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Children's locomotor learning model 4-6 years

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Abstract
The purpose of this learning model research is to produce a good locomotor basic motion learning model without any obstacles that can the development of children about the development and application of the basic locomotor motion learning model for street, run, and jump in children aged 4- 6 years and know the effectiveness and efficiency of the model made. The instruments used in this research development are questionnaires and basic locomotor motion tests instruments for road, run and jump used to collect data. The stages in this study are the stage of need analysis, expert evaluation, limited trials and main trials. The effectiveness test of the model using the initial test was obtained the locomotor basic ability level was 50.5%, then after the test was given the treatment was obtained at 69.20%. Then the locomotor motion learning model for road, run, and jump was very effectively used in early childhood. Based on the results of the development, it can be concluded that with the locomotor motion learning model students can learn effectively and efficiently.

Keywords: learning, locomotor, physical activity, motion children, borg and call

Introduction: Preliminary

Child development is a period in which to lay the first foundation to be able to improve physical, motor, cognitive, language and religious values. Gross motor is a process that can have skills as well as movements carried out by children. *The development of gross motor skills is an important element in developing the locomotor skill level according to the chronological age of the children* (Borhannudin and Jacklyn, 2016) [3]. Motor development in early childhood really requires many frequencies and opportunities for fundamental physical development such as the locomotor domain which includes walking, jumping. the point is learning motion is very important for children with the aim of being able to prepare children to be skilled and also children can move their bodies that is very important that continuing education for a process of growth and development in children (Desmita, 2015) [3]. Physical development for children who develops a movement skill that starts with a three-year-old child up to a child who can walk well.

Magil said that " *Motor skill Is a skill that a person performs in an environment in which ported surfaces, objects, and / or other people are in motion while the person performs the skill"* (Richard, 2015) [8]. Li sa (2017) explains "*skill is the one which in the primary is determinant of the success in quality of the movement".* Thereby can explain the development of motion rough merupakn a process for the child can learn to be skilled to move the limbs of his physically explore the environment to gain an appreciation and awareness of the body interacts with the environment *"* (Nuridin, 2016) [6].

The mastery of skills by these children must be needed if there is a development of high-level skills that is more optimal will occur to children who do not master these basic skills so that children are less able and often less willing to survive with the movements they make. The level of basic movement skills has a direct impact on individual motor development and plays an important role in the physical, cognitive and social development of early childhood (Hary & Firdiansyah, 2020) [4]. Basic motion is a basis for learning and developing various technical skills in sports and physical activity for life so that if the basic competence of children is not developed they fail to use a variety of sports and play skills in their childhood and adolescence (Stanojevic, 2018) [9]. This initial experience allows individuals to develop great motor movements, and from this basis future motor skills are met and applied to participation in physical activity (Yudha, 2015) [14]. Motion or *movement* is an activity that must be based on the process of motor movement. This process may involve a system in motion that has been coordinated (nerve, muscle, brain,) then the mental processes complex known as well as the process of copyrighted motion. At k Capacity of the hi's motion that the base starts to children since being womb until birth (Woue, 2015) [13].

In locomotor motion skills, Locomotor is a fundamental aspect of learning to move effectively and efficiently in one's environment, in emptying the body's projections to external space by changing its location relative to a fixed point from one surface. Activities such as walking, running, jumping, jumping, gliding, and jumping around are considered fundamental locomotor movements (Desmita, 2015) [3].

Movement to move various directions that me doing Gerakini just do not know the age, but if the movement to run less attention when I was younger feared surely there will be her who said to abnormalities in the process of learning (Richard, 2015) [8]. *This walking paradigm appears to be promoting in the development of an intervention program for children with DS to improve their motor adaptability* (Woue, 2015) [13].

Children are one of the more vulnerable groups in society. Therefore, we must pay special attention to their development. Childhood is a very sensitive period and is generally characterized by various dynamic changes in physiological and psychological development, as well as the formation of healthy or unhealthy behaviors (Nuridin, 2016) [6]. Very easy to mere ka

can change the direction of his run, at the age of 5 years are generally child can run fast with his ability.

Jump is a movement to menggangkat body from point one to another of her that very much too high that menginakan square off air run that fast too slow with bert umpuh on foot one and will land using the leg the other using a balance that is very good (Poerwanto & Firdiansyah, 2019) [4]. Jumping is one of the motor movements of children who must continue to get attention to continue to be improved in accordance with programs that are carried out regularly (Stanojevic, 2018) [9]. So one might conclude that the jump is to perform a repulsion by using foot one can with two legs and also to train the jump can be done repeatedly because it can improve the process of leap that is getting nice and kind.

