



Development of Pencak Silat Gym Learning

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Abstract

This research is a development research, namely the development of pencak silat gym learning for students at the University of PGRI Palembang. The development of this learning model aims to obtain a varied learning model that can be applied by students. This research was conducted at the University of PGRI Palembang, in 2021. The research subjects were students who took the pencak silat course in the Physical Education study program, Faculty of Teacher Training and Education. The research method used is the Research and Development (R & D) method adopting the Borg and Gall theory to the Operational Product Revision stage. The research instrument is a product appraisal questionnaire. The results of this study are the Pencak Silat)gymnastics learning model which consists of 17 movements, core 30 movements, and cooling down 9 movements. The media expert validation data obtained from the product display aspect got a score of 80.00% and the audio/music aspect used got a score of 93.33%, the development results from the video content aspect got 92.73%, the user alternative media aspect got 80.00% , expert validation of the quality aspect of the gymnastics material got a score of 93.33% and the content aspect of the gymnastics got 92.00%, while the results of the development of the quality aspect of the pencak silat material got 86.67% and the content aspect of pencak silat got 96.00%. In the small-scale test, the student's response to this product from the appearance aspect got a score of 86.13% and the material/content aspect got a score of 87.20%. In the large-scale test, the student's response to this product from the appearance aspect got a score of 87.00% and the material/content aspect got a score of 88.80%. And it can be concluded that the product is feasible to be applied.

How to Cite

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INTRODUCTION

The martial art of pencak silat has a wealth of movements as outlined in pencak silat moves. Pencak silat is unique in combining sports movements and martial arts moves with elements of art, as well as breathing techniques and spiritual awareness (Facal, 2016). The style used in pencak silat has a unique and aesthetic value that is different from other types of sports (Lanos et al., 2020). The introduction of the martial art of pencak silat has basic techniques that can be learned including pencak silat movement skills (1) Horses, (2) Pairs Attitudes, (3) Step Patterns, (4) Defense, (5) Avoidance, (6) Attacks, (7) Catch (lubis, johansyah & wardoyo, 2014). In learning pencak silat courses in universities, mastery of sports-specific movement skills required in carrying out physical activities (Zenga et al., 2019).

Education has a very important influence and is in line with competency standards in higher education, especially in pencak silat courses, students must have knowledge (knowlegde) of pencak silat, skills to demonstrate the basic movements of pencak silat (skills) and attitudes (attitudes) in pencak silat and able to apply it in pencak silat learning activities for self-development (Riyadi & Sugiyanto, 2017). Learning is the interaction of students with educators and learning resources in a learning environment (Goksu & Somen, 2018). This is a reference in improving learning outcomes in pencak silat courses which require skills in good movement mastery so that the objectives of learning can be achieved (Lestari et al., 2020).

Exploration of the relationship between physical education as a site of physical activity practice to understand how students engage in physical activity that will shape the learning experience as a learning stage from complex to simpler and more meaningful (Parker et al., 2019). The results of observations on the physical education study program, learning of pencak silat courses at the PGRI University of Palembang during the online covid-19 pandemic obtained initial data that the learning of pencak silat had been going quite well, however, there were many things that became obstacles which were found to be a lack of mastery of movement. on students in learning, students look more rigid in practicing movements, students look less enthusiastically motivated in doing movements, this is caused by low fitness levels. Fitness level is an important aspect that must be maintained, this greatly affects activities in participating in pencak silat courses (Nurcahyo & Nasution, 2014).

Increasing physical fitness in learning

pencak silat can be done with a fun learning approach (Lanos et al., 2019). Learning pencak silat can be collaborated with rhythmic gymnastics, because rhythmic gymnastics is very good for body fitness (Oktariyana, 2020). Pencak silat is a sport that is beneficial for ones fitness when performing pencak silat movements, because pencak silat contains elements of strength, endurance and physical speed that are dominant in it (Ridwan et al., 2019)

Researchers want to develop a learning model to improve students' physical fitness in pencak silat courses so that students can attend lectures to the maximum. The learning model that will be developed is pencak silat gymnastics. Pencak silat gymnastics is a martial arts gymnastics of pencak silat. The development of this pencak silat learning model answers the distance learning problems that are being faced by the Indonesian people in the Covid-19 pandemic situation because the development of this pencak silat learning model will produce videos of martial arts movements that are more interactive, easy, multimedia-based, rich in content and allowable. to be studied so that students can study anywhere and anytime (Vy Dang Bich Huynh, 2020).

