
Effectiveness of Fading Technique on Art Skills (Drawing with Pencils) for PG PAUD Students at the Riau University

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Abstract: This research is supported by the problem of art skills of PG PAUD students in drawing with pencil are still low. To improve this, an experimental research is carried out by giving treatments in fading techniques: shading techniques, drawing shapes, perspectives, and landscapes. In this research, it can be concluded the findings are: 1) before the provision of fading techniques, basic art skills of PG Riau PAUD students in the category of less than 55.72%; 2) after giving fading technique treatments, art skills of students of the Riau PA PAUD PG are in the good category of 73.57%; 3) after treatment, there is an influence (effectiveness) of fading techniques on art skills (drawing with pencil) for PG PAUD Students at the Riau University which is 40.30%.

Keywords: Fading; Art Skills

1. Introduction

The importance of art skills is inseparable from the teacher's efforts to develop perceptual and sensory sensitivities and sense, intellectual, and aesthetic experiences through art for students. In this case, it can fulfill the concept of meaningfulness of learning art, namely learning with art, learning through art and learning about art itself (Pekerti, et.al., 2008).

Art in drawing with pencil is necessary for the further development of teacher skills in various types of art fields. It is known that drawing with a pencil is the basis for painters, designers, architecture, sculptors, and illustrators (Apriyatno, 2004).

Some things that can be attributed in drawing with pencil: drawing shapes, perspectives (Pekerti, et. Al., 2008). To achieve this goal, learning can begin with the learning process: shading; one-dimensional field; three-dimensional field; shape drawings and perspectives (Apriyatno, 2004).

Art is needed because as a teacher these abilities can build the creativity teachers' in designing learning materials - related to learning media that are appropriate for the students' needs (Pekerti, et. Al., 2008). Therefore, the PG PAUD program directed students who will be educators can experience the process of art learning.

Fading is a technique to gradually shape the desired behavior by giving an initial stimulus or stimulus that is able to display the desired response continuously to the individual, and then the

stimulus is gradually removed. By using this process, it is expected that individuals are able to respond to the actual environment without providing initial stimulus (Martin, G & Pear, J., 2004)

Behaviors that can be changed and formed through fading techniques: introduce the objects to children, recognize letter-numbers, and therapy for children with autism. It is used in teaching and classroom learning (Martin, G & Pear, J., 2004)

In general, learning skill has certain processes in order to reach the desired stage. For examples: learning about lines, drawing shapes and perspectives (Pekerti, et al., 2008). Drawing with pencil was first attempted to learn about shading, gradations, perspectives and anatomy (Apriyatno, 2004).

Fading is a learning with the process carried out continuously to achieve the desired stage (Milten, Berger., 2008). Based on the description above variables, the process of learning art is required in the process and is carried out gradually. In conclusion, fading techniques can influence the learning process to improve art skills (drawing with pencil).

Based on observations of several students of the PAUD PG Riau University, it was found that some students could not demonstrate art knowledge and skills namely drawing with pencil in the lecture process. This is the reason to conduct the research by giving treatment in drawing with pencil. The research is entitled "The Effectiveness of Fading Techniques on art skills (drawing in pencil) for PG PAUD Students at the Riau University".

2. Research Methodology

2.1 Type of Research

This is an experimental research by designing of "Nonequivalent Control Group Design" to determine the effectiveness of fading techniques in improving art skills (drawing with pencils) for PG PAUD Students at the Riau University. This research was designed in one group but it was not as control group. The design of this research is:

O1	X	O2
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Note :

- O1 : Pretest
- O2 : Posttest
- X : Treatment group

2.2 Population and Sample

The population in this research was students of PG PAUD Riau University 2016 year as many as 97 people. The sampling technique was carried out by purposive sampling technique because of having a specific purpose. In addition, all populations must be included as samples in order not to interfere the implementation of learning programs.

2.3 Provision of Treatments

The data collection was carried out in several stages: 1) the implementation of the pre-test; 2) giving treatment; 3) post-test implementation. The implementation of fading techniques in basic art treatment (drawing in pencil) is carried out in stages: 1) shading techniques; 2) shape drawings; 3) perspectives; 4) landscape images.

2.4 Data Collection Techniques

Data collection techniques in this research use observation techniques to observe drawing skills. The observation sheet grid can be seen in the following table.

