

The Basic Learning Model of Traditional Motion Based Games for Early Childhood (5-6) Years

Nofi Marlina Siregar, Eka Fitri Novita Sari*, Marlinda Budiningsih, Zulham

Department of Physical Education, Universitas Negeri Jakarta, Jln Pemuda 10 Rawamangun Jakarta Timur, Indonesia

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Abstract This study aims to create a basic motion model of traditional games based on early childhood games (5-6) years. The aim of research is to create models and improve basic movements of early childhood education, especially those related to locomotor, non-locomotor and manipulative movements in early childhood (5-6) years. This research used a research and development (R&D) method which was carried out in DKI Jakarta with small experiment on 10 children and large experiment on 30 children by applying 20 basic movements based on traditional games. Based on the results of the effectiveness test on 30 research subjects, the initial test results of children's activities in motion were 12.8 and in the final test 20, there was an increase in children's activities in motion. The results of the initial test of children's activeness in non-motorized motion were 13.66 and in the final test 16.8 there was an increase in children's activeness in non-motorized movement. The initial test of children's activeness in manipulative movements was 19.7 and the final test 22, there was an increase in children's activeness in manipulative movements. Based on the results of the above research, basic motion models based on traditional games for early childhood (5-6) years old can be applied as well as effective basic motion models to increase activities, abilities and skills through movement, especially those related to basic locomotor motion techniques, non locomotor and manipulative.

Keywords Basic Movement, Early Childhood, Traditional Games

1. Introduction

Children are unique individuals. Many experts have observed that the abilities of infants and toddlers are extraordinary in various aspects of their development. From the point of view of language development, children are fast learners in absorbing vocabulary, grasping meaning and mastering language, even multiple languages at once. In the physical aspect, children experience rapid growth of functional abilities, from lying down, prone, crawling, sitting, standing, walking, walking and so on. From a social point of view, children are innocent imitators of the social behavior of those around them. From an emotional point of view, children are forming partnerships themselves through reflection from the environment, likewise from various other development angles.

A child experiences very rapid development in various aspects of his personality, both physically and mentally. Children have a lot of pleasure in receiving various stimuli that will affect their brain function. The development of children's cognition greatly determines the functioning of other aspects of development. The brain as the control center controls all functions and abilities in the activities of the body, both psychologically and physically.

Children get intelligence or knowledge from the environment by moving. Moving is the most dominant way to know the environment. For children at an early, playing is the main behavior and activity, while moving is one of the basic needs and basic means of expressing

themselves.

Movement development takes place from birth to elementary school age, where at an early age physical motor development is in its infancy. Along with that, the basic movements need to be considered by an educator at school so that they can grow optimally.

Actually, children do not need to be told or stimulated to move, because automatically the children will be happy to make movements. That's when we as educators pay attention to how basic locomotor, non-locomotor and manipulative movements develop optimally.

Games that require running and catching something (for example: catching a person or a ball) not only improve motor skills, reaction speed and defense ability, but can also improve children's basic movement skills.

The form of play should include all basic movements, such as: stepping, walking, jumping, crawling, climbing, rolling, pulling, swinging, throwing and catching. These movements can be developed from traditional games, where children can get to know the games from each region, so it is hoped that children can like and apply traditional games. Therefore, the above researchers have an interest in making a study on "Basic Motion Learning Model Based on Traditional Games for Early Childhood (5-6) years.

2. Material and Methods

This research and development uses quantitative and qualitative approaches and uses the Research & Development (R & D) development model from Borg and Gall¹ which consists of ten steps. The research begins by collecting data in the form of a needs analysis. Where the needs analysis will describe the needs of the research subject problem.

The Basic Learning Model of Traditional Motion Games for Early Childhood (5-6) Years is part of development research which aims to create a basic motion learning model based on traditional games in early childhood. Carried out in DKI Jakarta with as many as 10 children in the small trial and 30 children in the large trial by applying 20 basic movements based on traditional games, basic locomotor, non-locomotor and manipulative based motion test instruments traditional game.

