26. DEVELOPMENT OF LEARNING ATHLETIC LEARNING MODELS RELEASE DIRECTLY BASED GAMES IN ELEMENTARY SCHOOL

By Hartati Hartati

DEVELOPMENT OF LEARNING ATHLETIC LEARNING MODELS RELEASE DIRECTLY BASED GAMES IN ELEMENTARY SCHOOL

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Abstract

Objectives: This study aims to develop an effective, valid practical short-distance athletic learning model.
Methods: Methods used Research and Development by 1) Analyzing Needs, 2) Creating initial draft Design, 3) Validating Experts, 4) Improving the design of validation results, 5) Conducting small group trials, 6) Revising Products, 7) Conducting group trials large, 8) Revise the large group trial product, 9) Analyze the final product.
Results: The results obtained in small group trials include cognitive, psychomotor and affective values. The mean of student's motivation score is 71.91% for the old learning model and the pulse rate is 62.51% while the learning model that has been developed the pulse rate increased by 71,09%. Results of large group trials for student motivation obtained by 80.75% and pulse using the old learning model 62.20% while the new learning 3.63%.
Conclusions: Based on the results of the research, the findings of athletic learning of short distance run based on game meet the criteria of effective, valid and practical. The implication of research result of development of game-based athletic learning model can be applied in physical education learning at elementary school.

Keywords: Model Development, Athletic Learning, Game Based

INTRODUCTION

Physical education is a vehicle for educating children, and experts agree that physical education is a "tool" to nurture young people so that they will be able to make the best decisions about physical activity undertaken and live a healthy lifestyle throughout their lives (Suprayitno, 2014: 8 -9). Goals will be achieved through the provision of direct and real experience of physical activity. Physical activity can be either a game or a sport chosen for the learning process. Physical activity or motion is used for the child's personality as a whole. Implementation of learning physical education includes several kinds of sports. One of the sports that is taught in physical education is athletics.

Athletics is a physical activity or physical exercise that contains natural or natural movements such as roads, running, jumping and throwing (Rumini, 2004: 5). The learning of athletic physical education short distance run number is still limited because not yet exact model or learning method used by teacher physical education, other supporting factor which result of student activeness in learning sport is delivery of material by teacher still use model or method of demonstration only without supported by model or method another. This affects the liveliness of the students on the athletic learning of short distance numbers in the elementary school. Students feel bored and lazy in doing athletic activities short distance running number so that required model or method of learning through model or method of play (learn while playing) at the time of learning athletic physical education short distance running number. Through instruction physical education expected elementary school students can gain a variety of experiences to express a personal impression of fun, creative, innovative, skilled, and maintain the freshness of the body and understanding of human motion. Through physical education students are expected to be active in following all learning process in school physical education by applying the model or learning method of play approach in athletic sports.

Margono, Mukholid, Purnama and Satyawan (2013: 82) Learning approaches that can be applied in athletic learning, include play approach, approach to competitions, and engineering

approach. The game in question is a game that is around elementary students including traditional games. Traditional games are the result of human cultivation in the past has excited children to have fun and have a very meaningful influence on the development of children. This game does not cost even very easy to play (Hartati, et al, 2012: 28). Traditional games are a wealth of local culture that should be utilized in physical education learning. Traditional games are very easy to play and have good benefits for child development. Hanafi (2012: 17-18) Modified athletics in the form of games is not a new thing, athletic learning with play is not much known among the main teachers of primary school supervisors. Athletics play is aimed at the aspect of athletic play activity. The goal of athletic modification is that from the beginning the basic elements of motion in athletics can be introduced to children in an interesting and fun way. Athletics is introduced to children with the game so it can arouse attention to do by emphasizing the element of playing in school.

METHODS

Research development according to Sugiyono (2010: 407) argues the method of research and development or in English research and development is a research method used to produce a particular product and test the effectiveness of the product.

The types of data in this study are qualitative data. The qualitative data were obtained from the oral and written interviews of the masseur and the learning experts as the material for product revision, as a reference to the effectiveness of motion on the model of athletic learning model of short-range running games and student questionnaire as the product feasibility level in following the short distance run athletic learning game.