The development of technology as part of everyday life in learning so that education can bridge the realm of science (Nawzad Lezwan & Dana Rahim, 2018). Innovation and creativity in seeing opportunities to create a model in learning are needed to maximize the teaching and learning process in a fun form and pattern to achieve learning goals because future learning tendencies have changed the conventional learning system towards a modern one.

The development of the developed learning model is expected to be used in the pencak silat learning process, so that it can help students to improve their pencak silat learning outcomes by learning pencak silat gymnastics.

METHOD

The research method used in this study is a research and development method that adopts the theory (Borg and Gall, 1983) which has 10 steps or stages of development that are quite clear. The research was carried out at PGRI Palembang University on students of the Physical Education Study Program. The procedure carried out in this study aims to develop a model of Pencak Silat exercise at the University of PGRI Palembang using the stages of development according to Borg and Gall and adjusted based on the needs of the researcher, namely Needs Analysis, Initial Product Making, Product Trial, First Product Revision, Field Trial , and Second Product Revision

and Final Product.

The product design in the form of basic pencak silat technique movements consists of 3 parts, namely heating movements, core movements, and cooling movements. The series of Pencak Silat exercises are made on DVD. This research uses a mixed methods research approach. The type of data obtained is to combine qualitative and quantitative methods in the form of reasons for choosing answers and suggestions.

The instruments used for data collection are in the form of evaluation sheets and questionnaires. The evaluation sheet is used to collect data from physical education and learning experts. Questionnaires were used to collect data from expert evaluations, small group trials and large group trials.

The expert questionnaire focused on the first product that was made in the form of a number of aspects that had to be assessed for feasibility, while the student questionnaire focused on the convenience of the product, namely, student motivation in doing the product, the level of student enjoyment of the product. The evaluation ranges from “not good” to “very good” by marking “√” in the column provided. In this development research, the data analysis technique used is descriptive qualitative and quantitative statistical analysis techniques in the form of percentages. While the data in the form of suggestions and reasons for choosing answers were analyzed using qualitative analysis. In data processing, the percentage is obtained using the formula of (Sugiyono, 2015), namely:

$$P = (x/xi) \times 100\%$$

Description :

- P = Relative frequency / percentage number
- x = Frequency being searched the percentage
- xi = Total Data
- 100% = Constant

To determine the interpretation of the results of the analysis of the percentage level of student interest in the product, student motivation towards product development used Guik Ford percentage classification.

Tabel 1. Percentage of Analysis Results

Percentage	Classification	Meaning
10 - 20 %	Very Poor	Thrown away
21 – 40 %	Poor	Improved Needed
41 – 70 %	Fair	used
71 – 90 %	Good	used
91 – 100 %	Verry Good	used

RESULTS AND DISCUSSION

This research produces a product in the form of an interesting Pencak Silat gymnastics learning video, easy to understand by students. The material for Pencak Silat gymnastics activities is made in such a way that it becomes a learning medium for students in learning the basic movements of pencak silat more pleasantly. Pencak Silat gymnastics video consisting of warm-up, core, and cool-down exercises. The gymnastic movements are adapted to the characteristics of students in learning the basic techniques of pencak silat.

Research and Information Colletion

The following is a description of the results of the needs analysis and field findings obtained by researchers. There are several important points so that it is necessary to develop a learning model for Pencak Silat gymnastics; 1) out of 50 students, 100% of the students stated that the pencak silat subject that students participated in once a week was online. Thus, students’ understanding of the material for pencak silat is quite low, without any assistive media that makes it easier for students to learn independently who can study anywhere that does not only rely on teaching by lecturers. 2) Of the 50 students, only 20% of students learn pencak silat by reading books, 80% of students learn the basic techniques of pencak silat through videos on youtube. This means that students are so enthusiastic about learning through videos. So if the learning of pencak silat is packaged in the form of a video, it will be a source of student learning that can be done anywhere at any time without being bound by space and time.

