THE EFFECT OF MOSAIC ART ON IMPROVEMENT OF MOTORIC DEVELOPMENT SMOOTH CHILDREN

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ABSTRAK EFEKTIFITAS KONSUMSI TELUR AYAM (PULLUM) TERHADAP KADAR HEMOGLOBIN PADA REMAJA WANITA

Latar Belakang: Anak usia 3 sampai 6 tahun dikenal sebagai masa prasekolah dan masa sensitif. Menurut United Nations Children's Fund (UNICEF), hanya 38% dari 10 juta anak dengan disabilitas perkembangan di seluruh dunia berada dalam rentang usia yang sesuai untuk berpartisipasi dalam program anak usia dini pada tahun 2018. Jauh di bawah target RPJMN sebesar 77%. 2015-2019. Pada tahun 2010, 35,7% anak Indonesia mengalami stunting. Hal ini tergolong sebagai masalah kesehatan masyarakat yang tinggi menurut referensi WHO.

Tujuan penelitian: Untuk mengetahui pengaruh seni mozaik terhadap perkembangan motorik halus anak di Desa Tanjung Gusta.

Metode: Rancangan penelitian menggunakan metode pembentukan kelompok kontrol sebelum eksperimen, sebelum pengujian dan setelah pengujian. Populasi dan sampel penelitian adalah anak usia 5-6 tahun di Desa Tanjung Gusta Dusun I dengan sampel jenuh sebanyak 30 responden. Data dikumpulkan, diolah dan dianalisis dengan komputer untuk data univariat dan bivariat menggunakan uji t tidak berpasangan dengan taraf signifikansi 95% (0,05).

Hasil: nilai *mean* dalam kelompok seni mozaik sebesar 6,87 dan kontrol 5,33. Nilai *std. Deviation* pada kelompok seni mozaik sebesar 1,807 dan kelompok kontrol sebesar 1,799. Nilai *Std. Error Mean* pada kelompok seni mozaik sebesar 0,467 dan kontrol 0,465. Sedangkan uji statistik dengan uji T tidak berpasangan menunjukkan nilai Sig. 0,027 < 0,05.

Kesimpulan: Di desa Tanjungsta terdapat perbedaan pengaruh seni mozaik terhadap peningkatan perkembangan gerak halus pada anak.

Saran: Peneliti selanjutnya mengkaji pentingnya orang tua memperhatikan variabel lain yang berhubungan dengan stimulasi anak, seperti seni mozaik, dan peningkatan pengetahuan perkembangan motorik halus anak.

Kata kunci: Anak, Peningkatan Perkembangan Motorik Halus, Seni Mozaik

ABSTRACT

Background: Children aged 3-6 years are referred to as preschool and sensitive periods. The United Nations Children's Fund (UNICEF) says that 10 million children have developmental disabilities worldwide and in 2018 only 38% of children in the age group eligible for participation in early intervention programs are well below the RPJMN target of 77% for 2015-2019. In 2010, growth and developmental disorders among children in Indonesia reached 35.7% and are classified as serious public health problems according to WHO references.

Purpose of the study: to find out the influence of mosaic art on improving the fine motor development of children in Tanjung Gusta Village.

Method: The study design used a pretest design approach and a pretest and posttest control group design. The population and sample for the study were all children aged 5-6 in Tanjung Gusta Village 1 with a saturated sample of 30 respondents. Univariate and bivariate data that were collected, processed using a computer, and analyzed using a T-test were not paired with a meaningful ratio of 95% (0.05).

Result: the mean value in the mosaic art group was 6.87 and the control was 5.33. Std value. Deviation in the mosaic arts group was 1,807 and the control group by 1,799. The Std. Error Mean score in the mosaic art group was 0.467 and the control was 0.465. While statistical tests with unpaired T tests show Sig values. 0.027 < 0.05

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Conclusion: there is a difference in the effect of mosaic art on improving the development of fine motor skills of children in the village of Tanjung Gusta.

Suggestion: researchers went on to examine other variables related to child stimulation with mosaic or other art and the importance of parents to pay attention to increased knowledge of children's fine motor development.

