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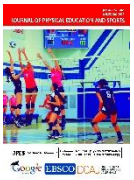

Stick Gymnastic Development for Learning Material Rhythmic Activities at Physical Education in Elementary Schools

Fauzul Mubin[1]✉, Soegiyanto[2] & Sulaiman[3]

[1] Public Elementary School 3 Krajankulon, Kendal, Jawa Tengah, Indonesia
[2] Sports Science, Universitas Negeri Semarang, Indonesia
[3] Physical Education, Health and Recreation, Universitas Negeri Semarang, Indonesia

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Abstract

This research aims to produce stick model gymnastics products, find out the effectiveness, and acceptability of students and physical education teachers. Borg & Gall's model development research procedures include: preliminary product analysis, expert validation, field trials, product revisions, and final product development results. The results of this research are stick exercise models in the form of DVDs and guidebooks. The research data contained a significant increase from field trials on psychomotor aspects from 10% to 34.6%. Affective from 23.3% to 45.2%. Cognitive from 53.3% to 67.3%. Conclusion Researchers have developed appropriate stick gymnastics as a learning media for elementary school students, effectively making students move actively, and can be accepted by students and physical education teachers.

✉ Correspondence address:
Kp. Anyar RT.02/RW.08 Krajan Kulon, Kaliwungu,
Kendal, Jawa Tengah, 51372
E-mail: kakmubin@gmail.com

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INTRODUCTION

Learning rhythmic activities must not distinguish between male and female students (gender learning), so all students are required to move and play an active role in it. Learning rhythmic activities includes structured rhythmic activities using rhythmic tools and activities that do not use tools. One of the material in rhythmic activities in the National Examination in its implementation must refer to the content of educational goals including developing self-management skills in the effort to develop and maintain physical fitness and healthy lifestyle through selected physical and sports activities. In addition, the goal of physical education is to understand the concept of physical activity and exercise in a clean environment as information to achieve perfect physical growth, a healthy lifestyle, and fitness, skilled, and have a positive attitude (Depdiknas,2006).

The survey was conducted from 22 February to 23 March 2016 in three elementary schools in Kendal district, Public Elementary School 2 Kutoharjo Kaliwungu, Public Elementary School 1 Penyangkringan Weleri and Public Elementary School 1 Taman Rejo Sukorejo about the implementation of rhythmic activity learning material in elementary school researchers got results that, in the third curriculum of elementary school using the 2006 KTSP and the method used by the teacher in delivering rhythmic activity learning material that is without tools and the implementation of rhythmic activities with tools has not been given.

Survey data on the implementation of rhythmic activities in the field of researchers showed results among others: (1) Physical education teachers master the material of rhythmic activity without tools and have not mastered rhythmic activities with tools. (2) The method used in implementing rhythmic activity learning is a demonstration method, in which some children learn rhythmic activities according to the teacher's instructions and follow their movements. (3) All the teachers who have been surveyed use the media for Physical Freshness Gymnastics whose movements are common to all communities so that students have difficulty in exercising gymnastic movements so that children do not move actively and efficiently. (4) The rhythmic activity material presented by the teacher is not interesting and does not make the child happy because the presentation is not appropriate, and monotonous. (5) Schools have not implemented rhythmic activity learning that uses tools and do not have the infrastructure facilities for rhythmic activities that use tools as supporting learning materials. To overcome this problem, researchers feel the need to do development research so that existing problems can be overcome and the results of the research can be carried out in schools.

The presentation of rhythmic activity learning material based on the survey above has not been effective as a media for learning motion. The biggest portion of learning time is spent studying and practicing skills through examples from teachers that are not easily done by students. Learning leads to psychomotor movement skills, while students are organized to imitate their movements. As a result, almost all activities in rhythmic activity are still very lacking, in addition to the implementation of rhythmic activity learning, schools surveyed have not implemented structured rhythmic activity learning using tools. Structured using a tool that is the implementation of learning rhythmic activities using tools such as sticks, ropes, balls, ribbons or anything else starting from the level of mastery of skills from the easy to the difficult, from movements per section, combination movements to complex ones. If so, hope that the learning process can run well and can improve student learning outcomes cannot be fulfilled. On the other hand, limited facilities and infrastructure or facilities that are not a barrier to the teaching of rhythmic structured activity materials that use tools at school. The limitations of facilities and infrastructure are expected to be a driving force for physical education teachers to create and implement physical education learning to make students more attractive and attractive.

Children in elementary school's early grades (ages 6-8 years old) are children who are in the early age range (ages 5-12 years). This early

age is a short period of child development but is a very important period for his life. Therefore, at this time all the potential possessed by children needs to be encouraged so that they develop optimally (David, L. G. & John, C. O., 2002).