Table 1. Grid of Observation Skills for Art Skills (Drawing with Pencil)

No	Indicator	Category				
		SB	B	C	K	SK
1	Able to gradual shading (thin)					
2	Able to draw object shapes					
3	Able to draw with perspective techniques					
4	Able to draw landscapes					

Note: VG = Very Good G = Good A = Average P : Poor VP = Very Poor

2.5 Data Analysis Techniques

The data were analyzed to determine the effectiveness of fading techniques in improving art skills (drawing with pencil) students of the Riau University PAUD PG by using the t test formula:

$$t = \frac{Md}{\sqrt{\frac{\sum (xd)}{n(n-1)}}}$$

Note: Md: mean mean of deviation (d) between post-test and pre-test
 Xd : difference in deviation with mean deviation (d-Md)
 n : many subjects
 df : or db is N-1

To find out the influence of fading techniques on art skills (drawing with a pencil) at the Riau University PAUD PG using the N-Gain formula:

$$G = \frac{\text{Post-test score} - \text{pre-test score}}{\text{Maximum score} - \text{pre-test score}} \times 100\%$$

Note:
 G = Difference between pre-test and post-test values
 Post-test = Value after treatment
 Pre-test = Value before treatment
 100% = Fixed number

3. Results and Discussion

The data collection research was carried out in several stages: 1) pre-test data collection; 2) giving treatment; 3) post-test implementation. The implementation of fading technique in basic art treatment (drawing with pencil) is carried out in stages: shading techniques in 2 meetings; shape drawings in 3 meetings; perspectives in 3 meetings; and 3 landscape landscape images.

The data analysis was carried out by using of IBM SPSS 22. Statistical techniques were used to test differences in art skills before and after treatment. The purpose of this research was to determine the effect of fading techniques application on art skills of the Riau PA PAUD PG students. This research consists of two tests: pre-test and post-test in the experimental for PG 2016 PAUD Riau University students, totaling 97 people. For this purpose, the experiment was carried out on the variables of art skills by conducting fading techniques to find out the art skills of students. There is a difference between pre-test and post-test, because the data obtained after the treatment illustrates a significant change to improve the art skills of students by using fading techniques. If the post-test score are higher than the pre-test, the application of fading techniques has a positive effect on students' art skills.

The criteria in testing hypotheses are based on the statistical t probability value (sig. T) obtained at the significance level = 0.05. If the p value is 5 0.05, it means that there is a significant influence. If the coefficient obtained is positive, it means a significant positive influence.

Overview of this research can be seen in the description table of research data, where from the data can be known basically statistical functions.

Table 2 Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Pre-test	97	222.8969	18.61422	181.00	281.00
Post-test	97	294.2680	17.35386	259.00	336.00

Based on the formula and the average empirical art skills of students PG PAUD University of Riau is higher after the experiment. It shows that the application of effective fading techniques to improve art skills is the student of the Riau University PAUD PG.

Furthermore, to describe the state of the subject based on the data obtained, it must be made a frequency distribution of the value of the variables studied by classifying subjects into five groups: very good, good, average, poor, and very poor. The description is below:

- Very Poor : <45
- Poor : 46-55
- Average : 56-65
- Good : 66-80
- Very Good : 81-100

3.1 General Description of Student Art Skills Before Application of Fading Technique

The implementation of the pre-test before the fading techniques application to find out the description of the students' art skills of PG PAUD at Riau University, it can be seen in the table below:

Table 3 Scores of Art Skills Indicators

Indicator	Factual Score	Ideal Score	%	Category
Able to shine light-dark (thin) gradually	5346	9700	55.11	Poor

Able to draw object shapes	5409	9700	55.76	Poor
Able to draw perspective techniques	5508	9700	56.78	Average
Able to draw landscapes	5358	9700	55.24	Poor
Total	21621	38800	55,72	Poor

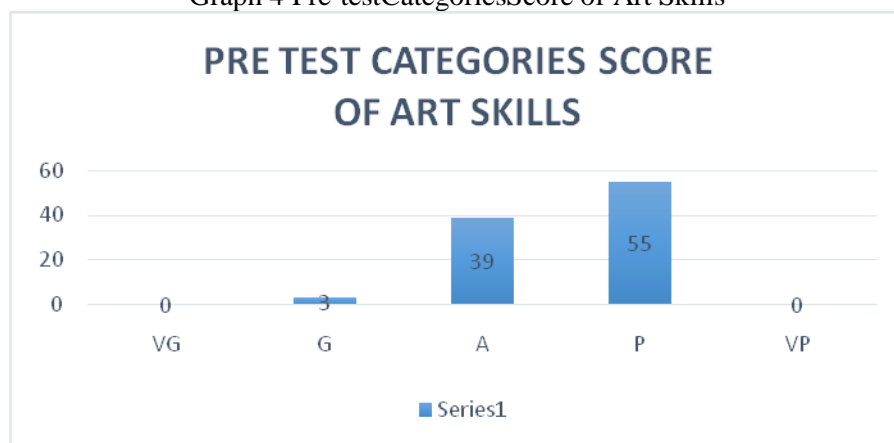
Based on the criteria above, it can be seen that the factual score on the indicator is able to shading dark gradually with a score of 5346 or 55.11%, drawing the shape of the object with a score of 5409 or 55.76%, drawing by using fading technique with a score of 5508 or 56.78%, and drawing a landscape with a score of 5358 or 55.24% of the expected.

