

The Implementation of Physical Fitness Test Instruments for Low Grade Elementary School Students in West Aceh District In 2019

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Abstract

This research is an implementation of the research on the development of physical fitness measurement instruments for low-grade elementary school students in Aceh Besar district. This research utilizes physical fitness test instruments for children aged 6–9 years or low-grade elementary school students. This research aims to implement the physical fitness test for low-grade elementary school students in West Aceh District. The indicators measured in this research include all aspects related to the problem, namely: (1) speed (running 20 meters), (2) strength endurance (body-lifting and elbow-bending), (3) flexibility (sitting and reaching forward), and (4) cardiovascular endurance (bufagon run 720 meters). The research method utilized in this research is development research. The Statistical Package for Social Science (SPSS) is used in data analysis. The subjects of this study were 516 male and female elementary school students of low grade of West Aceh District (274 male and 242 female). The results of the research are male validity level was $r^{\text{count}}0.603$, $r^{\text{table}}0.603$, while the female validity level was $r^{\text{count}}0.507$, $r^{\text{table}}0.383$. The male reliability level r^{count} was above 0.794 while the female's reliability level r^{count} was above 0.766 and the male objectivity level was $r^{\text{count}}0.587$, $r^{\text{table}}0.380$ while female's objectivity level was $r^{\text{count}}0.507$, $r^{\text{table}}0.383$.

Keywords: Implementation, Instruments, Physical Fitness Test, Low Grade Elementary School Students

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I. Introduction

Education should develop along with the developments and changes of science, culture and technology in life. Learning is very basic, because the knowledge, skills, and attitudes are formed and evolved when the activities carried out through the learning process. In addition to health purposes, physical activities can also improve one's achievements.

Husdarta (2010:142) states that "education through and of physical activities" meaning that physical, sport and health education are basically an integral part of the overall education system. Therefore, the implementation of physical, sports and health education must be directed at achieving these goals. The purpose of sports and health physical education is not only to develop the physical aspect, but also to develop aspects of health, physical fitness, critical thinking skills, emotional reliability, social skills, reasoning and moral action through physical activities and sports.

Based on Nurharsono (2006:52), physical fitness is the ability of one's body to vigorously and vigilantly perform daily tasks and works without experiencing significant fatigue, and still have energy reserves to deal with unexpected emergencies.

Students in physical education learning are not only required to be skilled in movement, but to also be able to understand the function and purpose of the movements that they are actively doing. Anatomical-anthropometric structures and physiological functions, emotional stability and intellectual intelligence as well as the ability to socialize with the environment are superior to students who actively participate in sports and physical education activities than students who are not actively participating in sports and physical education.

The physical, sports and health education is one among other subjects taught to elementary school students. General view of physical education and trying to ensure that physical education lessons are important lessons for growth and development and the intelligence level of children. If all this time the physical, sports and health education has not been implemented properly, this is because the understanding of physical education is not yet in accordance with the actual contents of the philosophy and purpose of physical education. Physical education as a component of education as a whole has been recognized by many. However, in practice, the teaching of physical education has not been as effective as expected.

So far, the physical fitness test has been carried out using the Indonesian Physical Fitness Test (TKJI), but the authors feel it is very important to implement the existing measuring tools, especially in low-grade elementary schools in West Aceh district. This can help teachers and students to know, improve and maintain the level of physical fitness of students during their learning process and will be a supporting factor for activities and thinking.

The lack of research on the physical fitness level of low-grade students in West Aceh district makes researchers want to re-apply the physical fitness test tools that have been tested in Aceh Besar district on students in West Aceh district. The aim is to see the level of physical fitness of low-grade students in West Aceh district who have been following lessons in schools, namely the extent to which the physical fitness level of students both in theory and practice in the field. The results of this study will make it easier for teachers to know the level of physical fitness of these students.

The research, which was conducted in low-grade elementary schools in Aceh Besar district, produced four test instruments, namely: 1) 20 meter running test, 2) body lying test for 60 seconds, 3) sitting and reaching forward test, 4) Bufagon test or running a distance of 720 meters on a square running track using balls and baskets to reduce boredom while running. Clarification of the level of physical fitness for low grade elementary school students are: 1) Very good with a value of 16.9-20.0. 2) Very good with a value of 13.7-16.8 3) Good with a value of 10.5-13.6 4) Moderate with a value of 7.3-10.4 5) Poor with a value of 4.0-7.2 6) Very Poor.

With this study, the authors hope to implement a physical fitness test measurement tool that is suitable for low grade elementary school levels aged 6-9 years. West Aceh district consists of 12 sub-districts out of a total of 154 elementary schools in West Aceh District.

II. Research Methodology

This research is a descriptive quantitative research which used to describe, explain, or summarize various conditions, situations, phenomena, or various research variables according to events as they are which can be photographed, interviewed, observed, and which can be expressed through documentary materials. The application of measuring tools to retry the validity, reliability and objectivity with this research design is to measure the physical fitness level of low-grade elementary school students in the West Aceh district with sampling conducted by the researchers by classifying plain areas, namely coastal plain cities, lowlands and highlands. The number of schools sampled in each land area is 2 (two) schools with different numbers of students in each. The total sample size was 516 students from eight different schools. In addition, researchers will also take male and female students as research samples. The sampling technique in this study uses culture sampling in which the entire population is sampled in order to achieve the objectives expected in this study.

