DEVELOPMENT OF MODEL TO IMPROVE BASIC TECHNIQUE IN PLAYING SEPAK TAKRAW

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Abstract

This study aims to: (1) to develop a learning model of sepak takraw material according to students' characteristics, (2) to measure the effectiveness of packing models that have been developed (3) to test the effectiveness of learning models that have been developed to improve basic technique sepak takraw skills. This research is a research and development consisting of two stages, they are: preliminary stage and development stage. The preliminary stage consisted of: observation and field study. The development stage consisted of: initial drafting, expert validation, small-scale trials, large-scale trials, the final products, and effectiveness tests. Expert validation involved 2 experts with delphi techniques. Field test design used times series design. Techniques using to collect the data was observation and interview. Data analysis to determine validity used Content Validity Ratio (CVR). Data analysis for effectiveness used Sample Paired t Test. The results of the development learning of sepak takraw were (1) the product of the learning model sepak takraw for student, (2) the implementation of a safe learning model, easy and fun to do and (3) the product is effective to improve the skills of sepak takraw students from psychomotor values. The results of expert assessment of the model product developing had a validation value of 1 entered in the eligible category. The result of analysis of the values got the result of significance of Sig2 tiled <0.5., the mean at test of effectivity psychomotor value of 6.6000 had increased to 7.5200. So it can be concluded that the model was affective to improve basic technique of students
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Keywords*: Model; Learning of Sepak Takraw; Tgfu; Basic Technique; Student.*

INTRODUCTION

Sepak takraw is one of the traditional sports in Indonesia. Takraw's current game of football that uses balls made of rattan and plastic (synthetic fibre). The ball is kicked from foot to foot, feeds the friend and turns the ball off in the opponent's field. The sport of sepak takraw in practice is a type of game sport using a ball made of synthetic fiber after its predecessors used rattan(RohmanHidayat1, 2020). Before sepak takraw was known to the People of Indonesia, in the area has developed a game of football, namely the game of children in the region that uses balls made of rattan. To display a good game of sepak takraw, one is expected to have an advantage in his skills(Putra et al., 2020). At first it did not have its own rules because at that time the player only tried to keep the ball from dying (falling to the ground), (2) showing their respective skills with variations in how to take the ball, (3) taking the ball quickly and directed. Some areas in Indonesia that are considered as the forerunner of the birth of sepak takraw, among others: Makassar (South Sulawesi), Minangkabau (West Sumatra), South Tapanuli (North Sumatra), Kandangan (South Kalimantan) (Iyakrus & Ramadhan, 2021). Sepak takraw turns out to contain the values of competition in demonstrating the excellence and proficiency of a person in playing the ball made of rattan. The player demonstrates his ability to play takraw balls by displaying dazzling skills to the audience.

Basic techniques and even acrobatics are displayed that amaze the audience. To be able to play the rattan ball, players are required to be able to master the basic techniques of sepak takraw. The basic technique according to (Al-Amien et al., 2021) is (1) football sila, (2) horse football, (3) rhino football, (4) pokeball, (5) heading, (6) juggling thigh, (7) chest control, (8) treading,(9) juggling first, (10) smash, (11) blocking . The dominant use of basic techniques in sepak takraw is football techniques. Sila football technique is very important because it can be said that the

ability of football sila is the mother of the game of sepak takraw because the ball is played a lot using football, starting from the beginning of the game, controlling the ball to making points (Hananto, 2015).

Football is to pack the ball using the inner legs. Basic football techniques are often used at the time of sepak takraw games. To be able to play the rattan ball, players are required to be able to master the basic techniques of sepak takraw. The basic technique according to (Hanif, 2015) is (1) soccer, (2) horse football, (3) rhino football, (4) sepak cungkil, (5) heading, (6) memaha, (7) mendada, (8) treading,(9) sepak mula, (10) smash kedeng, (11) blocking . The dominant use of basic techniques in sepak takraw is football techniques. Sila football technique is very important because it can be said that the ability of football sila is the mother of the game of sepak takraw because the ball is played a lot using football, starting from the beginning of the game, controlling the ball to making points (Hananto, 2015). An educator or trainer needs understanding and creativity in their learning. (Iyakrus & Ramadhan, 2021) explained that physical education learning must be implemented creatively. Coaches and educators must also have learning methods or strategies in their delivery so that students can perform basic techniques well. (Padli et al., 2019) In addition to being required to be creative in teaching students to perform basic techniques of facilities and infrastructure is also important in their activities.

