THE EFFECTIVENESS OF RHYTHMIC GYMNASTICS LEARNING TO IMPROVE KINESTHETICS INTELLIGENCE OF 4-6 YEARS OLD CHILDREN

(Study Quasi Experimental at Kober Anugerah Kota Bandung Academic Year 2015/2016)

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Abstract

Age 4-6 years is a sensitive period for children, the period in which the maturation of the functions of the physical and psychic so that they are ready to respond to any stimulation provided by the environment. Sensitive children begin to receive various efforts throughout the development potential of children.This study uses a quantitative approach with quasi experimental methods and test analysis of two samples correlated difference. The design was a pretest-posttest design nonequivalent group with the techniques of data collection using observation, interviews, and questionnaires.

Results of the study showed bodily kinesthetic intelligence of children in Kober Anugerah before experiments have intelligence that is relatively similar to the medium category. After the experiment, the experimental class has increased significantly. It concluded that the learning gymnastics effective in improving students' bodily kinesthetic intelligence.

Keyword : *children, rhythmic gymnastics, bodily kinesthetic intelligence*

1. INTRODUCTION

Education is an integral part of development. The educational process can not be separated from the development process itself. Development is directed and aimed to develop the quality of human resources and economic sectors, one with the other interconnected and going on simultaneously. Education is a process in order to influence students to be able to fit as well as possible with their environment, and thus will create a change in their self that allows them to function closely in the life of the community. In a broad sense, education can be interpreted as a process with certain methods so that people acquire knowledge, understanding, and ways of behaving according to the requirements (Muhibin Shah, 2008: 10). Teaching is in charge of directing the process so that the goals of the change can be achieved as desired (Oemar Hamalik, 2007: 3).

Based on the Law no. 20 of 2003 (UU No.20 / 2003) on the National Education System, the definition of education:

Education is a conscious and planned effort to create an atmosphere of learning and its process so that students are actively developing their own potential; religious spiritual strength, self-control, personality, intelligence, noble character, as well as skills needed by their self, society, nation and state.

In Islam, there are some terms commonly used in the definition of education. One of them ta'lim word according to the word of God s.w.t. Q.S. Al-Baqarah verse 31:

Meaning: "And He taught Adam the names - all of them. Then He showed them to the angels and said, Inform Me of the names of these, if you are truthful."

Similarly, the word ta'dib, as in a hadith of the Messenger of Allah. which reads:

أَدَّبَنِى رَبِّى فَأَحْسَنَ تَأْدِبِى

It means: "God educated me, so He gave me the best education.

There is one important thing that can be drawn from the understanding of education above, that is covered in the process of education is self-maturation through teaching and training.

Chidlren in 4-6 years old are in a child-sensitive period. They begin to be sensitive to accept the various development efforts of their potential. Sensitive period is the period of maturation of physical and psychic functions that are ready to respond to the stimulation provided by the environment. This is the time to lay the foundation for developing the physical, cognitive, linguistic, emotional, social, self-concept, discipline, self-reliance, artistic, moral, and religious values. Therefore, the necessary conditions and stimulation in accordance with what children need for their growth and development are achieved optimally.

Preschoolers are in the first five years of age called The Golden Age is a golden period of child development. Children at that age have enormous potential to optimize all aspects of their development, including physical kinesthetic intelligence.

According to Gardner, mental and physical activity are interconnected. Physical intelligence is the basic for the development of the next progress. In relation to one's ability to complement one's physical ability with the mind so as to be born a beautiful and well-organized physical motor appearance (Campbell et al .: 1996-67) .

With regard to physical growth, kindergarten children still need to actively perform various activities, it is indispensable both for development small muscle or large muscle. According to Solehuddin (2000: 47) the success of children in learning motor skills will make them proud to be himself. Physical movements can also help children to understand abstract concepts, as well as adults who need illustrations to understand that. But unlike adults, the child's understanding of a concept is almost independent of direct experience. Therefore required enough physical activity so that the

motor in the period of growth become optimal.

Furthermore, Samsudin (2005: 5) reveals that the activity or condition moves in kindergarten children is very high (dominant) based on observations 70-80% of kindergarten children do the motion in the learning process.

But in modern times with various forms of technological advancement as nowadays, most children choose to spend their playing time by enjoying the available facilities better than performing activities that have to move the muscle.

Physical activity by using the body exercise is meant that students have the development of body movement in harmony so that they will have the ability to develop good movement. In line with Hildayani (2005: 16) that less than 80% of a number of children develop developmental disorders, also have difficulty regulating the balance of the body.

Furthermore, Hildayani (2005: 8-11) deals with equilibrium, not all children in 4-6 years old are equal in gaining the perfect ability in accordance with the development of their age. Still according to Hildayani (2005: 8-16) approximately 80% of children have developmental disorders, and have difficulty in setting the balance of the body. A child's equilibrium arrangement requires the children to perform more difficult and complex activities such as jumping, standing on one leg, or walking on the bridge.

The impact of imbalance in children is a disturbance in controlling the body movements. Body problems are related to vestibular or system that regulate body balance.