Research and Information

Determination of potential problems in early childhood education, when researchers make initial observations in the field, during the observation, the researcher found various problems such as in providing learning that was not in accordance with the characteristics of the child, namely playing and moving. Was still adult, teacher-centered, so that in overcoming the above

problems, the researcher will create a physical activity model based on basic movement intelligence based on traditional games for early childhood (5-6) years, based on preliminary studies conducted by researchers in the field by conducting observation and interview techniques

Next, the researcher made a game design based on the indicators to be aimed at, namely the basic movements of the The researcher makes preparations for the subject and place of research, makes the media to be used, coordinates the subject and the place of research as well as the teachers and facilitators who will assist in carrying out the research..

Develop Preliminary Form of Product

Research can be started from potential problems as needed in the environment. The step is taken to find any information that is important for the product to be developed. This stage includes steps in the form of analysis, analysis and small-scale research to support the perfection of this initial stage. These steps are (1) needs analysis and literature study of research problems, (2) identification of literature studies, carried out to temporarily realize the product to be developed, and (3) small- scale research.

In this stage, the initial product is made in the form of a basic motion model based on traditional games for early childhood.

Preliminary Field Testing

This stage is to conduct field trials in the early stages using the subject to see the level of the product being made and to provide the model expert sheet with the models. Each expert is asked to assess the design of the model, so that further weaknesses and strengths can be found to analyze them. The researcher coordinates with the early childhood expert, Dr. lilis Suryani and early childhood physical activity expert, Eka Fitri Novitasari, M.Pd

Main Product Revision

The revision of the design at this stage was carried out based on input from the results of the experts; the results of the early stage field tests were made improvements to these models. Researchers made improvements according to the results during the initial trials and input from experts.

Main Field Testing

At this stage, the main field trial stage is carried out with two stages of small product trials and large product trials.

This test can compare effectiveness and efficiency.

Operational Product Revision

This stage is the stage of revising operational products based on input from expert suggestions as well as the results of the main field tests.

¹ Borg W. R., & Gall M. D, Educational Research: An Introduction. Fourth Edition (New York: Longman, 1983), h.775

Operational field Testing

In this operational field trial stage, data collected through interviews and observations.

Final Product Revision

Make revisions to the final product based on suggestions from experts and based on previous field

trials.

Dissemination and Implementation

Implementing and disseminating products through international seminars. Cooperate with publishers for product and commercial socialization and monitor distribution control.

Table 1. Basic motion (locomotor)

No	Ability	Score		
		Poor (1)	Average (2)	Good (3)
1	Walk forward in a straight line.	The child can move forward in a straight line as far as 3-4 m without a straight view, swinging the legs and arms out of sync.	Children can walk forward in a straight line as far as 3-4 m with a straight gaze, swing legs and arms are not in sync or gaze is not straight, swing legs and arms in harmony.	The child can walk forward in a straight line as far as 3-4 m with a straight gaze, swinging the legs and arms in sync.
2	Walk on the footbridge.	The child cannot walk with a balanced body position and may fall.	Children can walk with an unbalanced body position and do not fall.	Children can walk with a balanced body position and do not fall.
3	Walk on tiptoe in a straight line.	Children cannot walk on tiptoe in a straight line.	Children can walk on tiptoe in a straight line with an unbalanced body position.	Children can walk on tiptoe in a straight line with a balanced body position.
4	Walk backwards in a straight line.	The child cannot walk backwards in a straight line 2 meters away by making one or more glances.	The child can walk backwards in a straight line for 2 meters by making one or more glances.	The child can walk backwards in a straight line up to 2 meters with a forward gaze.
5	Step to the right side in a straight line.	The child cannot step to the right side in a straight line 2-3 meters away.	The child can step to the right side in a straight line 2-3 meters away with one or more loss of direction.	The child can step to the right side in a straight line for 2-3 meters without losing direction.
6	Step left in a straight line.	The child cannot step to the left side in a straight line 2-3 meters away.	The child may step to the left side in a straight line 2-3 meters away with one or more loss of direction.	The child can step to the left in a straight line for 2-3 meters without losing direction.
7	Run straight ahead.	The child cannot run straight ahead with irregular swinging of his legs and arms, not looking forward.	The child can run straight ahead with swinging legs and arms out of tune, looking forward.	The child can run straight ahead with swinging legs and arms in sync, looking forward.