Movement skills for elementary school students are basic motion skills. Pangrazi (2004) mentions that basic skills are useful skills that children need as provisions for life and attitude.

Thomas, et al. (2003) stated that the content of physical education for elementary school consists of motor programs (developing movement skills) and procedures (decision making), declarative knowledge (learning existing facts), and being active by understanding why physical activity is important and applying it in their lives.

According to Athanasia, C. & Nikolaos, D. (2011) that the application of appropriate learning strategies can provide good thinking and acting behavior. Therefore, it is necessary to apply learning strategies that can later make students easy to move and happy, which are varied in shape and can make students feel bored with the existing games, because not all schools have adequate facilities and infrastructure, so it takes educators' creativity to teach material to students in the form of modifications.

Anshel, M. H., & Lidor, R (2014) found that the implementation of the right strategy can promote students' behavior in the physical education process, that groups that implement strategies: preparing, imaging, focusing attention, implementing, and evaluating and activating the learning process in school.

Making gymnastic stick material for learning rhythmic activities at physical education in elementary school, as an alternative to structured rhythmic activity material that uses elementary school students. The previous stick gymnastics is not yet available and will be developed namely rhythmic gymnastics whose movements are adapted to elementary school children using 160 cm long sticks accompanied by national songs. The development of this stick gymnastics will be structured from core movements, heating and cooling packaged in product form in the form of guidebooks and DVDs, MP3s and MP4s so that physical education teachers and students can easily learn these stick exercises through Mobile Phones, Notebooks, and DVD Players. This is a form of effort so that students can receive structured rhythmic activity material that uses tools and participates in learning activities with pleasure, with a sense of pleasure that arises so that interest in participating in stick gymnastic learning materials can be carried out in all elementary schools, which include various kinds basic motion components can be mastered by students through learning physical education at school.

METHODS

In this research, the development model used is a procedural development model, because this model is descriptive, which is a procedure that outlines the steps that must be followed in producing a product. According to Wasis, D. (2004) in each development can choose and find the most appropriate step for his research based on the conditions and constraints faced.

According to Borg & Gall (2002), Research and development is a process used to develop or validate products used in education and learning.Development procedures carried out in this research, using the steps adapted from Borg & Gall (2002). The development research procedures used include preliminary product analysis, expert validation, field trials which included small group test and large group test, product revision, and final product development results. The results of this research are a stick gymnastic model that can be used as a learning media for Physical Education, Sports and Health.The subject of this research try, among others, the description of the number of product trial participants is described as follows: (Table 1)

Aspects to be studied include analysis of stick gymnastic learning needs: (1) A form of stick gymnastics activity for Elementary School students (2) Learning media in the form of DVDs for material enrichment.

Types of data used in this research are qualitative data and quantitative data. Qualitative

data obtained from interviews in the form of criticism, suggestions from experts on the material (gymnastics) and speakers both orally and in writing as the constructive input for product revision materials.

Table 1. Product Trial Participants

School	Teacher	Student	Expert
Public Elementary School 2 Kutoharjo	1	48	Physical education expert
Public Elementary School 1 Penyangkringan	1	38	Rhythmic gymnastics expert
Public Elementary School 1 Taman Rejo	1	18	
Total	3	104	2

The instruments used to collect data in this research were questionnaires and questionnaires, calculation of pulse before and after learning, field observations and documentation.

A questionnaire is used to capture information in a systematic and directed manner from experts and resource persons. While the questionnaire and field observations are used to determine the level of feasibility and acceptability of the product.

The data analysis technique used is the percentage to analyze and assess the developer subject in the level of feasibility, effectiveness, and acceptability of the product to the developer product. Respondents are interpreted as the results obtained, namely giving the results of the tests that have been carried out.

RESULTS AND DISCUSSION

Research of relevant research results Soegiyanto, Soekardi, & Sukardi (2015) in his research concluded the Dayu gymnastics product (Dayak Gymnastics and Melayu dance) as an alternative learning rhythmic activity for physical education in schools, especially 5th grade class students and has been adapted to the character of elementary school students, Dayu Gymnastics also has an effective influence for students in learning physical education. Opinions from Kizzy Fernandes Antualpa, & Roberto Rodrigues Paes (2013) the structure of the training program used as a product as one of the guidelines in developing the movement. Loo Fung Chiat & Loo Fung Ying (2012) stated the importance of understanding music and the suitability of music for learning rhythmic activities at an early age. In this case, the improvement of the learning outcomes of rhythmic activity is relevant to the accuracy of choosing music is in accordance with the characteristics of their students. So that knowledge of the rhythmic activity and motoric development of children can improve gymnastic learning outcomes.