Planning

This step is the second step after determining the needs analysis, which is determining the goals to be achieved in the research. The results of the development of the model are in the form of a learning video of pencak silat which consists of 20 developed models. The next step is to determine the parties involved in the model development process such as experts in related fields (media experts, materials experts, and learning experts).

Develop Preliminary from Product

The initial step in the preparation of this pencak silat model product, the researchers made an initial draft of the Pencak Silat gymnastic movement model product consisting of warm-up, core and cool-down exercises.



Figure 1. Warming Up



Figure 2. Core Movement



Figure 3. Core Movement

After the initial product was compiled in the form of a pencak silat exercise model which was poured into a media in the form of a learning video, it was then validated by five experts in related fields, including media experts, material experts and learning experts. The following are the results of the validation from these experts **Tabel 2 & Tabel 3.**

Tabel 2. Material Expert Validation Results

Expert Judgement	Material Quality (%)	Content Aspect (%)
Gymnastics Expert Judgement	93,33% (Very valid)	92,00% (Very valid)
Pencak Silat Expert Judgement	86,67% (Very valid)	96,00% (Very valid)

Tabel 3. Media Expert Validation Results

Expert Judgement	Tampilan Produk	Audio/ musik yang digunakan	Isi Video	Media Alternatif Pengguna
Ahli Media	93,33% (Sangat Valid)	92,00 % (Sangat Valid)	92,73 % (Sangat Valid)	80,00% (Sangat Valid)

Small-Scale Product Trial

Tabel 4. Small Scale Product Trial Result

Aspek yang dinilai	Persentase (%)	Kategori
Aspek Tampilan	86,13%	Sangat Baik
Aspek Materi/ isi	87,20%	Sangat Baik

Revision of Small-Scale Trial Products

From the observations of the observers and the observer companions (pencak silat lecturers) there are several things that must be considered operationally, namely when carrying out small-scale student positions, the goal distance must be given so as not to collide with each other when doing gymnastics, Wear comfortable clothes and shoes, to reduce the risk injury, preparing a bigger sound system so that the sound of gymnastics music can be heard louder in a large room.

Large-Scale Product Trial

The large group trial was given to 30 students who took the pencak silat course, with the following results:

Tabel 5. Large Scale Product Trial Result

Aspek yang dinilai	Persentase (%)	Kategori
Aspek Tampilan	87,00 %	Sangat Baik
Aspek Materi / isi	88,88 %	Sangat Baik

Revision of Large-Scale Product Trial

In a large-scale trial based on observations from observers and observer companions (lecturers of pencak silat courses) there are several things that must be considered operationally, namely the preparation of gymnastic equipment, for example, the sound of the music in the sound system is increased again, so that the volume is more enthusiastic when doing gymnastics. This product is suitable to be used as a material to do gymnastics in learning pencak silat both online and offline.

Final Product

The resulting product is a DVD of pencak silat gymnastics learning model for students who take pencak silat courses at PGRI Palembang University including a series of gymnastic movements that have been arranged according to the needs and abilities of the user.

On the article written from research, then in the early part of the results and a discussion on research be preceded by a description of the implementation, namely (1) a description of the time of the research, (2) the duration of the implementation of the research, (3) the informant or responden obtained, and (4) concludes with a description of the things that will be described in the be-how a paragraph afterwards.

CONCLUSION

The results showed a fairly good level of effectiveness for the use of the MCCT applicati-

on in the online student movement coordination learning process. Although in the field implementation the direct instruction method is still superior in several aspects of learning. However, the android application-based MCCT program is very helpful for students in performing movement tasks that are carried out online. So that the learning process of movement coordination with the aim of improving students' cognitive abilities can still be done.

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