The Influence of Playdough on Increasing Fine Motoric Movement in the Fingers of 5 Year Old Children at Ar-Ruhama' Kindergarten and Independent Pkk Kindergarten, Patokan Village, Bantaran District, Probolinggo Regency

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ABSTRACT

One aspect of development that is very important to be developed in kindergarten is the ability of fine motor movements. Fine motor movements are body movements that use small muscles or fine muscle are related to the activity of putting or holding an object using the fingers. To analyze the effect of playing playdough media in on the improvement of fine motor movements in the fingers of children aged 5 years in Ar-Ruhama' Kindergarten and PKK Mandiri Kindergarten, Patokan Village Bantaran District Regency Probolinggo. The study use a Quasy Experimental design with a pretest and posttest control group design. The sample in this study was 64 respondents consisting of 32 control groups and 32 intervention groups with Purposive sampling technique. This research was conducted for 4 consecutive days within 25 minutes and the measurement of the level of fine motor achievement was using an observation sheets. In the intervention group, before being given playing playdough media, they were first given a pretest and then given a posttest week, but the control group was not given playdough playing media intervention. This study use the Wilcoxon test.The results of statistical test in the intervention group obtained a e p value was 0.002 (<0.05) Ha was accepted,this means that there is an influence of playdough playing media on the improvement of fine motor movements in the fingers of preschool-aged children (5 years). There is an Effect of Playing playdough media on the improvement of fine motor movements in the fingers of children aged 5 years in Ar-Ruhama' Kindergarten and PKK Mandiri Kindergarten, Patokan Village Bantaran District Regency Probolinggo.

I. Introduction

Pre-school age children are between 3 to 6 years where the pre-school age is a critical period in the formation of human quality resources. At this time the child is also experiencing motor development, one of which is fine motor skills. Fine motor movements are movements that involve only certain body parts and are carried out by small muscles, using the right fingers and wrists, these movements require careful eye and hand coordination.

Fine motor development in pre-school aged children must begin to have the ability to wiggle fingers and toes, draw two or three parts, choose longer lines, draw people, pinch objects, wave hands, use hands to play, place objects into a container, eats alone, drinks from a cup with assistance, uses a

spoon with assistance, eats with fingers, and makes scribbles on paper. Children can be trained to draw, paint, and write. Fine motor development tasks in pre-school aged children, for example, are using scissors, simple tools, or holding a pencil well, imitating pictures of diamonds and triangles, printing some letters, numbers or words, such as nicknames.

The results of research in 2018 stated that globally, there were 52.9 million children under the age of 6 years, 54% experienced fine motor development disorders. While the prevalence of fine motor impairment in pre-school-age children in Indonesia in 2017 is estimated to be as many as 60% of cases that are found to occur spontaneously at the age of under 6 years. According to the Indonesian Pediatricians Association (IDAI) in 2017 examined 2,634 children from 0-72 months of age. The results of these examinations showed results of abnormal development according to age 53%, doubtful (requiring deeper examination) as much as 13% and deviations in fine motor development (finger movements that were still stiff such as writing, holding) as much as 34%. Based on the results of a preliminary study conducted at the Ar-Ruhama' Kindergarten on January 5 2021, there were 40 children aged 5 years, 26 children (about 65%) had not optimally developed fine motor skills, which was characterized by the fact that most children were less skilled in using fingers such as the child's lack of ability to hold a pencil properly, the movements of the fingers that are still stiff, and the child's lack of ability to make shapes/objects according to size. As many as 6 children (15%), fine motor development has begun to develop quite well, as indicated by children being able to hold pencils and crayons properly, being able to shape objects/objects according to size, and being able to move scissors without assistance, while children's fine motor skills are developing very good as many as 8 children (20%) which is marked by the child's ability, especially in terms of holding a pencil (between the thumb and 2 fingers) and writing is very good.

