International Journal of Education, Information Technology and Others (IJEIT), Agustus 2026, 9 (3), 33-48
DOI: https://jurnal.peneliti.net/index.php/IJEIT/article/view/14331
p-ISSN: 2654-2528 e-ISSN: 2623-2324
Accredited by Directorate General of Strengthening for Research and Development
Available online at https://jurnal.peneliti.net/index.php/IJEIT

The Effect of Beading Activities on the Fine Motor Skills of Children Aged 5–6 Years at Al-Fikri Early Childhood Education Center (PAUD Al-Fikri), Nanti Agung Village, Semidang Alas District, Seluma Regency

Erda[1*], Evi Selva Nirwana[2], Masrifa Hidayani[3]

[1]Early Childhood Islamic Education Study Program at UIN Fatmawati Sukarno Bengkulu.
[2,3] Lecturer at UIN Fatmawati Sukarno Bengkulu

Received: 25 Mei 2026
Revised: 6 Juni 2026
Accepted: 21 Juni 2026

Abstract

This study aims to determine the influence of meronce activities on the fine motor skills of children aged 5-6 years at PAUD Al-Fikri, Nanti Agung Village, Semidang Alas District, Seluma Regency. Fine motor skills are one of the aspects of early childhood development that need to be stimulated through activities that are interesting and in accordance with the characteristics of the child. One of the activities that can improve this ability is meronce activities because it involves eye and hand coordination, precision, finger flexibility, and skills in controlling hand movements. This study uses a quantitative approach with an experimental method. The research design used was a quasi-experiment with the experimental group and the control group. The research sample amounted to 120 children aged 5-6 years who were divided into two groups, namely 60 children in the experimental group who were given meronce activity treatment and 60 control group children who were given plasticine play activities. Data collection techniques are carried out through observation, tests, and documentation. Data were analyzed using analytical prerequisite tests and hypothesis tests (t-tests). The results of the study showed that there was an increase in children's fine motor skills after being given meronce activities. In the experimental group, before being given treatment, most of the children were in the undeveloped category (BB), while after being given the meronce activity, most of the children improved to the very good developed category (BSB). The results of the analysis showed that meronce activities had a significant influence on the fine motor skills of children aged 5–6 years at PAUD Al-Fikri, Nanti Agung Village, Semidang Alas District, Seluma Regency. Based on the results of the study, it can be concluded that meronce activities using media such as beads, straws, bottle caps, and grains are effective in improving fine motor skills in early childhood.

Keywords: *Meronce Activities, Fine Motor, Early Childhood.*

(*) Corresponding Author: erdawahyunisaputri@gmail.com,selvanirwana@gmail.com, masrifayani@gmail.com

How to Cite: Wahyunisaputri, E., Nirwana, E., & H, M. (2026). The Effect of Beading Activities on the Fine Motor Skills of Children Aged 5–6 Years at Al-Fikri Early Childhood Education Center (PAUD Al-Fikri), Nanti Agung Village, Semidang Alas District, Seluma Regency. *International Journal of Education, Information Technology, and Others*, *9*(3), 33-48. Retrieved from https://jurnal.peneliti.net/index.php/IJEIT/article/view/14331

INTRODUCTION

Education is one of the most important aspects of human life because through education a person can develop abilities, potential, and form a better

personality. Education not only plays a role in increasing knowledge, but also becomes a means in developing all aspects of human development from an early age. One of the levels of education that has an important role in the development process is Early Childhood Education (PAUD). Early childhood education is a coaching effort given to children from birth to the age of six through the provision of educational stimuli to help physical and spiritual growth and development so that children have readiness to enter further education (Fitriani & Adawiyah, 2020).

Early childhood is an individual who is undergoing a very rapid growth and development process. This period is often referred to as the *golden age* because in that period all aspects of child development undergo very rapid changes. Various aspects of development such as the development of moral religious values, cognitive, language, social-emotional, art, and physical motor develop gradually and require appropriate stimulation. If stimulation is given according to the needs and characteristics of the child, then the child's development can develop optimally.

One of the aspects of development that has an important role in children's lives is physical motor development, especially fine motor skills. Fine motor is a child's ability to perform movements that involve small muscles in the hands and fingers that require coordination between the eyes and hands. Fine motor skills are closely related to children's daily activities, such as holding pencils, drawing, scissors, folding, inserting small objects, and carrying out various activities that require precision and hand skills (Agustin, 2024).

