

# THE INFLUENCE OF CANDLE PAINTING ACTIVITIES ON DEVELOPMENT FINE MOTOR SKILL OF CHILDREN AGED 4-5 YEARS IN AL-QUR'AN KINDERGARTEN JAUHARUL WATHON MOARO JAMBI

Mayola Sapitri<sup>1</sup>, Asih Nur Ismiatun<sup>2</sup>, Akhmad Fikri Rosyadi<sup>3</sup>

<sup>1,2,3</sup> University of Jambi

Email : [mayolasptr@gmail.com](mailto:mayolasptr@gmail.com) [asihnurismi@unja.ac.id](mailto:asihnurismi@unja.ac.id)  
[akhmadfikri.rosyadi@unja.ac.id](mailto:akhmadfikri.rosyadi@unja.ac.id)

## Abstract

This research aims to determine the effect of wax painting activities on the fine motor development of children aged 4-5 years at Al-Qur'an Kindergarten, Jauharul Wathon Muaro Jambi. This type of research is quantitative with experimental methods. The design used in this research is Pre-Experimental Design in the form of One Group Pretest Posttest Design. The population in this study was 29 children and the sample in this study was 15 children. The sampling technique used in this research was an observation sheet. The data analysis techniques used in this research are normality test, homogeneity test and hypothesis test. Based on the discussion of the results of the research carried out, it can be concluded that there is an influence of wax painting activities on the fine motor development of children aged 4-5 years at Al-Qur'an Kindergarten, Jauharul Wathon Muaro Jambi. This is proven by testing the t test hypothesis that  $t_{count} (52.316) > t_{table} (2.145)$ , so  $H_0$  is rejected and  $H_a$  is accepted. From the effect size calculation using Cohen's formula, there is a result of 7.11, which means the magnitude of the influence of candle painting activities on the fine motor development of children aged 4-5 years at Al-Qur'an Kindergarten, Jauharul Wathon, Muaro Jambi, which is at a distance of  $>1$  to strong interpretation (Strong effect).

Keywords: Candle Painting Activities, Fine Motor Development, Early Childhood Aged 4-5 Years.

## Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh kegiatan candle painting terhadap perkembangan motorik halus anak usia 4-5 tahun di TK Al-qur'an Jauharul Wathon Muaro Jambi. Jenis penelitian ini adalah kuantitatif dengan metode eksperimen. Desain yang digunakan dalam penelitian ini yaitu pre-eksperimental design dengan bentuk one group pretest posttest design. Populasi dalam penelitian ini berjumlah 29 anak dan sampel dalam penelitian ini berjumlah 15 anak. Teknik pengambilan sampel yang digunakan dalam penelitian ini adalah lembar observasi. Teknik analisis data yang digunakan dalam penelitian ini adalah uji normalitas, uji homogenitas dan uji hipotesis. Berdasarkan pembahasan hasil penelitian yang dilakukan, maka dapat disimpulkan bahwa adanya pengaruh kegiatan candle painting terhadap perkembangan motorik halus dengan pengujian hipotesis uji t bahwa  $t_{hitung} (52,316) > t_{tabel} (2,145)$  maka  $H_0$  ditolak dan  $H_a$  diterima. Dari perhitungan effect size dengan menggunakan rumus cohen's terhadap hasil sebesar 7,11 yang artinya besarnya pengaruh pada kegiatan candle painting terhadap perkembangan motorik halus anak usia 4-5 tahun di TK Al-Qur'an Jauharul Wathon Muaro Jambi yang berada pada rentang  $>1$  dengan interpretasi kuat (strong effect).

Kata Kunci: Kegiatan Candle Painting, Perkembangan Motorik Halus, Anak Usia 4-5 Tahun

## INTRODUCTION

Every individual experiences an early age, it's just that the early age only occurs once in the phase of every human being's life, so the existence of an early age should not be wasted. The early years of a child's life are the best period to support his growth (Khaironi 2018). Early childhood is a period of rapid and deep development for a person in the future (Yuliana, 2021). Early childhood is defined as the age of 0–8 years. Early childhood development is an important developmental stage that shapes a child's future (Indryani, 2016). Children's daily behavior is influenced by their physical motor development, so it is important for their overall development. In order for children to grow and develop properly, they must be given stimuli that improve their motor skills. Fine and gross motor development is included in motor development. Large muscles include gross motor ability, while small muscles include fine motor skills (Ismiatun, 2015).

