The Influence of Rhythm Activity Learning on Student Understanding Skills Movement

Helmy Firmansyah, Tri Martini and Teten Hidayat

Faculty of Sport and Health Education, Universitas Pendidikan Indonesia, Jl. Dr. Setiabudhi No. 229, Bandung, Indonesia helmy,firmansyah@upi.edu

Keywords: Rhythmic, Activity, Skills.

Abstract: The purpose of this research is to know whether there is influence of learning rhythmic activity (SKJ and

SBP) to understanding and movement skills of students. Method used in this research is experimental research method of One Group Pre-test Post-test Design research with 40 research samples students with Simple Random Sampling method. While the data collection used in this study is a questionnaire in the form of multiple choice and fitness skill gymnastic skills test. The study used SPSS Version 18 calculation with ANOVA calculation method, based on hypothesis result, it can be seen that the understanding of SKJ is 14,75, SKJ movement skill is 14,30, and SBP appraisal is equal to 16,00, SBP skill of 15.15. The conclusion is that the learning of rhythmic activity has an effect on the understanding and movement skills,

and SBP is more dominant in the result of its comprehension and skill compared to the SKJ.

1 INTRODUCTION

The purpose of national education is of course contained in the purpose of physical education according to KEPMENDIKBUD No. 413 / u / 1997 "Physical education is an integral part of education aimed at increasing individuals organic, motor, intellectual and emotional through physical activity." The purpose of physical education requires teachers to be creative and innovative in the learning process. It relates to the purpose of physical education in terms of learning gymnastics type gymnastics fitness, generally senam kebugaran jasmani (SKJ) and senam bugar parahyangan (SBP) learning achievement not only ends in the physical fitness of learners but cognitive and affective aspects in terms of understanding the motion and skills of the learners should be developed (Wadsworth, 1996).

A physical fitness gymnastics is one kind of fitness gymnastics which become a learning media in physical education at school, where its activity is not only physical but also requires motion coordination including physical fitness component, memory and physiological based concentration and FITT principle (Frequency, Intensity, Time and Type) (Caspersen et al., 1985). With the holding of gymnastic fitness training at school has an important role in providing the opportunity to learn motion and

motor skills. Although in reality the potential of each learner is different, not all learners will understand the motion and skilled in the move after SKJ and SBP. Thus the authors are interested to conduct research on the influence of learning SKJ and SBP for understanding and movement skills in students of class X. Review whether learners who love to move in the field of dance art, both traditional and modern will experience difficulties in understanding the movement of SKJ and SBP whose movement in the form of different physological functions with dance although there are elements of dance in it as in the SBP.

Gymnastics physical fitness (SKJ) is a mass gymnastics required by the Indonesian government. Mass gymnastics means gymnastics followed by many people and accompanied by rhythmic songs from various provinces re-arranged. SKJ is a mass gymnastics required by the government of Indonesia (Chanal et al., 2005). Senam mass means gymnastics followed by many people. This sixth is usually accompanied by rhythmic songs from various provinces re-arranged (Oktara, 2010). The content of SKJ, among others, warming exercises consisting of 11 movements, the core movement 5 types of movement, and movement cooling (Cooling down). Similarly SBP, created with a movement of gymnastics that combines the movement of physical fitness fitness, dance, chacha, and pencak silat

(martial arts). The type of music that is used is the musical arrangement of the special area of West Java special Sundanese and the movement is relatively easy. So in addition to bringing learners in learning the gymnastics, they will also recognize the art of local culture, especially sunda in music and pencak silat movements contained therein. With the structure of motion that has been raw SKJ and SBP during the implementation of learning in schools requires understanding and skills generated through the process of training, especially with music as a medium accompaniment of motion.

Movement understanding is an aspect contained in cognitive goals. Understanding of movement refers to the new Bloom's Taxonomy version of the cognitive domain comprising six categories: 1) remembering, 2) understanding) 3) applying, 4) analyzing / deciphering), judging and creating (Anderson and Krathwohl, 2001). The understanding of each individual will differ according to his ability in receive and process the information it receives. While movement skills become the ultimate goal of all learning process of motion determinant of success is determined by the quality of movement that displays correctly. Fundamental Movement Skills (FMS) are movement patterns that involve different body parts such as the legs, arms, trunk and head, and include such skills as running, hopping, catching, throwing, striking and balancing. They are the foundation movements or precursor patterns to the more specialised, complex skills used in play, games, sports, dance, gymnastics, outdoor education and physical recreation activities. Fundamental movement skills are best categorised into groups because it makes planning, teaching and assessment easier. The three categories adopted in this resource are body management, locomotor and object control. Many skills can be included in these groups (Department of Education Westren Australia, 2013).

Basically all the tasks in everyday human life need to be implemented by involving various skills developed through various exercises and experiences. Mahendra and Saputra (2006), suggests five variables that show the characteristics of skilled appearance:

- Smoothness. Professionals do their work with ease, beautiful, smooth, and minimal effort;
- Automaticity. Individual expert who performs his duties without full awareness (without thinking);
- Mental effort. As skills increase, mental effort decreases. Tasks that seem easy, will cause very little mental fatigue, and less need of

- monitor. A real sign, will easily continue the conversation as the body does its job;
- Stress. Individual appearance does not decrease under stressful conditions though;
- Point of View. When first learning a skill, the individual must be aware of various activities, while the expert does not.

