THE EFFECT OF USING PEBODY APE ON FINE MOTOR DEVELOPMENT FOR 3-4 YEARS OLD CHILDREN

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ABSTRACT
According to the World Healthy Organization reports that 5-25% of preschool age children suffer from minor brain dysfunction, including impaired fine motor development. In Indonesia, the number of children under five in 2012 was ±31.8 million out of a population of 250 million or 12.72%.
This study aims to analyze the effect of the use of APE on the fine motor development of children aged 3-4 years. This study was carried out on September 31-7 in Sukaraja, Cikeas Village, 2025. The type of research used is a one group pretest posttest design. The sample size is 15 children aged 36-48 months. Sampling using total sampling technique. This study uses observation. Analysis of the data used is a prerequisite test.
Pre-requisite Test Results, The results of the pre-test showed that 8 people (24.3%) had doubtful fine motor development. While the post test showed that most of the 32 people (97%) had appropriate fine motor development. Prerequisite Test Results Shapiro-wilk test results. above, it is known that Based on the results of the Wilcoxon Signed Rank, Sig (2-tailed) was obtained, namely 0.000 which means that P Value <0.005 (H0 is rejected, Ha is accepted)
The conclusion of this study shows that there is a significant difference between pretest and posttest so that there is an effect of using Peabody APE on fine motor development of children aged 3-4 years.
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Keywords : APE, Pea Body, Fine Motor

INTRODUCTION

Growth and development in preschool children are inextricably linked to gross and fine motor skills. Gross motor skills in preschool children include the ability to jump on both feet, climb stairs, run, and ride and pedal a bicycle. Fine motor skills include the ability to pick up small objects using the thumb and index finger, cut paper and hold a pencil correctly, draw, write, and color (Soetjiningsih, 2015). (Munawaroh, Nurwijayawati, 2019)

Assessment of fine motor development using the Developmental Pre-Screening Questionnaire (KPSP). The KPSP is used to determine whether a child's development is normal or if there are any developmental abnormalities (Adriana, 2017). (Munawaroh, Nurwijayawati, 2019)

Disturbances in fine motor development cause obstacles in the learning process at school, which gives rise to various kinds of behavior, such as laziness in writing, lack of interest in learning, the child's personality is affected, for example the child feels insecure, becomes doubtful and often experiences anxiety when facing the surrounding environment (Nurlita, 2010). (Munawaroh, Nurwijayawati, 2019)

Delayed fine motor development results in a child's fine motor development falling below the normal range for their age. As a result, at a certain age, the child is unable to

perform developmental tasks appropriate to their peer group. The danger of delayed fine motor development is that some factors are controllable, while others are not. These delays are often caused by a lack of opportunities for the child to learn motor skills, excessive parenting, or a lack of motivation and stimulation (Hurlock, 2010). (Munawaroh, Nurwijayawati, 2019)

The process of fine motor development in preschool children will develop after the development of gross motor skills in children develops first, when the early age is one or two years old, grossmotor skills develop rapidly. Starting from the age of 3 years, the child's fine motor skills will develop rapidly, the child begins to be interested in holding a pencil even though the position of his fingers is still close to the pencil lead, besides that the child is also still stiff in making hand movements for writing (Fadhilah, 2014). (Munawaroh, nurwijayawati, 2019)

Preschool-aged children who have problems in their development tend to have non-formative behavior, such as children who are isolated, fearful, aggressive, and dependent on others (Susilawati, 2018). (Vinet & Zhedanov, 2011). Children with social developmental delays can show problems in socializing with their peers because of their passive attitude and indifference in responding to their peers' efforts through interaction (Smogorzewska & Szumski, 2018). (Vinet & Zhedanov, 2011).

Developmental problems in children that cannot be resolved immediately will affect the next stage of growth and development (Maria & Amalia, 2018). (Vinet & Zhedanov, 2011). Children will experience difficulties in various group demands and experience disruption in the formation of self-concept (Putri, 2019). (Vinet & Zhedanov, 2011). Optimal development in preschool children is largely determined by the family, school and surrounding community environment (Hazriyanti & Nasriah, 2019). (Vinet & Zhedanov, 2011).