Fine motor skills are developed from early infancy through fine muscle activities based on hand-eye coordination such as fisting, squeezing, rubbing, hitting, holding, touching, and painting (Rahmavati 2022). The development of fine motor skills involves the ability to control small muscles and certain body parts (Sitorus, 2016). Fine motor skills include manipulation abilities smooth (fine manipulative skill) which only involves certain body parts and is performed by small muscles, such as the skill of using the fingers of the hand and the right wrist movements (Nugraha, 2017).

The function of fine motor development for individual development is that through motor development children can entertain themselves and get a feeling of pleasure, through motor development children can go from a helpless state in the first months of their life to a state of freedom and not dependence on others, through motor development children can play or hang out with their peers, through motor development, Children can adjust to the school environment, motor development is very important for the development or personality of children (Yusuf, 2018).

Based on observations on September 26-29, 2023 at Jauharul Wathon Al-Qur'an Kindergarten located in Setiris Village, Maro Sebo District, Muaro Jambi Regency with a total of 84 children, consisting of 5 classes, namely 2 classes for children aged 4-5 years and 3 classes for children aged 5-6 years. The results of the researcher's observation of A1 class children aged 4-5 years, there were 15 children consisting of 8 boys and 7 girls found problems when children were learning to write, there were some children who had difficulty making curves and circles when they first started writing. Children have difficulty writing while paying

attention, tracing shapes, hand-eye coordination and playing plasticine, so teachers still need to help in doing these tasks.

This is due to several factors, one of which is that activities to develop children's fine motor skills are less varied. When learning to develop children's fine motor skills is applied only using student worksheets, children write letters and color in learning activities. So that this will invite boredom in children because the learning media used has not been able to attract children's attention and curiosity. So the fine motor development of A1 class children has not developed optimally.

One of the activities that helps children's fine motor skills is painting candles (candle painting). Children use paint to create lines and colors on large canvases or sheets of paper. A person's experience is depicted in a painting that has some meaning that no one fully understands (Arianie 2021). Painting is a learning activity by playing with shapes, colors and lines arranged in a medium, be it fabric, canvas, and a wide wall (Yuliana 2021). Drawing is about seeing, imagining, as well as expressing pictures. In art, the word candle comes from Latin *parum affinis* which translates to Par-affin. In English, this is called little affinity and depicts a slight interest (Aryanto & Winarno, 2016).

Magic candle painting (Candle magic painting) influences creativity especially in children's art because they learn to distinguish between fact and fiction and create something completely complete. The researchers used non-traditional materials such as painting with wax (Hasprimadyah et al, 2021). Referring to the various definitions of painting with wax (Candle Painting) that has been explained, it can be concluded that what is meant by painting with wax (Candle painting) is a learning activity by playing shapes, colors and lines from mixing ideas or the creativity of one's feelings with fun techniques through the medium of candles.

Painting with candles is a pleasant way of drawing in early childhood. The tools used are candles and the children are fascinated by the magic they produce. Children who first see the drawings that have been made, painted by posters and dried in the sun, will have a better understanding of them (Gustini 2017). This research uses the media of paper, wax, cotton, palettes, prints and food dyes to paint that is safe for children.

The benefits of painting with candles for children's development are painting as a medium for pouring out feelings, painting as a storytelling tool (visual language/form), painting functions as a play tool, painting can train memory, painting can practice comprehensive thinking (comprehensive), painting as a sublimation of feelings, painting can train balance, painting can train children's creativity, painting can develop children's fine motor skills.

