

DEVELOPMENT OF LEARNING MEDIA “STOP MOTION TECHNIQUE GYMNASTIC FLOOR ON SMARTPHONE”

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This study was designed to assess gymnastics is a gymnastics exercises performed in software, the elements of motion consisting of rolling, jumping, jumping, spinning in the air, resting by hand or foot to maintain balance when jumping forward or backward. Gymnastics floor is one of the disciplines of sports artistic gymnastics. In the process of training the presence of instructional media has a great role for trainers and for athletes. Learning media has an intermediary role in delivering messages from trainers to athletes. The study of learning media development is in the form of “stop motion motion technique base gymnastics floor on smartphone. The purpose of this research is to produce a software product of learning media stop motion technique of floor gymnastic on smartphone. Stop motion learning media software contains learning process related to the floor gymnastic designed concept with an interesting layout, so the learning process becomes not boring. Research method used in this research is R & D (research and development). The results showed: Development of Learning Media “Stop Motion Technique of Gymnastics Floor on Smartphone through preliminary study, product planning, expert validation, revision, small group trial and trial. Equency of stop motion by category apply 90% (feasible) and media expert 87.50% (feasible) Based on field trials of media experts 90.00% (feasible), and experts. Thus 100 % (feasible) the learning media stop motion technique gymnastics can be used as a medium of learning.

Keywords: Stop Motion, R n D, Gymnastic

1. INTRODUCTION

1.1. Background

The term gymnastics derived from the English “Gymnastic” in the native language is the Greek word absorption word “Gymnos” which means bare, while the purpose of gymnastics is to increase body endurance, strength, agility, agility, coordination, and body control (Agus Mahendra, 2001: 9). Gymnastics is part or branch of gymnastics. Agus Margono (2009: 79) suggests, gymnastics is a gymnastics exercises performed on the mat, elements of motion consisting of rolling, jumping, jumping, spinning in the air, resting by hand or foot to maintain balance when jumping forward or back one of the disciplines of sports artistic gymnastics.

C.H. Fajar Sri Wahyuniati (2008), explains that the gymnastics floor is one of the gymnastics that is competed to the international level. The proper method for teaching floor exercises is by using a demonstration method. Some basic techniques

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that can be taught in early childhood include: front roll, roll back, split, handstand, and balance.

Gymnastics in Indonesia is a sport that has been well known among the community both children to adults. Branch gymnastics has been to competition from an early age to adult hood from the regional arena, national, to international. In the process of gymnastics floor exercises, basic motion techniques in gymnastics floor should be introduced and trained as early as possible from athletes stepping on the age of practice. Gymnastics of the floor requires a factor of flexibility. The trainer plays an important role in the training process at the athlete. The trainer needs to know the appropriate and well-paced media that is given to the athlete. The importance of learning media for trainers to facilitate in conveying basic motion techniques to be trained. Media word derived from Latin *medius* which literally means middle, 'urkan', or 'introduction', in Arabic media is or sender message from the sender to the recipient of the message, (Azhar Arsyad, 2011: 3).

According to Sadiman (2008: 7) describes the learning media is anything that can be used to distribute messages from the sender to the recipient of the message. In this case is the process of stimulating the thoughts, feelings, attention, and interest and attention of students so that the learning process can be intertwined. The statement may explain that instructional media is a tool used by teachers as teaching aids. In the interaction of learning, teachers convey the message of teaching in the form of learning materials to students.

Field observations show that not all floor gymnastics trainers involve learning media as a tool that can assist in the delivery of messages to athletes. This causes the learning process or training process carried out by the trainer is monotonous so as to enable athletes who follow the training will experience saturation. Saturation can cause the motivation to practice decreased, so that will have an impact on the decrease of training results or performance that is not optimal. Based on the observations made by researchers on the internet, there are many applications of learning media gymnastics floor but the average application of learning gymnastics floor using English and less detailed form of movement. Yet to pay attention to technical details in the floor gymnastics needed a benchmark as the basis of assessment.

Based on the above background researchers intended to conduct research and development of learning media stop motion technique base gymnastics floor on the smartphone.

1.2. Roadmap Research

Road map of research activities related to the stages of research activities Yogyakarta State University, especially supporting aspects related to the

management of budget financing more efficient and effective. The focus of this research is related to the formulation of Science and Technology Development in sports in encouraging the improvement of achievement. This means that the relevance of university research plans with the development of science and technology into one of the research that has implications for the progress and welfare of society. This research activity is the beginning that focuses on the prototype design aspect. The research that will be done is to analyze and develop the stop motion learning media. This research activity is based on the actual phenomenon that is currently done by some sportsmen who study gymnastics, related to understanding perception when the exercise process is different. In this research activity can be shown on the roadmap of research. The products, technology, and research & development (R & D) in this research activity can be showed to the roadmap research in Table 1.

TABLE 1: ROADMAP RESEARCH

<i>Aspect</i>	<i>I</i>	<i>II</i>	<i>III</i>
Subject	elementary school students	elementary schoolstudents	elementary school students
Product	Model	Model Publication	Model Copyrigt Publication
Technology	Design Prototype Stop Motion Learning Media	Stop Motion Software Learning Media	Stop Motion Software Learning Media

1.3. Problems and Objectives

The research problem is how to make a model of floor gymnastics learning that is easily understood by the child. In line with the research problem, the purpose of this research is to make learning media gymnastics easy to understand by children in learning process of floor gymnastics in Indonesia.