WHO (World Health Organization) reports that 5-25% of preschool children suffer from minor brain dysfunction, including fine motor development disorders (Sutirna. 2013). In Indonesia, the number of toddlers in 2012 was ±31.8 million out of a population of 250 million or 12.72% (BKKBN in the Indonesian Ministry of Health, 2013).

National data from the Ministry of Health in 2017 showed that 12.5% of toddlers in Indonesia had problems with their growth and development. There are 23,878,447 preschool-aged children in Indonesia, consisting of 12,199,026 boys and 11,679,421 girls (Ministry of Health of the Republic of Indonesia, 2018). (Vinet & Zhedanov, 2011)

Research conducted by Indriani, Susi (2016) in TK Aisyiyah Bustanul Athfal 38 Surabaya, that still found children who ask for help in writing 23.5%, can mention but still need help in writing letters that have almost the same shape, 33.3%, the results of drawing are not neat and still broken 66.7% and ask for help when writing 22.2%. From the results of research in RA Baitul Karim Surabaya, 33 people before being given educational game tools (APE) 24.3% had doubtful fine motor development. While after being given educational game tool stimulation (APE) 97% had appropriate fine motor

development. (Baitul et al., nd) that influence child development in postpartum factors consist of nutrition, chronic diseases/congenital abnormalities, physical and chemical environments, air and light, culture, psychological, socio-economic parenting environment, stimulation or stimulation and drugs (Yuniarti, Sri. 2015).

Stimulation or stimulation is one of the postpartum factors that influences child development. When stimulation or stimulation is given, the hypothalamus will release hormones, in the anterior lobe of the pituitary gland (control center) the trophic hormones go to the target glands (effectors) so that there is an increase in GH hormones and causes increased development of body cells, especially bone cells and skeletal muscles (Kowalak, 2011). Stimulating child development is an activity to stimulate children's basic abilities so that they develop optimally (Setiani, Sri. 2007). (Baitul et al., nd)

Factors that can influence children's fine motor development are as follows:Hereditary factors (inherited from birth or congenital), environmental factors, and child activities.(Kartono, 2010). (Ii, 2010)

Every child needs early and continuous routine stimulation at every opportunity. Child development stimulation can be provided by mothers, fathers, caregivers, other family members, or community groups in the surrounding area. This stimulation can be provided through educational play equipment (EED). EED can enhance and develop children's psychomotor and social-emotional abilities (Andriana, Dian, 2013). (Baitul et al., nd)

According to Sadiman (2002:6), media is an intermediary or messenger that conveys messages from sender to recipient. Clearly, media is a tool for educators. Educational media is a complementary tool used by educators to communicate with children. This makes it easier for educators to communicate with children. Therefore, media selection is crucial for educators. Appropriate media must be tailored to the child's needs. (Baitul et al., nd).

According to Siswantari et al. (2012), hand puppets are imitations of human, animal, or other forms, which are smaller than ordinary puppets but larger than finger puppets, and can be adjusted to the size of the hand, with various motifs and patterns. (Kanuriant, 2018)

Failure to develop a child's basic development will influence and determine subsequent development. A common problem in children during development is a lack of abilities related to physical skills involving fine motor skills. The purpose of this study was to determine the effect of educational play equipment (APE) stimulation on the fine motor development of children aged 4-5 years at RA Baitul Karim Surabaya. (Baitul et al., nd)

The results of the pre-test study showed that 8 people (24.3%) experienced questionable fine motor development. While the post-test showed that most of the 32 people (97%) had appropriate fine motor development. The results of the analysis test obtained a value of $\rho = 0.000 < \alpha = 0.05$, so H0 was rejected, meaning that there was an effect of educational game tool (APE) stimulation on fine motor development of 4-5 year olds at RA Baitul Karim Surabaya.(Baitul et al., nd.)Management and Use of Early

Childhood Education. The early childhood phase is the most crucial stage for a child's growth and development. During this phase, a child's potential and talents experience tremendous growth through the development of their creativity. This phase even determines the child's development in the next stage. The successful implementation of an early childhood education program depends heavily on the management of learning resources. Management is crucial in every activity. (Mukhtar, 2018)

This is because stimulation is believed to elicit responses that act as motor training. Early childhood children are more likely to engage in physical movement as a way to explore and experiment. Enjoyable play experiences using APE materials will support successful learning, as their use is tailored to the child's developmental level, thus helping them develop optimally. (Mukhtar, 2018)

A preliminary study at the Kenanga Early Childhood Education Center (PAUD) on Jalan R. Ramdhan Lampita, Cikeas Village, Sukaraja District, Bogor Regency, involved 15 preschool-aged children. Six were 48 months old and nine were 36 months old. The questionnaires were filled out using a questionnaire. Therefore, the researcher is interested in conducting a study entitled "The Effect of Using Peabody APE on Fine Motor Development of Children Aged 3-4 Years."

