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Improving Fundamental Locomotor Skills of Elementary School Students in Padang City Through the Kids Athletics Model

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ABSTRACT

The problem in this study is the low level of basic movement of students, especially in basic locomotor movements. The purpose of this research is to improve the basic movement of elementary school students through the kid's athletics model. This research is development research with a model design adapted to the ADDIE development model. The steps taken are analysis, design, development, implementation and evaluation. Elementary school students in the city of Padang who are 9-10 years old, as well as the validators are four experts, namely two experts on evaluation and sports measurement tests, two experts on curriculum and materials. The results of the development of this kid's athletics model, obtained a validation value according to experts an average of 95.9% so that the learning model can be said to be feasible. Then the reliability level was up to 0.989 in the small group trial and 0.996 in the large group trial, so that the learning model was said to be reliable for improving the basic movements of the kid's athletics model. From the results of validation by experts, the practicality value obtained was a percentage of 96.7%. Then the value of its effectiveness, then obtained a percentage of 92.9%. Thus, it can be concluded that the kids' athletics learning model is well used as a learning model to improve basic movements, especially basic locomotor movements for elementary school students.

Keywords: Fundamental locomotor skills, athletics model, elementary school

INTRODUCTION

The basic movement patterns developed in early childhood become the basis for certain movement patterns and participation in physical activity [1]. Normally developing children usually acquire the same skills at the same age during childhood. Motor skills during childhood are very important for children's growth because they are related to cognitive growth and learning [2]. Basic movement skills are best at an early age [3], [4], because a child's body is more flexible than an adult's, it is easier for children to participate in activities that help them develop basic movement skills. This is influenced by several factors such as providing stimulation, location, economy, learning style, constraints of parents who provide opportunities for children to explore their skills [5], [6] To help develop children's motor skills, there are problems in children who do not get stimulation from the teacher.

Children aged <10 years are still classified as having low locomotor mastery [7] 6-13% of elementary school age children have poor motor skills [8] children with good motor skills are seen when children carry out the instructions given and get more stimulus good [9]

It is important for young people to develop a physically active lifestyle, basic movement skills are needed [10], [11]. Kid's athletics is a type of competition-based physical activity specifically designed for children

[12]. By improving basic movement skills, children's athletics prepares children to compete in entertaining games [13], [14]. Athletics is a track or field sport that predominantly uses large muscles such as throwing, running and jumping [15], this must be shared with children so that there are no delays in implementing locomotor motion and object control [16]–[20]

The goal to be achieved through this research is to obtain a new knowledge of the kids athletics model to improve the basic movements of children aged 9-10 years in the city of Padang. The results of this study can provide an overview of how kids athletics can improve the motor development of early childhood. We predict that children with higher motor levels will exhibit superior athleticism than children with lower levels.

MATERIALS & METHODS

This study uses a qualitative approach and model development methods (Research and Development). Research and Development (R&D) is a research method used to research so as to produce new products and then test the effectiveness and practicality of the product [21], the sample used is children aged 9-10 years in the city of Padang. By doing kids athletics that highlight children's self-expression through imitation kids athletics without tools, with tools, and can train gross motor skills, or large muscles to do locomotor movements. The kids athletic model for children aged 9-10 years uses the ADDIE development which has five analysis phases. design, development, implementation and evaluation.

STATISTICAL ANALYSIS

The data analysis used in this development research used quantitative and qualitative techniques in the form of percentage descriptive analysis.

RESULT

A. ADDIE Design Models

1. Analysis

In this stage, analysis was found, namely knowing the low basic movement of students so that the teacher needed to increase the basic movement of students with the right learning model, such as students who were less enthusiastic about participating in learning, the difficulty for students to understand basic movement material, and so on.

2. Desigen

Making race numbers in the kids athletic model learning to improve basic motion. The race numbers are sprint, kanga's escape, frog jump, turbo throwing and formula one. This kids athletics model will be used as a guide in improving the basic movements of students which will be measured through run, gallop, hop, long jump, jump, slide.

3. Development

The kids athletics model was first consulted with the supervisor and a revision process took place until the initial development product or draft 1 was finally produced. It was then validated by 3 evaluation and measurement experts, 3 curriculum and material experts. After that, revisions were carried out again until a development product was obtained in the form of draft 2 which was ready for trial (implementation).