Table 2. Basic motion (non-locomotor)

No	Ability	Score		
		Poor (1)	Average (2)	Good (3)
1	Sitting position with straight legs, hands touching toes.	The child cannot touch the toes with the hands.	The child can touch the toes with both hands, knees bent.	The child can touch the toes with both hands, knees straight.
2	Lean to the right side.	The child can lean to the right, right hand on the leg, fingertips touching up above the knee.	The child can lean to the right, right hand on the leg, fingertips touching up to the knee.	The child can lean over to the right, right hand on the leg, fingertip touching below the knee.
3	Learn to the left side.	The child can lean to the right, left hand on the leg, fingertips touching up above the knee.	The child can lean to the left, right hand on the leg, fingertip touching up to the knee.	The child can lean to the left hand, the left hand resting on the leg, the fingertip touching below the knee.
4	Turn the body to the right.	The child can rotate the body to the right side with both hands holding less than 45 degrees.	The child can turn to the right side with both hands holding from 45 s.d. 90 degrees.	The child can turn to the right side with both hands holding more than 90 degrees.
5	Turn the body to the left.	The child can rotate the body to the left side with both hands holding less than 45 degrees.	The child can turn to the left side with both hands holding from 45 s.d. 90 degrees	The child can rotate the body to the left side with both hands holding more than 90 degrees.

Table 3. Basic motion (manipulative)

No	Ability	Score		
		Poor (1)	Average (2)	Good (3)
1	Throwing the big ball with both hands up.	The child can throw the big ball, the position of one foot is in front, the view is forward, the body is not bouncy, the ball is released above the head without further hand movements.	Children can throw a big ball, position one foot in front, look forward, body bouncy, the ball is released above the head without further hand movements.	Children can throw a big ball, position one foot in front, look forward, body bouncy, the ball is released in front of the face with continued movements of the hands to the front of the chest.
2	Throwing the big ball with both hands down.	The child can throw the big ball with feet shoulder width apart, look forward, hands bent forward throwing the ball, not followed by body movements.	The child can throw a big ball with feet shoulder width apart, looking forward, straight hands swinging forward throwing the ball, not followed by body movements.	The child can throw the big ball with feet shoulder width apart, looking forward, straight hands swinging the ball forward, followed by body movements.
3	Toss the small ball with one hand up.	The child can throw a small ball, the position of one foot is in front, the view is forward, the body is not bouncy, the ball is released above the head without further hand movements.	Children can throw a small ball, position one foot in front, look forward, body bouncy, the ball is released above the head without further hand movements.	Children can throw a small ball, position one foot in front, look forward, body bouncy, the ball is released in front of the face with continued movements of the hands to the front of the chest.
4	Throwing a small ball with one hand from below.	The child can throw a small ball, looking straight, one leg in front of it is opposite the hand that throws the ball from below which is bent and not followed by body movements.	The child can throw a small ball, looking straight, one foot in front of it against the hand that throws the ball from below, not followed by body movements.	The child can throw a small ball, looking straight, one foot in front of it against the hand that throws the ball from below followed by body movements.
5	Catch the big ball with both hands.	The child cannot catch the big ball properly.	The child can catch the big ball in the hug position.	The child can catch the big ball with their hands in front of their chest.
6	Catch the small ball with both hands.	The child cannot catch the small ball properly.	The child can catch a small ball in a hug position.	Children can catch a small ball with their hands in front of the chest.
7	Kick the big ball forward.	Children can kick the ball using the inner leg, in a way that is not swung, with an upright body position.	The child can kick the ball using the inner foot, by swinging the leg from back to front, with an upright body position.	Children can kick the ball using the inner foot, by swinging the leg from back to front, body position following the leg movements.
8	Hit the balloon hanging.	The child hits the balloon but doesn't hit the target.	The child can hit the balloon with one hand opposite the foot in front, looking forward, body bouncy, without further movement.	The child can hit the balloon with one hand opposite the leg in front, gaze forward, body bouncy, with continued movements.

