles to move and process requirements that make a person able to move his limbs (hands, feet, and limbs).

Saputra and Rudyanto (2015: 118) explain that fine motor skills are the ability of children to carry out activities using fine (small) muscles such as writing, squeezing, grasping, drawing, arranging blocks and inserting marbles. Fine motor skills involve the wrists, ankles and fingers. Fine motors greatly affect the results, quality and speed in carrying out daily tasks. Just like gross motor skills, fine motor skills are also important in children's development and are also needed for daily activities, such as buttoning clothes, brushing teeth or for learning activities such as pasting paper or writing.

Motor development is highly dependent on the previous early childhood maturity process which also depends on the learning process and the child's knowledge and experience (Dehghan et al., 2017; Taverna et al., 2020). Childhood experiences will be very useful in adulthood, including the ability to solve problems both in the form of daily life and in the form of physical abilities (Mulyani, 2018). All forms of stimulation that children get and also the experiences they get through playing will have an impact on their growth and development in the future

RESEARCH METHOD

This research uses a quantitative approach with an experimental design. The quantitative approach according to Creswell (2013:32) is that quantitative research is a way to test certain theories in a study conducted by examining the relationship between existing variables. Based on the classification, this type of research is included in the type of experimental research. According to Jannah (2019), experimental research is research to determine the causal relationship between variables by manipulating one variable (independent variable), keeping other variables constant (secondary variable) and measuring related variables.

The research was carried out using a Quasi-Experimental model design or experimental design, where this design had a control group but could not fully function to control external variables that affected the implementation of the experiment. This study uses the Nonequivalent Control Group Design, where the experimental group and control group are not chosen randomly (Sugiyono, 2017:79). The design of this research can be described as follows:

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Table 1. Research Design Schematic

Group	Before Activity	Treatment	After Activities
Experiment	O1	X	O2
Control	O3	-	O4

Information:

O1 = The results of the initial observation (pretest) of the experimental group

O2 = The results of the final observation (posttest) of the experimental group

O3 = The results of the initial observation (pretest) of the control group

O4 = The results of the final observation (posttest) of the control group

X = The experimental group was given treatment with Educational Poster Media

- = Control group not given treatment

In this experimental research, the research will be divided into two groups, namely, the experimental and control groups. These two groups have the same or nearly the same characteristics and characteristics, namely the Experiment group is given treatment using Educational Poster Media, while the control group does not use Educational Poster Media. Furthermore, the research process was observed to determine the differences that occurred in the experimental group.

The research subjects in question are the parties who are the targets of data collection. This research was conducted in Group A Early Childhood Education institutions in the Waru sub-district cluster, namely Ar-Rasyid Islamic Kindergarten and NU TKM 04 Tambak Sumur. Ar-Rasyid Islamic Kindergarten Group A amounted to 62 as the experimental group and TKM NU 04 Tambak Sumur as the control group.

Data were collected using observation techniques. In this study, researchers used a type of systematic observation to observe teachers and students in the process of teaching and learning activities using the Media Poster Educational. Data collection in this study used an observation sheet that was made to assign values based on the assessment guidelines, namely using a score of number 1 (Not Developed), number 2 (Starting to Develop)), number 3 (Developing As Expected) and number 4 (Developing Very Well). Observation is used to determine the ability to recognize the concept of numbers and fine motor skills of children in group A Kindergarten.

The analysis technique used t-test analysis with the independent sample t-test formula with a significance level of 5%. Instrument trials were conducted to determine the feasibility of a research instrument. The test of the instrument uses the formula for testing the validity and testing the reliability. The subject of the instrument trial was group A TK DWP Waru.



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RESULT

Prior to the research, the instrument was tested to determine the validity and reliability. The validity test in this study aims to measure the validity of the research instruments that will be used in the study, including the ability to recognize the concept of numbers and fine motor skills. The results obtained from the analysis of the calculation of the validity of the instrument's ability to recognize the concept of numbers as many as 3 aspects and fine motor skills as many as 3 aspects were analyzed.