Stages of implementation are (1) Conducting observation activities in 2 elementary schools, namely elementary school number 166 Palembang and elementary school number 238 Palembang in getting the needs or constraints at the time of learning physical education take place. (2) Creating the initial product, in this study the initial product is the old learning model and new learning model. The new learning model is a short-distance athletic learning model based on the game. game on the initial product, which is the game of dragon snake, bentengan, black green, and mouse cat. (3) Conducting validation activities on the initial product. The initial product is validated by one master and one learning expert. (4) Conducting revision activities after prior validation of the initial product by the masonry expert and the learning expert. The initial product revision aims to provide a solution to the weaknesses or shortcomings of the product to be tested in small groups. (5) Prepare a draft of small group trial products and conduct small group trials. (6) Revision of product after small group trial, revision at this stage is done in order to know the location of weakness or deficiency of the product that was created before proceeding to large group trials. (7) Preparing the draft of large group testing products, at this stage the product is expected to no more shortcomings or weaknesses that are too much. (8) The eighth stage of the researcher conducted a large group trial in two schools namely elementary school number 166 Palembang and elementary school number 238 Palembang. (9) Revision after the implementation of group trials. This product phase will be validated and revised if needed before becoming the final product. (10) The end product is a valid, effective, and practical short-distance athletic learning model of athletic learning that enhances the active, creative, fun, interest, and motivation of short distance athletic learning.

The next step is the practical aspect of a product that is produced, for the practical aspects of data collection is done by giving a questionnaire and see the results of the questionnaire given to the students which contains about the practicality or ease in using new learning model products or athletic learning model runs a short distance based game is an aspect of effectiveness, to prove the effectiveness in the product of athletic learning model of short-range running games.

RESULT AND DISCUSSION

Sugiyono (2014: 172) valid research results when there is similarity between the data collected with the actual data occurred on the object under study. A valid instrument means the

measuring instrument used to obtain (measure) is valid. Valid means the instrument can be used to measure what should be measured.

Valid is a standard measure showing the accuracy of the research instrument. Collecting data by providing questionnaires with observation sheets obtained from validator evaluators of experts and learning experts, product testing and suggestions for product

This game-based athletic learning model is intended for teachers to meet the needs of the cognitive, affective, psychomotor, and motivational components of elementary school students. While the goal to be achieved is to produce a valid learning model assessment, practical use, and effective to obtain maximum results in implementing athletic learning short distance run at the level of elementary students.

Small Group Trial Results Data

Small group trials aim to identify and identify problems such as weaknesses, deficiencies, or product effectiveness when used by students. Products produced in small group trials development of athletic learning model running short-distance game in elementary school that is game of black green, bentengan, and cat mouse can be seen in table 1.

Table 1. Small Group Trial Data

No	Aspect of Assessment	Percentage	Criterion (meaning)
1	Cognitive (1-10)	72%	Good
2	Psychomotor (11-20)	71%	Good
3	Affective (21-30)	73.33%	Good
4	Motivation (31-40)	71.33%	Good
	Average	**71.91%**	**Good**

Data obtained on the small group trial ined an average percentage of new learning model or play-based learning model scored **71.91%** with the criteria of **"Good".** Based on predetermined criteria, the new learning model or game-based model is more effective in the implementation of short-run athletic learning process of elementary school students in small group trials.

Product small group trial consists of three (3) stages of the implementation of learning athletics sprinting, namely: a) the stage of heating (warming up) the allocation of time for 1x15 minutes, b) the core stage allocation of time for 1x45 minutes, and c) the stage closing time allocation for 1x10 minutes.

Warming up stage of uses sixteenforms of heating, namely (1) Movement pushing hands upward is nonlocomotor movement or movement that does not move place. Based on student psychology, it aims to improve students' self-esteem before swinging into both hands when athletic learning runs at a short distance. Static movements push the hand upward is done with the student's starting position standing upright, then both hands pushed upwards with the five finger knuckles hands are linked to each other. The movement is performed for 10 seconds. (2) Static movements pushing hands up the right is a nonlokomotor movement or motion that does not move. Static movements pushing hands up the right can aim to move and flex the togok muscles and waist muscles to the right. Based on psychology aims to improve students' self-confidence before swinging into both hands when athletic learning runs a short distance. The waist static movements are done with the students standing upright, then the five finger joints are linked to each other and the two hands are pushed upwards. The movement is performed for 10 seconds. (3) Static movements pushing the hand towards the top left is a nonlokomotor movement or movement that does not move. This movement anatomically aims to move to flex the hand muscles in the muscle supraspinatus muscle, teres minor muscle, infraspinatus muscle, and subscapularis muscle. Static movements pushing the hand towards the top left can aim to move and flex the togok muscles and waist muscles to the left. Based on psychology aims to improve students' self-confidence before