Purpose of painting with wax media (Candle Painting) according to Cahyanti (2014) To develop children's motor physique, such as children can get to know the concept of various colors, how to paint, various types of paintings and tools used using painting games with wax media. Meanwhile, according to Gemini (2018), painting with wax (Candle Painting) aims to develop children's creativity through painting with a mixture of wax and watercolor techniques, so that children can adjust the color composition, improve the neatness of the work, children's initial ability to draw sketches and attract children's interest in learning to draw. Based on the above background, the researcher is interested in raising a research entitled "The Influence of Activities Candle Painting On Fine Motor Development of Children Aged 4-5 Years at Kindergarten Al-Qur'an Jauharul Wathon Muaro Jambi".

## METHODS

The researcher used an experimental method. A pre-experimental design with a pretest-posttest approach with one group was used in this investigation. Two tests are used in determining a child's basic abilities when developing fine motor skills, there is an initial test given before treatment and a test after treatment. The population consists of 29 children in grades A1 and A2 with the age of 4-5 years. In this case, Purposive Sampling is used. The sample was 15 children aged 4-5 years at Al-Qur'an Kindergarten Jauharul Wathon Muaro Jambi. Data for the study were collected using observation techniques. Parametric statistics are used in data analysis procedures. Parametric statistical tests are used if both data sets have a normal and homogeneous distribution. Non-parametric statistical tests may be used if the two datasets are not homogeneous and normally distributed (Sugiyono 2017). Data analysis with normality test, homogeneity test, and hypothesis test using the t-test.

## RESULTS AND DISCUSSION

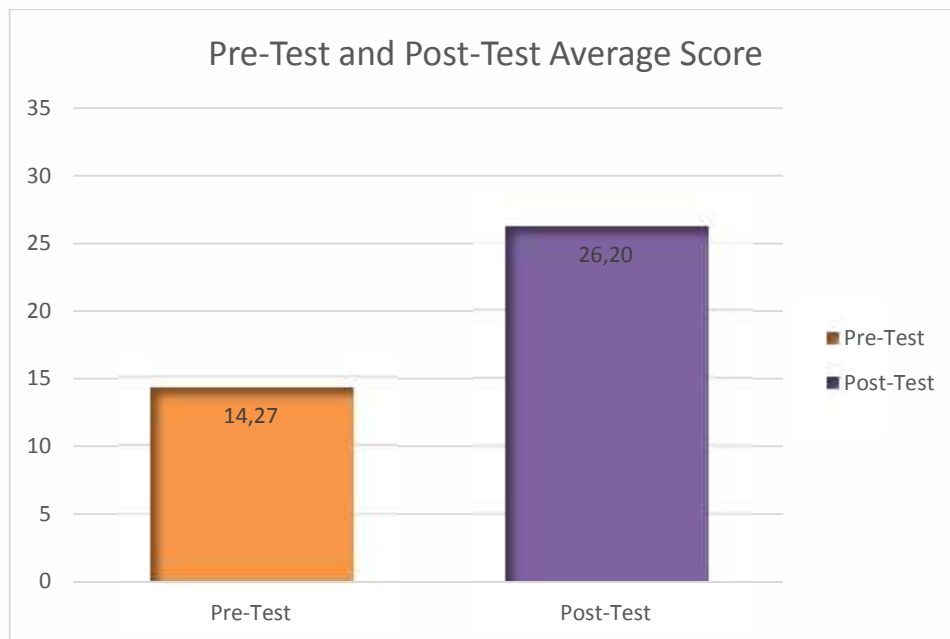
The data obtained by the researcher carried out experiments with a design using Pre-Experimental Design (One group pretest – posttest design) where there were no control variables and measurements were carried out twice, namely before being given treatment (pretest) and after being given treatment (posttest). The researcher details the three steps of the research approach: pretest data, treatment (candle painting activity), and posttest data as follows:

Table 1. Comparison of Pretest and Posttest Average Scores

Description	Observation Score
-------------	-------------------

	Pre-test	Post-test	Difference
Average Score	14,27	26,20	11,93

To be more specific, here is a bar diagram of the average fine motor development of children in class A1 during pretest and posttest:



**Figure 1.** Average Pretest and Posttest Scores

When comparing the bar graph above, it can be seen that the average pretest is 14.27 and the average posttest is 26.20. The difference in the average score of the two exams of 11.93 shows that the average score of the pretest is lower than the average of the posttest.