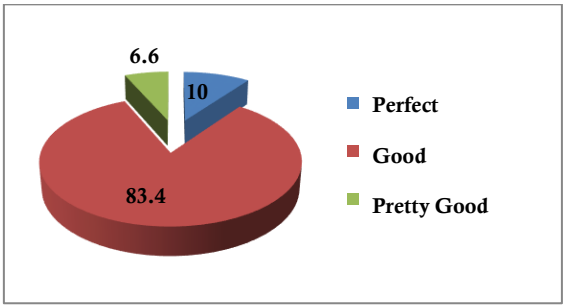
İnci, K., Mehmet, M. K., & Manolya, A. (2017) added that gymnastic movement development research is used as a guide for researchers in making basic motion series, especially in the movement of the ankle joints and their influence on the dynamic balance.

Barbora, N., & Michaela, S. (2016) gymnastic development as a guide to the basic movements of rhythmic activity for motor development. Karmen Sibanc (2013) his research on physical education can increase children's interest by using alternative gymnastic materials. Mahammad Mehrtash, Hadi Rohani, Esmail Farzaneh& Rasoul Nasir (2014) stated that training or learning rhythmic activities can improve students' motor skills. From some of the opinions of researchers, it can be concluded that the development of learning material in rhythmic activities can improve cognitive development, effective and psychomotor students by means of learning adjusted abilities and types of music that are appropriate to the character of students, the right method, and measured through tests.

The initial step that the researchers did was to compile rhythmic gymnastic movement products as outlined in the book and will be given learning for elementary schools in Kendal Regency. Before disseminating the gymnastics movement researchers first consulted experts in their fields, namely physical education elementary school teachers and rhythmic gymnastics experts. The two experts then provided various useful inputs so that the gymnastic movements taught could be done well at elementary school in Kendal Regency. The researcher then corrects the gymnastic movements and manuals in accordance with

input from experts who are competent in the field. Then the researchers conducted a small-scale trial of 30 elementary school students in Kendal Regency accompanied by sports practitioners. The results of small-scale trials showed that 10% of participants were able to perform movements perfectly, while 6.6% was good enough and the remaining 83.4% performed well.

Figure 1. Small Group Psychomotor Ability



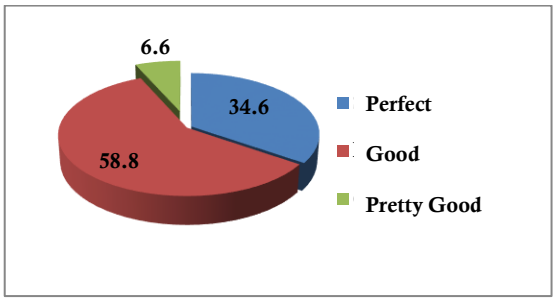
Psychomotor domains are domains related to skills or ability to act after a person has received a particular learning experience. Psychomotor learning outcomes are actually a continuation of cognitive learning outcomes (understanding something) and effective learning outcomes (new ones appear in the form of behavioral tendencies). Psychomotor domains are related to physical activity, such as running, jumping, painting, dancing, hitting, and so on.

Skill learning outcomes (psychomotor) can be measured through: (1) direct observation and assessment of students' behavior during the practical learning process, (2) after participating in learning, namely by giving tests to students to measure knowledge, skills, and attitudes, (3) sometime after learning is completed and later in the work environment.

The data shows that elementary school students in Kendal District like the rhythmic gymnastic movements that researchers developed and were able to do well. Thus the researchers then did it in a field trial with a total of 104 students coming from Public Elementary School 2 Kutoharjo Kaliwungu, Public Elementary School 1 Penyangkringan Weleri dan Public Elementary School 1 Taman Rejo Sukorejo.

The results of field trials showed that the psychomotor ability of students experienced significant development, this was evident that 34.6% of participants were able to perform movements perfectly, while 6.6% was good enough and the remaining 58.4% did well.

Figure 2. Psychomotor Ability of Field Trial



This shows an increase in the more perfect gymnastic movements. The perfect movement previously only 10% of students became 34.6%. This shows that the rhythmic gymnastic movement developed by the researcher is easy to do by students and is very well liked so that many students are able to perform the movement perfectly.