swinging into both hands when athletic learning runs a short distance. The waist static movements are performed with the beginner student position standing upright, then the five finger joints are linked to each other and the two hands are pushed toward the top left. The movement is performed for 10 seconds. (4) Static movement pushing the horizontal hand to the right is a nonlokomotor or motion that does not move. Static movements pushing the hand towards the top left can aim to move and flex the togok muscles and waist muscles to the left. Based on psychology aims to improve students' self-confidence before swinging into both hands when athletic learning runs a short distance. The waist static movements are performed with the beginner student position standing upright, then the five finger joints are linked to each other and the two hands are pushed toward the top left. The movement is performed for 10 seconds. (5) Static movements push the hand horizontally to the left is a nonlokomotor movement or movement that does not move. This movement anatomically aims to move to flex the hand muscles in the muscle supraspinatus muscle, teres minor muscle, infraspinatus muscle, and subscapularis muscle. Static movements push the hands flat to the left aim to move and flex the waist muscle to the left. Based on psychology aims to improve students' self-esteem before swinging both hands and moving the pelvis during athletic learning runs a short distance. Static movements push the hand horizontally to the left is done with the student standing upright, then the five fingers are linked to each other and both hands are pushed horizontally to the left of the body. The movement is performed for 10 seconds. (6) The static movement pushing the horizontal hand towards the front is a nonlocomotor or motion that does not move. This movement aims to mobilize their anatomy to flex its muscles in the hands of *the supraspinatus* muscle *muscle, teres minor muscle, muscle infraspinatus,* and *subscapularis muscle.* (7) Static movements of folding and straightening of the hands are nonlocomotor movements or movements that do not move. This movement aims to mobilize their anatomy to flex its muscles in the hands of *the deltoidmuscle, the supraspinatus muscle, teres minor muscle, muscle infraspinatus,* and *subscapularis muscle.* Based on psychology aims to improve students' self-confidence before swinging into both hands when athletic learning runs a short distance. Static movements fold the right hand upwards and straighten the left hand to the right done with the student standing upright, then the right hand up and straightening the left hand to the right. The movement is performed for 10 seconds. (8) Static movements of folding and straightening of the hands are nonlocomotor movements or movements that do not move. This movement aims to mobilize their anatomy to flex its muscles in the hands of *the deltoidmuscle, the supraspinatus muscle, teres minor muscle, muscle infraspinatus,* and *subscapularis muscle.* Based on psychology aims to improve students' self-confidence before swinging into both hands when athletic learning runs a short distance. Static movements fold the left hand upwards and straighten the right hand to the left with the student standing upright, then the left hand up and straightening the right hand to the left. The movement is performed for 10 seconds. (9) Dynamic rotating movement of the hands is a nonlocomotor movement or movement that does not move. Based on psychology aims to improve students' self-confidence before swinging into both hands when athletic learning runs a short distance. Dynamic movement to two-handed play performed by students standing position, then to two hands rotating simultaneously. This movement is done alternately, if at the beginning to rotate to the front for 10 seconds then the next movement rotates backwards for 10 seconds. This movement has an implementation time amount of 20 seconds. (10) Dynamic movements rotate the waist is a nonlokomotor movement or movement that does not move. This movement aims to mobilize their anatomy to flex its muscles and joints waist. Based on psychology aims to improve students' self-confidence before swinging into both hands when athletic learning runs a short distance. Dynamic movements rotate the pelvis performed with the student standing position, then both hands placed on the pelvis and pelvis rotated alternately from right to left for 10 seconds and vice versa from left to right for 10 seconds. This movement has an implementation time amount of 20 seconds. (11) Static movement lifts the knee of the foot upwards is nonlokomotor movement or movements that do not move. This movement aims to flex its muscles anatomic knee or lower leg *patella.* Psychologically it aims to improve students' self-esteem before swinging and bending to the two knee legs at a time when athletic learning runs a short distance. The pelvic rotation is done

