

The Influence of Play and Conventional Approaches on the Basic Movements of Children Aged 9-10 Years

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Abstract This research was conducted on the basis of the low level of basic movement skills of children aged 9-10 years. It is thought that many factors influence other game approaches, conventional and physical fitness. This research aims to determine the effect of play, conventional and physical fitness approaches on the basic movements of children aged 9-10 years. This type of research is a quasi-experiment with a sample size of 40 people divided into two groups using ordinally meat pairing, 20 experimental people and 20 control people. Basic movement skills are obtained with the TGMD-2 test which consists of locomotor movements and object control. Data were analyzed using the t-test technique. The results of research and data analysis show that children who use a play approach are better than conventional children, as seen from their basic movement skills and physical fitness, $\text{sig } 0.000 < 0.05$. Compared with the traditional playing method approach, basic movement abilities are compared with students who use the playing approach having higher basic movement abilities. So the play approach is suitable for children aged 9-10 years. Because there are differences in the basic movement skills of children who use play methods and conventional methods, teachers need to design learning models. We understand that teaching movement skills to children is the same as educating them to live an active lifestyle. Apart from that, providing children with an understanding of movement also helps

increase their self-confidence when interacting with the environment.

Keywords Basic Movement Skills, Playing, Conventional

1. Introduction

Developing children's basic movement skills is very important for their overall development which forms the basis for physical activity in children, adolescents and adults [1], [2]. Basic movement skills are very important, which are used in physical activities and almost all aspects of daily life [3], [4]. Acquiring basic movements is not only achieved through normal development and maturation, but basic movements involve physical movement, object control and stability physical [5]. A professional and effective teaching approach also makes it possible to influence children's basic movements [6], [7], thus producing a system of perception and action that develops dynamically.

Low basic movement proficiency can also contribute to a decrease in physical activity levels [8], however basic movement in children and adolescents is still in the low category throughout the world [9], reaching 6-13% of poor

basic movement coordination [10]. Only 34% of children showed object mastery skills [11].

Children's basic movement skills are partly developed at the age of 10 years [1], [12]. At this stage, children can be given a play activity approach and a conventional approach to solving the problems they face [13]. The conventional approach itself only focuses on teachers and emphasizes reading content without providing space for application during learning, in contrast to the play activity approach which makes children happy to move and explore [14].

Therefore, this research was conducted to look at children's basic movement skills by taking both a play approach and a conventional approach, which wants to convey which approach is better applied by educators for elementary school children's basic movements for 16 weeks and analyze the play activity approach better than conventional approaches.

2. Materials and Methods

2.1. Study Design

In this research, quasi-experimental research was used, 20 participants participated in the play approach and 20 children became the control group. The children sampled in this research were aged 9-10 years or in grade 3 of elementary school.

2.2. Steps to Conduct the Research

In this research, research preparations were carried out, such as determining the equipment used in the research, preparing the test format, carrying out the pre-test and determining groups using Ordinally Matching Pairing to determine the experimental and control groups, then carrying out the experiment and the final step was carrying out the post-test.

2.3. Research Instruments and Research Analysis

The TGMD-2 instrument (Test of Gross Motor Development -2nd) was used in studies on children's fundamental motions [15] Six locomotor skills (run, gallop, hoop, leap, horizontal jump, slide) and six object handling skills (striking a stationary ball, stationary dribble, catch, kick, overhead throw, underhead roll) were tested, with data from the group investigated analyzed using the quantitative T test to describe significant data [16].

2.4. Research Hypothesis

Researchers assume that there are differences in children's basic movement skills between those given play activity method treatment and the group of children given conventional method treatment.

3. Result

From the results of the research carried out, there is normal data with a significance value of >0.05 , so the data can be said to be normally distributed data. For more details, see Table 1. Meanwhile, for the Paired Samples Test, the sig (2-tailed) <0.05 means that the data obtained shows that there are differences and there is an influence of providing play activities on children's basic movement skills which can be seen in Table 2.

Findings from a study on fundamental motor skills in urban children aged 9 to 10 years who engage in locomotor activities and object control on basic motor abilities. There are striking differences between children who use the play activity approach and those who use the conventional approach, where these results support the hypothesis proposed by the researcher. When compared with the conventional group who carried out play activities to develop basic motor skills, a real improvement can be seen in Tables 3 and 4.

Table 1. Data normality test

	Children	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Children's Movement Skills	Pre-Test Experiment	0.084	20	0.200*	0.982	20	0.960
	Post-Test Experiment	0.124	20	0.200*	0.981	20	0.951
	Pre-Test Experiment	0.172	20	0.122	0.953	20	0.423
	Post-Test Experiment	0.131	20	0.200*	0.930	20	0.156

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Table 2. 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	Pre-test experiment- Post-test experiment	-7.950	1.504	0.336	-8.654	-7.246	-23.647	19	0.000
Pair 2	Pre-test experiment - Post-test experiment	-7.450	1.317	0.295	-8.066	-6.834	-25.300	19	0.000

Table 3. Pre-test and post-test basic movement competency with a play activity approach