According to (Rolita, 2024), motor is everything related to body movements that involves three main elements, namely muscles, nerves, and brain. Motor development occurs through the coordination process between the nervous system and muscles so that children are able to perform various movements according to their level of development. Meanwhile, (Setiyawati, 2021) explained that physical motor development is related to the child's ability to control body movements through limb coordination, while fine motor puts more emphasis on activities that use small muscles such as the fingers and wrists.

Fine motor skills in early childhood need attention because they are the basis for children to carry out various activities independently. Children who have good fine motor skills will find it easier to do activities that require coordination and precision of movement. Therefore, learning activities are needed that can provide direct stimulation through activities that are interesting, creative, and in accordance with the child's world.

However, in the implementation of learning in PAUD institutions, various problems are still found related to children's fine motor development. Not all children are able to develop fine motor skills optimally. Some children still have difficulty controlling hand movements, holding small objects, coordinating eye and hand movements, and completing activities that require precision.

The results of research by (Rahmasari and Ismet, 2022) show that saturation of the use of conventional learning media causes children's eye and hand coordination skills to not develop optimally. Children need more interesting learning media so that they can provide a direct learning experience. Taha's research

(2025) also explains that the lack of sensory stimulation in the fingertips causes the ability of children's hand muscles to remain stiff, thus affecting fine motor development.

In addition, research by (Dwi Nomi, 2024) found that some children still lack focus when doing activities to glue collage materials. This shows that the learning activities provided need to be more varied so that children can be actively involved. (Yanti, 2024) also explained that the continuous use of paper media can cause children's boredom in participating in learning activities.

Problems with fine motor skills are also found in activities that require hand coordination. (Nurwita, 2024) shows that some children still need the help of teachers in putting together puzzle pieces. (Damayanti et al., 2020) explained that low coordination ability and finger skills are one of the factors that cause children's fine motor development to be not optimal. The same thing was also stated by (Rahmawati, 2024) that the lack of stimulation of the coordination of the small hand muscles causes children's fine motor skills to develop more slowly.

Based on these various problems, a learning activity is needed that is able to stimulate children's fine motor skills through fun activities. One of the activities that can be used to develop these abilities is meronce activities.

Meronce is an activity of arranging or assembling objects that are hollow using rope so that it becomes a form of a certain series. Meronce activities include play-while learning activities that can train children's hand skills through the activities of picking, holding, inserting, and arranging objects in order. According to (Sila, 2021), meronce activities are activities that involve elements of art by paying attention to the shape, color, and size of the objects that are assembled.

Meronce activities have a close relationship with fine motor development because in its implementation children actively use the fingers of the hand. Children must be able to pick up small objects, put them in a rope, and arrange objects according to a certain pattern. These activities directly train eye and hand coordination, finger flexibility, hand muscle strength, accuracy, and the child's concentration ability.

According to Sumantri, meronce is an activity of chaining or arranging objects with holes using rope or thread so as to produce a certain series. This activity aims to practice coordination between children's eyes and hands. In addition, Parmadhi explained that meronce is an activity of arranging and connecting various components using ropes so as to produce a work that has beauty value.

In this study, meronce activities were carried out using mixed media, namely beads, straws, plastic bottle caps, and grains. The use of mixed media was chosen because it has a variety of different shapes, colors, sizes, and textures so that it can provide a more interesting learning experience for children. In addition to training fine motor skills, these media can also help children get to know the concepts of color, shape, size, and simple patterns.

The use of mixed media in meronce activities is one of the novelties in this research. Previous research has used more one type of medium such as beads, natural materials, or certain used materials. Meanwhile, in this study, several types

of media were used that were combined so that children gained a more diverse experience in learning activities.

Several previous studies have shown that meronce activities have a positive influence on children's development. Hidayah's research (2025) shows that meronce activities can increase children's independence in completing fine motor tasks without the help of teachers. (Lestari, Hartono, and Isnawati, 2025) explained that the use of more interesting meronce media can increase children's interest in participating in learning activities.

Research by (Hasmidar, Bahrun, et al., 2025) shows that the use of hollow wood block media can increase the strength of children's hand muscles. Nasaruddin's research (2021) also proves that meronce activities using beads can improve fine motor skills in early childhood. In addition, (Maharani, 2023) found that the use of simple objects such as stones, wood, and twigs in meronce activities can increase the flexibility of the fingers and children's creativity.

Based on previous research, it can be found that meronce activities have great benefits in improving children's fine motor skills. However, previous research still has limitations in the use of media that tend to use one type of material. Therefore, this study uses mixed media in the form of beads, straws, plastic bottle caps, and grains as a form of innovation in meronce activities.

