# Proceedings Series on Health & Medical Sciences, Volume 5 Proceedings of the 4th International Nursing and Health Sciences

ISSN: 2808-1021

# The Effect of Finger Painting Therapy on Preschool Children's Language and Fine Motor Development

# Jamilah<sup>1</sup>, Ikhsan Mujahid<sup>2</sup>

<sup>1,2</sup>Faculty of Health Sciences, Universitas Muhammadiyah Purwokerto, Indonesia

## ARTICLE INFO

Article history:

DOI:

10.30595/pshms.v5i.990

Submitted: Oct 13, 2023

Accepted: Feb 25, 2024

Published: Mar 20, 2024

#### Keywords:

Finger Painting, Fine Motor, Language

## **ABSTRACT**

Background: Insufficient stimulation in children might lead to deficits in fine motor development. Young children must improve their language skills so they can orally express what is on their minds and help others comprehend what they desire. Activities like finger painting help improves creativity, imagination, eye, muscular, and brain coordination, and color blending abilities. Method: Quantitative pre-experimental study with one group pretest and posttest design. The population and sample used were 41 respondents with the total sampling method. The statistical test used is the Wilcoxon test. Results: The findings showed that the respondents' fine motor development in the normal category was 56.1% before therapy and that it climbed to 97.6% after receiving therapy. The results of the respondent's language development were 51.2% before therapy in the normal category, and it increased to 90.2% after receiving developmental therapy in the normal category. Conclusion: There is an effect of finger painting therapy on fine motor development and language development in preschool-aged children.

This work is licensed under a <u>Creative Commons Attribution 4.0</u> International License.



# Corresponding Author:

# Ikhsan Mujahid

Faculty of Health Sciences, Universitas Muhammadiyah Purwokerto, Soepardjo Rustam Street KM. 7, Banyumas, Indonesia

Email: ikhsan\_m83@yahoo.com

# 1. INTRODUCTION

The development stages of each child generally have the same process, namely the result of the maturation process. Preschool aged children during learning activities are still not well developed in flexing their fingers, in learning activities children are also not able to explore with many tools, and are also still unable to maintain neatness [1]. The results of examinations of 2634 children aged 0-6 years by IDAI in 2015 showed that growth and development, 53% of children were normal, 13% of children whose development was doubtful, and 34% of children with developmental deviations [2]. Developmental problems that are still Many things happen in society today, one of which is delayed fine motor development. Lack of fine motor development in children can result in a decrease in children's achievement [3]. Motor development focuses on the process of a person's ability to move. From birth, children begin to develop the motor skills needed to interact with their environment. With the help of motor skills, children interact directly with their environment [2]. Apart from fine motor development, language development in children is also important so that children are able to communicate verbally what is in the child's mind so that other people understand what they want. One activity that can help children develop fine motor skills and speaking skills is finger painting (painting with your fingers). According to [4] Finger painting or painting with fingers is painting using the fingers of the hand without the help of any tools. Finger painting activities can develop expression through painting media, develop creativity, imagination, train muscle, brain and eye coordination, as well as train skills in combining various colors [5]

## 2. RESEARCH METHOD

Quantitative research with Aisyiyah Karangtalun Kidul Kindergarten student respondents. Sampling was taken using the total sampling method, with a total of 41 respondents. This method used a pre-experimental method with one group pretest and posttest. The criteria for this research were kindergarten students who were willing and willing to become respondents. The instrument used in the research was the Denver II sheet which is an instrument that has been standardized by Frakenburg.

#### 3. RESULT AND DISCUSSIONS

#### 3.1. Univariat

Table 1. Characteristics of Respondents (n=41)

F	%	Mean±SD
2	4.9	$2,66\pm0,575$
10	24.4	
29	70.7	
		1,34±0,480
27	65.9	
14	34.1	
	2 10 29	2 4.9 10 24.4 29 70.7

Based on the characteristics of the 41 respondents, it shows that the majority of respondents were 6 years old, 29 respondents (70.7%) and the majority were male, 27 respondents (65.9%).

Table 2. Fine motor development of respondents before and after being given finger painting therapy (n=41)

Fine Motor Development	$\mathbf{F}$	%	Mean±SD
Before			
Normal	23	56.1	1,56±0,502
Suspect	18	43.9	
After			
Normal	40	97.6	1,98±0,156
Suspect	1	2.4	

Based on table 2, the mean fine motor development before therapy was given was 1.56. Then, after being given finger painting therapy, fine motor development increased to 1.98. This shows that there was an increase in development between before and after giving finger painting therapy with an increase of 0.42.

Table 3. Respondents' language development before and after being given finger painting therapy

Language Development	F	%	Mean±SD
Before			
Normal	21	51.2	1,51±0,506
Suspect	20	48.8	
After			
Normal	37	90.2	$1,90\pm0,300$
Suspect	4	9.8	

Based on table 3, the mean language development before being given finger painting therapy was 1.51. Then after being given finger painting therapy, language development increased to 1.90. This shows that there was an increase in development before and after giving finger painting therapy with an increase of 0.39.