Table 2. Validity Test Results Recognizing the Concept of Numbers

Aspect	r Count	r Table	Information
Item No. 1	0.762	0.396	Valid
Item No. 2	0.866	0.396	Valid
Item No. 3	0.785	0.396	Valid

From table 2, it is known that the rtable value for n = 25 with a significance level of 5% is 0.396. Based on the 3 items on the ability to recognize the concept of numbers being tested, there are 3 items that are declared valid. This is because the value of the instrument's ability to recognize the concept of numbers has an rount value of more than 0.396, so it meets the requirements that rount rtable. Furthermore, the validity test was carried out on the other dependent variable, namely fine motor skills. Test the validity of the fine motor ability instrument as many as 3 items with n = 25 as follows.

Table 3. Validity Test Results of Fine Motor Ability

Aspect	r Count	r Table	Information
Item No. 1	0.806	0.396	Valid
Item No. 2	0.746	0.396	Valid
Item No. 3	0.704	0.396	Valid

From the table above, it shows that the fine motor ability instrument consisting of 3 items is declared valid. This is because the rount value of 3 items has a value of more than 0.396 (rtable). All instruments of fine motor skills were declared valid with the provisions of rount > rtable. Thus, all instruments (the ability to recognize number concepts and fine motor skills) were declared valid and then all of these instruments were tested for reliability.

After the validity test was carried out, the next step was to test the reliability of the instrument for the ability to recognize the concept of numbers and fine motor skills. This aims to determine whether the instrument used for research is reliable or not. Reliability testing in research instruments that have been trusted and reliable produces reliable data as well. The results of the reliability test to recognize the concept of numbers are presented in the following table.



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Table 4. Reliability Test Results Recognizing the Concept of Numbers

Instrument	Cronbach's Alpha	N of Items
Ability to Recognize Number Concepts	0.729	3
Fine Motor Ability	0.733	3

Based on the table above, it shows that the instrument of recognizing number concepts and motor skills has a reliability value of Cronbach's Alpha > 0.6. Thus, the instrument for recognizing number concepts and fine motor skills has met the requirements that Cronbach's Alpha value is greater than 0.6 (Hair et al. 2014), so the instrument is declared reliable.

This study aims (1) to determine the effect of the effectiveness of educative poster media on the ability to recognize the concept of numbers in group A Kindergarten children; and (2) To determine the effect of the effectiveness of educational poster media on fine motor skills in children in group A Kindergarten. The researcher used an experimental research design pattern (Quasi Experiment Design) with a nonequivalent control group design experimental design.

The research activity was initiated by conducting initial observations in both groups of Ar-Rasyid Islamic Kindergarten and TKM NU 04 Tambak Sumur Sidoarjo regarding the development of recognizing the concept of numbers and motor skills in children, this aims to measure the level of development of recognizing the concept of numbers and fine motor skills in Group A Taman Children The next step is to give treatment to the experimental group. The treatment in the form of educational poster media was given 2 times a week for 3 weeks, so the total treatment (treatment) given was 6 times. While the control group continued to follow routine activities in the classroom as planned by the educators/teachers at their respective institutions.

Before analyzing the hypothesis testing using the independent sample t-test, it is necessary to first test the assumptions on the data to be processed using the normality test and homogeneity test. The



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normality test is used to test whether the data is normally distributed or not (Sundayana, 2014: 82). This research data is the result of observing the ability to recognize the concept of numbers and fine motor skills. Testing for normality using the Kolmogorov-Smirnov formula with a significance level of 0.05 or 5%, using SPSS. The distribution of the data is said to be normal if the significance result is more than 0.05 (Sundayana, 2014: 88). The results of the normality test are shown in the table below.