Based on the results of initial observations at PAUD Al-Fikri, Nanti Agung Village, Semidang Alas District, Seluma Regency, it was found that some children still have difficulties in carrying out activities that require eye and hand coordination. Children still need help when holding small objects, putting objects in ropes, and arranging objects in order. In addition, the fine motor learning activities provided still need variety so that children are more interested and active.

Therefore, meronce activities using mixed media are considered suitable to be applied in improving the fine motor skills of children aged 5–6 years. Through this activity, children can learn in a fun way while developing hand coordination skills, precision, concentration, and creativity.

Based on this description, this study was conducted to determine the influence of meronce activities on the fine motor skills of children aged 5-6 years at PAUD Al-Fikri, Nanti Agung Village, Semidang Alas District, Seluma Regency. This research is expected to contribute to the development of early childhood learning, especially in the use of creative activities that can improve children's fine motor development.

RESEARCH METHOD

This study uses a quantitative approach with an experimental method. The quantitative approach is used because research data is in the form of numbers which are then analyzed using statistical techniques to determine the influence of a treatment on the research variable. According to Donatus (2020), the quantitative approach is a research approach that carries out the measurement process of a phenomenon through numerical data so that it can be analyzed objectively. In this study, a quantitative approach was used to determine the influence of meronce

activities on the fine motor skills of children aged 5–6 years.

The type of research used is experimental research with *a quasi-experimental* design. The experimental research aims to determine the causal relationship between the treatment given and the changes that occur in certain variables. This research Using two groups, namely the experimental group and the control group. The experimental group was given treatment in the form of meronce activities, while the control group was given learning activities as usual. Before being given treatment, both groups were given a pretest to find out the child's initial ability. After the treatment was given, the two groups were again given a final test (*posttest*) to determine changes in the child's fine motor ability (Ummah, 2019).

This research was carried out at PAUD Al-Fikri Nanti Agung Village, Nanti Agung Village, Semidang Alas District, Seluma Regency. The research was carried out from April 6 to May 6, 2026. The selection of the research location was based on the results of initial observations which showed that there were still children aged 5–6 years who had difficulties in carrying out activities related to eye and hand coordination, accuracy, and skills to use the small hand muscles.

The research design used in this study is *pretest-posttest control group design*. In this design, the experimental group and the control group were given initial tests before treatment and final tests after treatment. The research design can be described as follows:

Kelompok	**Pretest**	**Perlakuan**	**Posttest**
Eksperimen	X1	Kegiatan Meronce (X)	X2
Kontrol	X1	Tidak diberikan perlakuan khusus	X2

The population in this study is all children aged 5-6 years in PAUD Al-Fikri Desa Nanti Agung with a total of 160 children. The population is a whole of research subjects that have certain characteristics in accordance with the research objectives. The research sample was selected based on the needs of experimental research. The sample used amounted to 120 children which were divided into two groups, namely the experimental group of 60 children and the control group of 60 children.

The variables in this study consist of independent variables and bound variables. The free variable (X) in this study was meronce activities. Meronce activity is the activity of arranging or inserting objects such as beads, straws, bottle caps, and grains into a rope so that it forms a certain series. This activity aims to train children's hand and finger coordination. While the bound variable (Y) is the fine motor ability of children aged 5–6 years. Fine motor skills are the ability of children to use small muscles, especially hands and fingers, which involve coordination between eyes and hands.

The data collection techniques in this study use observation, tests, and documentation. Observations were carried out to observe children's fine motor skills during learning activities, especially when doing meronce activities. The test

is used to determine changes in children's fine motor skills through the administration of *pretests* before treatment and *posttests* after treatment. Documentation is used to obtain research supporting data in the form of data on the number of students, sample data, and documentation of research activities.

The research instrument used was in the form of an observation sheet on fine motor development of children aged 5–6 years. The instrument was compiled based on indicators of fine motor ability which included eye and hand coordination, accuracy, finger flexibility, finger and hand muscle strength, fine movement speed, and motion control. The assessment of children's abilities uses developmental categories, namely Not Developing (BB), Starting to Develop (MB), Developing as Expected (BSH), and Developing Very Well (BSB).

Before being used in research, the instrument is first tested for validity and reliability. The validity test was carried out to determine the level of validity of each instrument item using *Pearson's Product Moment correlation* through the help of the SPSS program. The instrument is said to be valid if the calculated r value is greater than the r table. In addition, reliability tests were carried out using Cronbach's Alpha method to determine the consistency of the research instruments. The test results showed that the child's fine motor ability instrument was declared valid and reliable so that it could be used as a research data collection tool.