Keywords: Children Improvement Fine Motor Development, Mosaic Art

INTRODUCTION

In a child's life, the first three years of life are the most joyous. As they move from infancy to toddlerhood, children explore both their independence and autonomy. Children improve skills in all areas and make leaps and bounds in language, motor, cognitive, social and psychological development. (Warner 2018)

According to the Indonesian Ministry of Health, development is an increase in sensory, motor, cognitive, communication / language, social-emotional, and independent abilities. (Rivanica and Oxyandi 2016) (Dewi, Oktiawati, and Saputri 2015)

The process of growth and development of children's movement abilities is one of motor development (Kemenkes 2015) in the phase of preschool children starting at the age of 3-6 years (Purwandari, Mulyono, and Suryanto 2014) Sensitive period is a period of certain functions that are stimulated and directed so that there are no barriers to child development. (Indraswari 2012)

The United Nations Children's Fund (UNICEF) reports developmental disabilities in 10 million children worldwide and in 2018, the appropriate age group to participate in early childhood programs. Only 38% of children in the country, well below the 2015 RPJMN target for 2019 of 77%. (UNICEF 2020)

The World Health Organization (WHO) reports that 5-25% of preschool children suffer from mild brain disorders such as mild motor development disorders. On the other hand, it is reported that children worldwide have about 9% anxiety, 11-15% emotional tendencies, and 9-15% behavioral disorders. (Kemenkes RI 2019)

In Indonesia, about 16% of the population is reported to suffer from developmental disabilities, which manifest as impaired brain development, hearing, and motor skills. In 2010, 35.7% of Indonesian children experienced growth and development disorders which were included in the WHO's list of high public health problems. (Nurjanah 2017)

Children's fine motor development, when properly stimulated, will bring out their own pride abilities. (Soetjiningsih 2018) Stimulation is an important need for child growth and development. Children who are stimulated and guided develop faster than children who are not stimulated. (Elmeida 2015)

Children are stimulated and directed by holding a pencil, writing, recognizing letters, numbers and others (Dewi et al. 2015) (Elmeida 2015) and require meaningful activities that not only channel abundant energy, but also make them feel useful and valuable. (Paramita 2020a) Support, guidance and observation is the important thing not intervention, coercion, only prohibition so far. (Paramita 2020b)

As pointed out by Sujiono, children with good fine motor skills will be very confident in themselves. Therefore, educators and parents should look to the possibility of the Golden Age for children, namely the beginning of learning with activities with recipes or assistive methods related to fine motor skills. (Sembiring 2020) Among them with the help of mosaic art, that is, certain images are created by attaching small materials that are located near the surface. (Soetjiningsih 2018)

Fine motor development using the mosaic technique mentioned in this study is to create two-dimensional works of art using simpler materials and without harming children. These materials include pieces of paper, seeds and plants. The purpose of the mosaic technique activity is to develop small motor skills in children to assess the process when children perform tasks. (Istiqomah 2017)

Researchers observed children, 6 out of 10 children had impaired fine motor development. It has been proven that children who have impaired fine motor development that have not been achieved have not been achieved according to the child's age, such as inflexible finger movements when holding writing instruments, children are not willing to draw or paint, children get tired easily when told to write this is due to fine motor skills. children have not been stimulated properly by their parents. This study aims to determine the effect of mosaic art on improving children's fine motor development in Tanjung Gusta Village.

RESEARCH METHODOLOGY

The stages of the study began with population observation, sample, intervention, and evaluation. The research design used a pre-experimental planning approach with a control group design before and after testing. (Hidayat 2007) The intervention group was given treatment once a week for 3 consecutive weeks. No treatment was given to the control group.

Research Design Scheme

Group	Pretest	Treatment	Posttest
Intervention	O1	X	O2
Control	O3	-	O4

Information :
O1: Measurement of the pre-intervention treatment group
O2: Measurement of post-intervention treatment group
X: Mosaic art intervention provided
O3 : The first measurement of the control group was carried out simultaneously with the treatment group at the time of prediction
O4 : Measurement of the control group was carried out simultaneously with the post-measurement of the treatment group at that time
- : No Mosaic Art intervention

The research location was carried out in Tanjung Gusta Village, Dusun I. The research was carried out until September 2021.

The population in this study were all children aged 5-6 years in Tanjung Gusta Village, Dusun I using a saturated sampling technique (Sugiyono 2010) ie the entire population was selected as many as 30 respondents with a sampling ratio of 1:1, where 15 respondents were stimulated with mosaic art, and 15 respondents without stimulation were the control group.

