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Model of Learning Front Kick Skills in Pencak Silat

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Abstract

Abstract Pencak silat is expected to be able to provide provisions for children, especially early childhood for themselves now and in the future in martial arts, also besides that with this pencak silat it is hoped that the spirit This study aims to create a Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years. The method used in this study is a research and development method based on Borg and Gall references. The subjects in this study were students of Senior High School in Karawanag Regency including students who had Pencak Silat martial arts skills for small group trials of 20 students, 60 athletes for large group trials, and in effectiveness trials of 60 athletes for. The instrument used in this study was to use the Pencak Silat Sports Front Kick Skill Test. This shows that there is an Influence Before and After the Learning Model is Given so that it can be said Based on the calculation of the t-Paired- ttest using SPSS, it is known that the value of t is -4.353 and the significance value of 2 directions (two-tailed) 0.000 < 0.05. This shows that there is a significant difference in scores before and after the model of learning front kick skills in high school athletes aged 15-18 years is effective.

How to Cite

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INTRODUCTION

Pencak silat is expected to be able to provide provisions for children, especially early childhood for themselves now and in the future in martial arts, also besides that with this pencak silat it is hoped that the spirit of Tangguh, Taqwa, Tanggon, Tanggah and Trengginas children can be firmly attached to children, so that pencak silat can function as a character that exists in him as a characteristic that exists in Indonesian citizens. Pencak silat is a movement consisting of a combination of punches, kicks and knowledge of the weakest parts of the human bodyPencak Silat has become one of the sports that are competed in various championships both national and world levels. Pencak silat as a sport that is competed has several rules that must be followed by athletes during the competition. (Nia Nuraida, 2016) (Mardotillah &; Zein, 2016)

The coaching and results of pencak silat trainers are increasingly adjusted to the knowledge and principles of sports, which generally emphasize the maximum skills of the body. In the coaching process, it is realized that each region has different potentials, both from human resources, the coaching process, learning facilities, and differences. For this reason, the region must be able to determine the perioritas of coaching its sports.

In pencak silat sports, the existence of power plays an important role in supporting the achievements of athletes. Speed and Kick Skill make the power that produces a loud explosion on the front kick of the athlete. Kicks from the legs really need to be trained early. Thus, there needs to be special learning to improve the kick technique. Physical, technical, as well as tactical and mental coaching cannot be separated from Learning itself. The ability of kick technique is one of the most important factors to support the achievements of a martial arts athlete. Many athletes need better learning and more towards the concept of actual motion. (Deri & Purwanto, 2019; Kuswardini, 2012; Prabowo, 2018; Sinulingga et al., 2018; Suwiwa et al., 2014) (Lubis & Wardoyo, 2016)

Based on the results of observational research conducted by research in the form of direct observations and interviews by several martial arts coaches and athletes, several problems were found, namely the lack of learning resources to learn kicks in martial arts, so this makes it difficult for athletes to learn kicking techniques properly and correctly. In addition, in making a front kick, the athlete's kick speed is less than optimal, the power is less than optimal so that this kick gives results that are less than perfect and easy to read by the opponent, lack of kick skills are still weak or lack of power and less optimal so that they are easily caught by the opponent, the horses that support it are also still weak and easily swept and hooked so that they are easy to drop. (Ricky, E. N., Hudah, M., &; Widiyatmoko, 2021)

That possibility as an example of completion to get the maximum front kick can be done by increasing power, kick skills, speed, to increase it can be used some Learning for example running stairs, learning cakingkling, Learning squat jump

Of course, not only physical ability and readiness are needed to achieve these achievements, but technical skills are also a must. In general, the dominant basic skills possessed by competitive pencak silat athletes are the ability to tide, step patterns, deflection, dodge, hand attacks, foot attacks, dropping, specifically for the double category plus lockdowns and openings. (Akbar &; Rizki, 2021)