with the student standing, then the hands are placed in the pelvis, and the pelvis is rotated from right to left for 10 seconds and vice versa from left to right. For 10 seconds. This movement has an implementation time amount of 20 seconds. (12) Static movements pull the toes are nonlokomotor movements or movements that do not move. Psychologically it aims to improve students' self-esteem before swinging and bending to the two knee legs at a time when athletic learning runs a short distance. Static movement pull your toes up toward the back of the heel or sole of the foot touches the *hamstring muscles.* This form of heating movement can be performed by the students alternately for 10 seconds for the right leg and 10 seconds for the right leg with the amount of time of execution for 20 seconds. (13) Static movements to bend the leg knee are nonlokomotor movements or movements that do not move. This anatomical movement aims to flex the muscles of the knee or lower leg patella as well as make it a form of movement to extend the necessary steps in short-distance athletic learning. Psychologically it aims to improve students' self-esteem before swinging and bending to the two knees of the foot at a short-distance athletic learning course. Static movements to bend the leg knee is one form of warming movement that can be done by students seara alternately for 10 seconds to bend the right leg knee and 10 seconds to bend the left leg knee with the amount of execution time for 20 seconds. (14) Dynamic movements swing up and down legs are nonlokomotor movements or movements that do not move. Dynamic movement swings up and down legs is one form of warming movement that students can take turns for 10 seconds to swing the right leg and 10 seconds to swing the left leg with the amount of time the exercise for 20 seconds. (15) Dynamic movement of the foot is a nonlokomotor movement or movement that does not move. Psychologically it aims to improve students' self-confidence before swinging and moving on both feet when athletic learning runs a short distance. Dynamic movement of the foot up and down is one form of warming movement that can be done by students seara alternately for 10 to 20 seconds. (16) Dragon game aims to build a sense of confidence, to build a sense of courage, to stimulate balance, and to stimulate the basic motor. The difficulty level in the dragon serpent game is Very Easy, Its execution time is 10 to 15 minutes, Number of Participants in dragon serpent 6 to 15 students, and tools used None. Dragon dragon game is a form of warming through game form without tool or lokomotor (movement that causes body to move place). Dragon dragon game aims to prepare the student body before the implementation of athletic learning run short distance, the dragon game has a characteristic of singing while walking. Singing movement is expected to entertain students so as not to easily get bored doing the road movement in other words students are expected to feel happy while the movement of the road able to raise the pulse of students slowly. The dragon game drills muscles Musculus Quadratus Lumborum, Musculus Gastrocnemeus, Musculus Soleus, Musculus Flexor Digitorium Longus, and Musculus Longus Fibularis. The first form of student movement lined up one long back, participants or players 6 to 15 people. Dragon dragon game only use the activities of walking forward that accompanied the rhythm of chants sung by players. The doorman had two people clinging to the dragon's head, his duties only lowering into two hands simultaneously as the song was finished by the players or participants. Dragon dragon game is also able to train the motor and intellectual or intelligence elementary school students, because this game there is a Q & A session when one of the players or participants were caught by the two doormen. The gatekeeper will grab or hold onto his or her hands when the singing or rhythm is finished by the student then the doorman asks about something that is easily answered by the participant or player. The question can be like the name of fruit, food, clothing, color, animals, insects, and others. For participants or players who are able to answer questions from the doorman then the player is released and for players or participants who can not answer the question then the player becomes a substitute for the door guard while the door guard back into the player. A very simple warm-up movement before core learning begins, teachers can use the game method one of them is the dragon snake game. Dragon dragon game has a characteristic, namely: have a song in every game lasts. Dragon dragon game is a game that uses the movement of the road so that slowly raising the pulse of students and chanting on the dragon game can be used as a medium to entertain students or attract students to follow the learning with passion. The warm-up stage through the dragon-snake game can be performed by the master's teacher for 10 to 15 minutes.

The core stage used three traditional games children Indonesia, namely (1) The game of Bentengan aims to build a sense of confidence, to build a sense of courage, to stimulate balance, and to stimulate basic motor. The game of castle has difficulty level Very Easy, Time Allocation 10 to 15 minutes, Number of Participants 6 to 15 students, and Tools None. How Bentengan game execution is Bentengan game played by two teams, each consisting of 4 (four) to 8 (eight). Each team chooses a place as a base, usually a pillar of stone or a pillar as a 'fortress'. (2) The game of cat and mouse has a purpose to build a sense of confidence, to build a sense of courage, to stimulate balance, and to stimulate basic motor. The difficulty level is very easy, the allocation of time for 6 to 15 minutes, the number of participants from 6 to 15 students, and the tool used does not exist. The game of rat cats is a locomotor game or game that causes the body to move. These games use a lot of running in the coaching game of cat mouse to increase the speed straight ahead and speed agility. (3) The green black game has a purpose to build a sense of confidence, to build a sense of courage, to stimulate balance, and to stimulate basic motor. Difficulty level in the game of green black is very easy, the allocation of time for 6 to 15 minutes, the number of participants 6 to 15 students, and the tool used does not exist. The green black game is a locomotor game or game that causes the body to move. These games use a lot of running in the black game green coaching to improve the speed of action and reaction *(Reaction Speed)*. Black and green games are the games that run the most runs. Green black game is very suitable as a learning medium athletics sprint. Games green black students were divided into two groups: the black team and the green team is lined up with the banjo and dealing with the opposing team. The named team (hiyam or green) as the game progresses is the team being chased. Missal when the referee shouts "hiiiiiiiiiiitam" then the black team that runs and the green team catch up to be caught and if the referee mentions "hiiiiiiiii green" then the green team that runs and the black team are chasing.