1.4. Implementation Results Activity

Implementation of the results of this activity can be a conceptual reference (modeling) and to produce learning include: (a) results in the form of the model prototype, publications and scientific journals for publication, both journals of international and national journals; (b) Document the results of this study can be used as a reference or a reference in the and develop concepts in a software model learning media gymnastic media for the community, especially children about the importance of learning media for efficient and effective floor gymnastics software. Means the implementation of the results of this activity can be done: (a) Academically; model estimates, publications, seminars, focus group discussions. (b) Practical; learning media gymnastics software

1.5. Outcomes & Contributions

Outcomes and contribute to the development of sport science and technology of the research activity include: (a) results in the form of the model prototype, publications and scientific journals for publication, both journals of international and national journals; (b) reference or a reference in the and develop concepts in a software model learning media gymnastic.

III. RESEARCH METHODS

3.1. Research Design

This was study was used research and development design

3.2. Scope

The scope of the study in this research is sport science and technology. The location of observation as the laboratorium s sport school in Sport Science Faculty, Yogyakarta state universities of Indonesia and gymnast in special region of Yogyakarta. The observation period is about 2017.

3.3. Types and sources of data

The data used is primer data and analysis unit. primer data sources are from the laboratorium sport school, sport coaching, sport science faculty, Yogyakarta state university and analysis unit in special region of yogyakarta. According to (Sugiyono, 2003: 333) research and development method (R & D) is a method used to produce a particular product, and test the effectiveness of the product

3.4. Methods of analysis

The method of analysis in this research is reseach and development. research methods used to produce a particular product, and tested the effectiveness of the product. In the design of this study, researchers want to create a software that can be operated on a smartphone. In the software there is a material about the technique of floor gymnastics, and there are explanations of techniques Having obtained a percentage with the formula, then this eligibility is classified into four categories of eligibility as follows:

TABLE 2: PERCENTAGE OF ELIGIBILITY.

<i>No</i>	<i>Persentase</i>	<i>appropriateness</i>
1	76%-100%	feasible
2	56%-75%	quite decent
3	40%-55%	less feasible
4	< 40%	not feasible

Source: Suharsimi Arikunto (1993:210)

3.4. Operational definition

Learning Media Stop Motion Gymnastics Technique Floor on Smartphone Learning media is a medium used by trainers, as well as athletes who are used as a means of learning so that the material delivered can be absorbed properly and fun.

Learning media and exercise stop motion technique motion gymnastics floor is a medium of learning for basic motion gymnastics techniques in the form of software that there are video, pictures, and technical implementation of basic motion gymnastics floor in the video and drawings steps of basic motion gymnastics floor. This app is designed to appeal to athletes to improve their motivation to exercise gymnastics.

- (a) Development of Learning and Exercise Media The development of instructional media is an effort process to prepare and develop media that will be used for learning process. One effort to prepare and plan carefully in developing, producing and validating a media program.
- (b) Learning Media Stop Motion Gymnastics Technique Floor on Smartphone

IV. RESEARCH RESULTS

1. Expert Judgement Validation

This gymnastics learning media is validated by a media expert learning and gymnastics experts. The result of validation both experts as follows:

TABLE 3: VALIDATION RESULT

<i>Validation</i>	<i>Score</i>	<i>Maximum Score</i>	<i>(%)</i>	<i>Category</i>
Media Expert 1	35	40	87.50%	feasibility
Media Expert 2	36	40	90%	feasibility
Learning Expert 1	36	40	90%	feasibility
Learning Expert	40	40	100%	feasibility

RESULT

Testing of the product. A small group of test subjects performed for 10 gymnasts SELABORA, while studies of field trials carried out in field trials conducted at 20 Gymnasts DIY. As for the product trial results as follows:

TABLE 4: A SMALL GROUP OF TRIAL RESULTS

<i>No</i>	<i>aspects</i>	<i>score obtained</i>	<i>The maximal score</i>	<i>presentation</i>	<i>Category</i>
1	display	81	100	81,00%	feasibility
2	material	79	100	79,00%	feasibility
	Score total	160	200	80,00%	feasibility

The results of the test question form small groups. shows the display aspects of 81.00% by category “feasible”, material aspects of 79.00% by category “feasible”, and could be construed that the media deserves to be tested to the next stage

TABLE 5: A FIELD TRIAL RESULTS

<i>No</i>	<i>aspects</i>	<i>score obtained</i>	<i>The maximal score</i>	<i>presentation</i>	<i>Category</i>
1	display	178	200	89,00%	feasibility
2	material	186	200	93,00%	feasibility
	Score total	364	400	91,00%	feasibility

The results of the field trials now about learning media stop motion shows the display aspects of 89.00% by category “viable”, material aspects of 93.00% by category “viable”,. Total assessment test feasibility study stop motion media according to respondents (91.00% of Gymnasts are categorized “decent”.

IV. CONCLUSION

Based on the research and testing in the previous chapter obtained some conclusions as follows: produce prototype design and model software floor gymnastics software. Beginner gymnast better using software floor gymnastics.

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