The concept of human motion in the theory of Fitts and Posner in (William, 2011) suggests that the process of learning the motion of skills occurs in three phases, namely: cognitive phase (initial phase in learning skill movement), associative phase (movement mastery/sequence motion), Phase autonomous (skill movement automatically). The concept of human motion divided by the difference of movement, movement skills can be categorized (William, 2011):

- Discrete motor skills are motion skills where in the implementation can be distinguished obviously the starting point and the end point of the movement. Example: roll front 1 (one time). the starting point of movement at the time of the squats and placing both the palms of the hands and the nape on the mat, while the end point when the perpetrator in the squat position back;
- Serial motor skills are discrete motion skills performed several times continuously. Example: roll ahead a few times;
- Continuous motor skills are motion skills that can not easily be marked the starting point or end point of the movement. Example: the front roller is then forwarded with other skills so as to form a series of motion of various movements.

Bambang and Sukadiyanto (2014) said if a person performs the task of motion, it will generate a stimulus of intrinsic feedback. These stimuli leave traces in the nervous system called perceptual traces. Each response produces a trace that is getting closer to the desired target. Each time a student exercises or experiments with a movement, the more perceptual the trace becomes and the less likely it is the error. Students actively use the knowledge of the results in relation to the perceptual traces to make the more careful movements. After a movement is performed, the student will compare the feedback it receives with a perceptual trace, and the difference that occurs is an error to respond to. Direction of motion in the intended direction can produce change because the continuous feedback adds a perceptual trace. The concept of a perceptual trace allows one to: (1) determine the location of his limbs correctly, (2) as a basis for knowing how far a motion slips from the place set after the whole motion is done.

2 METHODS

The method used in this study is the experimental method. Because want to know the effect of SKJ and SBP to skills movement and understanding of movement with statistical processing through SPSS Version 18 with ANOVA calculation method. The population in this study is the students of class X SMP Negeri 1 Cipatat with the number of students as much as 270 people. Sampling using Simple random sampling technique of 10-15% or as many as 40 people, then given treatment of SKJ and SBP. The research design used is One-Group Pretest-Posttest Design.

3 RESULTS AND DISCUSSIONS

Based on table 1, the average questionnaire result or questionnaire of SKJ understanding movement is 19.30 with 95% confidence level or 5% significance, the average yield is in the range of 18.11 to 20.48 with minimum result is 14.00 and maximum 23.00. While the average SBP for 20.05. with a 95% confidence level or a 5% significance, the average yield is in the range 19.10 to 20.99 with the minimum result being 17.00 and the maximum of 24.00.

Table 1: Descriptive.

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
que_SKJ	20	19.3000	2.53606	.56708	18.1131	20.4869	14.00	23.00
que_SBP	20	20.0500	2.01246	.45000	19.1081	20.9919	17.00	24.00
KG SKJ	20	14.3000	1.68897	.37767	13.5095	15.0905	12.00	18.00
KG_SBP	20	15.3000	2.00263	.44780	14.3627	16.2373	10.00	19.00
Total	80	17.2375	3.22272	.36031	16.5203	17.9547	10.00	24.00

Average for SKJ skill is 14.30, with 95% confidence level or 5% significance, average yield is in range 13.50 to 15.09 with minimum result is 12.00 and maximum is 18.00. While the average for SBP skills is 15.30 with 95% confidence level or 5% significance, average yield is in range 14,36 to 16,23 with minimum result is 10,00 and maximum 24,00.

Table 2: Anova.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	490.938	3	163.646	37.740	.000
Within Groups	329.550	76	4.336		
Total	820.488	79			

Description:

Ho: rejected = F table (sig) <F count (F) <F table (sig) = acceptable.

Based on table 2 that F calculates 37.740 with probability or F table 0,000. Since F table is smaller F count then Ho is rejected or average of four different groups.

Table 3: Multiple Compressions.

