

Development of Petanque Training Pointing and Sport Shooting

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Abstract -The purpose of this study is to produce a variation of petanque training books for pointing and shooting training models in petanque sports. find out the validity of the petanque exercise variation book for the Petanque pointing and shooting exercise model, know the effectiveness of the petanque exercise variation book for the Petanque pointing and shooting exercise model, know the response of the acceptance of the textbook product by athletes, teachers and petanque trainers for the target of the pointing and shooting training model . This research was conducted at the North Sumatra FOPI Pengprov Petanque, school or place where petanque club teachers and coaches train with a sample of 48 athletes. The process of research and development of the Petanque pointing and shooting exercise model includes ten steps, namely: Research and information collecting, Planning Development of the preliminary from product, Preliminary field testing, Main product revision, Main field testing, operational product revision, operational field testing , final product revision, dissemination and implementation. Model testing aims to find out whether the model developed is feasible or not. The test model also looks at the extent to which the products made can achieve goals and objectives. a good model meets two criteria, namely: (1) instructional criteria (instructional criteria); and (2) presentation criteria. The trial was conducted three times, namely: (1) expert test; (2) limited testing is carried out on small groups as model users; (3) field testing for large groups (field testing); and (4) empirically testing the effectiveness of the model

Keywords: *Research and Development (R&D), Pointing and Shooting Training Models, Pentanque Training Variations*

I. INTRODUCTION

Sports are not only carried out by certain circles, but sports activities have penetrated to various levels of age and various levels of social life in society in various countries. Some do sports to improve health, improve physical fitness, as a recreational tool, and for the purpose of improving sports

achievements. According to the Law of the Republic of Indonesia Number 3 of 2005 concerning the National Sports System (2010: 33), Sports is any systematic activity to encourage, foster and develop physical, spiritual and social potential. Many sports were competed at national and international sporting events, so new sports (exhibitions) were introduced at prestigious events such as the National Student Sports Week (POMNAS) and National Sports Week (PON) such as Arum Jeram, Barongsai, Handball, Rugby, Muaythai, Basketball 3x3, Gateball, Yongmoodo, Soft Tennis, and Petanque, with the aim of socializing the sport to the regions. (POMNAS Aceh XIV 2015 internet news: 2015), (PON West Java XIX 2016 internet news: 2016).

According to the Mondiale Sport Boules Confederation (2019) Petanque is played on every type of land. The metal ball known as Boules has a diameter between 70.5 mm and 80 mm and weighs 650 grams (min) and 800 grams (max). Jacks or Choconuts are made of wood and have a diameter of 30 mm (tolerance: + or - 1 mm). The aim of the game is to get the boules as close to the jack as possible. It is possible to shoot or hit the opponent's boules directly, without touching the ground or by rolling the boules along the ground to hit the target boules. The player must play the game standing with both feet on the ground in a circle that has a diameter of 35 to 50 cm. There is also a special shooting competition.

According to Cahyono, Eko C (2018: 2), petanque is included in one type of achievement sports. Achievement sports are sports that have national and international official parent organizations, which are competed in national and international events. This achievement sport aims to improve the ability of individuals to meet the goals and desires of an athlete. Not just sports but it is programmed in detail starting from the training program, training schedule, evaluation, until the nutrition needed is well considered

Based on observations made by the author so far and supported at the holding of the Regional Championship of Petanque on 21-23 May 2016 and the activities of the Regional Office of Medan City Petanque Sport Exhibition on March 26, 2019 which was held at the STOK Bina Guna Campus in Medan which was participated by 18 districts in Medan City, it appears that when competing on average most athletes when competing tend to use one technical model in petanque which is pointing because most of them rarely do shooting techniques where the level of difficulty and target imposition is very minimal. According to Borg & Gall (1983: 775), Conceptually, the research and development approach includes 10 general steps, as described as follows: 1) Research and information collecting, 2) Planning, 3) Develop preliminary form of product, 4) Preliminary field testing, 5) Main product revision, 6) Main field testing, 7) Operational product revision, 8) Operational field testing, 9) Final product revision, and 10) Dissemination and implementation.

ASSURE Model (2008: 110), is a model formulated for learning activities or also called class-oriented models. According to Heinich, this model consists of six steps, namely: Analyze Learners, States Objectives, Select Methods, Media, and Materials, Utilize Media and Materials, Require Learner Participation, Evaluate and Revise.

According to Imran Akhmad (2013: 2), Exercise is a process that is carried out systematically and continuously by increasing the amount of burden to improve the performance of athletes in achieving predetermined targets. According to Irawadi (2011: 32), varied training is defined as a form of presentation or implementation of training activities with various forms or methods, in order to achieve a goal. This means that to achieve a training goal should be used several ways, so that the exercise does not arise boredom. According to Juhanis (2018: 2), Shooting is a type of throw to drive the opponent's bosi from the target boka.

The basic motion of petanque sports is to focus on throwing, which must be mastered by petanque athletes in a training or competition. According to Ria Lumintuarso (2013: 72), throwing aims to reach the distance as far as possible and to the right target.