The data analysis technique is carried out through several stages. The first stage is the analysis prerequisite test which includes the normality test, homogeneity test, and linearity test. The normality test was carried out to find out whether the research data was distributed normally. The homogeneity test was performed to determine the similarity of variance between the experimental group and the control group. Meanwhile, the linearity test was carried out to determine the relationship between the variables of meronce activities and children's fine motor skills.

Next, hypothesis testing was carried out using the t-test (*Independent Sample t-Test*). This test was used to find out if there was a significant influence between meronce activities on the fine motor skills of children aged 5–6 years. Decision-making is carried out based on significance values (Sig.). If the Sig. value < 0.05, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted, which means that there is a significant influence. On the other hand, if the value of Sig. > 0.05 then H_0 is accepted and H_1 is rejected.

RESULTS AND DISCUSSION

Results

1. Description of the Research Area

A brief history of Paud Al-Fikri

Paud Al-Fikri is located in Nanti Agung village, Semidang Alas District, Seluma Regency. Paud al-fikri was established at the end of 2014. to be precise, it was established on July 6, 2015 which was named Paud al-Fikri.Paud al-Fikri is a private school with accreditation C. Education of Paud al-Fikri is through village

deliberations on July 6, 2015 and as the person in charge of the village head will be agung. With the existence of village funds for the 2017 Fiscal Year, a building was established for the al-Fikri early childhood education which has been occupied until now.

This study aims to determine the influence of meronce activities on the fine motor skills of children aged 5-6 years at PAUD Al-Fikri, Nanti Agung Village, Semidang Alas District, Seluma Regency. Fine motor skills are one of the aspects of development that are important to be stimulated from an early age because they are related to the coordination of small muscles, especially hand and finger movements that are needed in various daily activities and children's learning readiness at the next level of education.

In this study, an experimental design was used with two groups, namely the experimental group that was given meronce activities and the control group that was given plasticine play activities. Both groups were given measurements of fine motor skills before treatment (pre-test) and after treatment (post-test). Meronce activities were chosen because they involve eye and hand coordination, precision, concentration, and finger skills in inserting objects into the rope in order. Meanwhile, playing plasticine is used in the control group because it is also an activity that can stimulate children's fine motor development through squeezing, rolling, pressing, and shaping various objects.

The results of the study obtained will further describe the condition of children's fine motor skills before and after being given treatment in each group, as well as analyze the difference in the improvement of fine motor skills between the group that received meronce activities and the group that received plasticine play activities. Through these results, it can be known the extent of the effectiveness of meronce activities in improving the fine motor skills of children aged 5-6 years at PAUD Al-Fikri, Nanti Agung Village, Semidang Alas District, Seluma Regency.

Furthermore, the results of the study will be presented in the form of pre-test and post-test data distribution in the experimental group and control group, as well as the results of statistical tests to determine the effect of meronce activities on children's fine motor skills

Results of Observation of Fine Motor Ability of Children Aged 5-6 Years in the Control Group Before Plasticine Play Intervention

In this study, children aged 5-6 years in the control group were given plasticine games to improve their fine motor skills. Before giving or inviting children to play plasticine, the researcher first observed fine motor skills based on sheets The observation that has been compiled is 41 observation points. The results of measuring fine motor skills before being given stimulation of plastic games can be seen in the following table.

Tabel 4.5

The observation that has been compiled is 41 observation points. The results of measuring fine motor skills before being given stimulation of plastic games can be seen in the following table.

(Pretest)

No	Kemampuan Motorik halus	Frekuensi	Persentase
1	BB	17	28.3
3	MB	43	71.7
	Total	60	100.0

Sumber : Data primer yang diolah, 2026

Based on Table 4.5 above, it can be seen that the fine motor skills of children aged 5-6 years are 43 people or most (71.7%) with an undeveloped level (BB).

Results of Observation of Fine Motor Abilities of Children Aged 5-6 Years in the Control Group Before the Plasticine Play Intervention

Furthermore, children aged 5-6 years in the control group were given plasticine game intervention and after the intervention was followed by a re-measurement of the child's fine motor skills with the following results:

Table 4.6 Frequency Distribution of Fine Motor Abilities in Children Aged 5-6 Years After the Plasticine Play Intervention (Control Group) *(Posttest)*

No	Kemampuan Motorik halus	Frekuensi	Persentase
1	BSB	20	33.3
2	BSH	40	66.7
	Total	60	100.0

Sumber : Data primer yang diolah, 2026

Based on Table 4.6 above, it can be seen that the fine motor skills of children aged 5-6 years begin to develop where it can be seen that there is a decrease in the number of children with the undeveloped category (BB) from 17 people (28.3%) to none and increasing to very well developed (BSB).