#### 3.2. Bivariat

Table 4. The effect of finger painting therapy on fine motor development and language development in preschool children

Variabel	Intervensi	p-value	_		
Fine Motor Development	Finger Painting Therapy	0,000	-		
Language Development	Finger Painting Therapy	0,000			

This research shows that the p-value for finger painting therapy intervention on fine motor development is 0.000. Because the p-value is 0.000 < 0.05, this shows that there is a difference in fine motor development scores before and after being given finger painting therapy. Then for language development, it shows that the p-value of the finger painting therapy intervention on language development is 0.000. So this shows that the p-value is 0.000 < 0.05, so there is a difference in fine motor development scores before and after being given finger painting therapy.

This research was carried out on Aisyiyah Karangtalun Kidul Kindergarten students located in Purwojati District, Banyumas Regency. The number of research respondents who followed the entire research flow starting from pretest, intervention and posttest was 41 respondents. In this study, the highest number of ages was 6 years old with a percentage of 70.7%. The respondent's age is still in the preschool age range. At the age of 6 years, the child has learned how to use his fingers and wrist to grasp and use a pencil. At this age, children can start to count to 10 and have a large vocabulary. Meanwhile, in this study the majority of respondents were male, namely 65.9%. Gender can influence a child's fine motor development and language development. [6] stated that gender is a component that influences the fine motor development of preschool children. Studies show that female respondents are easier to manage compared to men, who tend to be more difficult to manage. Other research that supports this is [7] stating that girls have better speaking skills than boys and they have a larger vocabulary than boys. Children's language development is influenced by stimuli which can be in the form of stimulation, encouragement, and opportunities for communication. The results of their development can be shown in the form of children being able to convey their desires and express emotions. In line with what was stated by [8] nutritional intake, health conditions, socio-economic conditions, nurturing environment and stimulation are factors that influence development. Stimulation, if not carried out optimally, can have a significant impact on a child's development. Many parents don't know how to stimulate their children, so many children don't get optimal stimulation.

Based on graph 2, it is known that the mean fine motor score before being given finger painting therapy was 1.56 and after being given finger painting therapy was 1.98. There was an increase in development of 0.42. Based on the research results, it shows that fine motor development before being given therapy was in the normal category as many as 23 children (56.1%), suspect as many as 18 children (43.9%). According to [9] fine motor development is the development of body movements that use small muscles. Based on the research results, it shows that fine motor development before being given therapy was in the normal category as many as 23 children (56.1%), suspect as many as 18 children (43.9%). There were 18 respondents in the suspect category because when the Denver II test was carried out, the average respondent failed in the components of modeling a rectangle and drawing a person in 6 parts. Respondents are still embarrassed and hesitant about making circles, writing, making squares, and drawing the shape of people. Apart from that, respondents also seemed to lack concentration in taking tests, got bored quickly, and enjoyed playing alone. Based on the results of the researcher's research, the researcher proposed finger painting therapy to develop children's fine movements. The research results show that finger painting therapy can change children's fine motor skills. The success of the finger painting therapy process can be seen from the results after being given finger painting therapy, children become more independent, creative, and children have writing, painting and drawing skills in line with research conducted by [10] stating that finger painting helps children's fine motor skills, improves hand-eye coordination, and helps them focus.

Based on graph 3, it is known that the mean language score before being given finger painting therapy was 1.51 and after being given finger painting therapy was 1.90. There was an increase in development of 0.39. Language is a communication system that is used voluntarily and is socially agreed upon. [11]) The results of research data analysis that has been carried out show that children's language development before being given finger painting therapy has almost the same percentage of language development categories, namely in the normal category 21 respondents (51.2%) and the suspect category 20 respondents (48.8%). Children's language development is influenced by stimuli which can be in the form of stimulation, encouragement, and opportunities for communication. The results of their development can be shown in the form of children being able to convey their desires and express emotions. In line with what was stated by [8] that nutritional intake, health conditions, socio-economics, nurturing environment and stimulation are factors that influence development. Stimulation, if not carried out optimally, can have a significant impact on a child's development. [12]) research results show

that stimulation can help children recognize and understand developmental tasks and crises that arise during childhood development. In this study, respondents were provided with therapy to support language development so that it improved. During the finger painting therapy process, respondents were given the freedom to do finger painting accompanied by researchers and research assistants, then after respondents had finished with the activity, respondents were asked to tell what they were doing, such as introducing themselves, telling what they painted and what colors they used for it. paint. So that respondents experienced increased development after being given finger painting therapy. This research is strengthened by research by [13] which states that skills will not be achieved unless supported by adequate resources, because facilities are a process of becoming skilled. Facilities are something that can facilitate the implementation of a business, whether in the form of objects or skills training.