A fighter will not get value in a match if he does not go through the process of tide attitude, there is a pattern of steps then perform defensive attacks and return to the tide attitude in an inseparable series. Of course, it is the attack pattern that becomes the decisive thing in the match,

because by attacking the fighter can reap points or value. In pencak silat there are two kinds of attack techniques, namely attacks with hands (punches, elbows) and attacks with feet (kicks, sweeps). Among them, both are equally important between punch techniques and kick techniques, but kicks have greater kick skills than punch kick skills. When kicking a good balance is very important, not only the weight rests on one leg but also caused by the shock of the back force at the time of impact. The feet have a long reach that is not reached by the hands. The use of kicking techniques must be accompanied by good coordination between foot posture, hand posture, body posture. (Paradiso &; Wahyudi, 2021) (Selian &; Irwansyah, 2018) (Lusi Anggraeni, 2017)

The dominant attack technique in martial arts matches is the kick technique. Kick technique, a process whose movement uses legs or feet. Kick is an attack that is carried out using the legs, feet as an attacking component. Looking at the effectiveness and efficiency of movement, not all of these kicks can be used in the pencak silat match in the sparring category. Ineffective kicks and efficiency will hinder athletes from obtaining value in the competition. The types of kicks that are often done in pencak silat matches in the spar-

ring category consist of: front kick, sickle kick, T kick. (Dirgantoro, 2020)

Based on the above problems, the author is interested in taking the title of research on the model of learning front kick skills in martial arts high school athletes aged 15-18 years.

METHODS

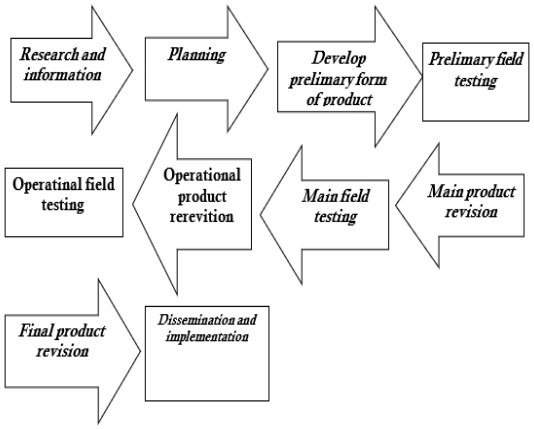
In general, the results of this study aim to produce new products in the form of manuals or visualization recordings of a model that will later be used for learning or learning activities, to make it easier for teachers or trainers to achieve the expected activity results. Model Learn front kick skills in pencak silat athletes aged 15-18 years. For the time of implementation of this research will be carried out at the time of determination or issuance of a research letter from academic until completion. The subjects of this study were beginner athletes in high school with martial arts front kicks. This is assumed to facilitate the implementation of the subject retrieval technique applied in this study is purposive sampling which is also known as consideration sampling or based on certain considerations. The number of subjects as well as the criteria for subject selection are described in the following **Table 1.**

Table 1. Research Criteria and Subjects

Research phase	Number of subjects	Criterion	Instruments
Preliminary research	3	Pencak Silat trainers, Academics, Teachers	Interview
Expert evaluation	3	Expert In Martial Art	Interview
Product trials	20	Senior Hight School in Karawang Timur	19 model
Small group try out	60	Senior Hight School in 5 Karawang	19 model
Field try group			
Test product effectiveness	60	Senior Hight School in Alwasiah Karawang	15 model

The model of learning the front kick for this pencak silat sport is to use research and development methods (Reasearch and Development). The end result of this research is the front kick learning model, According to Borg and Gall there are 10 stages that must be passed in the R&D research stages proposed by Borg and Gall (Amirzan, 2017).The next step is the stages carried out in model development. Research and development of this model uses model development steps developed by Borg and Gall, the steps of model development include **Figure 1.**

Figure 1. Instructional Design R and D.