Results of Observation of Fine Motor Skills of Children Aged 5-6 Years in the Experimental Group Before the Meronce Play Intervention

In the experimental group in this study, children aged 5-6 years were given an intervention or simulation in the form of playing using meronce media. Similarly, in the control group, before being given an intervention, a measurement of the child's fine motor skills was carried out which can be seen in the following table:

Table 4.7 Frequency Distribution of Fine Motor Abilities in Children Aged 5-6 Years Before Meronce Media Play Intervention (Experimental Group) *(Pretest)*

No	Kemampuan Motorik halus	Frekuensi	Persentase
1	BB	35	58.3
3	MB	25	41.7
	Total	60	100.0

Sumber : Data primer yang diolah, 2026

Based on the table above, it can be seen that as many as 35 children (58.3%) with the undeveloped category (BB).

Results of Observation of Fine Motor Skills of Children Aged 5-6 Years in the Experimental Group Before Meronce Play Intervention

The following are the results of measuring the fine motor skills of children aged 5-6 years after being given a media play intervention.

Table 4.8 Frequency Distribution of Fine Motor Abilities of Children Aged 5-6 Years After Meronce Media Play Intervention (Experimental Group) *(Posttest)*

No	Kemampuan Motorik halus	Frekuensi	Persentase
1	BSB	52	86.7
2	BSH	8	13.3
	Total	60	100.0

Sumber : Data primer yang diolah, 2026

Based on the table above, it can be seen that as many as 52 children or almost all (86.7%) with the category of very good development (BSB)

Prerequisite Test Results

This test is carried out as one of the requirements before the *paired t-test hypothesis test*. The tests carried out were normality and linearity tests on the variables of plasticine game intervention and meronce media. The data is said to be distributed normally and linear if *the value of Asymp.Sig (2.tailed)* > 0.05. The following are the results of the normality and linearity test of variable data.

Normality Test

In this study, the normality test aims to find out whether the variables in this study have a normal distribution or not. In this study, normality testing was carried out using *the Kolmogorov Smirnov value*, this is because the data or sample is more than 50. In this study, the data obtained is data on the results before and after treatment so that the normality test used is the *Kolmogorov Smirnov test*, where the data used in this normality test is the result of residual *pretest* and *posttest values*. A data is said to be normally distributed if the value of Asymp.Sig (2-tailed) is greater than or equal to 0.05 or 5%. (Scott, 2020) The following are the results of the normality test of pretest and posttest anxiety score data.

Tabel 4.9 Uji Normalitas

Variabel	*Shapiro-Wilk*
Bermain Plastisin	0,107

Bermain Meronce	**Media**	0,170

Sumber : Data primer yang diolah, 2026

Based on the table above, it can be seen that as many as 52 children or almost all (86.7%) with the category of very good development (BSB)

Prerequisite Test Results

This test is carried out as one of the requirements before the *paired t-test hypothesis test*. The tests carried out were normality and linearity tests on the variables of plasticine game intervention and meronce media. The data is said to be distributed normally and linear if *the value of Asymp.Sig (2.tailed)* > 0.05. The following are the results of the normality and linearity test of variable data.

Normality Test

In this study, the normality test aims to find out whether the variables in this study have a normal distribution or not. In this study, normality testing was carried out using *the Kolmogorov Smirnov value*, this is because the data or sample is more than 50. In this study, the data obtained is data on the results before and after treatment so that the normality test used is the *Kolmogorov Smirnov test*, where the data used in this normality test is the result of residual *pretest* and *posttest values*. A data is said to be normally distributed if the value of Asymp.Sig (2-tailed) is greater than or equal to 0.05 or 5%. (Scott, 2020) The following are the results of the normality test of pretest and posttest anxiety score data.

Tabel 4.10 Hasil Uji Homogenitas

Levene Statistic	**df1**	**df2**	**Sig.**	**Keputusan**
72.067	1	118	.310	Homogen

Sumber: Hasil pengolahan data penelitian, 2026.