Table 5. Normality Test Results Recognizing the Concept of Numbers

Variable	Class	Score Significance	level	Information
Recognizing numbers (pretest)	Evnoriment	0.090	0.05	Normal
Recognizing numbers (posttest)	Experiment	0.152	0.05	Normal
Recognizing numbers (pretest)	Control	0.112	0.05	Normal
Recognizing numbers (posttest)	Control	0.143	0.05	Normal

Based on table 5 above, it is stated that all data on the ability to recognize the concept of numbers have a value of more than 0.05, so it can be stated that the research data on the ability to recognize the concept of numbers are normally distributed.

Table 6. Normality Test Results for Fine Motor Ability

Variable	Class	Score Significance	level	Information
Fine motor (Pretest)	Experiment	0.084	0.05	Normal
Fine motor (Posttest)	Experiment	0.172	0.05	Normal
Fine motor (Pretest)	C1	0.175	0.05	Normal
Fine motor (Posttest)	Control	0.180	0.05	Normal

Based on table 6 above, it is stated that the fine motor ability data has a value of more than 0.05, so it can be stated that the fine motor ability research data is normally distributed.

This homogeneity test was conducted to test the similarity of several parts of the sample. This homogeneity test uses the Levene Test with SPSS with a significance level of 5% or 0.05 (Priyatno, 2016:46). This means that if the calculated significance is more than 0.05 then the data variance is said to be homogeneous. The results of the homogeneity test are shown in the following table.





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Table 7. Homogeneity Test Results Recognizing the Concept of Numbers

Variable	Class	Score Significance	level	Information
Recognizing numbers (pretest)	Experiment Control	0.976	0.05	Homogeneous
Recognizing numbers (posttest)	Experiment Control Control	0.280	0.05	Homogeneous

Table 7 is the homogeneity test data for the ability to recognize the concept of numbers using a significance level of 5%, which is 0.05. In conclusion, if the significance value is < 0.05 then the variance of the data group is not homogeneous, and if the significance value is > 0.05 then the variance of the data group is homogeneous. In the pretest obtained a significance value of 0.976 > 0.05, it can be said that the variable is homogeneous. While the posttest obtained a significance value of 0.280 > 0.05, it can be said that the variable is homogeneous. Thus, all data variants of the ability to recognize the concept of numbers are concluded that the data is homogeneous or has met the basic assumption of homogeneity.

Table 8. Results of Homogeneity Test of Fine Motor Ability

Variable	Class	Score Significance	level	Information
Fine Motor (Pretest)	Experiment Control	0.697	0.05	Homogeneous
Fine Motor (Posttest)	Experiment Control	0.338	0.05	Homogeneous

Table 8 above is the homogeneity test data using a significance level of 5%, which is 0.05. The fine motor ability variable (pretest) obtained a significance value of 0.697 > 0.05, so it can be said that the variable is homogeneous. The fine motor ability variable (posttest) obtained a significance value of 0.338 > 0.05, so it can be said that the variable is homogeneous. From the data that has been described, it can be concluded that the variant of the fine motor ability data has homogeneous criteria or has met the basic assumption of homogeneity.

Hypothesis testing in order to answer the formulation of the problem and the hypothesis proposed in this study. Hypothesis test used in this research is using t test. The t test is needed to test the significance level between each independent variable influence on the dependent variable partially.



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Table 9. Hypothesis Testing

Variable	T	Df	Sig. (2-tailed)	description
Recognizing the Concept of Numbers	4,755	60	0.000	Ha accepted
Fine Motor Ability	3,735	48	0.003	Ha accepted

The t_{table} value refers to the formula (a/2); (df) is equal to (0.05/2); (60), so that the t_{table} value is 2,000. In the ability to recognize the concept of numbers, the t_{count} value is 4.755. When a comparison is made, the value of $t_{count} > t_{table}$ that is (4,755>2,000) and the result of sig. 2 tailed worth 0.000 <0.05, meaning that there is a significant difference. Thus, the educative poster media is effective in increasing the ability to recognize the concept of numbers in group A Kindergarten children.

