Effect of Locomotor Creative Dance on Student Motor Skills Development

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Abstract: In physical education there is a goal called skill. Aspects that are need to be developed in children such as motion skills or so-called motor skills. The purpose of this study is to determine the influence of locomotors creative dance on the development of students' motor skills. The research method used is experimental with research design of The matching Pretest-Posttest Control Group Design. The population in this study is SD Lab school UPI students and the samples of this study are the 3rd graders divided into two treatment groups. The rhythmic activity group is treated by providing creative dance learning and group learning of the game activity given traditional game learning. The provision of creative dance treatment is more effective in increasing gross motor quotient.

1 INTRODUCTION

Rough motor development is very important for children. The acquisition of motor skills must be owned by the child as a basis for mastering the next motor skills more complex and useful to improve the quality of life in the future (Stork and Sanders, 2008). In addition, the increase in gross motor skills of the child is related to the acquisition of specific skills in physical activity outside the school (Raudsepp and Päll, 2006). In other words, one determinant of a person's quality of life is to actively move and exercise, while to be able to move and exercise, one must master complex motor skills, and the mastery of complex skills can be obtained by mastering rough motor skills first. Rough motor development not only prepares children for more complex motor skills, but also influences academic success (Lopes et al., 2013); efficiency control and memory work (Haapala, 2013).

To achieve good movement, a child must be supported by a physical state (motion element) such as muscle strength, muscle endurance, cardiovascular endurance and flexibility (Annarino et al., 1986). According to Gallahue (1995) Rough Motion is divided into three categories namely as follows: (1) Locomotors: road, run, jump; (2) Combination motion: gallop, glide, shift right or left, climb, and roll over; (3) Non-locomotors: stalling, bending, rocking, rocking, turning, turning, twisting, pushing, lifting and landing; (4) Manipulative: push, punch, bounce, throw, kick, and roll, accept: catch and stop. The three types of motion are interrelated, or mutually supportive. Also these three types of motion will be performed either singly, or in combination, whether done in gymnastics, games (sports), or in dance. For children, all of this movement is done from the simple to the complex movement. Basic motion is what is needed by early childhood, especially in elementary school to be able to support the ability of later child movement later. Because at this early age is a golden opportunity for children to increase their potential, at this age child have the extraordinary ability to learn.

Physical education in primary school can be used as a supporting tool in the development of motor skills in children. The demand for the right physical education program is an important study to be done. Teachers can provide a range of motion lessons from the scope of materials taught in primary schools to foster the development of children's motor skills. From the scope of the material given in this physical education, most teachers prefer to apply game activity as a teaching material in physical education learning when compared to rhythmic activity. The activity of the game is already familiar in learning physical education and is in great demand by the children. While rhythmic activities seem unfamiliar to the students because the teachers rarely provide

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learning materials of this rhythm activity to students. In fact, with this rhythmic activity the child will participate in learning in an exciting and fun way to the accompaniment of music.

2 METHODS

The method used in this research is the experimental method with The Two Group Pretest-Posttest design by providing treatment to both groups. The rhythmic activity group is treated by providing creative dance learning and group learning of the game activity was given traditional game learning.

About 68 students consisting of two classes, namely class III an and III b which each class numbered 34 students. Then the researcher determines which class will be given treatment of rhythmic activity and game activity. The instrument for measuring rough motor skills of children used in this study was Test of Gross Motor Development -Second Edition (TGMD-2) developed by Ulrich (2000). The test includes 12 motion tests categorized into two Sub variables, Locomotors (run, gallop, hop, leap, horizontal jump, and slide) and Object Control (striking a stationary ball, stationary dribble, catch, kick, overhand throw and underhand roll) (Frankenburg, 1967). TGMD-2 has high reliability with locomotors sub variable reliability coefficients and object controls of 0.91, 0.85 and 0.88 combinations respectively (Chow and Chan, 2011)

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3 RESULTS AND DISSCUSION

The mean and standard deviations of TGMD-2 test results during pre-test and post-test in both groups are presented in Table 1.

Table 1: Pretest and Posttest Gross Motor Quotient between treatment and control group.

