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Developing A Narae Chagi Kicking Exercise Model For Beginner Taekwondoins In Special Region Of Yogyakarta

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Abstrak

The purpose of this research was to produce an exercise model in the form of simulation of *narae chagi* development technique for beginner tekwondoins in Special Region of Yogyakarta. The technique simulation was adapted to the characteristic aspects of upper elementary school age students through physical activities focusing on multilateral movements packed in a manual book and VCD (Video Compact Disk). The approach taken in this research was research and development.

Conclusion The product development of *narae chagi* technique simulation model for beginner taekwondoins was done in eight stages, namely: (1) collecting research result and information, (2) analyzing the product to be developed, (3) developing the initial product, (4) doing expert validation, (5) conducting small-scale and revised trials, (6) conducting large-scale trials and revisions, (7) making final products, and (8) testing effectiveness. The results of this study in the form of *narae chagi* kick exercises on novice taekwondoins which contains five games, namely: (1) preparation model, (a) initial attitude, (b) basic motion, (2) implementation model, (a) kick, (b) landing, (3) simulations model.

Keywords: Model beginner taekwondoin, *narae chagi*.

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Introduction

Taekwondo which is now widely known by the world community including Indonesian society is actually the result of a long journey from a traditional martial art. The techniques used are a combination of speed, accuracy, straight motion. And another peculiarity of taekwondo as a typical Korean martial arts (South Korea) in the form of attack techniques uses a lot of kicks. (1) Taekwondo is a popular sport around the world involving skilled kicks and single foot movements that require a high level of balance control. In taekwondo sports are emphasized in foot techniques because they are often used during training and competition. Kick is one of the most important components in taekwondo martial arts, because without good kicking ability, all the things that are very important in training will not be done automatically. Furthermore, (2) adding the uniqueness of taekwondo namely: "Kick technique is very dominant in taekwondo martial arts, even it must be admitted that taekwondo is very well known for its advantages in kick techniques". In reality, even though the *chagi*'s kick has a level of ease in his movements and can produce many points during the match, but the reality in the field that is the background of the problem, it is found that the *chagi* kick is less attractive to beginners, so the mastery of technique is low. To train beginner taekwondoin so that they can easily kick in the *chagi*, the researchers tried to develop a training model to improve the ability of beginner taekwondoin to kick in the *chagi* during training. With the technique of kicking the *Narae Chagi*, the beginner taekwondoin is better able to understand the movements that are carried out other than what the trainer exemplifies. The model made must be really interesting and easy to understand by beginner taekwondoin. The solution to this research and development is the creation of a product in the form of a guidebook and a video tutorial on the basic techniques of kicking a *chagi* for beginner taekwondoin. (Bridge, 2014) Taekwondo competitors also display moderate to high maximum dynamic strength characteristics of the lower and upper extremities, and moderate endurance properties of the trunk and hip flexor muscle.

Methods

Development Style

This study uses research and development methods, aiming to develop a training model kicking Narae Chagi on beginner taekwondoin. Then in developing, at the stage of choosing the form of physical activity in the stages of development as well as the characteristics of beginner taekwondoin so that the resulting model is suitable or suitable for children with the stages of child development.

Development Procedure

The development procedure in this study was adapted from the development model according to Sugiyono (2010, p. 409) includes 10 steps that must be implemented, namely: (1) information gathering, (2) planning, (3) initial product development, (4) initial trial, (5) revision to develop the main product, (6) main field trials, (7) revisions to compile operational products, (8) operational product trials, (9) final product revisions, and (10) dissemination and implementation of product development results.

Time and Place of Research

This development research was carried out at ten dojangs in Sleman Regency. Performed from May 2017 to September 2017, so it can be said that it's old research from the initial process to the final process is 4 months.