Based on Table 4.10, the significance value of Levene's Test is 0.310 > 0.05. Thus, the variance of the data between the experimental group and the control group was declared homogeneous. This means that the two groups have relatively similar data diversity so that they can be compared in hypothesis testing

Linearity Test

This linearity test uses the help of SPSS 2.5 which aims to find out whether two variables have a linear relationship or not. The following are the results of data processing conducted by the linearity test between variables X to Y in both interventions, using the help of SPSS 2.0

Tabel 4.11 Uji Linearitas

Variabel	Deviation from Linearity
Bermain Plastisin	0,799
Bermain Media Meronce	0,258

Sumber : Data primer yang diolah, 2026

From the calculation presented in table 4.11 above, the Deviation from Linearity value > 0.05 so it can be said that the linearity requirements have been met.

Hypothesis Test Results

Effect of Playing Plasticine on Fine Motor Abilities in Children Aged 5-6 Years (Control Group)

In this study, to determine the effect of playing plasticine given to the control group using a statistical test, namely *the Paired t-Test* , can be seen in table 4.11 below.

Table 4.11 Effect of Plasticine Play on Fine Motor Skills in Children Aged 5-6 Years (Control Group)

Plastisin	Mean	Standar Deviasi	t	P
Pretest	74.43	12.545	13.936	0,000
Posttest	102.75	23.510		

Sumber : Olah Data, 206

Based on table 4.11 above, it is known that the mean value before plasticine play therapy is 74.43 which is smaller than the mean value after plasticine play therapy is 102.75 and Std. Deviation before plasticine play therapy is 12.545 and after plasticine play therapy is 23.510. The results of the *Paired t-Test* were obtained with a p value of 0.000 ($p < 0.05$), which means that there is an effect of playing plasticine on the improvement of fine motor skills of children aged 5-6 years at PAUD AL-Fikri.

Effect of Playing Plasticine on Fine Motor Abilities in Children Aged 5-6 Years (Control Group)

Furthermore, the distribution of the results of the statistical test of the influence of playing media on meronce given to the experimental group can be seen in table 4.12 below.

Table 4.12 Effect of Meronce Play on Fine Motor Skills of Children Aged 5-6 Years (Experimental Group)

Meronce	Mean	Standar Deviasi	t	P
Pretest	78,18	10,023	13,936	0,000
Posttest	106,10	20,057		

Sumber : Olah Data, 2026

Based on table 4.12 above, it is known that the mean value before meronce play therapy is 78.18 which is smaller than the mean value after meronce play therapy which is 106.10 and Std. Deviation before meronce therapy is 10.023 and after meronce play therapy is 20.057. The results of the *Paired t-Test* obtained a p value of 0.000 ($p < 0.05$), which means that there is an influence of playing

plasticine on the improvement of fine motor skills of children aged 5-6 years in PAUD A-Fikri**.**

DISCUSSION

The results of this study show that meronce activities have an influence on the improvement of fine motor skills of children aged 5-6 years at PAUD Al-Fikri, Nanti Agung Village, Semidang Alas District, Seluma Regency. Fine motor skills are one of the most important aspects of development in early childhood because they are related to the ability to use small muscles, especially hands and fingers that require coordination between eyes and hands. Optimal fine motor development will help children in carrying out various daily activities and support children's readiness to participate in the next learning activities

Based on the results of the study before being given treatment (*pretest*) in the control group given plasticine play activities, it showed that most of the children were in the developing category (MB) as many as 43 children (71.7%) and the undeveloped category (BB) as many as 17 children (28.3%). This condition shows that children's fine motor skills before being given stimulation are still not fully developed. Children still need activities that are able to train hand coordination, finger flexibility, and the ability to control hand movements.

In the experimental group before being given meronce activities, the results showed that most of the children were in the undeveloped category (BB) as many as 35 children (58.3%) and the early development category (MB) as many as 25 children (41.7%). This shows that the initial condition of fine motor skills between the experimental group and the control group still requires appropriate stimulation for the child's ability to develop.

According to Setiyawati (2021), early childhood motor physical development requires stimulation through activities that involve direct bodily activity. Fine motor is related to the child's ability to control the movement of small muscles, especially in the fingers and hands. Therefore, learning activities given to early childhood must be able to provide opportunities for children to carry out manipulative activities that can train hand skills.

After being given treatment, there was an increase in fine motor skills in both the control group and the experimental group. In the control group that was given plasticine play activities, *the posttest* results showed that children's fine motor skills had improved, namely as many as 20 children (33.3%) were in the developing category very good (BSB) and 40 children (66.7%) were in the category of developing according to expectations (BSH). These results show that playing plasticine also has a positive influence on children's fine motor development.

Plasticine play activities can improve fine motor skills because in these activities children perform squeezing, pressing, rolling, shaped, and manipulating materials using the fingers of the hand. These activities help train the strength of the hand muscles and coordination of the child's movements. This is in accordance with Sumantri's opinion that children's fine motor development can be developed

through activities that provide opportunities for children to actively use their fingers through play activities.