	Treatment Group	Control Group
Pretest		
LOC	4.22 (0.26)	4.23 (0.19)
OC	4.24 (0.24)	4.16 (0.23)
GMQ	50.79 (2.18)	50.35 (1.82)
Posttest		
LOC	7.01 (0.35)	6.73 (0.36)
OC	6.84 (0.27)	6.46 (0.35)
GMQ	83.17 (2.71)	79.14 (3.03)

The average Gross Motor Quotient (GMQ) value of each group increases from pre-test to post-test. The mean value of the GMQ treatment group at pretest was 50.79, while the mean value at the time of the post-test was 83.17. Meanwhile, in the control group, the mean value of GMQ at the time of pretest was 50.35 and at the time of post-test 79.14.

The statistical analysis was used to see if giving creative dance treatment is more effective in increasing gross motor quotient compared with traditional games is by comparing the average gain score (post-test value minus pre-test value) of each group with independent sample of t test. The result is as follows:

Table 2: Independent Samples Test.

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Gain score	Equal variances assumed	5.283	66	.000
	Equal variances not assumed	5.283	60.405	.000

Based on the calculation, it is known that there is a significant Gain Score difference between the groups who were given creative dance treatment with the group who were given traditional treatments games (P < 0.05). (see table 2)

The teaching of rhythmic gymnastics / dances in the form of physical activity by students such as twisting, stepping, jumping, etc. will foster basic motor skills of elementary students. The presence of a rhythm that is played during a gymnastic activity adds to the excitement of the elementary students so that they are interested in continuing to perform the movements as demonstrated by the teacher. Activity motion performed in this rhythmic activity can stimulate the ability of basic motion of students, because in addition to basic motor motion then the students will get motion that its manipulation, like step one step left and right side, it can be manipulated into double step left and right in gymnastics movement rhythmic.

Therefore, children can develop and express an understanding of the rhythmic pattern by walking, running, jumping, gallop, slides and hops, echoing, playing rhythm, using wooden stick or twang. So with the pattern of rhythmic movements coupled with the accompaniment of music, it can make children become happy when doing the movement. Furthermore, the movement has become a habit for them to perform locomotors movement, nonlocomotors and manipulative. Habituation will result in skill to be implemented in their daily life.

The learning process of rhythmic activity and learning through the game are equally facilitated by the teacher well, meaning that when learning takes place the learning situation does not threaten the students, appropriate reinforcement, and supervised exercises. In addition, the motion activities undertaken by the child planned and structured. Thus the child's motor can develop optimally. This is in line with opinion (Stork and Sanders, 2008) "Planning and careful organization of physical activities maximize opportunities for children to acquire a wider variety of physical skills than might be developed during play alone". Thus, with wellplanned and well-organized physical activity it maximizes the opportunity for the child to develop his motor skills compared to playing alone. So it can be assumed that the development of motor learning with rhythmic activity can improve the motor development of children better because in learning this rhythm activity is not just focus on the fun game only.

Gallahue (1995) and Russell (1987) explains that "Creative rhythmic movement is fundamental to children's ability to move with joy and efficiency." It means that creative rhythm movements are the basis of a child's ability to move happily and efficiently. In this rhythmic activity not only contains the elements of play alone, but it becomes more fun for children when implementing it by using music accompaniment and various new varied movements. So in doing the activity of motion with the accompaniment of interesting music, it will make the child more excited and happy in following the learning. In rhythmic activity, the child is not only required to be active and do well, but also the child is required to explore and be creative in order to create and perform a new movement. So the child will be more enthusiastic and feel challenged to perform a new movements presented in this rhythmic activity.

In addition, in the learning of this rhythm activity the utilization of active learning time can be done better when compared with learning game activity. In rhythmic activities students can move actively without wasting time with various rules as well as in game activities. Skill in teaching this rhythmic activity is more focused on simple and interesting movements and still incorporates elements of play in it. Competitive elements still exist in it but do not make the child feel the need to win as in the game activity. In this rhythmic activity, the child will find something new that becomes a challenge for the child to be competing to try to avoid being seen left behind from other friends. The child also learns to concentrate on the learning process.

In learning this rhythmic activity modification and variation of movement is a challenging new thing for the child, so the child is enthusiastic, not feel bored and receive it with great cheer. Thus, if a physical education teacher can package and review rhythmic activity as well and creatively as possible then it can make the child more active so that it will also affect the improvement of motor skills better when compared with the game activity.

4 CONCLUSIONS

The results of this study indicate that there are differences in motor skills in creative dance learning and game activity, but the greatest contribution is on creative dance. Therefore, it can be concluded that locomotors creative dance is more effective in increasing gross motor quotient.

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