Furthermore, on fine motor skills, the tcount value is 3.735. When a comparison is made, the value of $t_{count} > t_{table}$ that is (3,735>2,000) and the result of sig. 2 tailed worth 0.003 <0.05, meaning that there is a significant difference. It can be stated that there is a significant difference in children's fine motor skills group A kindergarten between the control group and the experimental group.

DISCUSSION

Use of Educational Poster Media to Improve Ability to Recognize Number Concepts in Group A Children in Kindergarten

In the analysis of the results of hypothesis testing on recognizing the concept of numbers (pretest), the tcount value is 0.081 (0.081 < 2,000) and the results are sig. 2 tailed worth 0.936 (0.936 > 0.05), meaning that there is no significant difference between the control group and the experimental group when the pretest (initial test). Furthermore, recognizing the concept of numbers (posttest), the tcount value is 4.755 (4.755 > 2.000) and the result is sig. 2 tailed worth 0.000 (0.000 < 0.05), meaning that there is a significant difference between the control group and the experimental group when the posttest (final test) was conducted. From these results, it can be concluded that there is an influence of the educative poster media variable (X) on the ability to recognize the concept of number (Y1) variable.

Basically, the ultimate goal of learning is to produce children who have the knowledge and skills to solve problems they will face when they grow up. To produce children who have reliable competence in the development of recognizing the concept of numbers, a series of learning strategies are needed that are able to improve the ability to recognize the concept of numbers, especially the development of recognizing the concept of different numbers shown when comparing the treatment of groups of children who use educational poster media having the ability to recognize the concept of numbers. better than the group of children who used picture media. This is in accordance with the opinion of Hurlock (2016) that understanding the concept of numbers through games is very important because with games, Children can quickly understand the meaning and purpose of the learning.

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Cognitive development according to Gagne (in Sukardi, 2013:1) is a process that occurs internal in the nerves when a person thinks. In the stage of cognitive development in early childhood, in the age range of 4-5 years, there is a preoperational stage where early childhood at this stage can use symbols and internal thoughts in solving problems and children develop their language skills. This is in accordance with the opinion expressed bySusanto (2016) that the experience experienced by a child affects the concept of children's numbers, that's why in general children who receive education in Kindergarten will understand the concept of numbers faster than those who do not experience education in Kindergarten.

Cognitive development has a deep role for the growth and development of a child. Therefore, cognitive development is very influential on the thinking process of children in addressing a problem, especially for early childhood. At this time the child has the ability to think extraordinary or golden age. This sensitive period has a very important meaning for every child's development, it means that if parents know their child has entered a sensitive period and they immediately provide the right stimulation, it accelerates the child's mastery of developmental tasks at his age.

Children begin to learn to observe or recognize the differences and similarities of various shapes, sizes, pictures, colors, letters and numbers. The statement above can be observed to what extent the ability of Kindergarten children aged 4-5 years in recognizing number symbols, and sorting number symbols with objects, so that the role of teachers here in stimulating children is needed. The introduction of number symbols, matching and sorting numbers is done by the teacher by choosing activities that are interesting, simple, fun for children. The educational poster media aims to develop children's understanding in recognizing the concept of numbers, making it easier to recognize number symbols and sorting numbers.

The findings of this study are in accordance with Rosa & Kustiawan (2019) that the use of creative learning media can improve children's ability to recognize the concept of numbers. By using educational poster media, children will experience stages in recognizing number concepts such as sorting and pairing numbers with objects or others. Educational Poster Media is a visual media in the form of a rectangular modified with various interesting images such as numbers, pictures and stickers with various attractive colors. The stickers or images used are made very attractive in the hope that children are interested in the media. This is in accordance with what is explained by Mustaji (2016:14) that visual media is media that in its use uses the sense of sight more, for example: pictures, films, posters, billboards, photos and so on.