Walter R. Borg and Meredith D. Gall,Educational Research: An Introduction, 4th Edition. The first time that is determined is an idea to be developed, R & D can depart from the potential of the problems that are around

1) Gathering information, after potential and problems that can be shown factually, then needs to be collected sharing information that can be used as material for planning
2) The product design is the result of a series of preliminary research, which in this study is the learning model of the front kick of martial arts
3) Design validation is the process of assessing learning models or learning by experts
4) Improvements to the design after known weaknesses
5) Limited product trials by developing a model Learn pencak silat front kicks
6) Product revision is again based on the results of field exams that have been carried out
7) 'Test use under real conditions
8) Revise the product again if deficiencies are found in the actual condition
9) Mass manufacture of products after repairs.

RESULTS AND DISCUSSION

Analysis

The Learning model to be developed is the result of preliminary studies in the form of literature studies and problems found in the field

through observation and interviews as well as researchers' personal experiences as Teachers and Extracurricular Trainers. Based on literature studies as well as observations and interviews that have been conducted by researchers, the goals to be achieved from the development of the model of learning front kick skills in pencak silat athletes aged 15-18 years. In addition, researchers can also find out some of the characteristics of the subject of the model to be developed.

Model Development Implementation

After conducting preliminary activities in the form of literature studies and needs analysis, then make a draft model to be developed. Forms of Front Kick Skill Learning Models In Pencak Silat High School Athletes Aged 15-18 Years, Learning media variations and movement formation variations are made different from each Learning Kick Skill.

Developing a Learning model needs to pay attention to the facilities and infrastructure needed. The facilities used in this study include pencak silat Kick techniques using tools and not using tools

Table 2. First Draft of the Developed Model

Name of Variation/Learning Form
Learning Model of Tidal Attitude Down
Learning Model of the attitude of pairs of hands front chest
Learning Model one-way target tire rubber resistance
Learning Model of rubber resistant three-way target tires
Learning Model cone zigzag kick
Learning Model coone triangular motion
Learning Model of goal jumping with kicks
Learning Model of zigzag goal jumping kicks
Learning Model one-way target kick
Learning Model angklingan straight kick
Learning Model knee up straight kick
Learning Model steps forward on tiptoe and stompers forward
Model Learn to kick on the spot using the middle stances
Learning Model angklingan side kick
Learning Model jumps right and left over obstacles
Model Learn to kick and step zigzags using the front stances
Learning model kicks side sliding steps with middle stances
Learning Model straight kick attack
Learning Model straight kick slip off catch

Model Feasibility

The model design compiled by Borg and Gall has 10 stages that must be passed by researchers in making and developing a model. The first stage that has been passed by researchers is to conduct preliminary studies, plan research and design development. The next step is to perform model validation by experts. This validation is carried out to find out whether the model that has been designed meets the eligibility criteria to be used as a Learning model later. After expert validation, stage I revision of the input and suggestions provided was carried out. After revision followed by small group trials, trials were carried out to

Based on this trial, input was obtained from the Test and Skills team, then a phase II revision was carried out. The next stage is a large group trial, where researchers conduct this trial from the Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years From this large group trial, many inputs were given by the coaching team concerned, then the researcher revised phase III for the perfection of this model.

Expert Validation and Revision Phase I

Phase I revision is carried out based on the results of expert validation of the model that has been prepared. Validation is done by expert judment. The experts selected to validate the model that has been compiled are people who are competent in their fields and have knowledge both academically and scientifically.

The following experts (expert judment) are selected in validating the model that has been prepared : 1) Prof. Johansyah Lubis Dlis, he is an expert in Pencak Silat academics, 2) Master Hendro, he is a lecturer at the Faculty of Sports Science, State University of Jakarta for Pencak Silat, 3) Master Rizki Aminudin, he is a lecturer at the Faculty of Sports Science, State University of Jakarta for Pencak Silat Trainer experts.

Small Group Test

From the results of expert validation carried out on the Kick Skill Learning model, there are several forms of Learning that are recommended to be crossed out or not worth continuing. Here is a recapitulation of the results of expert validation **Table 3**.