The impact of delays in fine motor development is that children have self-confident low, less active and difficult to adapt to the environment which ultimately reduces the quality of the nation's next generation due to low human resources. This can make it difficult for children to enter school because fine motor skills in socializing with their peers are needed, for example when playing and also writing. A sense of dependence and lack of confidence in children will result in a decrease in achievement below the ability of the child.

Improving children's fine motor development can be done by designing interesting and impressive game strategies for children, such as play playdough , origami, and mosaic activities

II. Methods

Research Design

Research design *Quasy Experiment*. The type of research used in this study is *Pre Test And Post Test Control Group Design.* The purpose of this study was to determine the effect of play media therapy *playdough* on the improvement of fine motor movements in the fingers of pre-school aged children.

Research variables

This study uses 2 variables, independent variables (*independent variable*) in this research is*playdough*, Dependent variable (*dependent variable*) in this study children5 years old in Ar-Ruhama Kindergarten and pkk mandiri kindergarten.

Data source

The population in this study were 64 respondents consisting of 32 control groups and 32 intervention groups by using *Purposive sampling*

Data Collection Technique

a. Sending mail

b. Researchers determined the number and names of respondents who included the inclusion criteria with a total of 64 respondents.

c. Researchers asked for consent from the parents of prospective respondents to participate in the study

d. The researcher gave an explanation to the intervention group regarding pre and post play media therapy playdough and the length of time needed for playing media techniques playdough.In one large group there are 18 children.

e. Researchers observed fine motor development through sheets

f. The researcher was assisted by the teacher explaining playing techniques playdough and approximately 25 minutes.

Data analysis

The instrument test in this study used the Normality test, with the aim of assessing the distribution of data in a data group or variable, whether the data distribution is normally distributed or not..

Table 1.1 Normality Test Before and After Giving Media Play *Playdough* In the Control Group

Data type	Statistic	N	*p Value*
pretest	0.39	32	0.000
posttest	0.38	32	

Table 4.4 above the normality test results*pretest* in the control group 0.39. Whereas*posttest* in the control group 0.38

Table 1.2 Normality Test Before and After Giving Media Play*Playdough* In the Intervention Group

Data type	Statistic	N	*P Value*
Pretest	0.20	32	0.000
Posttest	0.31	32	

Table 4.5 above the normality test results *pretest* in the intervention group 0.20. Whereas *posttest* in the intervention group 0.31

III. Result and Discussion

1. **General characteristics of respondents**

Table 1.3 Characteristics of Respondents

Characteristics of Respondents	Frequency (F)	Presentase (%)
Gender		
Man	40	62,5
Woman	24	37,5
	64	100
Fine motor achievement		
Very less	9	14,1
Less	44	68,7
Enough	11	17,2
Good	0	0
Very good	0	0
Total	64	100

Table 1.3 Gender of respondents 62.5%, fine motor achievement 68.7% less

2. Distribution of Respondents Before and After Given Play Media *Playdough* in the control group

Table 1.4 Distribution of Respondents Before and After being given Play media *Playdough*control group

Fine motor achievement	Pre test Control Group		Post test Control Group	
	F	%	F	%
Very less	3	9,4	3	9,4
Less	24	75	24	75
Enough	5	15,6	5	15,6
Good	0	0	0	0
Very good	0	0	0	0
Total	32	100	32	100

Tabel 1.4 Pre Test 75 % , post test 24 responden 75 %

3. **Distribution of Respondents Before and After Given Play Media*Playdough*In the Intervention Group**

Table 1.5 Distribution of Respondents Before and After Given Play Media*Playdough*In the Intervention Group

Fine motor achievement	Intervention Group pre test		Intervention Group post test	
	F	%	F	%
Very less	6	18,7	5	15,6
Less	20	62,5	19	59,4
Enough	6	18,7	8	25
Good	0	0	0	0
Very good	0	0	0	0
Total	32	100	32	100

Table 1.5 Pre Test 62,5 %, post test 59,4%

Discussion

In children, the need for play cannot be separated from the development of their world and is one of the basic needs to be able to grow and develop optimally. Children need fun activities in the learning process. For children, playing is a means of learning for them. Playing is a process of preparing oneself to enter the next world and is a way to develop various aspects of children such as motor, social, emotional and physical (Alimul AH in Fitriani 2016).