Every media used by teachers in Kindergarten has benefits. The content of these benefits is adjusted to the learning objectives to be achieved at that time. This is in accordance with Arsyad's theory (2016: 24) that the benefits of learning media in the child's learning process, namely learning will attract more



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children's attention so that it can foster children's learning motivation. Seen when the teacher communicates to children about learning activities using educational poster media. Learning media has a variety. However, not all of them can be used in learning. The teacher must first consider and see the abilities to be achieved. The existence of this learning media is expected to build a situation that helps children gain knowledge, skills and attitudes in learning.

The ability to recognize the concept of numbers in the research in Kindergarten that has been carried out is included in the concept of cognitive development which is the basis for the development of intelligence in children. Intelligence is a continuous process that produces the necessary structures for interaction in the environment. The process supports Saputra (2015) that interactions with the environment individuals will acquire knowledge by gaining assimilation, accommodation and being controlled by the principle of balance. Children will get to know and understand a lesson better through fun activities or playing, as well as when applying children's understanding of the concept of numbers. With the educational poster media, children can play fun games and attract children's interest in participating in learning.

In accordance with the principle of early childhood learning through concrete objects, educational poster media is the right choice. This educational poster media has several functions that need to be understood, one of which is cognitive function. Based on the theory of cognitive flexibility asserts that effective learning depends on the context. In addition, this theory also emphasizes the importance of knowledge that is built and therefore students or students must be given the opportunity to develop their own representation of information in order to learn well. Based on the results of the research combined with supporting theories and the calculation of hypothesis testing using the independent sample t-test test, it was found that the use of educative poster media was effectively used in learning to improve the development of recognizing the concept of numbers for children in Group A Kindergarten.

Use of Educational Poster Media to Improve Fine Motor Ability of Group A Children in Kindergarten

In the analysis of the results of hypothesis testing on fine motor skills (pretest) obtained a tcount of 0.409 (0.409<2,000) and the results of sig. 2 tailed worth 0.684 (0.684> 0.05), meaning that there is no significant difference between the control group and the experimental group when the pretest (initial test) was conducted. Furthermore, the fine motor skills (posttest) obtained a tcount of 3,735 (3.735>2,000) and the results of sig. 2 tailed worth 0.003 (0.003 <0.05), meaning that there is a significant difference when the posttest (final test). From these results it can be concluded that there is an effect of using educational poster media (X) on children's fine motor skills (Y2). This finding is in line with research conducted by Amurwaningsih & Hasanah (2018) that an appropriate learning media



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can improve children's fine motor skills. In relation to the symbol system theory, the effectiveness of a learning media depends on the suitability of the learner and the task.

Early childhood grows and develops thoroughly naturally. If growth and development is stimulated it will reach an optimal stage. Guidance and direction from educators take an important role to optimize growth and development. These developmental aspects consist of cognitive, language, motor, emotional, social, moral, self-concept, and discipline development. The development of these aspects is integrated with each other. Aspects of motor development is one aspect of development that can integrate the development of other aspects (Ardyatmika, et al., 2016).

The theory stated by Santrock (2018:127) is that at the age of 4 years, children's fine motor coordination is more precise. At the age of 5 years, the child's fine motor coordination is increasing. Hands, arms, and fingers all move together under the command of the eye. This is in accordance with Permendikbud Number 137 of 2014 concerning National Standards for Early Childhood Education Article 10 explains that fine motor skills include the ability and flexibility to use fingers and tools to explore and express themselves in various forms, without adequate fine motor skills, children will find it difficult to independent life.

The ability possessed by early childhood in kindergarten in using their physical muscles, both smooth and gross muscles, can lead to self-confidence in children that children are able to master motor skills. This is in accordance with Syaodih (2005) that different motor skills play different roles in children's social and personal adjustment, because these motor skills have two functions, namely helping children gain independence, and helping to help gain social acceptance. Furthermore, Hurlock (2016) states that children's fine motor development is a process of maturity related to the differential aspects of form or function including social emotional changes. Motor processes are movements that directly involve muscles to move and process requirements that make a person able to move his limbs (hands, feet, and limbs).