Where this learning contains material that is quite complex, and has educational goals and functions, in which there are cognitive, affective, psychomotor, emotional and social aspects (Alchonity Harika Fitri & Putra2, 2022). (Arends, 2012) "The model of teaching is really a model of learning, as we help students acquire information, ideas, skills, value, ways of thinking, and means of expressing themselves". The determination of the learning model to be used in learning activities should consider: (a) the objectives to be achieved, (b) the materials or learning

materials, (c) the learners, and (d) other considerations of a nontechnical nature (Gil-Arias et al., 2017). (Butler, 2005) says that, Teaching Games for Understanding is a learner and game centered approach to sport-related game learning with strong ties to a constructivist approach to learning. The teaching model is a learning model, the learning model can help students gain information, ideas, skills, grades, ways of thinking, and how to express themselves. So this model is very important to develop the potential of students or students in order for the learning process to run well.

METHOD

This research is education research and development (R&D). (Borg, W.R. et al., 2007) explains that research and development uses research findings to design new procedures and products, then systematically tested in the field, evaluated, and refined until they meet certain criteria of the same element of effectiveness, quality, or standards. The steps are adapted into (5) development research procedure design namely (1) needs analysis, (2) product development stage, (3) conduct expert validation, (4) conduct field trials, (5) effectiveness test.

The design of the trial in this study is in the form of validity test to 2 experts using *delphi* technique. *Delphi* techniques are performed by submitting drafts to experts without meeting one expert with another for assessment and being commented on.Small-scale trials and large-scale trials are conducted by making revisions in the learning product evaluation process. Small-scale trials are conducted first and then large-scale trials are conducted. After conducting validation and small scale test and large scale test will be conducted effectiveness test by conducting quasi-experimental method with *Time Series Design* / pseudo experiment. The subject of the trial is the target of the use of this product is unsri penjaskes students.

The subjects of small-scale trials came from achievement coaching students and for large-scale trials in this study using palembang class students. Effectiveness

test using test subjects in indralaya class students.

Data Analysis Technique

Data analysis techniques used in this study is a test data analysis technique using a likert scale with the level of criteria counting questionnaire scale using ideal mean (Mi) and ideal deviation standard (SDi), with the formula:

Table 1. Questionnaire Scale Calculation

No.	Score Interval	Criterion
1	Mi + 1.5 SDi < x	Excellent
2	Mi ≤ x < Mi + 1.5 SDi	good
3	Mi – 1.5 SDi ≤ x < Mi	Good Enough
5	x < Mi – 1.5 SDi	Less Good

Source: (Ali Sha'Ban, 2012)
Mi = 0.5 × (highest score + smallest score)
SDi = 1/6 × (highest score – smallest score)
Information:
Mi = Ideal Average Value
SDi = Ideal Deviation Standard
x = Average Value obtained
CVR

For data analysis techniques, effectiveness tests are conducted by pseudo-experimental methods. The effectiveness test result data is processed using SPSS 21 with *Sample Paired t Test. Sample Paires t Test* is conducted to determine if there is a real difference. Validation is done by providing an initial product draft of the learning model penjasorkes ball basket game materials, accompanied by a validation sheet for experts. Validation sheet is a questionnaire that contains aspects of the quality of the learning model and suggestions and comments from experts. Validation results in the form of values for the quality aspects of the learning model by using the validity of the content (CVR) with assessments of "1" and "0". Here is the formula of *the Content Validty Ratio*(Brinkman, 2012).

The learning model of sepak takraw through tgfu consists of 4 games. The games of the development are (1) tong target games, (2) xox football games, (3) futsal soccer games. A strong team is a team that can play tight. In this case, players are required to cooperate well and compactly (Pratama & Arisman, 2022).

Tong Target Game Implementation. The goal of the game (1) is to improve the basic technical skills of sepak takraw, namely football, (2) improve the accuracy of the football, (3) improve the spirit of the competition and never give up. Equipment: sepak takraw balls, stopwatches, cones,barrels.

The rules of the game are that students are grouped, each group contains 3-5 children. Each group is in part of one of takraw's football fields. Each competing group gets the most points. Each group must take turns doing football to the opponent's barrel. Every kick that goes into the opponent's barrel that has been provided gets 1 point. The group that gets the most score is the winner.

Implementation of xox Football Games please. The goal of the game (1) improving the basic techniques of sepak takraw is football, (2) Improving the accuracy of football, (3) Improving the cognitive of the child, (4) Improving the spirit of competition and never giving up, (5) Improving confidence, communication, and cooperation. Equipment: sepak takraw ball, stopwatch, cone.

Student game rules are grouped, each group contains 3-5 children. Each group stands behind 2-3 meters from the box that has been made. Each group took turns doing football into the box to form xox. Each group can take the opponent's territory if they manage to make a football into the opponent's box. The group that gets xox first time is the winner.

