



## Physical Fitness Profile of Students in terms of Student Activities in Sports

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### Abstract

The fatigue experienced by junior high school (SMP) students while doing activities for a moment indicates that the students are not fit. Therefore, improving fitness to do more activities at a productive age is necessary. The purpose of this research was to determine the physical fitness profile of students in terms of sports activities. The quantitative description was the method of this research. The data collection technique used was the Indonesian Physical Fitness Test. The results showed that the fitness level of SMP Sekolah Alam Indonesia students was 0% in the excellent and good category, 31% in the medium category, 36% in the low category, and 33% in the poor category. The calculation obtained a significance value of more than 0.05, meaning the sample variance was normal. Thus, the hypothesis that the variance of the existing variables was the same was accepted. To determine whether there was a difference between sports activities and the fitness profile of SMP SAI students, the researchers performed the independent sample t-test on the data taken from the Indonesian Physical Fitness Test. The obtained significance value was 0.000 (less than 0.05). Therefore, it can be interpreted that there was a significant difference between the Fitness Profile of SMP SAI students and sports activities. In conclusion, the 8<sup>th</sup>-grade students of the school have not yet reached the good and excellent categories. The more active students are in exercising, the better their physical fitness level will be.

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## INTRODUCTION

Physical fitness is the body's ability to adapt its physiological functions to environmental conditions and physical work that requires brain work (Arifin, 2018; Fahrizqi et al., 2020; Julianto, 2016; Lengkana & Muhtar, 2021; Mutaqin, 2018). Physical fitness cannot be separated from the health and fitness of a person (Astar, 2020; Chen, 2017; Chou et al., 2022; Haverkamp et al., 2022; Sirtbaş et al., 2021). The more often you maintain your health by exercising, the more fitness you will be and the fatigue you will have (Amenya et al., 2021; Lengkana & Muhtar, 2021; Paiman, 2022; Riyanto, 2020). Physical fitness is an important aspect that every student must have to participate in teaching and learning activities properly. Physical fitness is a supporting factor for a student to participate in school activities and achieve good learning outcomes (Mutaqin, 2018; Osmila et al., 2019; Riyanto, 2020; Sobarna et al., 2020).

The Indonesian Nature School (SAI) activities involve learning in the natural surroundings. SAI organizes various programs besides teaching and learning, namely: Matriculation, Internship Program for several SMEs, OTFA (Out Trekking Fun Adventure), mountain climbing and beach walks, student board (student president), inspiring leadership activities, local wisdom, student KPU (general election commission), farming, *muhadhoroh*, life skills, outbound, supporting outing, Ramadan activities, *i'tikaf*, Qur'an camp, science fair, literacy fair, mentoring, independent (counselling guidance), live in, researcher, young explorers, program towards the national examination, and many other activities that require fitness.

Several studies examining physical fitness have been carried out by many researchers (Adhariah, 2018; Elshafey & Alsakhawi, 2022; Henning et al., 2022; Julianto, 2016; Krissanthy et al.,

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2020; Maden et al., 2022; Mulya, 2020; Munipiddin et al., 2018; Pezoa-Fuentes et al., 2022; Sobarna et al., 2020). The study explains that physical fitness needs to be improved through sports activities. The more a person does sports activities, his fitness will further improve. Other studies that describe students' physical fitness profiles have also been carried out by several researchers in various schools (Andre & Sembring, 2022; Arifandy et al., 2021; Cuesta-Vargas et al., 2011; Ilyas & Almunawar, 2020; Kusyandi et al., 2021; Penha et al., 2019; Prianto et al., 2022; Sari, 2020; Telford et al., 2016; Wulandari & Hariyanto, 2022). The studies conclude by describing the physical fitness profile of students. The school will know the students' abilities when carrying out various activities during school. However, research on the physical fitness profile in student activities has never been conducted. So to find out the fitness of SMP SAI students, the researchers need to describe the physical fitness profile of students at SAI SMP to monitor the extent of the physical fitness of students who will undergo some of the school's programs.