3. Results and Discussion

Test results data in the study are presented in three parts, the average score on each item of locomotor, non-locomotor and manipulative basic motion. The result data presented with the aim of seeing the child's improvement in each test item and also the overall variable of movement in the child.

The following shows the data on the results of basic motion tests on 30 children in the DKI Jakarta area that are reached in the study sample. For data on each basic motion item, following are the data obtained.

Based on the information in the table 4, there is a difference between the Pre-test and Post-test results obtained that have previously been carried out in DKI Jakarta, before the application of the basic motion model

based on traditional games for early childhood (5-6) years old did a pre-test or test Initially using the existing locomotor observation sheet, the pre-test results obtained the number of results for the basic locomotor motion of children obtained by 386 with an average of 12.8. After that the basic motion model based on traditional games for early childhood (5-6) years using the basic motion model based on traditional games that have been developed. After the treatment is given, the subject is tested again with the same locomotor basic motion observation sheet, and this is called the post-test which is used to determine whether there is an increase in basic locomotor motion based on traditional children's games. Based on the results of the post-test, the results were 621 with an average of 20.7.

Table 4. Results of locomotor pre-test and post-test data

Subject	Pre-Test	Post-Test	Information
1	12	21	Increase
2	13	21	Increase
3	11	21	Increase
4	13	20	Increase
5	12	21	Increase
6	12	19	Increase
7	12	21	Increase
8	12	20	Increase
9	13	21	Increase
10	14	21	Increase
11	12	21	Increase
12	14	21	Increase
13	15	21	Increase
14	13	21	Increase
15	11	19	Increase
16	12	21	Increase
17	14	21	Increase
18	13	21	Increase
19	14	21	Increase
20	12	20	Increase
21	14	21	Increase
22	12	20	Increase
23	13	21	Increase
24	12	20	Increase
25	14	21	Increase
26	15	21	Increase
27	14	21	Increase
28	12	21	Increase
29	12	21	Increase
30	14	21	Increase
Total	386	621	Increase
Average Value	12.8	20.7	Increase

The final result of the basic motion model product based on traditional games for early childhood (5-6) years after the research was carried out. It can be concluded that the basic motion model based on traditional games that is applied is feasible and suitable for use for early childhood (5-6) years and is effective for early childhood (5-6) years.

Based on the information in the table 5, there is a difference between the Pre-test and Post- test results obtained which have previously been carried out in DKI Jakarta, before the application of the basic motion model based on traditional games for early childhood (5-6) years old did a pre-test or test Initially using the existing non-locomotor observation sheet, the pre-test results showed that the number of results for children's non-locomotor basic motion was 410 with an average of 13.66. After that the basic motion model based on

traditional games for early childhood (5-6) years using the basic motion model based on traditional games that have been developed. After the treatment is given, the subject is tested again with the same non-locomotor basic motion observation sheet, and this is called the post-test which is used to determine whether there is an increase in non-locomotor basic motion based on traditional children's games. Based on the results of the post-test, the results obtained were 505 with an average of 16.83.

The final result of the basic motion model product based on traditional games for early childhood (5-6) years after the research was carried out. It can be concluded that the basic motion model based on traditional games that is applied is feasible and suitable for use for early childhood (5-6) years and is effective for early childhood (5-6) years.

Table 5. Results of nonlocomotor pre-test and post-test data

Subject	Pre-Test	Post-Test	Information
1	15	17	Increase
2	13	17	Increase
3	11	16	Increase
4	15	16	Increase
5	14	16	Increase
6	14	15	Increase
7	12	16	Increase
8	12	17	Increase
9	14	16	Increase
10	14	17	Increase
11	13	17	Increase
12	17	18	Increase
13	15	17	Increase
14	13	18	Increase
15	11	15	Increase
16	12	18	Increase
17	14	16	Increase
18	14	17	Increase
19	14	18	Increase
20	12	17	Increase
21	15	16	Increase
22	13	17	Increase
23	13	16	Increase
24	16	18	Increase
25	15	17	Increase
26	16	18	Increase
27	14	17	Increase
28	12	17	Increase
29	15	18	Increase
30	12	17	Increase
Total	410	505	Increase
Average Value	13.66	16.83	Increase