Table 3. Learning Model Summary After Expert Validation

Name of Variation/Learning Form	Information
Learning Model of Tidal Attitude Down	Not Worth It

Learning Model of the attitude of pairs of hands front chest	Proper
Learning Model one-way target tire rubber resistance	Proper
Learning Model of rubber resistant three-way target tires	Proper
Learning Model cone zigzag kick	Proper
Learning Model coone triangular motion	Proper
Learning Model of goal jumping with kicks	Not Worth It
Learning Model of zigzag goal jumping kicks	Proper
Learning Model one-way target kick	Proper
Learning Model angklingan straight kick	Proper
Learning Model knee up straight kick	Not Worth It
Learning Model steps forward on tiptoe and stompers forward	Proper
Model Learn to kick on the spot using the middle stances	Proper
Learning Model angklingan side kick	Proper
Learning Model jumps right and left over obstacles	Proper
Model Learn to kick and step zigzags using the front stances	Not Worth It
Learning model kicks side sliding steps with middle stances	Proper
Learning Model straight kick attack	Proper
Learning Model straight kick slip off catch	Proper

Source: researcher archives

Small Group Test Revision

Based on the results of small group trials, constructive and perfect conclusions and suggestions were obtained from experts / experts regarding the Learning model as follows:

1) At the beginning of the experiment the subject had difficulty in trying the given model, because it was new and had never been given at the time of learning before.
2) There are variations in the level of difficulty in each subject, for example there is difficulty in performing a Twisting Kick
3) In Doing Model Movements with the provision of less than maximum movements This is done so that every movement made can train the muscles optimally.
4) Most of the subjects already knew about the Model of Learning Front Kick Skills In High School Athletes Pencak Silat Age 15-18 Years and so on.
5) The model given in the small group trial could be understood by the subject both the way and the results of using the Learning model
6) There is one model that is difficult to implement because of weight and must change the position of motion carried out in a series of models. Based on the results of small group trials, the Front Kick Skill Learning Model for Pencak Silat High School Athletes Aged 15-18 Years is 19 years old, after being tested getting a revision from 19 models to 15 models that can be implemented for further trials, it can be concluded that 15 Models of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years are feasible and can be used, But with a note there are some revised variations. Thus, according to the validation of three experts, this product is feasible to be tested at the next stage (large group trials)

While the implementation of the model according to experts / experts obtained the following results: The results of a limited-scale trial and revision of the Physical Learning Model in schools for the formation of Officers of the Educational and Learning Institutions of the National Police of the Republic of Indonesia obtained from three experts / experts when practiced were declared feasible to proceed to the next stage.

Large Group Trials

After conducting small group trials and revisions of the Learning model, the next stage was conducting large group trials, where large groups were tested on 60 student subjects.

The following is a summary of revisions based on evaluation and advice from experts/ paka. Based on the results of large group trials, constructive and perfecting conclusions and suggestions were obtained from experts / experts regarding the Learning model as follows:

1) The model given can be understood and applied by the subject after an explanation.
2) The same thing happens in large groups, namely in the Learning model number 34 Push Up (lion dance) for Kick Skills is very risky for hand kick skills if carried out to learn can suffer injuries and endanger officer participants
3) In the Learning model of Pull Up numbers (variations of backpack lift movements 1 ground, 2 chest, 3 over the head, 4 down the ground, standing) for Skill Kick the outer muscles because the position of

the backpack on the back is too heavy a load and risks injury to the back of student officers.

4) For the Sit Up Learning Model (cross pepples) for abdominal muscle kick skills (Too Easy) there is no variation of the Learning model and is almost the same as the model before it was developed.
5) Provision of Physical Abilities, please pay attention to the rhythm of every movement made by athletes. This is done so that every movement made can train the muscles optimally.

Based on the results of large group trials, the Front Kick Skill Learning Model for Pencak Silat High School Athletes Aged 15-18 Years can be used to improve and improve the kicking ability of students in the formation of Pencak Silat Skills. Based on the results of a large group trial of the Front Kick Skill Learning Model for Pencak Silat High School Athletes Aged 15-18 Years, statements from three experts / experts were obtained when practiced, it was declared feasible with the number of final models for the next stage as many as 15 Learning models to be tested for effectiveness.