Next, a normality test is carried out, used to determine whether the data that has been collected is normally distributed or normal tidal. The data normality test used in this study used the liliefors test. By using this method, a data is said to be normally distributed if it meets the conditions, namely the L value calculated < L table and if the L value is calculated > L table, then the data is not normally distributed. The results of the normality test processing are as follows:

Table 2. Normality Test

Class	Sum	L count	L table	Information
Pretest	15	0,1049	0,2200	Usual

Posttest	15	0,1162	0,2200	Usual
----------	----	--------	--------	-------

For the pretest data , L was calculated as 0.1049 < L table was 0.2200 and for posttest data , L was calculated as 0.1162 < L table was 0.2200. Therefore, it is concluded that the data is normally distributed.

Then continued with the homogeneity test used to find out whether some of the data variants are the same (homogeneous) or not homogeneous. The method of determining the homogeneity test is if the L value is calculated < L table, then the data distribution is homogeneous and if the L value is calculated > L table, then the data distribution is not homogeneous. The results of the homogeneity test are as follows:

Table 3. Homogeneity Test

Class	Sum	Fcal	Ftabel	Information
A1	15	1,346	2,484	Homogeneous

Based on the table above, it can be seen that the data of class A1 has an F calculation of 1,346 < the F table of 2,484. So it can be concluded that the A1 class data has homogeneous variance.

After carrying out normality and homogeneity tests. If the data meets the requirements of the prerequisite test, a hypothesis test is carried out. In this study, a t-test is used, namely a paired sample t test. An experiment was carried out at Al-Qur'an Kindergarten Jauharul Wathon Muaro Jambi to find out the hypothesis of painting candles with fine motor skills of children aged 4-5 years. The following is table 2 of the results of the hypothesis test:

Table 4. Hypothesis Test

Class	Sum	T count	Table
A1	15	52,316	2,145

The results of the hypothesis test obtained a calculated t value of 51.869 > t table 2.145 which means that H0 was rejected and H1 was accepted based on the table that had been provided previously. It was found that candle painting activities had an effect on children's fine motor development.

The findings of the study show that children aged 4-5 years can draw circles, vertical and horizontal lines, curved lines on both sides, and oblique lines on both sides of the body with the help of wax painting. Children can trace the thin edges of an image to create straight, curved, and rounded lines. In line with (Sari, 2015) states that painting with wax improves fine motor skills is beneficial for 4-5 year olds. This is because the shape of the candle is similar to

a pencil, so it is easier for young children to use and improves their ability to paint or scratch candles.

According to researchers, it is known that children plagiarize the outline of an image either by using alternative media or tracing media that has been prepared by researchers is one of the indicators of the development of fine motor skills. Children can obtain these markers by using drawings with candles. In line with the opinion (Novinda, 2022) stated that one of the activities that helps children develop their fine motor skills is plagiarism. Children can learn to paint, draw, and imitate by tracing which helps them develop their fine motor skills.

The results of the study showed that painting with candles improved children's fine motor skills by helping hand-eye coordination for challenging activities. Children can concentrate on gently painting the canvas with wax, staying within the line. In line with the opinion (Arianie, 2021) that children express their creativity through painting with wax which can improve their fine motor skills and creative potential by focusing on scratching candles using wax media carefully and neatly.

The results of the study show that the younger generation can express themselves more creatively if they use the media of artworks and train fine motor skills through wax painting. In particular, children use cotton to combine colors in paintings and candles in making pictures based on their ideas. In line with the opinion (Gustini et al, 2017) that candle magic painting It was chosen as a strategy to help children's fine motor skills because it allows children to use certain colors, express their originality by painting, and produce works that are in accordance with their thoughts without imitating the work of others.