Fine motor development also has several functions, including training the flexibility of the finger muscles, increasing children's emotional development, growing feelings of love for yourself. This is in accordance with the function of fine motor development by Hurlock (2007), namely (1) Through motor skills, children can entertain themselves and get a feeling of pleasure; (2) Through motor skills, children can move from being helpless in the first month of life, to being free and independent; (3) Through motor skills, children can adapt themselves to the school environment.

The findings in this study prove that the educative poster media is effectively used in learning to improve children's fine motor development. This can be seen when learning using educative poster media in the experimental class, children look enthusiastic and active in participating in learning.

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Besides being able to be used to deliver learning as a whole, it can also be used to convey certain parts of learning activities, provide reinforcement and motivation. Back to the importance of media in the teaching and learning process that can lead to educational goals. The use of learning media in the teaching and learning process has a great influence and impact on students' interest and motivation. In addition, the use of learning media will also provide relief and convenience for teachers in presenting and teaching students. So that learning is more student-centered, not teacher-centered. This happens because of the effort to make learning from the abstract to the concrete through sharpening the senses.

The development of recognizing the concept of numbers based on the results of research at the Ar-Rasyid Islamic Kindergartenin accordance with the symbol system theory of Salomon (2009) that every media has the ability to convey content through a certain symbol system. Salomon further stated that the effectiveness of a media depends on the suitability of the learner or students, content, and tasks. This is because with the learning media students will be able to see, hear, even feel, according to the material presented. Giving stimulation is a stimulus that comes from outside the child's environment. This stimulation is very important in the development of children. Stimulation can function as a driver and reinforcement for optimal child development.

Motor development is very dependent on the process of maturity of early childhood which also depends on the learning process and the knowledge and experience of children. This is in accordance with Mulyani (2018) that childhood experiences are very useful in adulthood, the ability to solve problems both in the form of daily life and in the form of physical abilities. It makes children more useful human beings and also makes it easier for them to take care of themselves and interact with others. This is reinforced by Fischer, et al (2020) that the process of experience greatly determines children's motor development through activities that can encourage children's growth and development, both physical motor growth and other aspects of development.

Good physical and motor development in accordance with the stages of development is also of course very important in the developmental maturation process. Physical motor development in accordance with the stage of development of his age certainly makes children confident, makes it easier for them to carry out daily activities, makes it easier for them to take care of themselves and so on. That is why the development of the motor aspect is important. The better his physical motor development, the better he is in carrying out activities regarding his motoric physical development activities. Based on the results of the research combined with supporting theories and the calculation of hypothesis testing using the t-test, it was found that there was an effect of using educational poster media on the fine motor skills of children in group A Kindergarten.

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CONCLUSION

There is pthe positive difference in the increase in the average score of the ability to recognize the concept of numbers between children in the experimental group who were taught by using educational poster media and the control group who were given learning by using worksheets. This is evidenced by the average value of observing the ability to recognize the concept of numbers in the experimental group (Islamic Kindergarten Ar-Rasyid) at the time of the pretest, which is 6.39 and after being given treatment, the posttest score is 9.68, while the average value of observing the development of recognizing the concept of numbers in the control group (TKM NU 04 Tambak Sumur at the time of the pretest obtained a value of 6.35 and after being given treatment it got a posttest value of 7.35.

There is ppositive difference in the increase in the average score of fine motor skills between children in the experimental group who were given learning using Educational Poster Media and the control group who were given learning using LKS. This is evidenced by the average value of observing fine motor skills in the experimental group (Islamic Kindergarten Ar-Rasyid) at the time of the pretest which was 6.48 and after being given treatment the posttest value was 9.10, while the average value of observing fine motor skills in the control group (TKM NU 04 Tambak Sumur at the time of the pretest obtained a value of 6.32 and after being given treatment it got a posttest value of 7.45

For other researchers in conducting further research, they can use similar learning media with improvements in various ways to get more optimal results and can also be combined with other models or variables related to learning.

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