Product Testing Design

This field trial phase includes small-scale trials and large-scale trials. Small-scale trials carried out in 5 hours, followed by analysis and revision of the product. The last test was a large-scale trial at 10 hours, followed by data analysis and product revision based on the results of these trials to produce the final product. Product trials were conducted to obtain data that will be used to find out product weaknesses which were developed as a basis for revising products in the form of a training model kicking Nara Chagi on beginner taekwondoin.

Test Subject

The subjects tried in this study were beginners taekwondoin in the upper class elementary school category aged 11-13 years. The subjects were taken from taekwondo dojang in Sleman Regency. This development research classifies the test subjects into two, namely:

a. Small Scale Test Subjects

The subjects of the small-scale trial in the development study used a beginner sample of plain green belt taekwondoin and srib green belt at 5 (five) dojangs that were registered at the TI Pengcab Sleman.

b. Large Scale Test Subjects

The subjects of the large-scale trial in this development study used a starter sample of plain green belt and green belt in 10 (ten) dojangs registered at the TI Pengcab Sleman.

Data Type

The data collected from this study is in the form of qualitative data. Qualitative data was obtained from 2 sports lecturers, 3 from taekwondo masters. For small and large scale field tests data is generated from observations given to experts and taekwondo experts when observing the implementation of trials that have been documented in the form of manuals and video compact disks (VCDs).

Data Collection Instrument

Instruments used to collect data in the form of assessment instruments to assess products that have been developed both from the aspect of conformity, aspects of the content, aspects of convenience, and aspects of student movement. Instruments developed and used in this study include questionnaires for material and media experts.

Data analysis technique

The data analysis technique used in this study is descriptive data analysis. This compiled model is considered feasible to be tested in small scale if the score is calculated to reach the minimum standard of feasibility. The score is obtained from filling out the questionnaire that has been given, in the questionnaire there are five rating scales, namely 1, 2, 3, 4 and 5. Then the scale is translated into a scoring system as in Table 1.

Table 1: Assessment Categorization

No.	Rating Score	Statement	Maximum Score
1.	5	25	125
2.	4	25	100
3.	3	25	75
4.	2	25	50
5.	1	25	25

Table 2: Categorization of the Narae Chagi Kick Exercise Model at the Beginning Taekwondoin in Special Region Yogyakarta

No.	Category Simulation Model	Score the Assesment
1.	Equal or greater 100	Very good/very effective
2.	75 to 99	Good/effective
3.	50 to 74	Good enough/quite effective
4.	Less than 49	Not good/ineffective

Results and Discussion

1. Small Scale Data Analysis

The following is the presentation of the data percentage recapitulation of the results of expert evaluations of the product in small-scale trials of instructors / trainers as experimental groups.

Table 3: Data on the Results of Expert Assessments of Products on Trial Small-Scale Experiment Groups

Expert	Maxs Score	Real Score	Persentase	Category
ID-A	115	99	86.00%	Very Good
ID-B	115	103	89.40%	Very Good
ID-C	115	101	87.80%	Very Good
ID-D	115	102	88.60%	Very Good
ID-E	115	107	93.00%	Very Good

Based on Table 3 above, if it is displayed in the form of a result diagram it can be seen in figure 1.

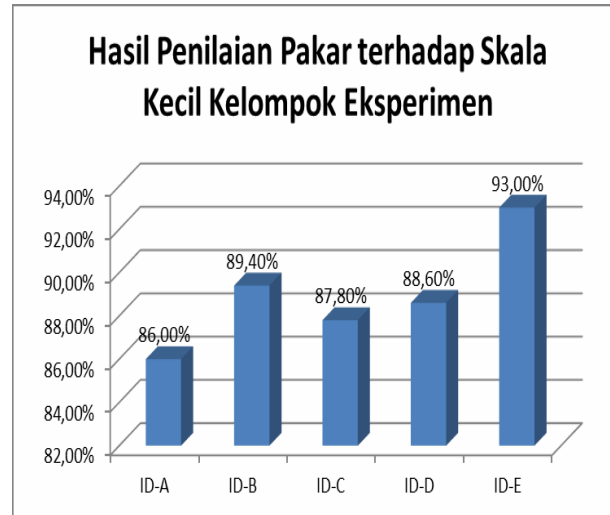


Figure 1: Bar Diagram of Results of Expert Assessment of Products on Experimental Small-Scale Trials.