Closing stage used four forms of cooling motion, namely (1) Dynamic rotating movement of the hands is a nonlokomotor movement or movement that does not move. This movement is done alternately, if at the beginning to rotate to the front for 10 seconds then the next movement rotates backwards for 10 seconds. This movement has an implementation time amount of 20 seconds. (2) Dynamic movements rotate the waist is a nonlokomotor movement or movement that does not move. Based on psychology aims to improve students' self-confidence before swinging into both hands when athletic learning runs a short distance. Dynamic movement rotate the pelvis done with students standing position, then both hands placed on the hips and pelvis is rotated alternately from right to left for 10 seconds and instead of side to side for 10 seconds. This movement has an implementation time amount of 20 seconds. (3) Dynamic movements swing up and down legs are nonlokomotor movements or movements that do not move. Dynamic movement swings up and down legs is one form of warming movement that students can take turns for 10 seconds to swing the right leg and 10 seconds to swing the left leg with the amount of time the exercise for 20 seconds. (4) Dynamic movements of attraction and pull are nonlokomotor movements or movements that do not move. This movement aims to train the formation on the togok bar. Based on psychology aims to improve students' self-confidence before moving the body at the time of athletic learning to run a short distance. Dynamic movements pull each other and pull is one form of movement that can be done by students alternately for 10 to 20 seconds.

Data Results Trial Large Group

A large group trial aims to determine the effectiveness of the development of short-run athletic learning models based on games in primary schools. Changes that have been obtained from expert evaluation as well as large group trials whether the game-based learning model can be used in the actual environment can be seen in table 2.

Table 2. Data Trial Large Group

No	Aspect of Assessment	Percentage	Criterion (meaning)
1	Cognitive (1-10)	81%	Good
2	Psychomotor (11-20)	80%	Good
3	Affective ((21-30)	82%	Good
4	Motivation (31-40)	80%	Good
Average		**80.75%**	**Good**

The data obtained in a large group trial gained an average percentage of answer options according aspects assessed in the amount of **80.75%.** Based on the criteria which have been determined k then, Bentengan game model has met the criteria of **"Good".**

The short-run athletic learning model of game-based short run on large group trials has been tested for its validity, these results are demonstrated by the questionnaire validation along with the sheets evaluated by the skilled consultant and the learning expert. The results of the product draft assessment of the game-based learning model, large group trials of validator expert validation obtained an average percentage value of 86% and the results of validation from the expert learning obtained average percentage value of 86%. Validation results that have been assessed by expert of physical education and expert validators of learning hence, the product of athletic learning model of short distance run based on the game has entered in good category or valid.

CONCLUSION AND SUGGESTION

Results of research learning model athletics sprint the products with the learning model based athletics sprinting game based on testing small group and large group test. Based on the analysis h acyl study concluded that the results of expert validation physical education on draft products based learning games on the small group trial the average percentage of 84% and testing a large group average percentage of 86% while the results of the validation learning experts on draft products learning model based games on try small group didapatka n average percentage of 86%, and then test a large group obtained an average 86% of the results of validation that has been assessed by experts physical education and learning experts then, products based learning game had been categorized as **valid** and can be used in teaching physical education and health in primary school.

Results of data analysis obtained the small group trial with an average percentage 71.91% and the analysis results obtained testing large groups of 80.78%. Based on predetermined criteria, the product of game-based learning model has been categorized as good or practical to use. The practicality of the product of game-based learning model is seen from the use of simple and affordable means and infrastructure. M odel new learning to get the average value increased, reaching 71.09% athletics sprint-based games learning model are given to students is effective to make students actively engaged and learning models athletics sprinting based games can already be used in the learning process athletics run a short distance to the elementary school students.

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