Measurement of fine motor development using a checklist guide by observing motor development in children aged 5 to 6 years measured before and after stimulation. hen the intervention group was stimulated with mosaic art. 1. Free tearing technique (without tools) 2. Overlapping tearing technique (with tools) 3. Scissors technique 4. Cutting printing technique 3 times every Sunday. And the control group was not stimulated, only children whose fine motor skills were observed.

The hypothesis of this research is that mosaic art affects the fine motor development of children in Tanjung Gusta village in 2021. The collected data is processed using a computer. The data obtained were then analyzed: univariate analysis, separately describe the respondent variables and improve the fine motor development of children before and after being given stimulation. Bivariate analysis was conducted to determine the effect of mosaic art on the improvement of children's motor development, using an unpaired t test if the data were normally distributed with a significance level of 95% (0.05). (Dahlan 2011)

RESEARCH RESULTS

The results can be known by using data analysis, Table 1 shows the characteristics of the respondents: age, education, and the distribution of the frequency of work. Table 2 shows the frequency distribution of children's fine motion improvement before and after being given mosaic art and controls. Shapiro-wilk's data on mosaic art and controls are in Table 3. Homogeneity test using Levene statistical test Table 4. The effect of mosaic art on improving children's fine motor skills Table 5.

The frequency distribution of characteristics in this study amounted to 30 mothers who have children, the results obtained include the majority in the age group 20-35 years totaling 16 respondents (53.3%), the majority having high school education totaling 15 respondents (50.0%), with the majority not working a total of 21 respondents (70.0%). These results are shown in Table 1 of the frequency distribution of the following characteristics of the respondents:

Table 1
Frequency Distribution Characteristics of Respondents

Characteristics of Respondents	Amount	
	F	%
Age		
<20 years	4	13,3
20-35 years old	16	53,3
>35 years old	10	33,4
Education		
SD	3	10,0
Junior High School	9	30,0
Senior High School		
College	15	50,0
	3	10,0
Profession		
Doesn't work	21	70,0
Working	9	30,0
Amount	30	100,0

The results in the table majority 9 respondents (30.0%) majority 4 checklists for increasing children's fine motor development before

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mosaic art and control while increasing fine motor development for children before mosaic art and majority control 5 Checklists totaling 7 respondents (23.3), the results are shown in the following table:

Table 2
Frequency Distribution Improved Children's Fine Motor Development

Improved Fine Motor Development of Children	Amount	
	F	%
Before		
3 Checklist	6	20,0
4 Checklist	9	30,0
5 Checklist	4	13,3
6 Checklist	5	16,7
7 Checklist	4	13,3
8 Checklist	2	6,7
After		
3 Checklist	2	6,7
4 Checklist	5	16,7
5 Checklist	7	23,3
6 Checklist	3	10,0
7 Checklist	5	16,7
8 Checklist	4	13,3
9 Checklist	3	10,0
10 Checklist	1	3,3

Bivariate analysis used independent sample t-test and Shapiro Wilk's normality test. Based on Table 3, the mosaic art group is 0.379, while the control group is 0.299 which is the sig value. > 0.05 for both groups, indicating that the data is normally distributed. These results are shown in Table 3 of the normality test below:

Table 3
Normality test

Group	*Shapiro Wilk*		
	Statistic	*Df*	*Sig.*
Mosaic Art	0,940	15	0,379
Control	0,933	15	0,299

This study uses the Levene statistic test to see the homogeneity of the data. Based on table 4 the value of sig. 0.939 > 0.05 which indicates that the two groups come from the same population (homogeneous). These results can be seen in table 4 of the following homogeneity test:

Table 4
Homogeneity Test

Levene Statistic	*Df1*	*Df2*	*Sig.*
0,277	1	28	0,939

The research data has been tested for normality and homogeneity, the data obtained are normal and homogeneous so that they meet the requirements for the unpaired T test. Based on table 5, the mean value in the mosaic art group is 6.87 and the control group is 5.33. std value. Deviation in the mosaic art group was 1.807 and the control group was 1.799. Std value. Mean error in the mosaic art group was 0.467 and the control group was 0.465. Based on the results of statistical tests with unpaired T-test showed the value of Sig. 0.027 <0.05, which means that there is a difference in the effect of mosaic art on improving the fine motor development of children in Tanjung Gusta Village. These results can be seen in table 5 of the following unpaired T-test:

Table 5
Unpaired T Test

Grup	*Mean*	*Std. Deviation*	*Std. Error Mean*	*Sig.*
Mosaic Art	6,87	1,807	0,467	0,027
Control	5,33	1,799	0,465	

DISCUSSION

Value of Sig. shown based on the results of statistical tests using unpaired T-test. 0.027 < 0.05. This means that there are differences in the effect of mosaic art on improving the fine motor development of children in Tanjungsta village.