Affective domains are the realms of attitudes and values. Affective domains include behavioral characteristics such as feelings, interests, attitudes, emotions, and values. Some experts say that a person's attitude can be predicted for a change if someone has a high level of cognitive power. The characteristics of effective learning outcomes will appear to students in various behaviors. Affective domains become more detailed into five levels, namely: (1) Receiving or attending, (2) Responding means "active participation", (3) Valuing, (4) Organization, (5) characterization with a value or value complex

The effective ability of 30 Elementary School students in small-scale trials showed that 23.3% of students very much liked the stick gymnastic movement developed by researchers, the remaining 76.7% said they liked.

The data shows that there are no students who do not like the rhythmic gymnastic development movement that researchers have done. Thus this was continued in a field trial with 104 students. Researchers hope that in 104 field trials with students, the results will be even better.

Figure 3. Small Group Student Affective Ability

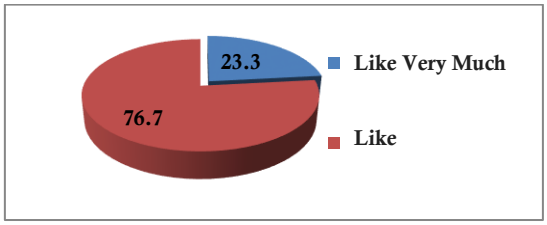
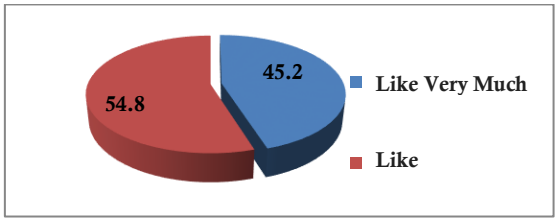


Figure 4. Students' Affective Ability Field Trial



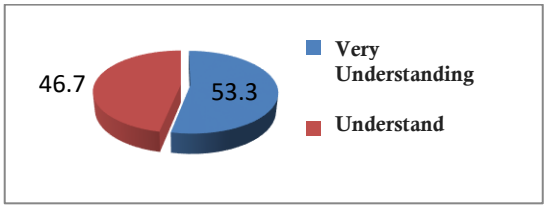
The data shows that the effective ability of 104 Elementary School students in field trials showed that 45.2% of students really liked the stick gymnastic movement developed by researchers, the remaining 54.8% said they liked it. This shows a significant increase from small group trials that are very fond of stick gymnastic movements as much as 23.3% increased in field trials to 45.2%.

Cognitive domain is a domain that includes mental activity (brain). All efforts related to brain activity are included in the cognitive domain. The cognitive domain has sixlevels or aspects, namely: (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, (6) evaluation.

The purpose of the cognitive aspect is oriented to the ability to think which includes a simpler intellectual ability, namely remembering, to the problem-solving ability that requires students to connect and combine several ideas, ideas, methods or procedures learned to solve the problem. Thus the cognitive aspect is the sub-taxonomy which reveals mental activities which often start from the level of knowledge to the highest level, namely evaluation.

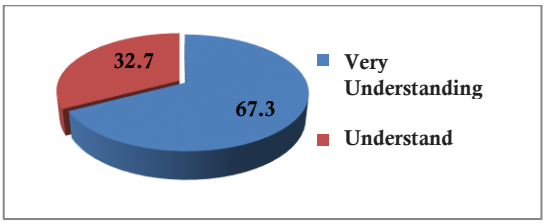
The cognitive abilities of 30 elementary school students in small-scale trials showed that 53.3% of students were very understanding of the stick gymnastic movement developed by researchers, the remaining 46.7% said they understood.

Figure 5. Cognitive Capability of Small-Scale Trial Students



The data shows that the majority of students understand the movements that must be carried out in the development of rhythmic exercises that the researchers have compiled. The researcher confronts in a field trial with 104 students, the results will be even better.

Figure 6. Cognitive Ability of Students Test Field



The data shows that cognitive abilities of 104 Elementary School students in field trials showed that 67.3% of students were very understanding of the stick gymnastics movement developed by researchers, the remaining 32.7% said they understood. This shows a significant increase from small group trials that are very understanding of stick gymnastic movements as much as 53.3% increased in field trials to 67.3%.

CONCLUSION

Based on the results of research that has been done on the development of stick gymnastics, conclusions and suggestions can be taken as follows: (1) Researchers have developed appropriate stick gymnastics as a physical education learning media for Elementary School students and can be implemented in all elementary schools with minimal facilities, (2) The development model is developing effective stick gymnastics to make students move

actively, this is indicated by an increase in students' psychomotor, affective and cognitive abilities in small-scale trials and field trials. (3) The model of stick gymnastic development can be accepted by students and physical education teachers, this can be seen from the students' participation in the research and the various suggestions given for the perfect development of rhythmic gymnastics.

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