RESEARCH METHODS

The design used was a one-group pre-test post-test design, which can determine causal relationships by involving one group of subjects. The subject group was observed before the intervention, then observed again after the intervention. The research was conducted at PAUD Kenanga, Cikeas Village, Sukaraja District, Bogor Regency, from August 31 to September 7, 2024. There were two teachers at PAUD Kenanga, with 25 preschool students consisting of 9 children aged 36 months, 6 children aged 48 months, 1 child aged 84 months and 9 children aged 24 months. Of the 25 preschool children, only 15 met the inclusion criteria to be research respondents. Before conducting this research, these 15 respondents were given an informed consent sheet to become respondents and the researcher conducted an initial observation or Pretest using the KPSP sheet that was appropriate for their age, namely 36-48 months.

RESEARCH RESULT

Table 1. Analysis Frequency Distribution of Fine Motor Development in Preschool Children Before Being Given Peabody APE

NO	Pretest	Frequency	%
1	Doubtful	14	93

Based on Table Frequency Distribution of Fine Motor Development of Preschool Children before being given Peabody APE, the results show that out of 15 respondents, 14 (93.3) were the largest number of pretest respondents with questionable results.

Table 2. Analysis Frequency Distribution of Fine Motor Development in Preschool Children After Being Given Peabody APE

NO	Pretest	Frequency	%
1	Doubtful	14	93

Based on Table Frequency Distribution of Fine Motor Development of Preschool Children After Being Given Peabody APE, the results show that out of 15 respondents, 14 (93.3) were the largest number of appropriate post-test respondents.

		N	Mean Rank	Sum of Ranks
Posttest - Pretest	Negative Ranks	14a	7.50	105.00
	Positive Ranks	0b	.00	.00
	Ties	1c		
	Total	15		

DISCUSSION

The discussion addresses the gaps that emerged after researchers conducted the study and then compared the results. This study examines the effect of educational play tools on the fine motor skills of 3-4-year-old children

1. Development of Preschool Children Before Being Given APE Peabody on Fine Motor Development of 3-4 Year Olds

   Based on the results of research conducted at PAUD Kenanga in 2024, before being given treatment for children's fine motor development using the KPSP observation sheet and hand puppet media.shows the results of 15 respondents, there were 13 (86.7%) the largest number of pretest respondents with doubtful results. 1 (6.7%) with appropriate results and 1 (6.7%) with deviation results.

   Delayed fine motor development refers to fine motor development that falls below the normal range for a child's age. As a result, at a certain age, a child is unable to perform developmental tasks appropriate for their age group. The danger is that the causes of delayed motor development are partly controllable, while others are not. These delays are often caused by a lack of opportunities for the child to learn motor skills, overprotection from parents, a lack of motivation to learn, and a lack of stimulation (Hurlock, 2010). (Munawaroh, Nurwijayawati, 2019).

   Based on the results of research conducted by Indriani, Susi (2016) at TK Aisyiyah Bustanul Athfal 38 Surabaya, that there were still children who asked for

help in writing 23.5%, could mention but still needed help in writing letters that had almost the same shape, 33.3%, the results of drawing were not neat and still broken 66.7% and asked for help when writing 22.2%. From the results of research at RA Baitul Karim Surabaya, 33 people before being given educational game tools (APE) 24.3% had questionable fine motor development. (Baitul et al., nd)

Based on the results of the theory above, researchers assume that delays in fine motor development are caused by a lack of opportunities to explore the environment since childhood and parenting patterns that tend to be overprotective and lacking in providing learning facilities and stimulation, so it is necessary to provide stimulation, one of which is using educational play media to stimulate the child's fine motor development.

2. Development of Preschool Children After being given APE Peabody on the fine motor development of children aged 3-4 years

   Based on the results of research conducted at PAUD Kenanga after being given treatment for the development of children's fine motor skills using the KPSP observation sheet and hand puppet mediashowed results of 14 (93.3%) post-test respondents who were appropriate and 1 (6.7%) who had deviations.