The main skill in motor development is motion. If the motor skills is the basic motion lakomotor can be done in good will by itself be mempe rbaiki development of the child in the activity of the child more. In the P aud curriculum there is a material on the motion which must be mastered by the child, planting on the right basic motion for early childhood institutions. Motion late locomotor is a standard of competence which has been assigned to aspects of the process of motor development has been taught in early childhood.

A model of learning is str a Tegi can be used teachers in improving the level of learning of children, patterns of thinking critically, achievement should also skill social (Lisa, 2017). This learning model aims to help students find meaning in the social world and solve dilemmas with the help of groups. With explanations and descriptions of the author will be un researching and making a model of Learning Locomotor Children Aged 4-6 years early childhood.

Method

The study was conducted using a model development method known as *Research and development.* research is used to design new products and procedures, which are then systematically tested in the field, evaluated, and fermented until they meet the criteria determined by the effectiveness, quality, or similar standards (Walter, 2015) [1]. Tangkudung (2015) [11] describes penelitian devlopment is research that is used in order to create a new product also can develop a product that already exist that are based on the analysis of needs encountered in the field.

Sugiyono (2016) [10] also said that development research is a research method used to produce certain products and test the effectiveness of these products ", to be able to produce certain products used research that is needs analysis and also to test the effectiveness of the product so that it can function for the wider community (Borg & Joyce, 2011) [1].

Research and development is research that has been focused on product development in education in the school environment. The products will be developed in the research which is a product of the learning model motion locomotor road, run, and also jump that can improve the ability to move an base for 4-6 year olds. The model is to use a tool that is also simple to media pembel distance, to be sure the equipment is using a material that is easy to come by, such as, paper, tires, cardboard, rope, rubber, board former and duct tape, which is to be adjusted on the characteristics of early childhood.

Results and Discussion

Result

On the model of the locomotor learning for early childhood age 4-6 years was carried out with a game that is written in the form of such a script that has Preparing what model form pemb disable in locomotor in the process of learning that can be given in a game on early childhood.

Evaluation on the initial product has been conducted in order to evaluate the initial product, which already provides a variety of inputs in order to perform repair by using means Analisia concept and the next will be a revision. *expert judgment* should dilakuakn order to get a feedback on the draft on the model pembel distance ber road, air run, also melom fat.

At this approach would be in testing small for the students, who will diliahat severe expert, expert motion, a physical education and skilled early childhood, in order to obtain advice and input to the design on the model pemb disable in locomotor is then developed, but were given a questionnaire in order to get the results and will be in use as a foundation to improve the initial product of this.

After that ev aluasi can be done using the method that shows the product that is the beginning of the learning model motion locomotor for early childhood children, who accompanied premises sheets of an expert. Sheets late in the form of a questionnaire that advice and comments to the learning model locomotor that will be developed. For the improvement of this product, it is carried out by experts who get enough constructive suggestions for the improvement of this product.

Table 1: Average value of walking-Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair1	Pretest	43.25	40	5.49475	.86880
	Posttest	74.25	40	4.31901	.68290

Table 2: Average Value of Running-Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair1	Pretest	50.12	40	4.455	.704
	Posttest	75.25	40	3.914	.618

Table 3: Average Value of Jumpping-Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair1	Pretest	48.50	40	4.830	.763
	Posttest	77.37	40	4.234	.669

The groups that small on the learning model of the locomotor movement for children 4-6 years of early childhood and then proceed to the stage following the test group were great. Prove efe ktivitas on product models pemb disable in locomotor children 4-6 years by using the different test average. The *output is* using SPSS there is value average of the results of the movement of the road before it was 43.25 and then finish given treatment is 74.25.

The result of the running motion before is 50.12 after giving the model is 75.25 while the pumping motion is 48.50 after the model is 77.37 so it can be summarized as the average run, nets, and also jumping increases.

Table 4: Significant Difference in Walking

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1 Pretest - Postest	-3.100	5.453	.862	-32.744	-29.255	-35.950	39	.000

Table 5: Significant Difference in Running Motion

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1 Pretest - Postest	-2.512	5.125	.810	-26.764	-23.485	-31.006	39	.000

Table 6: Significant Difference in Jumpping Motion

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1 pretest - postest	-2.887	4.158	.657	-30.204	-27.545	-43.917	39	.000

In the process of testing significantly on the path difference using SPSS 16 then proceeds t = 35 950 mean = -3100 df = 39 and p-value of 0.00 < 0.05 then surely there is a difference is very significant, in the process of significant test test differences running motion using SPSS 16 then t = 31.006, mean = 2.512 df = 39, and also p-value = 0.00 < 0.05 then there is a significant difference, whereas in a significant test the difference using SPSS 16 then the t-count = - 43.545, mean = 2.887 df = 39, p-value = 0.00 < 0.05 then surely there is a significant difference for hiking, running, and jumping before being given the model later after being given the model. Below is a comparison of the level of results of locomotor walking, running and jumping tests which give this model after giving the model.