Furthermore, in the experimental group that was given the treatment of meronce activities, a more visible improvement was shown. The results *of the posttest* showed that as many as 52 children (86.7%) were in the very good development category (BSB) and 8 children (13.3%) were in the expected development category (BSH). There are no more children who are in the undeveloped category. This shows that meronce activities are able to provide effective stimulation to children's fine motor skills.

The improvement of fine motor skills through meronce activities occurs because meronce activities involve various basic skills related to the development of small hand muscles. When doing meronce activities, children must pick up small objects, hold the rope, direct the rope to the hole of the object, insert the object appropriately, and arrange a series according to a certain pattern. The process directly trains the child's eye and hand coordination, precision, concentration, and finger flexibility.

According to Sila (2021), meronce activities are the activity of arranging objects with holes using rope so as to form a certain series. This activity has benefits in developing eye and hand coordination skills and training children's skills in controlling finger movements. In line with this opinion, Parmadhi explained that meronce activities are creative activities that provide opportunities for children to develop motor skills as well as creativity through the process of compiling various materials.

The results of this study are also strengthened by the research of Nasaruddin (2021) which shows that meronce activities using beads can improve fine motor skills in early childhood. Meronce activities provide direct experience to children to practice the ability to hold small objects, regulate hand positions, and increase accuracy in completing tasks. In addition, Maharani's research (2023) explains that the use of various objects in meronce activities can increase finger flexibility and children's creativity.

Based on the results of the prerequisite test analysis, it is known that the research data is distributed normally. The results of the normality test showed a significance value in the plasticine playing group of 0.107 and the meronce media playing group of 0.170, which means that the value was greater than 0.05 so that the data was declared to be normally distributed. In addition, the results of the homogeneity test showed a significance value of $0.310 > 0.05$ which means that the variance of data between the experimental group and the control group was homogeneous. Thus, the data are eligible for hypothesis testing using parametric statistical tests.

The results of hypothesis testing in the control group showed that there was an effect of playing plasticine on children's fine motor skills. The mean before treatment was 74.43 increased to 102.75 after treatment. The results of the *Paired t-Test* showed a significance value of 0.000 ($p < 0.05$), so it can be concluded that playing plasticine has an effect on improving children's fine motor skills.

Meanwhile, the results of the hypothesis test in the experimental group showed that meronce activities also had a significant influence on children's fine motor skills. The average score before being given meronce activity was 78.18 increased to 106.10 after being given treatment. The results of the *Paired t-Test* showed a significance value of 0.000 ($p < 0.05$), so that there was an influence of meronce activities on the fine motor skills of children aged 5–6 years at PAUD Al-Fikri.

The results of this study show that meronce activities provide a more optimal improvement in fine motor skills compared to plasticine play activities. This is because meronce activities have more specific activities in practicing eye and hand coordination. Children directly learn to control hand movements when inserting objects into ropes, arrange patterns, and maintain the results of the series to keep them neat.

According to Agustin (2024), children's fine motor skills develop through activities that provide opportunities to perform manipulative movements using hands and fingers. The more often children are given activities that involve hand-eye coordination, the more their motion control skills will develop. Therefore, meronce activities are one of the appropriate activities to be given to early childhood in improving fine motor skills.

The findings of this study are also in line with the research of Hidayah (2025) who stated that meronce activities are able to increase children's independence in completing fine motor activities. In addition, Lestari, Hartono, and Isnawati (2025) explained that the use of interesting media in meronce activities can increase children's motivation and involvement in the learning process.

Thus, based on the results of research and the support of theories and previous research, it can be concluded that meronce activities using media such as beads, straws, bottle caps, and grains are effective in improving the fine motor skills of children aged 5-6 years. Meronce activities can be one of the learning alternatives that can be applied by PAUD teachers to provide stimulation of fine motor development through fun and meaningful play activities.

CONCLUSION

Based on the results of research and data analysis regarding the influence of meronce activities on the fine motor skills of children aged 5–6 years at PAUD Al-Fikri, Nanti Agung Village, Semidang Alas District, Seluma Regency, it can be concluded that meronce activities have an effect on children's fine motor skills.

This is evidenced by the results of the paired sample t-test in the experimental class which showed a significance value of $0.000 < 0.05$, which means that there is a significant difference between the results of the pretest and posttest after being given the treatment of meronce activities. Meanwhile, in the control class that used plasticine activities, a significance value of $0.066 > 0.05$ was obtained, indicating that there was no significant difference between pretest and posttest.