Based on initial observations and interviews in Kober Anugerah, there are still many play group teachers who do not understand about children's kinesthetic intelligence through the application of learning by using rhythmic gymnastics. So from the results of these observations can be concluded that the learning is still not maximized, especially in developing kinesthetic physical intelligence. This is because not all teachers have understood the benefits of physical kinesthetic intelligence through the application of rhythmic gymnastics learning in early childhood.

As a solution in solving the above problems is through the implementation of physical development that fun and comfortable for children. Delphie (2005: 35) suggests that in the life of this world turns out the relationship between humans and rhythms, as well as music there is a form that attracts each other pulling causing tensions that make the challenge for humans themselves to be able to make the movement. Similarly, kindergarten children love to move rhythmically, as for the rhythmic activities are commonly performed kindergarten children who are rhythmic gymnastics.

When listening to the rhythm, the children are expected to perform motion, either spontaneous or conscious movement, and to use their energy appropriately.

Rhythmic gymnastics does not require the children to move in accordance with the pattern but gives freedom to them to move freely in accordance with their wishes. With an expression, they will discover new experiences and by following the children's rhythmic exercises more freely moving, imagining and daring to face new challenges.

Based on the exposure presented above, it becomes a central issue in this research is **"Effectiveness of Rhythmic Gymnastics Learning to Improve Children's Kinesthetic Intelligence (Quasi-Experimental Study at Kober Anugerah Bandung City Academic Year 2014/2015)".**

2. FORMULATION OF PROBLEMS

To clarify the identification of the problem, the researcher prepares the formulation of the problem so that the research study is more focused and directed. The formulation of the problem that will be studied: How is the effectiveness of rhythmic gymnastics learning in improving the kinesthetic intelligence of early childhood?

3. OBJECTIVES OF RESEARCH

Based on the research problems that have been formulated, the main objective of the study is to determine the effectiveness of rhythmic gymnastics learning in improving the kinesthetic intelligence of early childhood.

4. RESEARCH METHODOLOGY

This research was conducted at Kober Anugerah, which is located at Jalan Cintaasih no. 193/122 RT. 04 RW. 13 Kelurahan Cibangkong Batununggal District Bandung West Java City.

In this study there are two variables that will be studied, that are learning gymnastics rhythmic and kinesthetic children's physical intelligence. From the three variables, there is one experimental variable that is the learning of gymnastic rhythms (X) and one variable result or outcome variable (k) physical kinesthetic intelligence (Y).

As for the populations in this study are students at Kober Anugerah which 58 students in the age range of 4-6 years, 29 students as experimental group, and 29 others as control group. Because the researcher made all the elements that exist in the research area as research subject, this research is called population research and the research study is called population study or census study (Arikunto, 2013: 173).

This research uses quantitative approach with quasi experimental method. The design used in this research is pretest-posttest nonequivalent group design (Heppner, Wampold and Kivlighan, 2008: 183-186). This design makes it possible to disagree between the experimental class and the control class (Heppner, Wampold and Kivlighan, 2008: 183).

Data collection techniques in this study uses a questionnaire. This questionnaire uses a check list

questionnaire with a closed questionnaire type, which researchers have provided the answer so the respondents just choose. Questionnaires were given to experiment class teachers and control classes as respondents from this research.

Technique of data analysis is done by going through three stages, namely data description stage, test requirement analysis phase, and hypothesis testing phase.

5. RESEARCH RESULT

a. Description of Results

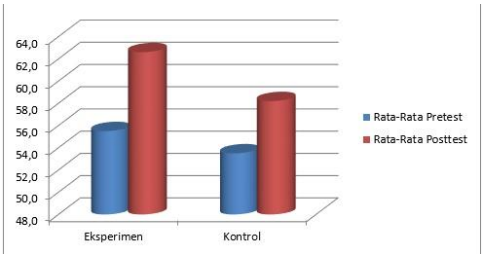
The kinesthetic intelligence profile of the students in Kober Anugerah was known before treatment, in the experimental class of 8 children (27.6%) belong to the "high" category, 11 children (37.9%) belong to the "moderate" category, 7 children (24.1%) belong to the "low" category, and 3 children (10.3%) belong to the "very low" category, there were no children in the experimental class who had physical kinesthetic intelligence in the "very high" category .

The physical kinesthetic intelligence of the control class had a high degree of physical kinesthetic intelligence after experiments of 41.4% (12 persons), moderate '31.0% (9 persons), low 20.7% (6 persons) , and 6.9% (2 persons) are included in the "very low" category. No physical kinesthetic intelligence was found to be very high in the post-experimental control class.

After being treated with rhythmic gymnastics learning, there was an increase in the experimental class. This is based on posttest data that the children in the experimental class after being treated, 7 people (24.1%) included in the category "very high", 9 people (31%) included in the "high" category, 6 people (20.7%) included in the "moderate" category, 5 people (17.2%) and 2 people are in the "very low" category.