Implementation of Futsal Soccer Game. Game objectives (1) Training communication, cohesion, and group cooperation, (2) Training the actual form of sepak takraw game, (3) Improving the basic techniques of sepak takraw i.e. soccer

sila, (4) Training mentally competing in the form of simple games. Sepak takraw equipment, futsal goal, and stopwatch. Student game rules are grouped, each group contains 4-6 children. Each group tries to insert the ball into the opposing group. The ball is played and executed using football techniques. All players are prohibited from crossing the goal line that has been created. The winner is the group that puts the most balls into the opponent's goal.

Table 2. Inputs on sepak takraw learning model through tgfu from experts

expert	input
Educators	selection of materials on each product must be adjusted to the student
Expert 1	
Expert 2	
	steps in each game should be clarified
	facilities and infrastructure must be safe for students.

Expert Input Data Analysis

The results of the assessment scale assessment given by experts / material experts on the product of sepak takraw learning model through tgfu include (1) tong target game, (2) xox game of sila football, (3) mini sila football game, (4) futsal sila football game is considered appropriate and feasible.

Small Scale Trial Data Analysis

In small-scale trials conducted aimed to know the implementation and results of assessment using sepak takraw learning model through tgfu. educators conduct learning using the developed learning model. The data taken from this small-scale trial is the data of educators' assessment of the implementation of the development of

sepak takraw learning model through tgfu. Quantitative assessment results from practitioners are converted to qualitative data, the criteria for calculating the scale of this questionnaire using ideal mean (Mi) and ideal deviation standard (SDi). Based on a small-scale test assessment table filled by educators on the development of sepak takraw model through tgfu to improve student football skills, a score of 38 was obtained. Thus, small-scale trial values are categorized as "excellent" because they belong to the Mi + 1.5 SDi intervals < 38.
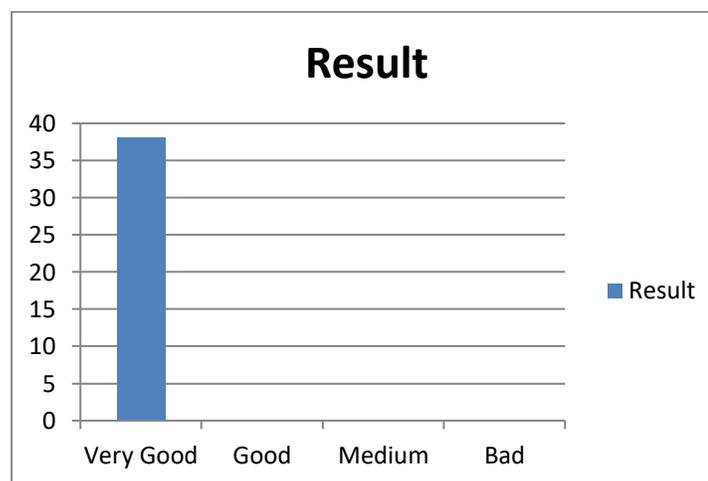

Figure 1. Small Scale Trial Results

Large-scale trials were conducted aimed at knowing the implementation and results of assessments using sepak takraw learning models through tgfu. educators carry out learning using developed learning models. The data taken from this large-scale trial is the data of educators' assessment of the implementation of the development of sepak takraw learning model through tgfu. Quantitative assessment results from practitioners are converted to qualitative data, the criteria of calculation of the scale of this questionnaire using ideal mean (Mi) and ideal deviation standard (SDi), Based on a large-scale test assessment table filled by educators on the

development of sepak takraw learning model through tgfu to improve student football skills, obtained a score of 78. Thus, small-scale trial values are categorized as "excellent" because they belong to the Mi + 1.5 SDi intervals < 78.
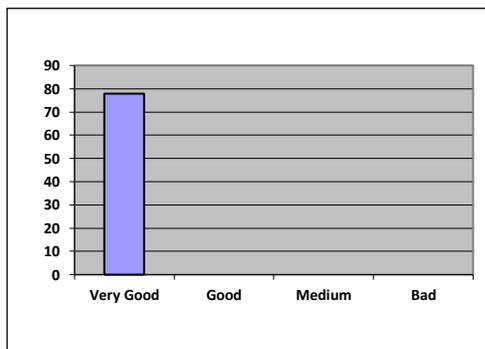

Figure 2. Large-Scale Trial Results

CONCLUSION

Based on the results of research and discussion on the final product study obtained concluded research, namely:

1. The management of sepak takraw learning model through TGFU with expert assessment of CVR (Content Validity Ratio) = 1.

2. Implementation of effective learning models (easy, safe and fun) for educators and students

3. Based on the effectiveness test of sepak takraw learning model through TGFU

effective with $p > 0.05$ on every aspect of assessment and can be used in sepak takraw learning process.

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