   Hand puppets are a popular learning aid for children. They mimic human and animal-shaped objects and serve as engaging learning tools for children, aiding their language development. Therefore, the stories conveyed don't have to be fairy tales or legends; they can also draw on children's everyday experiences. (Djamalu et al., 2021)

   The results of the pre-test study showed that 8 people (24.3%) experienced questionable fine motor development. While the post-test showed that most of the 32 people (97%) had appropriate fine motor development. The results of the analysis test obtained a value of $\rho = 0.000 < \alpha = 0.05$, so H0 was rejected, meaning that there was an effect of educational game tool (APE) stimulation on fine motor development of 4-5 year olds at RA Baitul Karim Surabaya.(Baitul et al., nd.)

   Based on the theoretical findings above, it can be concluded that children who are stimulated by educational play tools (EPD) will have appropriate fine motor development. This relates to the benefits of EPD for children.

3. The Effect of Using Peabody APE on Fine Motor Development of 3-4 Year Old

   Based on the Wilcoxon test statistical data above, it is known that the Asymp.sig Sig value (2-tailed) is 0.000. Since the value of 0.000 <0.05, it can be concluded that "Ha is accepted"which means there is a significant difference between the pretest and posttest so that there is an influence of the use of APE on the fine motor development of children aged 3-4 years.

Children aged 3-4 years showed a marked difference before and after being stimulated by educational play equipment (EA). Educational play equipment (EA) provides cognitive, affective, and psychomotor stimulation, so guidance is essential, considering that play is a necessity for children. As a necessity, play deserves careful

Based on research results at Al-Mustariyyah Kindergarten This shows that children's language skills through storytelling activities with finger puppet media, where in the initial conditions the first indicator, namely children are able to give ideas, obtained results of 22 or 34%, increased in cycle I to 42 or 66% and in cycle II increased to 59 or 92%. Then the second indicator, namely students are able to give ideas in the initial state, obtained results of 25 or 39%, increased in cycle I to 43 or 67% and in cycle II increased to 57 or 89%. The third indicator, namely children are able to create themselves without help in the initial state, obtained results of 26 or 41%, increased in cycle I to 44 or 69% and in cycle II increased to 62 or 97%. The fourth indicator, namely children are able to answer simple questions in the initial state, obtained results of 22 or34%, increased in cycle I to 42 or 66% and in cycle II increased to 61 or 95%. And the fifth indicator is that students have responsibility for the tasks given in the initial state, the results obtained were 24 or 38% increasing in cycle I to 43 or 67% and in cycle II increasing to 60 or 64%. And seen from the results of the average value of each cycle obtained in the initial state the average percentage was 37% in the less category, in cycle I increased to 67% and still in the less category, then in cycle II it increased to 95% in the very good category. This can be said that the use of finger puppet media to increase the creativity of early childhood is said to be very good and successful. (Rohmani, 2019)

This is in accordance with Andriana (2013) Educational game tools (APE) are all kinds of facilities that can stimulate activities so that they are fun and serve as a medium for children to increase and develop independence. (Baitul et al., nd)

Based on the theoretical results above, researchers assume that the Peabody APE has a significant influence on fine motor development, especially in preschool-aged children aged 3-4 years.

So the conclusion from the contents of the discussion above is that after conducting observations using KPSP and providing treatment regarding stimulation of fine motor development using APE Peabody in any form, especially hand puppet media, there is an influence on the fine motor development of preschool children.

CONCLUSION

1. Frequency Distribution of Fine Motor Development of Preschool Children before being given Peabody APE at PAUD Kenanga shows that out of 15 respondents, there were 14 (93.3) the largest number of pretest respondents with questionable results.

2. Frequency Distribution of Fine Motor Development of Preschool Children After Being Given Peabody APE at PAUD Kenanga showed that out of 15 respondents, 14 (93.3) were the largest number of appropriate post-test respondents.
3. It is known that the Asymp.sig Sig value (2-tailed) is 0.000. Since the value of 0.000 <0.05, it can be concluded that "Ha is accepted"which means there is a significant difference between the pretest and posttest so that there is an Effect of the Use of APE on the Fine Motor Development of Children Aged 3-4 Years at PAUD Kenanga.

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