Model Effectiveness Test

After being tested in small groups and large groups and also revisions to the model given, the next step is to test the effectiveness of the model to be given. The effectiveness test was conducted to determine whether the Front Kick Skill Learning Model in Pencak Silat High School Athletes aged 15-18 years was effective on the results of Kick Skill Improvement

Results of the Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years and the Results of Scores Without Treatment Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years in the following table: Results Description of the Model Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years Before the data is collected, then In the t-test analysis Paired to find out Before and After Given Treetment Know the description of the data The research is shown in the following **Table 4.**

From **Table 4** it can be seen that each experimental and control group had 60 subjects. In Table 3 it can be seen that the average result of the difference in the subject's score is at Mean 5.40. After the data Before and After the Treatment was collected, then a t-test analysis of the Paired Sample T Test was carried out to determine the effect before and after the treatment shown in the following **Table 5**.

Based on the calculation of the t-iPaired test using SPSS, it is known that the t-value is -4.353 and the two-tailed significance value is 0.000 < 0.05. This shows that there is a significant difference in scores before and after the model of learning front kick skills in high school athletes aged 15-18 years is effective.

Model Implementation

Research implements and disseminates products (dissemination) that have undergone final revision to users such as trainers through meeting forums in a seminar and writing in journals.

Data Collection and Data Analysis

Data collection carried out in research and development of this model goes through the following stages: The first evaluation stage carried out at the stage of model design by experts, the initial evaluation is the first assessment from ex-

Table 4. Average Yield

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Pre_test	60	9	19	28	23.92	0.301	2.331	5.434
Pos_test	60	6	22	28	25.40	0.165	1.278	1.634

Table 5. Paired Samples

		Paired Differences					t		
			Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
		Mean			Lower	Upper		df	Sig. (2-tailed)
Pair 1	Pre_test - Pos_test	-1.483	2.639	0.341	-2.165	-.802	-4.353	59	0.000

perts to: (1) determine whether the material is in accordance with the skills provided for Learning 15-18 years, (2) whether the front kick Learning model is appropriate to be tested

The Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years has gone through the trial stage, where the first trial was carried out by experts in archery, then obtained from 19 Learning models to 15 Learning models. Next, the model was tested in small groups to see if the developed model could be given to small-scale groups. From the results of small group trials, input was obtained from experts / experts on Learning variations so that the model given can be applied properly and safely if done by the subject itself. After conducting a small trial with some changes to the variation of the Learning model, it was then tested in a large-scale group to see if the Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years could be given to a large-scale group. The Testing of the Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years was carried out to improve the Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years

The results of the initial test and the final test were then calculated by statistical calculations using SPSS, and obtained an effective Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years. The results obtained are very positive, because participants Learn to do Learning three times a week with a duration of 90 minutes each Study session. This is similar to the research conducted by entitled The Effect of Circuit Learning Methods on Physical Abilities, where circuit learning methods effectively have a positive influence on skills. There are many factors that affect skills, including physical, technical, and mental factors. In a study entitled (Sin &; Ihsan, 2020) (Halbatullah et al., 2019) The Effects of Psychological Skills Training for Players in Korea: Research Synthesis Using Meta-Analysis, where the results showed that learning mental psychology for archers is effective. Another study conducted by entitled The Relationship of Concentration of Arm Muscle Kick Skills and Hand Balance with Accuracy, where the results of the research Concentration, Arm Muscle Kick Skills and hand balance have a positive and significant relationship with accuracy. (Septiadi &; Widiastuti, 2019)

CONCLUSION

Based on the results of the study, conclusions can be drawn from Research on the Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years as follows Based on the results of product trials conducted in this study, it can be concluded that the Model of Learning Front Kick Skills in Pencak Silat High School Athletes Aged 15-18 Years is effective. And the model of learning front kick skills in Pencak Silat High School athletes aged 15-18 years that was developed can be used and applied to Improve Kick Ability.

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