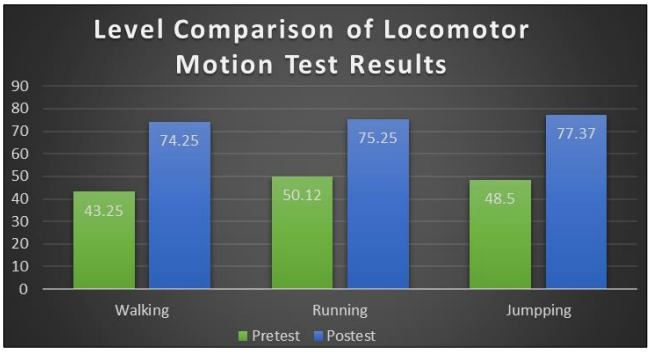

Fig 1: Bar chart-Level Comparison of Locomotor

Discussion

Locomotor learning model street, run and jump in children 4-6 years of early childhood education that is based on the results of that analysis needs to show that gross motor learning has been carried out in early childhood. Learning hatched taught, the motion of the locomotor, non locomotor. The learning gross motor skills that are taught also the motion of the locomotor for children. The pattern of movement taught to children, other ways are walking, running, throwing, also jumping. The means are available, but there are still uneven floors and also not so extensive.

To address the results of the analysis of requirements, will be required a learning model that is highly efficient and is also effective that could attract the attention of children let the children feel happy to do so in the learning locomotor air- road, air run too me jump. Therefore, based on the analysis that is required on learning models ranging from movement the simple to the complex to be active children and also make a child happy to follow the learning process.

Learning on the motion of the locomotor have been developed by researchers who have advantages such as this model, locomotor learning is arranged using the simplest to most complex motion designs in accordance with the process of growth and development for children. Explanation of movement on learning model is adjusted in characteristics children. Model learning that learning to sing motion are air road, air run, also me jump that is efficient and effective, and very pleasant to be able to do all children. There are weaknesses of a learning model for motion walking, running and jumping can require time that can prepare on a learning medium before learning takes place. As for students it is rarely to do motor skills it seems very difficult to be able to do a good movement.

Conclusion

Based on the data it has been concluded that (1) locomotor motion learning models for walking, running, and jumping early childhood children aged 4-6 years can be developed and also applied in locomotor motion learning material to be able to improve locomotor basic motion skills.

(2) The locomotor learning model for street, run, and jump early childhood children aged 4-6 years that have been developed can be obtained data on the effectiveness of locomotor motion learning outcomes in early childhood children.

References

1. Borg R Walter, P Joyce GDM. Educational Research and introduction (Eight). New York: Logman, 2015.
2. Borhannudin Abdullah, Jacklyn Son Joseph, MBMS Differences in locomotor gross motor development level among grade 1 ballet dancers, students with and without co-curricula. Journal of Physical Education and Sport. 2016; 16(1):77-86.
3. Desmita. Developmental Psychology. Bandung: PT Remaja Rodaskarya, 2015.
4. Hary V, Firdiansyah B. Training Model for Attacking in Football of 16 Years Old. JUARA: Jurnal Olahraga. 2020; 5(1):8-18.
5. Lisa K. Understanding Motor Skills in Children with Dyspraxia, ADHD, Autism, and Other Learning Disabilities. London: Jessica Kingsley, 2017
6. Nuridin PW. Development of Coarse Motor Learning Model for Kindergarten Students in Group A. Sports Journal. 2016; 4(6):88-99.
7. Poerwanto S, Firdiansyah B. Effectiveness of Game Model on Tsunami Disaster Anticipation in Two Provinces of Indonesia, Year 2019. Science of Tsunami Hazards, 2019, 38(4).
8. Richard AID, MA. Motor Learning And Control Concepts And Applications. New York: McGraw-Hill, 2015.
9. Stanojevic. Infulence of programmed exercise on the motor abilities of preschool children. International Journal of Cognitive Research in Science, Engineering and Education. 2018; 4(1):55-67.
10. Sugiyono. Quantitative, qualitative, and R&D research methods. Bandung: Alfabeta, 2016.
11. Tangkudung J. Types of Research Methodology Description and Examples. Jakarta: Media Lens in Indonesian Library, 2015.
12. Walter GDMBR. Educational research An Introduction. New York: Logman, 2015.
13. Woue J. Toyin Ajisafe, Huaqing Liang, Walking Dynamics in Preadolescents Weh and Down Down Syndrome. Journal of the American Physical Therapy Association. 2015; 9(5):87-98.
14. Yudha F. Fun Motor Learning Models In Early Childhood Education. International Education Conference Od. 2015; 5(2):56-67.