No	Sub-district	School Name	Area	Subject Number		Total
				Male, Grade I, II, III	Female, Grade I, II, III	
1	Johan Pahlawan	SDN 14 Meulaboh	City	65	41	106
		SDN 25 Meulaboh		57	45	102
2	SamaTiga	SDN SuakGeudebhang	Coastal area	23	16	39
		SDN SuakSeumaneh		9	14	23
3	AronganLambalek	SDN SuakTeBeuso	Lowland	41	42	83
		SDN SeunebokTeungoh		25	33	58
4	Woyla	SDN Padang Jawa	Highland	31	30	61
		SDN Pasi Aceh		23	21	44

Total	274	242	516
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Table 3.1 List of Primary Schools To Be Studied in West Aceh District

III. Results

Research on the implementation of physical fitness instruments for low-grade elementary school students was carried out by applying the physical fitness test instruments for low-grade elementary school students, the implementation stage as well as testing the physical fitness test instruments for low-grade elementary school students. The first step taken in this study was expert validation of the design of the physical fitness test instrument for low grade elementary school students. To generate the best products.

1. The Analysis of Physical Fitness Instruments Validation

The validity of the instrument for the implementation of the Physical Fitness Test Measurement Tool for Low Grade Elementary School Students in West Aceh district, namely: Male, 20meters run, $r^{\text{count}} = 0.623$ while $r^{\text{table}} = 0.381$, Body-lifting and elbow-bending test obtained $r^{\text{count}} = 0.684$ while $r^{\text{table}} = 0.381$, sitting and reaching forward test obtained the value of $r^{\text{count}} = 0.589$ while $t^{\text{table}} = 0,381$, cardiac pulmonary endurance test obtained the value of $r^{\text{table}} = 0.589$ while $t^{\text{table}} = 0,381$. Moreover, female run 20 meters, $r^{\text{count}} = 0.487$ while $r^{\text{table}} = 0.383$, body-lifting and elbow-bending test obtained $r^{\text{count}} = 0.484$ while $r^{\text{table}} = 0,383$, sitting and reaching forward test obtained $r^{\text{count}} = 0,525$ while $t^{\text{table}} = 0,383$, Cardiac pulmonary endurance test obtained a value of $r^{\text{count}} = 0,533$ while $t^{\text{table}} = 0,383$. Thus, the instrument of cardiac pulmonary endurance test is declared to have validity.

2. Reliability Test of Physical Fitness Instrument

The reliability of the instrument for the development of physical fitness tests measurement instruments for low-grade elementary school students, West Aceh district, namely, male is 0.794 while the reliability of the female is 0.766. Thus, it can be concluded that the physical fitness test instrument for low-grade Elementary Schools in West Aceh district has reliability.

3. The Objectivity Test of Physical Fitness Instrument

The objectivity of the instrument for the development of physical fitness measurement tools for low-grade elementary school students in West Aceh district, namely: Male run 20 meters, $r^{\text{count}} = 0,623$ while $r^{\text{table}} = 0,380$. Body-lifting and elbow-bending test obtained the value of $r^{\text{count}} = 0,684$ while $r^{\text{table}} = 0,380$. Sitting and reaching forward test obtained the value of $r^{\text{count}} = 0,596$ while $t^{\text{table}} = 0,380$. Cardiac pulmonary endurance test obtained the value of $r^{\text{count}} = 0,588$ and $t^{\text{table}} = 0,380$. Moreover, Female run of 20 meters, $r^{\text{count}} = 0.487$ while $r^{\text{table}} = 0,383$. Body-lifting and elbow-bending obtained the value of $r^{\text{count}} = 0.484$ while $r^{\text{table}} = 0,383$. Sitting and reaching forward test obtained the value of $r^{\text{count}} = 0,525$ while $t^{\text{table}} = 0,383$. Cardiac pulmonary endurance test obtained the value of $r^{\text{count}} = 0,533$ while $t^{\text{table}} = 0,383$. Thus, the cardiac pulmonary endurance test instrument is stated to have objectivity.

4. Physical Fitness Percentage Level

The results of the percentage of low grade primary school male students are 272 students, namely: 110 male students in the very good category (40%), 96 male students in the Good category (36%), 42 male students in the moderate category (15%), and 23 male students in the Poor category (9%). Therefore, it can be concluded that the physical condition of low-grade elementary school students in West Aceh District is in the **Very Good** Category.

The results of the percentage of low grade primary school female students are 272 students, namely: 101 female students in the very good category (42%), 96 female students in the good category (39%), 30 female students in the moderate category (12%), and 17 female students in the poor category (7%). Therefore, it can be concluded that the physical condition of the low-grade primary school female students in West Aceh District is in the **Very Good** Category.

IV. Conclusions

Based on the results and data analysis on the Implementation of Physical Fitness Test Measuring Instruments for Low Grade Elementary School Students in West Aceh District, it has a high level of fitness with the **validity score point index of 0.876**. It has the **reliability score index point of 0.985**, and a high level of fitness with the **objectivity score point index of 0.904**. Therefore, it can be used as a form to determine the Physical Fitness of Low-Grade Elementary School Students in Aceh District.

The results of research on the physical fitness test of low-grade elementary school of 272 male students in West Aceh District are: 110 male students were in the very good category (40%), 96 male students were in the

good category (36%), 42 male students were in the moderate category (15%), and 23 male students were in the poor category (9%). Therefore, it can be concluded that the physical condition of low-grade elementary school students in West Aceh District is in the **Very Good** Category.

The results of research on the physical fitness test of low grade elementary school of 244 female students in West Aceh District are: 101 female students in the very good category (42%), 96 female students in the good category (39%), 30 female students in the moderate category (12%), and 17 female students in the poor category (7%). Therefore, it can be concluded that the physical condition of low-grade primary school female students in West Aceh District is in the **Very Good** Category.

The proposed hypothesis is accepted as true. Therefore, the physical fitness test instrument that has been modified or designed by Dr. Mansur, M.Kes, after being used in West Aceh district, has very good values of validity, reliability, objectivity and percentage.

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