No	Basic Movement Skills						Comparison	Percentage
	Pre-test			Post-test				
	Object Control	Locomotor	Total	Object Control	Locomotor	Total		
1	26	29	55	30	33	63	8	15%
2	24	33	57	29	35	64	7	12%
3	29	32	61	36	35	71	10	16%
4	28	31	59	32	36	68	9	15%
5	26	27	53	30	35	65	12	23%
6	32	29	61	34	36	70	9	15%
7	27	33	60	34	34	68	8	13%
8	29	31	60	32	36	68	8	13%
9	33	35	68	39	38	77	9	13%
10	28	28	56	34	30	64	8	14%
11	28	34	62	31	37	68	6	10%
12	23	29	52	27	32	59	7	13%
13	22	25	47	27	28	55	8	17%
14	27	29	56	29	32	61	5	9%
15	23	27	50	30	28	58	8	16%
16	20	26	46	24	30	54	8	17%
17	29	25	54	33	27	60	6	11%
18	23	28	51	26	32	58	7	14%
19	23	21	44	27	25	52	8	18%
20	30	24	54	33	29	62	8	15%
Amount	530	576	1106	617	648	1265	159	
Average	26,5	28,8	55,3	30,85	32,4	63,25	7,95	
The highest score	33	35	68	39	38	77	12	
Lowest Value	20	21	44	24	25	52	5	
Standard Deviation	3,47	3,62	5,99	3,69	3,70	6,32	1,50	
Variance	12,05	13,12	35,91	13,61	13,73	39,99	2,26	

Table 4. Pre-test and post-test basic movement competency with a conventional approach

No	Basic Movement Skills						Comparison	Percentage
	Pre-test			Post-test				
	Object Control	Locomotor	Total	Object Control	Locomotor	Total		
1	21	23	44	24	29	53	9	20%
2	30	23	53	34	28	62	9	17%
3	23	27	50	28	29	57	7	14%
4	30	24	54	32	29	61	7	13%
5	22	31	53	26	33	59	6	11%
6	26	27	53	29	32	61	8	15%
7	26	32	58	29	36	65	7	12%
8	27	28	55	32	31	63	8	15%
9	21	30	51	24	33	57	6	12%
10	28	25	53	31	28	59	6	11%
11	23	28	51	27	32	59	8	16%
12	25	28	53	28	32	60	7	13%
13	30	22	52	34	26	60	8	15%
14	25	31	56	29	36	65	9	16%
15	28	28	56	32	30	62	6	11%
16	23	27	50	27	30	57	7	14%
17	29	21	50	31	25	56	6	12%
18	29	32	61	35	37	72	11	18%
19	21	28	49	24	32	56	7	14%
20	24	29	53	27	33	60	7	13%
Amount	511	544	1055	583	621	1204	149	
Average	25,55	27,2	52,75	29,15	31,05	60,2	7,45	
The highest score	30	32	61	35	37	72	11	
Lowest Value	21	21	44	24	25	53	6	
Standard Deviation	3,20	3,29	3,58	3,39	3,20	4,12	1,32	
Variance	10,26	10,80	12,83	11,50	10,26	17,01	1,73	

4. Discussion

Based on findings that researchers obtained some time ago, children who were given a play approach were better at implementing basic movement skills compared to conventional approaches. Because playing is a stimulant for children's growth and development which has a positive impact [17]. Elementary school-age children are experiencing a phase of rapid growth and development, causing them to be quite active in their daily lives. Active children need sufficient direction to ensure their bodies function well [18]. The many basic movement skills that children develop are of course very beneficial for their future lives. For example, if children are used to climbing

or sprinting, they will prefer sports as adults. Children's basic movement abilities must continue to be trained and taught, accompanied by efficient learning strategies, so that they become mature [19]. Play techniques are one of the educational strategies that are suitable to be applied to elementary school students for children's growth and development [20]. One of the children's activities is playing. Activities for elementary school students that include playing are really fun. Children engage in a variety of movement experiences during play. Therefore, with playing activities, movement skills and several other crucial features will improve [21].

Children must participate in both scheduled and unstructured physical activities with the help of parents and

instructors so that their physical and motor development can develop as well as possible [3], [4]. Every aspect of a child's growth has the potential to improve their academic, social life, and overall well-being [22]. Basically, children's basic movement patterns can develop spontaneously, and with proper teaching, encouragement, and training, they can reach higher levels of proficiency. Children who are not able to follow instructions well will show delays in the development of motor competence [15], which affects a person's emotions and social interactions [23]. Children's mobility, social, cognitive and behavioral abilities, as well as their emotional and physical development, can all be improved through play [24], [25]. Playing is a material that develops and is rich in exploration space [22]. It creates fun, new knowledge, and changes in children's progress [26], thus playing activities and physical activity become very important for children's basic movements [27].

Several previous studies have discussed structured play and free play in children's physical activity [28], playtime activities participate in the development of long-term motor skills [29], and children's active play improves children's social development and basic motor skills [30]. With play-based learning, children can improve their physical (motor), mental and social abilities among their peers [31].

The play period is when kids are in elementary school. At this age, kids prefer to engage in all sorts of play-based activities. Running, throwing, and leaping are examples of simple movement models that mimic playing. Students' enthusiasm for being active should grow as a result of these activities. As a result, the future growth and development of children's physical and motor systems will greatly benefit from the function of the PJOK instructor. Research conducted some time ago showed that there were differences in basic movement skills based on the approach model applied to children aged 9-10 years. Showing that play activities are more effective than conventional approaches, play activities can stimulate the growth and development of children's basic movements. We understand that introducing children to movement skills is the same as introducing them to an active lifestyle [16], [32], [33].

5. Conclusions

From the results of our research, we say that the approach has an influence on children's basic movements. As can be seen in the research carried out regarding the play approach with the conventional approach which has differences both in terms of the approach and the results of children's basic movements, children who use the play approach show good child basic movements, and conversely children with a conventional approach have less basic movement, so it can be concluded that the model approach has an influence on children's movement.

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