The results of the same research by Mansyur Romadon Putra (Putra 2017) This was done because it showed that the child's motor skills increased significantly by 69.23% in the first cycle and 92.31% in the second cycle with guided cutting activities at Paud Al Fatih, Lubuklinggau City.

This research is in accordance with the research of Nurul Hasanah, Muhammad Ali, and Lukmanulhakim, (Hasanah, Ali, and Lukmanulhakim n.d.) It is known that there are differences in fine motor development in children aged 5 to 6 years before and after being given treatment with a t-test calculation, namely t count > t table (3.267 > 2.1098) at PAUD Tamanseria, Sasan Village, Penkadan District, Capuasful Province.

Farah Rizkita Putri, Rudiyanto Rudiyanto, and I Gusti Komang Arya did the same thing (Putri, Rudiyanto, and Arya n.d.) and stimulated by the mosaic technique of Raudatl Athfal Nurul Huda showed a very good improvement in children's fine motor development.

This research is in accordance with the research of Intan Nursayyidah Wahyudi and Iman Nurjaman (Wahyudi and Nurjaman 2018) and the

results of the research data are t count (11,636) > t table (2,021), indicating that Ho is rejected and Hi is accepted, namely the mosaic technique has a significant positive effect on fine motor skills of children aged 4-6 years in Al-Falahiyyah Rajeg Kindergarten.

In the survey, Nyoman Wida Komalasari, Luh Putu Putrini Mahadewi, and Putu Rahayu Ujiti (Komalasari et al. 2016) 70% of children reached the moderate category in the first cycle and were classified in the medium category, and 80% of the results in the second cycle, showed that it was carried out in the high category. The results of Cycle I and Cycle II showed an increase in fine motor performance by 10% in group A children.

Children's motor development can be divided into gross and fine motoric. (Soetjiningsih 2018) Gross motor development is a physical movement that requires balance and coordination between body parts through the use of some or all of the large muscles (Soetjiningsih 2018) and fine motor skills are influenced by learning opportunities and training the eyes and hands. and other bodies.

Stimulation of fine motor skills through arranging cubes, playing with sand, dressing yourself, collecting things, cutting, painting lines, pasting and others. (Merita 2019)

Good stimulation in children can develop their fine motor skills which are shown by producing their own pride skills. (Soetjiningsih 2018) Stimulation is an important requirement for the growth and development of children. Developmental changes will be seen and directed in children who are stimulated compared to less stimulated. (Elmeida 2015)

Stimulus involves the use of mosaic art, some images are created by pasting small pieces of material placed side by side on a flat surface. (Soetjiningsih 2018)

Improve children's fine motor development through mosaic art. This means creating two-dimensional works of art using simpler materials without harming your child. These materials include scraps of paper, seeds and plants. (Istiqomah 2017)

According to Muhihrar and Sri, paper can be used to make simple mosaics. That is, free tear (without tools), tear overlap (with tools), cut and cut the mold. (Afandi 2019)

Therefore, stimulation has the benefit of preparing children's fingers to write, increasing concentration, and training visual and motor coordination. In the future, it is hoped that the children will be able to feed themselves, hold a pencil and tie a rope. In this case, the child's fine motor skills will improve.

According to researchers, children's motor development is closely related to the motor center of the brain. Children's motor development develops along with the maturation of the nerves and brain. As children develop better fine motor skills, they will learn hand-eye coordination, flexible wrist movements, and creative ways to imagine and demonstrate. So creative children cut paper, imitate the shape of lines, make paper balls, store paper according to a set example, etc., but not all children reach maturity and achievement at the same stage, nor are they obliged to achieve the same results quickly. By improving fine motor skills, accompanying parents also always provide different stimuli through playing, so that children will develop better in the future and reach their age. Researchers believe that a child's motor development is closely related to the motor center.

CONCLUSION

Mosaic art has an impact on increasing the fine motor development of children in Tanjungsta village.

SUGGESTION

This research is suggested to researchers to study other variables related to children's motivation with mosaic art or other things besides the importance of parents' interest in increasing knowledge of children's fine motor development.

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