The results of the research show that there is an effect of providing finger painting therapy to improve fine motor development and language development in preschool children, this is proven by a p-value of 0.000. Based on what was conveyed by [14] who said that finger painting has several benefits such as training fine motor skills, developing language skills, developing hand and eye coordination, helping children to focus, and developing sensory and touch senses. The study above shows that finger painting activities given to preschool children at Aisyiyah Karangtalun Kidul Purwojati Banyumas Kindergarten have a significant influence on children's fine motoric development and language development. In the Denver II test before finger painting therapy was carried out, the average respondent was not able to imitate a rectangle, draw a person in 6 parts, answer opposite words, interpret 5 words, and interpret 7 words. Then, after the finger painting activity was carried out, respondents were able to copy a rectangle, draw a person in 6 parts, answer opposite words, and interpret words. So it can be concluded that finger painting therapy is applied to help preschool children develop their fine motor skills and language skills. In this way, finger painting therapy can improve fine motor development and language development in preschool children at Aisiyiyah Kindergarten Karangtalun Kidul Purwojati Banyumas.

## 4. CONCLUSION AND RECOMMENDATION

The fine motoric development and language development of preschool aged children at the Aisyiyah Karangtalun Kidul Purwojati Banyumas Kindergarten before being given therapy was still partially within the suspect criteria, after being given finger painting therapy the fine motoric development and language development of the children increased so that the majority of children were within the normal criteria. From this research it can be concluded that there is an influence of finger painting therapy on fine motor development and language development in preschool children.

## Acknowledgements

The authors are thankful to the Head of Kindergarten Aisyiyah Karangtalun Kidul Purwojati Banyumas who has supported and assisted in providing data and information for the purposes of this research, to the respondents who have been willing to help make this research a success, as well as all parties who have supported the conduct of the research.

### REFERENCES

- R. Lisdayanti, M. Syukri, and D. Yuniarni, "Pembelajaran Melukis Teknik Finger Painting Untuk Meningkatkan Perkembangan Motorik Halus Di TK Islamiyah Pontianak," *Jurnal Pendidikan dan Pembelajaran*, vol. 8, no. 3, pp. 1–8, 2019.
- E. Yanti, N. Fridalni, S. Syedza, S. Padang, S. Mercu, and B. Padang, "Faktor Yang Mempengaruhi Perkembangan Motorik Anak Usia Prasekolah," *Jurnal Kesehatan Medika Saintika*, vol. 11, no. 2, pp. 226–235, 2020, doi: 10.30633/jkms.v11i1.761.
- dkk. Farida, "Pengaruh Pemberian Stimulus Seni Melukis Dengan Teknik Pointilis Terhadap Perkembangan Motorikmhalus Pada Anak Prasekolah," *Jurnal Mahasiswa Kesehatan*, vol. 1, no. 2, pp. 140–150, 2020.
- N. Nurjanah, C. Suryaningsih, and B. D. A. Putra, "Pengaruh Finger Painting Terhadap Perkembangan Motorik Halus Anak Prasekolah di TK At-Taqwa," *Jurnal Keperawatan BSI*, vol. 5, no. 2, pp. 65–72, 2017, [Online]. Available: http://ejournal.bsi.ac.id/ejurnal/index.php/jk
- L. Maghfuroh and Kiki Chayaning Putri, "Pengaruh Finger Painting Terhadap Perkembangan Motorik Halus Anak Usia Prasekolah Di Tk Sartika 1 Sumerguk Kecamatan Babat Lamongan," *Jurnal Ilmiah Kesehatan*, vol. 10, no. 1, pp. 36–43, 2017.

L. Maghfuroh, "Kolase Daun Kering Meningkatkan Perkembangan Motorik Halus Anak Parasekolah," *Jurnal Endurance: Kajian Ilmiah Problema Kesehatan*, vol. 5, no. 2, pp. 403–412, 2020, doi: 10.22216/jen.v5i2.4480.

- Andriana, Tumbuh kembang dan terapi pada anak. Jakarta: Salemba Medika, 2017.
- Soetjiningsih and IG. N. G. Ranuh, Tumbuh kembang anak, 2nd ed. Jakarta: EGC, 2016.
- A. Rohendi and L. Seba, *Perkembangan Motorik, Pengantar Teori dan Implikasinya dalam Belajar*, 1st ed. Bandung: Alfabeta, 2017.
- N. Varahdilah Sandi, R. Setyorini, P. Guru Sekolah Dasar, and P. Bahasa Indonesia, "Analisis Kegiatan Bimbingan Belajar Pada Anak Usia Dini Dalam Kreativitas Pembelajaran Finger Painting (Melukis Terhadap Peningkatan Motorik Halus)," 2018.
- Soetjiningsih and IG. N. G. Ranuh, Tumbuh Kembang Anak, 2nd ed. Jakarta: EGC, 2014.
- S. Yenawati, "Stimulasi Tumbuh Kembang Anak," Jurnal Ilmiah Psikologi, vol. 3, no. 2, 2018.
- W. Y. Liu, T. H. Tung, Y. Zhou, D. T. Gu, and H. Y. Chen, "The Relationship Between Knowledge, Attitude, Practice, and Fall Prevention for Childhood in Shanghai, China," *Front Public Health*, vol. 10, Mar. 2022, doi: 10.3389/fpubh.2022.848122.
- N. V. Sandi and R. Setyorini, "Analisis Kegiatan Bimbingan Belajar Pada Anak Usia Dini Dalam Kreativitas Pembelajaran Finger Painting," *Jurnal Pendidikan Islam Anak Usia Dini*, vol. 1, no. 2, 2018.