Table 6. Results of manipulative pre- test and post-test data

Subject	Pre-Test	Post-Test	Information
1	20	24	Increase
2	21	24	Increase
3	20	23	Increase
4	16	20	Increase
5	17	22	Increase
6	16	19	Increase
7	19	22	Increase
8	19	23	Increase
9	23	24	Increase
10	22	23	Increase
11	22	23	Increase
12	19	22	Increase
13	20	23	Increase
14	19	22	Increase
15	20	23	Increase
16	20	23	Increase
17	18	20	Increase
18	19	23	Increase
19	21	22	Increase
20	18	20	Increase
21	17	23	Increase
22	18	23	Increase
23	19	22	Increase
24	23	24	Increase
25	22	23	Increase
26	19	22	Increase
27	22	23	Increase
28	21	22	Increase
29	21	23	Increase
30	20	22	Increase
Total	591	672	Increase
Average Value	19.7	22.4	Increase

Based on the information in the table 6, there is a difference between the Pre-test and Post- test results obtained that have previously been carried out in DKI Jakarta, before the application of the basic motion model based on traditional games for early childhood (5-6) years old did a pre-test or test Initially using the existing manipulative observation sheet, the pre-test results obtained the number of results for the basic manipulative movements of children obtained by 591 with an average of 19.7. After that the basic motion model based on traditional games for early childhood (5-6) years using the basic motion model based on traditional games that have been developed. After the treatment is given, the subject is tested again with the same manipulative basic motion observation sheet, and this is called the post-test which is used to find out whether there is an increase in manipulative basic motion based on traditional children's

games. Based on the results of the post- test, the results were 672 with an average of 22.4.

The final result of the basic motion model product based on traditional games for early childhood (5-6) years after the research was carried out. It can be concluded that the basic motion model based on traditional games that is applied is feasible and suitable for use for early childhood (5-6) years and is effective for early childhood (5-6) years.

John N. Drowtzky (1975)² states as follows: "Learning movement is learning that is realized through muscular responses that are expressed in body movements or body parts." The main purpose of moving is to improve movement skills. Understanding movements is only a goal that must be followed in order to master skill movements,

² Drowatzky, John, N. (1975). Motor Learning Principles And Practice. Minneapolis: Burger Publishing Company.

both imitating and self- created.

The results of research by experts show that an early age is a period that is truly very valuable for children, and is right to instill a personality foundation, therefore early childhood is called the golden age, which is a very decisive period for the success of educators at school age, adolescence, adulthood and so on.

In connection with basic movements based on traditional games from 30 DKI Jakarta children, it describes how to improve basic locomotor, non-locomotor and manipulative movement skills. Children who are actively moving with good basic movement results give a temporary picture that they are healthy because they are able to move actively by displaying their abilities through traditional games. To measure more deeply the level of basic movement whether it is proven that it shows good results, it is also necessary to do more in-depth study and collaborate with researchers who have the capacity to be able to diagnose and measure their health level in depth.

4. Conclusions

Based on the research results obtained 20 basic motion models based on traditional early childhood games (5-6) years which in the small trial involved 10 research subjects and in the large trial 30 research subjects. Based on the results of the effectiveness test on 30 research subjects, the initial test results of the basic locomotor motion of the children obtained an average of 12.85 and the final test obtained 20.71, there was an increase in locomotor. The results of the non- locomotor preliminary test for children obtained an average of 13.66 and the final test obtained 16.83, then there was an increase in non-locomotor. The results of the initial manipulative test of children obtained an average of 19.71 and the final test obtained 22.42, so there was an increase in manipulatives. Based on the results of the research above, the researcher can draw the conclusion that the basic motion model based on traditional games can be applied and can

increase the activity of basic movements for early childhood (5-6) years.

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