Thus it can be concluded that the research development is a research that is based on the manufacture of an effective product, in which in this study the researcher will develop a training model for pointing and shooting petanque sports to improve knowledge and textbooks about petanque sports.

II. RESEARCH METHODS

This research is a research and development (R&D) which is a process or steps to develop a new product or improve an

existing product, which can be accounted for. The purpose of this study is to resolve the problems that occur in the Petanque sports training model by developing variations of the Petanque pointing and shooting exercises.

The research was conducted in several places, namely: North Sumatra FOPI Pengprov Petanque, School or place where the teacher and coach of the petanque club train, including: Medan Region: YWKA Medan Private High School, Deli Serdang Area: Private School 8 Saentis BAO, Tanah Karo Region: SMA Karo Region: SMA Private Al Karomah Berastagi, Labuhan Batu Selatan Region: Private PGRI 17 Lohsari Vocational School, Samosir Region: SMK Negeri 1 Samosir Daily

The instrument used in this study was to use an assessment using the rubric of worksheets conducted by athletes, teachers / trainers of the Petanque Club then the assessment of the poses was carried out in the form of an assessment rubric sheet conducted by Petanque experts (in Trial I and Trial II). Rubric assessment is very suitable to determine the effectiveness and supervision of the training model used by athletes, teachers / coaches of the Petanque Club by assessing the collection of tasks they do. Rubric assessment is an ongoing assessment process that is based on a collection of information that shows the development of abilities, especially the psychomotor / athlete performance aspects in a certain period. This type of assessment basically assesses the work of athletes individually within a certain period

III. DATA ANALYSIS TECHNIQUE

To calculate the average implementation of the development of pointing and shooting training variations on the mastery of pointing and shooting techniques through rubric assessment, criteria must be determined / ideal for the work system, then the ideal score must be calculated by multiplying the highest score, the number of items, the stages of movement, with the number of respondents. Then we calculate the ideal score of each instrument by multiplying the highest score, the stages of the movement by the number of respondents. Next to calculate the percentage obtained by dividing the ideal score of each item divided by the ideal score multiplied by 100%. Mathematically can be described as follows:

$$SK_i = A \times B \times N$$

Where:

A = highest answer score

B = grading indicators are indicators 1, 2 and 3

N = number of respondents

Furthermore, the ideal score of each rating indicator item

$$SK_{TB} = A \times B \times N$$

Where:

A = highest answer score

B = three stages of pointing and shooting

N = number of respondents

Then to calculate the percentage of effectiveness in developing the exercise model the formula is used:

$$E = \text{SKTB} / \text{SKi} \times 100\%$$

Where:

E = percentage of subjects' trial results

SKTB = total ideal score of each item

SKi = ideal score

After the results of the application of the development of training variations are reviewed from the kinematics of the motion and the role of the model on mastery of pointing and shooting techniques through the rubric assessment calculated, a score will be obtained in the form of a percentage. shooting through rubric assessment is higher then it can be said that the application of the development of exercise variations from kinematic motion and the role of the model to mastering pointing and shooting techniques through rubric assessment.

To prove the significance of the application of the development of training variations in terms of the kinematics of motion and the role of training in mastering pointing and shooting techniques through the rubric assessment, it needs to be statistically tested with correlated t-tests (related). The formula used is as follows.

Where :

$x_{_1}$ = sample average 1 (old work system)

$x_{_2}$ = sample mean 2 (new work system)

S_1 = standard deviation of sample 1 $S = \left(\frac{\sum (X_1 - X)^2}{(n-1)} \right)$

S_2 = standard deviation of sample 2

S_{12} = sample variance 1

S_{22} = sample variance 2

R = correlation between the data of the two samples $r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$

Source: Sugiyono, Statistics for Research (Bandung: Alfabeta, 2008), p. 122

Furthermore, to calculate the percentage of the effectiveness of the development of exercise variations obtained by dividing the total score of the respondents with an ideal score multiplied by 100%. Mathematically can be described as follows:

$$\text{SKi} = A \times B \times N$$

Where:

A = highest answer score

B = Initial attitude

Implementation Movement

Final attitude

N = number of respondents

Then to calculate the percentage of effectiveness in developing variations of the exercise used the formula:

Furthermore, to obtain the effectiveness of each indicator item (questions) obtained by distributing the total value of each indicator item all respondents divided by the ideal value of each item indicator assessment.

$$\text{SKTB} = A \times N$$

Where:

A = highest answer score

N = number of respondents

Then to calculate the percentage of effectiveness of each indicator item the formula is used:

Source: Sugiyono, Educational Research Methods (Bandung: Alfabeta, 2008), p. 419

Where:

E = percentage of test results for all subjects

ETB = total percentage of each item

SKTB = total ideal score of each item

SKi = ideal score

For nonparametric data using the rank test marked Wilcoxon. However, all parametric and non-parametric data analysis uses SPSS software. Calculation of the results of the second and third trials used the percentage formula, as was done in the first group trial. To determine the conclusions that have been reached, criteria are set as in the following table:

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