Based on the above viewpoint, it is concluded that the child's fine motor development is positively affected by painting candles. Wax painting is one of the learning tools that can be used to help children aged 4-5 years at Jararul Wathon Muaro Jambi Al-Qur'an Kindergarten develop their fine motor skills. The average value of fine motor development is the basis for this.

## CONCLUSION

In conclusion, there was a significant influence of candle painting activities on the fine motor development of children aged 4-5 years at Al-Qur'an Kindergarten Jauharul Wathon Muaro Jambi. This is proven by the average score obtained from the pretest of 14.27 and the posttest score of 26.20. And also the results of the hypothesis test obtained a calculated t value of  $51.869 > t$  table 2.145 which means that  $H_0$  was rejected and  $H_1$  was accepted based on the table that had been provided earlier. So, candle painting activities affect the fine motor

development of children aged 4-5 years at Al-Quran Kindergarten Jauharul Wanthon Muaro Jambi.

## REFERENCES

- Arianie, Y. D. R. (2021). Improvement of Art Ability in Learning to Paint with Candles for Group A Children at Kepanjenlidul I State Kindergarten, Blitar City. *Journal of Early Childhood Education Innovation*, 1(1), 60–67.
- Aryanto, H., & Winarno. (2016). Efforts to Improve the Artistic Sensitivity of Unesa Fine Arts Education Students Class of 2013 by Painting Using Watercolor and Candle Media. *Journal of Dimensions*, 1(1):77–92.
- Gustini, D., Rudiyanto., & Mariyana, R. (2017). Increasing creativity in painting in children through candle magic painting activities. *Journal of Growth, Development and Early Childhood Education*, 14(2), 328–337.
- Hasprimadyah, I., Aunnurahman., & Miranda, D. (2021). The Effect of Candle Magic Painting on the Creativity of Free Painting for Children Aged 5-6 Years. *Journal of Equatorial Education and Learning*, 11(3), 1-8.
- Indryani., Rosyadi, A. F., & Sonita, S. (2023). The Effect of the Educational Game "I Take Care of Me" on the Sexual Knowledge of Children Aged 5-6 Years at Kindergarten Harapan Bunda, Telanaipura District. *Mandalika Light Journal*, 4(2), 740–749.
- Ismiatun, A. N., Syamsuddin, M. M., & Rahmawati, A. (2015). Application of Physical Education to Improve Movement Coordination in Group B Children of Aisyiyah Bobotasari Kindergarten, Purbalingga Regency for the 2014/2015 Academic Year. 1–8.
- Novinda, E. (2022). Efforts to improve fine motor skills through shape tracing activities in children aged 5-6 at Al Hidayah Kindergarten, Maibit Village, Tuban in 2022. Thesis. Faculty of Tarbiyah and Teacher Training. Walisongo State Islamic University, Semarang.
- Nugraha, F. E. (2017). Identification of Fine Motor Development of Children Aged 5-6 Years in Kindergarten Cluster III, Piyungan District, Bantul. *Journal of Early Childhood Education*, 329-340.
- Rahmawati, R. (2022). Developing fine motor skills of children aged 4-5 years through painting with fingers at PAUD Latansa Tanggamus. Thesis. Faculty of Tarbiyah and Teacher Training. Raden Intan State Islamic University Lampung.
- Sari, A. P. (2015). Efforts to Improve Fine Motor Skills in Children through Painting Activities in Group A at Kindergarten 02 Kaling Tasikmadu Karanganyar Academic Year 2014-2015. Thesis. Faculty of Teacher Training and Education. University of Muhammadiyah Surakarta.
- Sitorus, A. S. (2016). Fine motor development in early childhood. *Journal of Raudhah*, 4(2), 2338 – 2163.
- Sugiyono. (2017). *Quantitative, Qualitative and R&D Research Methods*. Bandung: Alfabeta Publishers.
- Yuliana, F. (2021). Developing children's painting creativity through candle media at PAUD KB Nurul Islam Sridadi Tanggamus. Thesis. Faculty of Tarbiyah and Teacher Training. Raden Intan State Islamic University Lampung.