4. Implementation

The product trial will be carried out through the product trial stage with the method (Test and Retest) which will be carried out at SD Angkasa 1 Padang City, with a sample of 20 students. This procedure includes planning, implementation, observation and analysis. This stage is a process used by researchers to obtain data from field testing results on basic movements consisting of run, gallop, hop, long jump, jump, slide. Learners through learning model kids athletics

5. Evaluation

At this stage the researcher gave the kids athletics model plus other forms of games that increased students'

enthusiasm in learning the kids athletics model

B. Test Phase Of Validity, Reliability, Practicality, Effectiveness

Table. 1 Eligibility Level from Expert

No	Expert	Percentage	Eligibility level
1	Exercise measurement evaluation and test	95,2%	Very Good/Decent
2		96,0%	Very Good/Decent
3	Curriculum Expert	96,7%	Very Good/Decent
4		95,6%	Very Good/Decent
		95,9%	

Table 2. Small Group Reliability Correlation Coefficient Category

N	Correlation coefficient	Reliability
33	0.989	Very strong

Table 3. Large Group Reliability Correlation Coefficient Category

N	Correlation coefficient	Reliability
50	0.996	Very strong

Table 4. Practical Percentage of Expert Ratings

No	Expert	*F*	N	Percentage	Eligibility level
1	Exercise measurement evaluation and test	29	30	96,7%	Very Good/Decent
2		29	30	96,7%	Very Good/Decent
3	Curriculum Expert	29	30	96,7%	Very Good/Decent
4		29	30	96,7%	Very Good/Decent
				96,7%	

From the results of the validation by the three experts, if the average value of practicality is obtained, a percentage of 96.7% is obtained and it can be concluded that the learning model resulting from the development of the kids' athletics model to improve basic movements has a level of practice of "Very Good/Decent".

Table 5. Effective Percentage of Expert Ratings

No	Expert	*F*	N	Presentase	Eligibility level
1	Exercise measurement evaluation and test	56	60	93,3%	Good/Decent
2		57	60	95,0%	Good/Decent
3	Curriculum Expert	28	30	93,3%	Very Good/Decent
4		27	30	90,0%	Very Good/Decent
				92,9%	

From the results of the validation by the three experts, if the average value of effectiveness is obtained, a percentage of 92.9% is obtained and it can be concluded that the learning model resulting from the development of the kids' athletics model to improve basic movements has "Good/Decent" Effectiveness.

DISCUSSION

Along with the use of substantially modified equipment, athletic learning also includes activities that naturally interest students. This game is also played competitively to encourage children to take sports seriously[22]. Students will generally choose to play games over other sports, which will enable them to reach their full potential and absorb and best express subject matter when they learn physical education through play. Teachers can use this kids athletics game model to educate students about basic locomotor movements such as running, jumping, and throwing [23]. In addition, this game model can increase students' knowledge, literacy, and understanding of sports [24]. This design is recommended for elementary school aged children, whether used for outdoor activities, indoor activities, or both.

Athletic material has been introduced starting from elementary school which affects basic movement skills such as locomotor, non-locomotor and manipulative needed in the growth and development of children[14], children's basic movement

skills are building blocks in children's physical activity[6],[25], in general, basic movements do not develop naturally and need to be directed in a guided manner, rather the child's movements are successful in sports and physical activity, because childhood is minimal in the development of basic movements [26]

There is also research on athletic kids that discusses the fitness of elementary school children, saying that with the athletic model children's physical fitness increases[24], and increasing the concept of elementary school children through the kids athletic model[27], in previous studies also conveyed long jump skills with style squatting can be increased through the application of athletic kids [22].

In accordance with the objectives of this study, it appears that children who have low basic locomotor movements can be improved through the athletic kids learning model, and this athletic kids model can be applied indoors, outdoors or both can be used, therefore the authors said that this is suitable to be applied in physical education learning for elementary school children.

CONCLUSION

From the research that has been done, it can be said that the Kids Athletics model can improve basic movements in children aged 9-10 years in the city of Padang. The learning model named "Model Kids Athletics Basic Locomotor Movement" is used as a learning model to improve the basic movements which consist of 4 race numbers namely sprint and hurdles (kanga's escape), frog jump, turbo throwing and formula 1.

Declaration by Authors

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Conflict of Interest: The researcher officially certifies that there are no conflicts of interest with any parties with respect to this study.

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