Table 4 Categories of Art Skills Scores Before Treatment

No	Category	Score	Frequency	%
1	Very Good	81-100	0	0
2	Good	66-80	3	3,09
3	Average	56-65	39	40,21
4	Poor	46-55	55	56,70
5	Very Poor	< 45	0	0
Total			97	100%

Based on the table above, it can be seen that art skills of students before doing fading techniques are in average categories: the empirical average obtained by students. For more details can be seen in the graph below.

Graph 4 Pre-test Categories Score of Art Skills



3.2 General Overview of Student Art Skills After Doing Fading Techniques

Next research is providing treatment with the application of fading techniques. After giving the treatment, the description of the PAUD PG students' art skills at University of Riau can be seen in the table below.

Table 5 Scores of Art Skills Indicators After Treatment

Indicator	FactualScore	Ideal Score	%	Criteria
Capable of shading light-dark (thin) gradually	7174	9700	73,96	Good
Able to draw object shapes	7229	9700	74,53	Good
Able to draw with perspective technique	7016	9700	72,33	Good
Able to draw landscapes	7125	9700	73,45	Good
Total	28544	38800	73,57%	Good

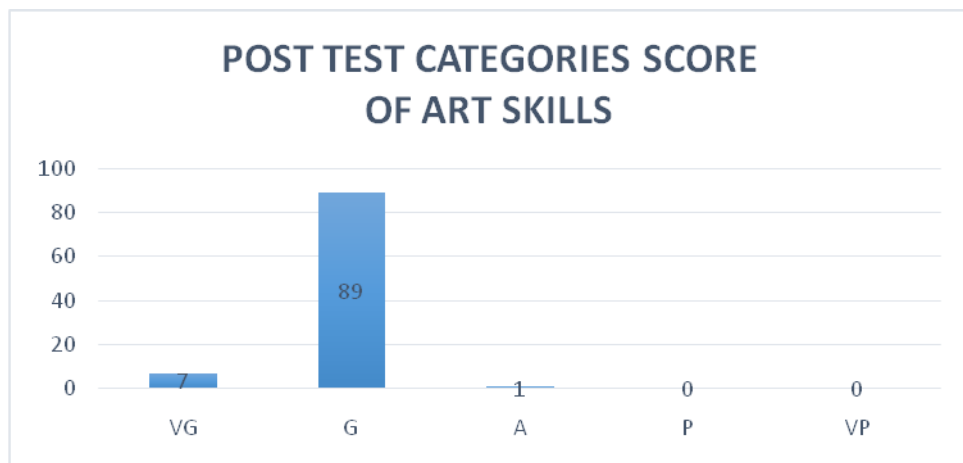
Based on the table above it is known that the score obtained after doing fading technique. The students that are able to shade the dark light gradually obtained score of 7174 or 73.96%, draw the shape of the object obtained a score of 7229 or 74.53%, draw with perspective techniques obtained a score of 7016 or 72.33% and draw landscapes obtained 7125 or 73.45% of what was expected. General description of art skills of PG Riau Early Childhood University students after doing fading techniques can be seen in the table below:

Table 6 Categories of Art Skills Scores after Doing Treatment

No	Kategori	Score	Frequency	%
1	Very Good	81-100	7	7,22
2	Good	66-80	89	91,75
3	Average	56-65	1	1,03
4	Poor	46-55	0	0
5	Very Poor	< 45	0	0
Total			97	100

Based on the empirical average obtained by the subject after the application of fading technique, the art skills of PA PAUD students of the Riau University are in good level. For more details can be seen in the picture below:

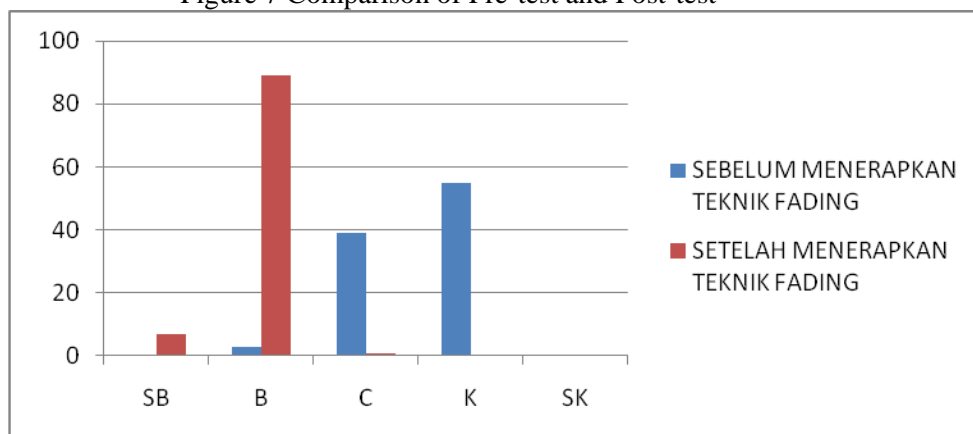
Graph 4 Post-test Categories Score of Art Skills



3.3 Comparison of Pre-test and Post-test Data

Based on the comparison before and after treatment in the picture, it can be seen that there is a significant increase. There was no student who got very good category but after treatment 7 students got very good category. In good category, there were 89 from 7 students. In average category, there were 39 students from 1 student. Fortunately, in poor category there were no student from 55 student and there was no student got very poor category.