Multiple Con	mparisons						
Dependent V	/ariable						
	(I) Sub	(J) Sub	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
			(I-J)			Lower Bound	Upper Bound
Tukey	que SKJ	que SBP	75000	.6585.0	.667	-2.4797	.9797
HSD		KG_SKJ	5.00000*	.6585.0	.000	3.2703	6.7297
		KG_SBP	4.00000*	.6585.0	.000	2.2703	5.7297
	que_SBP	que_SKJ	.75000	.6585.0	.667	9797	2.4797
		KG_SKJ	5.75000*	.6585.0	.000	4.0203	7.4797
		KG_SBP	4.75000*	.6585.0	.000	3.0203	6.4797
	KG_SKJ	que_SKJ	-5.00000	.6585.0	.000	-6.7297	-3.2703
		que_SBP	5.57000	.6585.0	.000	-7.4797	-4.0203
		KG_SBP	-1.00000	.6585.0	.432	-2.7297	.7297
	KG_SBP	que_SKJ	-4.00000*	.6585.0	.000	-5.7297	-2.2703
		que_SBP	-4.75000*	.6585.0	.000	-6.4797	-3.0203
		KG_SKJ	1.00000	.6585.0	.432	7297	2.7297
Bonferroni	que_SKJ	que_SBP	75000	.6585.0	1.000	-2.5339	1.0339
		KG_SKJ	5.00000*	.6585.0	.000	3.2161	6.7839
		KG_SBP	4.00000*	.6585.0	.000	2.2161	5.7839
	que_SBP	que_SKJ	.75000	.6585.0	1.000	-1.0339	2.5339
		KG_SKJ	5.75000*	.6585.0	.000	3.9661	7.5339
		KG_SBP	4.75000*	.6585.0	.000	2.9661	6.5339
	KG_SKJ	que_SKJ	-5.00000	.6585.0	.000	-6.7839	-3.9661
		que_SBP	5.57000	.6585.0	.000	-7.5339	-3.9661
		KG_SBP	-1.00000	.6585.0	.798	-2.7839	.7839

Test of significance of average difference between SKJ and SBP. Based on the probability value: If the probability is> 0.05, then Ho is accepted and if the probability is <0.05, then ho is rejected.

The test results of significance can be seen from the presence or absence of an asterisk (*) in the Mean Difference column, the asterisk (*) in the Mean Difference column means significant differences.

Based on table 3 probability value is 0.667 which means greater than 0.05, then Ho accepted, then the value of 0.00 probability means less than 0.05 then Ho is rejected. The average difference of SKJ questionnaires and SBP questionnaires was no significant or not real difference, nor did the SBP

questionnaires differ significantly with the SKJ questionnaires. The SKJ questionnaires differ significantly with SKJ motion skills (KG_SKJ) and with the skills of SBP (KG_SBP) motion and vice versa. The SBP questionnaire differs significantly with SKJ motion skills (KG_SKJ and SBP skills (KG_SBP) and vice versa.

Essentially, a skill is the result of a decision-making process that occurs within the viewer. Thus, the main focus of the offender is to assess the information, which leads to the decision-making of the action to be performed. To find out how these skills can occur, in this module 8 we will discuss various skills earning process from the point of view of information processing theory.

There are three stages in the processing of information that aims to understand the nature of the process of information processing in the control of motion skills. Of course there are various ways to understand it: one of them is to assume the discrete stages of information processing, from the start of the input information as input to output. For that purpose, let us consider there are three stages, as Schmidt (1991) in Mahendra (2007), namely stimulus identification, response selection, and response programming. In this stage of analysis of human performance, some psychologists consider that whenever information from the environment enters the processing system, that information is first processed in the first stage, that is, the identification of the stimulus. When this stage is completed, the remaining information is passed to the second stage, the selection of the response, which proceeds to the third stage, i.e. the response programming, until an action is generated.

4 CONCLUSIONS

Based on the results of processing and data analysis through statistical process processing process then the authors can draw the following conclusions:

- SKJ and SBP exercises have an effect on understanding and movement skills;
- For teacher are expected to apply SKJ and SBP exercises in physical education or daily activities in order to improve and maintain physical fitness. In connection with the research that the authors do, should be held further research with a large number of samples and a more in-depth study.

REFERENCES

- Anderson, L. W., Krathwohl, D. R., 2001. A Taxonomy for Learning. Teaching and Assessing: a Revision of Bloom's Taxonomy, Longman Publishing. New York.
- Bambang, P., Sukadiyanto, Pengembangan Model Pembelajaran Gerak Dasar Untuk Anak Usia 2-4 Tahun. *Jurnal Keolahragaan*. Volume 2 – Nomor 1, 2014). hh. 1-21
- Caspersen, C. J., Powell, K. E., Christenson, G. M., 1985. Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public health reports*. 100(2), p.126.
- Chanal, J. P., Marsh, H. W., Sarrazin, P. G., Bois, J. E., 2005. Big-fish-little-pond effects on gymnastics self-concept: Social comparison processes in a physical setting. *Journal of Sport and Exercise Psychology*. 27(1), pp.53-70.
- Department of Education Westren Australia, 2013. Fundamental movement skills: Book 1 Learning, teaching and assessment. *Preparing Children for an Active and Healthy Lifestyle*.
- Mahendra, A., Saputra, Y., 2006. *Perkembangan dan Belajar Motorik*, Universitas Terbuka. Jakarta.
- Mahendra, A., 2007. Modul Teori Belajar Mengajar Motorik, Pengolahan Informasi dan Keterampilan, FPOK – UPI. Bandung.
- Oktara, B., 2010. Aktivitas Ketangkasan dan Beladiri Binamuda. Depok.
- Wadsworth, B. J., 1996. Piaget's theory of cognitive and affective development: Foundations of constructivism. *Longman Publishing*.
- William, H. E., 2011. *Motor Learning and Control From Theory to Practice*, USA, California State University, Sacramento. Belmont.