Graphic 1

Average Comparison of Physical Kinesthetic Intelligence Value Between Experiment Class and Control Class



This graph describes the average kinesthetic intelligence level of experimental class before treatment is 55.5 and control class is 53.5. After the experiments performed, an increase in both classes. The experimental class after the average experimental child's kinesthetic

intelligence level is 62.6 and the control class is 58.2. This shows that the average score of physical kinesthetic intelligence in Kober Anugerah is in the medium category.

Hypothesis Testing

Hypothesis testing is done by using two correlated (pairwise) samples because the sample in this study is correlated (dependent) or couples. Couple here means that one sample is treated differently from time dimension (Siregar, 2013: 248). The calculation is done by using SPSS program for Windows version 20 with the following results:

Tabel 1
Hypothesis Testing Statistics (Physical Kinesthetic Intelligence)

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest Kecerdasan Kinestetik Jasmani	55.52	29	12.032	2.234
	Posttest Kecerdasan Kinestetik Jasmani	62.41	29	16.717	3.104

From the 29 subjects observed, we know that the mean of experimental kinesthetic intelligence of the experimental class before treatment was 55.52 and the mean after treatment was 62.41. The t-tests performed are shown in the following table:

Table 2
Paired Samples Test

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest KKJ - Posttest KKJ	-6.897	11.623	2.158	-11.318	-2.475	-3.195	28	.003

From the result of paired t-test it is seen that the mean difference between physical kinesthetic intelligence before treatment and after treatment is equal to -6,897. That means that there is increase Physical Kinesthetic Intelligence after experiment with average increase equal to -6,897.

The result of calculating the value of t is equal to -3.195 with probability number (Sig.) 0.003. This means H0 is rejected and the research hypothesis is accepted.That is statistically there is significant / significant difference between the average kinesthetic intelligence of the child's body before after treatment.

b. Discussion of results

The initial idea of experimental research on using gymnastic rhythmic refers to a theoretical study which mentions that mental and physical activity are interconnected. Physical intelligence is the basic for the progress of subsequent development.

After going through the process of data analysis based on the results of statistical processing of data from the field, the researchers explain the results of the findings as follows: First, the results of data collection showed that the average students in Kober Anugerah before treatment has physical kinesthetic intelligence in the category medium. After treatment in the form of learning cadence gymnastics, experiment class has increased significantly. This can be seen from the percentage of children's physical kinesthetic intelligence as follows: 7 people (24.1%) fall into the category of "very high", 9 people (31%) included in the "high" category, 6 people (20.7%) in the "moderate" category, 5 people (17.2%) and 2 people are in the "very low" category. In addition, the increase can also be seen from the average level of physical kinesthetic intelligence experimental before the treatment was 55.5 and the control class was 53.5. After the experiment was done, there was an increase in both classes. The experimental class after the average of physical kinesthetic intelligence level was 62.6 and the control class was 58.2.

Second, the result of paired t-test shows that the mean difference between physical kinesthetic intelligence before treatment and after treatment is -6,897. That means that there is improvement in physical kinesthetic intelligence after experiments with average increase of -6,897.The result of calculating the value of t is of -3.195 with probability number (Sig.) 0.003. This means H0 is rejected and the research hypothesis is accepted. It is statistically there is a significant / significant difference between the average kinesthetic intelligence of the child's body before and after treatment.

This suggests that the learning of rhythmic gymnastics has an effect on the improvement of physical kinesthetic intelligence, based on the average increase in learning motivation of learners before and after the experiment.

These findings also prove that the learning of gymnastics has an important role in the education process. In this rhythmic gymnastics activity, children can follow physical development activities, although at first the children are not required to perform the movement according to the pattern or example. Children move in accordance with the expression of their soul or the desire of their heart, but the children also did not close the possibility in the end can follow all the movements due to the frequency of children do the movement with repeated so accustomed.

With the expression of the children will find new experiences and by following the rhythm of children more freely moving, imagining and daring to face new challenges. As suggested by Sujiono (2007: 97) that: Approaches in rhythmic motion activities should emphasize creative and flexible methodologies that place the process

of movement and self-expression to the rhythm more important than the motion pattern that resulted.

6. CLOSING

a. Conclusion

Based on the data analysis that has been discussed in chapter IV, it can be concluded as follows:

First, the results of the data collection indicate that the objective condition of the students' kinesthetic intelligence in Kober Anugerah before being given treatment has physical kinesthetic intelligence at the same level both in the experimental class and in the control class that is in the medium category.

Secondly, after experimenting using the learning of rhythmic gymnastics, the experimental class has a significant improvement. Thus can be concluded that there is a significant effectiveness between the learning of rhythmic exercises in improving the kinesthetic intelligence of the of the students.

b. Implications

From this study the results obtained that there is a correlation between rhythmic learning rhythm with increased kinesthetic intelligence of children in Kober Anugerah although with different levels of significance.

Thus, the learning of rhythmic gymnastics should be used by teachers both in kindergartens (TK), Early Childhood Education (PAUD), Study Groups (Kober), as well as in other equivalent educational institutions. Such learning can be included in every learning program plan, both daily and weekly with due regard to the objective and developmental condition of the students.

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