Figure 7 Comparison of Pre-test and Post-test



3.4 Data Analysis

3.4.1 Prerequisite Test

The data before and after treatment has a linear line and both of them has a homogeneous relationship. In the normality test, the data is not normally distributed even though the transformation test has been carried out. Because the data is not normally distributed, then to test the hypothesis will be carried out by the *Wilcoxon Signed Rank Test*.

3.4.2 Hypothesis Test

This is the result of data analysis using the *Wilcoxon Signed Rank Test* in the experimental group before and after treatment of fading techniques

Table 7 Rank Analysis

		N	Mean Rank	Sum of Ranks
Post-test – pre-test	Negative Ranks	0 ^a	.00	.00
	Positive Ranks	97 ^b	49.00	4753.00
	Ties	0 ^c		
	Total	97		

Based on the table above, there are 97 students differspositively and 0 students differ negatively. It means that students who have been given fading technique treatment have increased their art skills.

The Wilcoxon Signed Rank Test test is used to test hypotheses that show that the use of fading techniques is effective to improve students' art skills. The Wilcoxon Signed Rank Test is used because the data is not normally distributed. The following are the results of the Wilcoxon Signed Rank Test:

Table 8 Analysis *Wilcoxon Signed Rank Test*

	postest - pretest
Z	-8.552 ^b
Asymp. Sig. (2-tailed)	.000

Based on the data above, hypothesis testing can be done by comparing the significance level (p-Value) with the terms:

- a. If the significance is > 0.05, Ha is rejected and H0 is accepted
- b. If the significance is < 0.05, Ho is rejected and Ha is accepted

In this study it can be seen that Z = -8,552 with a significance of 0,000 < 0,05, then Ha is accepted and H0 is rejected. There are differences in students' basic art skills before and after treatment of fading techniques.

3.4.3 Effectiveness of Fading Techniques on Art Skills (Drawing with Pencils) for for PG PAUD 2016 Students at the Riau University

To find out how is the effectiveness of fading technique uses the gain formula according to David E. Meltzer (in Yanti Herlanti) as follows:

$$G = \frac{\text{post-test} - \text{pre-test}}{\text{maximum score} - \text{pre-test}} \times 100\%$$

$$G = \frac{28544 - 21621}{38800 - 21621} \times 100\%$$

$$G = 40,30\%$$

4. Conclusion

This study concludes: 1) before the provision of fading techniques, art skills (drawing in pencil) by students of PG Riau Early Childhood Education were in the category of less than 55.72%; 2) after giving fading techniques, it increase in the good category is 73.57%; 3) the influence (effectiveness) of fading techniques on art skills (drawing with pencil) for students of PG Riau University PAUD period of 2016 is 40.30%.

References

- Alim, Muhammad Baitul (2010). Fading. Modifikasi Perilaku. Accessed on November 11th2011 from <http://www.psikologizone.com/fading-modifikasi-perilaku/065111017>
- Annianingrum, Naning (2011). Prompting and Transfer Stimulus Control. Accessed on November 11th2011 from <http://raneebk.blogspot.com/2011/02/prompting-and-transfer-stimulus-control.html>
- Bellack, A.S. & Hersen, M. 2003. *Behavior Modification : An Introductory Textbook*. New York : Oxford University Press.
- Edi Purwanta. 2012. *Modifikasi Perilaku*. Yogyakarta. Pustaka Pelajar Offset.
- Ian Wongkar and Patricia Linkan.t.t. *Melukis Dengan Pensil: Bunga, Buah dan Tumbuhan Lain*. Jakarta: Gramedia.
- Martin, G & Pear, J. 2004. *Behavior Modification : What It Is and How to Do It*. Fourth edition. New Jersey : Prentice Hall.
- Milten, Berger. 2008. *Behavior Modification : Principals and Procedures*. Belmont : Thompson Higher Education.
- Sugiono. 2010. *Statistika untuk Penelitian*. Bandung: Alfabeta
- Very Apriyatno. 2004. *Cara Mudah Menggambar Dengan Pensil*. Jakarta; Kawan Pustaka.
- Widya Pekerti, et.al. 2008. *Metode Pengembangan Seni*. Jakarta: Universitas Terbuka.