The following is the presentation of the percentage of recapitulation data from the results of expert assessment of the product in a small scale trial of the instructor / head coach as a control group.

Table 4: Data on the Results of Expert Assessment of Products in the Control Group Small Scale Trial

Expert	Max Score	Real Score	Percentage	Category
IK-A	95	84	88.40%	Very Good
IK-B	95	88	92.60%	Very Good
IK-C	95	88	92.60%	Very Good
IK-D	95	86	90.40%	Very Good
IK-E	95	88	92.60%	Very Good

Based on Table 3 above, if it is displayed in the form of a result diagram it can be seen in Figure 2 as follows:



Figure 2: Bar Chart of Results of Expert Assessment of Products in the Control Scale Small Scale Trial

1. Large Scale Data Analysis

The following is the presentation of the percentage data recapitulation of the results of expert evaluations of the product in large-scale trials of instructors/trainers as experimental groups.

Table 5: Data on the Results of Expert Assessment of Products in Experiments of Large-Scale Experimental Groups

Expert	Max Score	Real Score	Percentage	Category
ID-A	115	99	86.00%	Very Good
ID-B	115	103	89.60%	Very Good
ID-C	115	101	87.80%	Very Good
ID-D	115	102	88.60%	Very Good
ID-E	115	107	93.00%	Very Good
ID-F	115	104	90.40%	Very Good
ID-G	115	103	89.60%	Very Good
ID-H	115	104	90.40%	Very Good

Based on Table 27 above, if it is displayed in the form of a result diagram it can be seen in Figure 4 as follows:

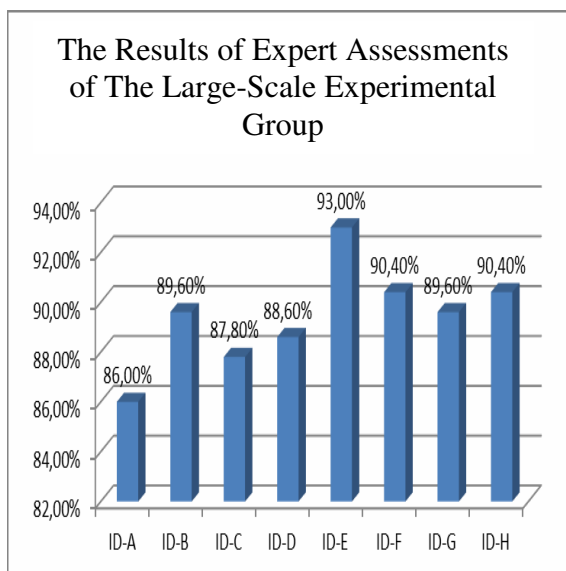


Figure 4: Bar Diagram of Results of Expert Assessment of Products on Experimental Large-Scale Tests

The following is the presentation of the percentage data recapitulation of the results of expert evaluations of the product in large-scale trials the instructor / head coach as a control group

Table 6: Data on the Results of Expert Assessment of Products in the Control Group Large Scale Trial

Expert	Max Score	Real Score	Percentage	Category
IK-A	95	84	88.40%	Very Good
IK-B	95	88	92.60%	Very Good
IK-C	95	88	92.60%	Very Good
IK-D	95	86	90.40%	Very Good
IK-E	95	88	92.60%	Very Good
IK-F	95	87	91.60%	Very Good
IK-G	95	88	92.60%	Very Good
IK-H	95	89	93.60%	Very Good

Based on Table 29 above, if it is displayed in the form of a result diagram it can be seen in Figure 5 as follows:

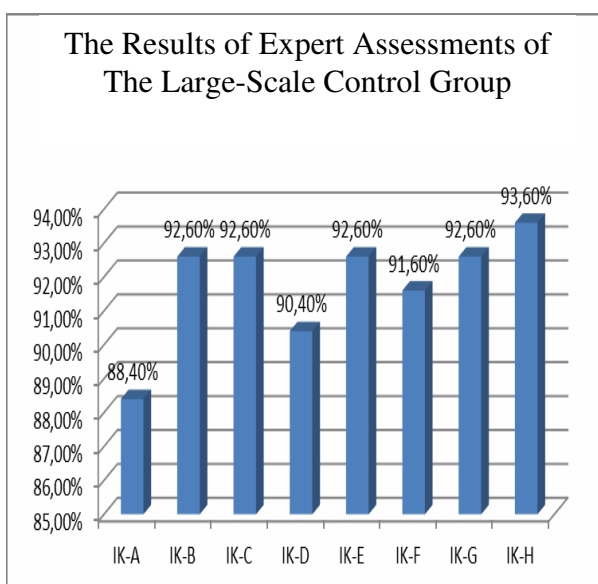


Figure 5: Bar Chart of Results of Expert Assessment of Products in the Control Group Large-Scale Trial

Conclusions

Based on the research and development steps that have been carried out according to Borg and Gall, a number of things have been concluded as explained previously, including:

- 1) The final product of research and development that is produced produces a product in the form of a Training Guide, which is named: "Technical Simulation and Narae Chagi Kick Training Model for Beginner Taekwondoin" compiled in a guidebook that is equipped with a video exercise simulation technique.(3) Free activities of children spent outside the home cannot be ignored. In various regions there are many traditional games that can be played by children. Most children have the development potential to overcome obstacles, and grow skills in motion activities.
- 2) The exercise model consists of three parts, which include preparation, implementation, and simulation. At the preparation stage, it consists of the initial attitude and basic movements. The preparation stage consists of kicks and landings, while in the simulation phase consists of four simulations with two models of each simulation movement. The preparation and implementation phases are made by packaging dynamic and static heating forms, and for the implementation phase following the kick criteria that have been routinely carried out, the core of the developed training model is the engineering simulation model that is the focus of development. This engineering simulation model consists of four motion simulation simulations that are often carried out when Junbiundong or (Calisthenics) after heating. The series of motion in question is: simulation 1; (a) jogging fast forward with counts, (b) jogging fast backwards with counts, simulation 2; (a) run fast forward, turn hips with count, (b) run fast backwards, turn hips with count, simulation 3; (a) run fast forwardlift the knee / average water with a count, (b) run back and forth lift leg / average water with count, simulation 4; (a) run fast forward lift your knee / average water, rotate your hips for a count, (b) run more back lift your knee / average water, rotate your hips for a count. Each movement is done with three beats, the command is given by the trainer. The total training time needed for the narae chagi kick training model developed from preparation, implementation and simulation is no more than 2 hours or 120 minutes with the number of repetitions in each section and form of the exercise.
- 3) Development products meet the category of "Eligible (Appropriate)" to be used or used as an exercise model in developing the technique of kicking the ability of the chagi on novice taekwondoin based on the feasibility test of two trials evaluated by four observers namely taekwondo experts / practitioners.
- 4) Based on the findings of the effectiveness test of the final product development, it is known that the effective development product has a significant effect and good effect on improving the ability of kick technique in beginner taekwondoin especially kicking narae chagi.
- 5) Overall the product development in the form of a training model simulation of narae chagi kick technique in beginner taekwondoin Effective and Appropriate is used by trainers in the dojang / training ground to train and improve the correct technical skills, so thatget maximum results in practice.
- 6) Product development in the form of technical simulation training models can also be used by novice taekwondoin parents in training independently at home, with repetitions or counts that are adjusted to their respective abilities and / or with parental supervision.

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