Thus, it can be concluded that meronce activities are more effective in

improving the fine motor skills of children aged 5–6 years compared to plasticine activities

BIBLIOGRAPHY

Agustin, R. (2024). *Pengembangan kemampuan motorik halus anak usia dini melalui kegiatan pembelajaran kreatif*. Jurnal Pendidikan Anak Usia Dini, 8(1), 45–53.

Damayanti, A., Sari, N., & Wulandari, R. (2020). Pengembangan motorik halus anak usia dini melalui kegiatan bermain yang kreatif. *Jurnal Pendidikan Anak Usia Dini Indonesia*, 5(2), 112–120.

Donatus, S. K. (2020). *Pendekatan kuantitatif dalam penelitian pendidikan*. Yogyakarta: Pustaka Pendidikan.

Dwi Nomi, S. (2024). Pengaruh kegiatan kolase terhadap kemampuan motorik halus anak usia dini. *Jurnal Pendidikan Anak*, 9(1), 33–41.

Fitriani, A., & Adawiyah, R. (2020). Pendidikan anak usia dini sebagai dasar perkembangan karakter dan kemampuan anak. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 4(2), 789–798.

Hasmidar, Bahrun, & Rahmawati. (2025). Penggunaan media balok kayu berlubang untuk meningkatkan kemampuan motorik halus anak usia dini. *Jurnal Ilmiah Pendidikan Anak Usia Dini*, 10(1), 55–64.

Hidayah, N. (2025). Kegiatan meronce dalam meningkatkan kemandirian dan kemampuan motorik halus anak usia dini. *Jurnal Pendidikan Anak Usia Dini*, 9(2), 101–110.

Lestari, D., Hartono, & Isnawati. (2025). Penggunaan media meronce dalam meningkatkan minat belajar anak usia dini. *Jurnal Pendidikan dan Perkembangan Anak*, 7(1), 22–31.

Maharani, P. (2023). Pemanfaatan bahan alam dalam kegiatan meronce untuk meningkatkan kreativitas dan motorik halus anak usia dini. *Jurnal Pendidikan Anak Usia Dini*, 8(2), 75–84.

Nasaruddin. (2021). Pengaruh kegiatan meronce menggunakan manik-manik terhadap kemampuan motorik halus anak usia dini. *Jurnal Pendidikan Anak*, 6(2), 120–128.

Nurwita, S. (2024). Peningkatan kemampuan koordinasi tangan anak melalui kegiatan permainan edukatif. *Jurnal Anak Usia Dini dan Pendidikan*, 5(1), 66–74.

Parmadi, H. (2021). *Seni keterampilan anak usia dini melalui kegiatan kreatif*. Jakarta: Universitas Terbuka.

Rahmawati, D. (2024). Stimulasi perkembangan motorik halus anak usia dini melalui aktivitas manipulatif. *Jurnal Golden Age Pendidikan Anak Usia Dini*, 8(1), 90–98.

Rahmasari, A., & Ismet, S. (2022). Penggunaan media pembelajaran kreatif dalam meningkatkan koordinasi mata dan tangan anak usia dini. *Jurnal Pendidikan Anak Usia Dini*, 6(2), 134–142.

Rolita, M. (2024). Perkembangan motorik anak usia dini melalui aktivitas bermain. *Jurnal Pendidikan Anak Usia Dini Indonesia*, 9(1), 15–24.

Setiyawati, N. (2021). Perkembangan fisik motorik anak usia dini dan stimulasi pembelajarannya. *Jurnal Pendidikan Anak Usia Dini*, 5(2), 98–107.

Sila, W. (2021). Kegiatan meronce sebagai media pengembangan motorik halus anak usia dini. *Jurnal Pendidikan Anak*, 7(1), 45–53.

Sugiyono. (2020). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.

Sumantri. (2019). *Model pengembangan keterampilan motorik anak usia dini*. Jakarta: Departemen Pendidikan Nasional.

Taha, N. (2025). Stimulasi sensorik melalui aktivitas bermain untuk meningkatkan kemampuan motorik halus anak usia dini. *Jurnal Pendidikan Anak Usia Dini*, 10(1), 40–49.

Ummah, M. S. (2019). *Metodologi penelitian eksperimen dalam pendidikan*. Malang: Literasi Nusantara.

Yanti, R. (2024). Pengaruh penggunaan media pembelajaran terhadap motivasi belajar anak usia dini. *Jurnal Pendidikan Anak Usia Dini*, 8(2), 56–65.