Gender can also affect a child's fine motor skills, because after going through puberty, boys will grow faster than girls. Hurlock also stated that that in general before going through puberty, the growth and development of children will be faster in girls. This will decrease slowly following the age of the child until finally the difference disappears.

Kartikawati also gave a theory which stated that girls are easier to manage and calm, in contrast to boys who tend to be more whimsical, more difficult to manage, often argue with their parents and are hard to direct.

Fine motor skills are not one of the abilities that will develop just like that, but through a process of learning and practicing. The characteristics of fine motor movements are movements that do not require energy, but require careful coordination between the eyes and hands. The movement must get the right and continuous stimulus to get the right and perfect movement

Based on Rika Raihanun's research (2016) with the title "Improvement of Fine Motor Abilities in Group A1 Children Through Plasticine Playing Activities in Aisyiyah Bustanul Athfal Balung Kulon Kindergarten", hresearch resultsshowed an increase in the fine motor skills of group A1 children after being given action by implementing plasticine playing activities in fine motor learning, namely in cycle

I it was carried out by explaining and giving examples to children how to make shapes with techniques, and correct finger movements by making basic shapes first, namely round and long shapes, using plasticine and LKS, each child 4 plasticine with different colors, dividing 16 children into 2 groups. Cycle II was carried out almost the same as cycle I, but in cycle II it did not use worksheets but instead used plasticine and tart plates, divided groups of 16 children into 6 groups, distributed plasticine to 1 group, 1 container filled with plasticine of various colors. It is known that the average value of children's learning outcomes in cycle I was 75.49% with very good qualifications, and in cycle II it showed a significant increase with the acquisition of an average class value of 85.38%, these results were included in very good qualifications

Motor development at preschool age is very important. Through motor skills, children can entertain themselves and get a feeling of pleasure. As children feel happy by having the skills to play dolls, throw and catch balls or play toy tools. Through motor skills, children can move from a helpless condition in the first months of life to an independent condition. Children can move from one place to another and can do it for themselves. This condition will support the development of self-confidence. Through motor development, children can adapt themselves to the school environment. At pre-school age or the age of the early elementary school classes, children can already be trained to write, draw, paint, and line, through normal motor development allows children to play or socialize with their peers, while those that are not normal will hinder the child. to be able to get along with peers even he will be isolated or become a child whofringer (marginalized). The development of motor skills is very important for developmentself-concept or the child's personality

This research is also supported by Fitriani's research (2016) with the title "The Effects of Media Game TherapyPlaydough against Fine Motoric Ability in Pre-school-aged Children in Mawar Kindergarten, Gowa Regency" found thatP value= 0.000 < from α = 0.05. This shows that there is influence of media playplaydough significant effect on the fine motor skills of pre-school-aged children in the Mawar Kindergarten, Gowa District.

Based on Yezy Nur Azizah's research (2019) with the title "Effectiveness of Mosaic and Play Activities Playdough Regarding the Improvement of Fine Motoric Development in Pre-School Children in KB Permata Hati, Jogodayuh Village, it was found thatp-Value (Asymp. Sig 2- tailed) of 0.546 (> 0.05) so that it is concluded that H0 is accepted and Ha is rejected, which means there is no difference in the effectiveness of mosaic activities and playdoygh there is an increase in the fine motor development of preschool children aged 3-4 years at KB Permata Hati, Jogodayuh Village. The results of this study are known that both of these therapies proved to be equally effective in increasing fine motor development.

IV. Conclusion

There is an Influence of Media Play Playdough on the Improvement of Fine Motor Movement in Children Aged 5 Years at Ar-Ruhama' Kindergarten and Independent PKK Kindergarten in Patokan Village, Bantaran District, Probolinggo Regency.

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