### METHOD

This research employed the quantitative descriptive method (Budiastuti & Bandur, 2018; Retnawati, 2016; Sugiyono, 2018). The population of this research were the eight-grade students of SMP Sekolah Alam Indonesia (SAI), which consisted of 39 students (26 male and 13 female students). The sample of this research was all eight-grade students of SMP Sekolah Alam Indonesia. The Indonesian Physical Fitness Test (TKJI) used the data collection technique. The series of Indonesian physical fitness tests for adolescents aged 13-15 years consists of: (1) running 50 meters, (2) hanging and lifting for 60 seconds, (3) lying down for 60 seconds, (4) jumping upright, (5) running 1000 meters for male and 800 meters for female. The researchers also interviewed the students to find out about their sports activities. In this research, the researchers presented the quantitative results of the measurement of research data using a descriptive percentage technique. The descriptive percentage data analysis technique was intended to determine the status of variables, namely to describe the physical fitness profile of SMP SAI students presented through percentages. The normality test was performed to find out whether the data were normally distributed or not (Qomusuddin, 2019). In testing for normality, the researchers used the Shapiro Wilk Test (Priyastama, 2020). Testing the normality of the data using the Shapiro-Wilk Test was assisted by the SPSS program with a significance level of 0.05. If the output value in the sig column has a significance level of p more than 0.05, then the data is normally distributed, and vice versa. The hypothesis test was performed using the independent sample t-test. This test was used to determine the differences between variables (Mustofa, 2013). The following is a picture of the flow of research.



**Figure 1.** Research Flow

### RESULTS AND DISCUSSION

This research was used to determine the physical fitness profile of junior high school students at Sekolah Alam Indonesia in terms of activities in sports. The subjects in this research were the eight-grade students of SMP Sekolah Alam Indonesia, which consisted of 39 students. This research was conducted within one day, on May 18, 2022. The data was then analyzed using percentage analysis. A summary of the overall data description is presented in the form of tables and diagrams as follows:

**Table 1.** Table of Physical Fitness Profile of Indonesian Junior High School Students

Category	Total	Percentage
Good	0	0%
Good	0	0%
Moderate	12	31%
Low	14	36%
Poor	13	33%
Total	39	100%

Based on the data from the Physical Fitness Profile table, the fitness levels of the SMP SAI students were 0% in the excellent and good categories, 31% in the medium category, 36% in the Low category, and 33% in the poor category.

**Table 2.** Sports Results

Category	Number of Students	Percentage
Active	22	56%
Passive	17	44%
Total	39	100%

Based on the table above, 22 (56%) students were active in sports. The number of students who were not active in sports was 17 or 44%. The researchers tested the normality using the Shapiro-Wilk test. This test determines whether the sample comes from a population that is normally distributed or not. The normality test hypothesis can be determined by comparing its significance value with 0.05. If the significance value is greater than 0.05, the hypothesis is accepted, and vice versa.

**Table 3.** Normality Test Result

Tests of Normality				
	ACTIVITY	Shapiro-Wilk		
		N	Sig.	Conclusion
TKJI	ACTIVE	22	.498	Normal
	PASSIVE	17	.080	Normal

The calculation results obtained a significance value of more than 0.05, which means that the sample variance was homogeneous. The research hypothesis was tested using an independent sample t-test. The t-test was used to answer the proposed hypothesis, whether there is a difference between sports activities and the fitness profile of the SMP SAI students. The result of the t-test is presented in the table below.

**Table 4.** Independent Sample T-Test Result

Independent Samples Test		
t-test for Equality of Means		
Sig. tailed		
TKJI	Equal	variances
	assumed	)

The average physical fitness value of students in the active category is higher than in the passive category. The information on the level of physical fitness can be used as evaluation material on whether the physical activity program positively impacts the students, especially those related to fitness levels. Also, the Physical Fitness Test procedure can be used to measure students' physical

fitness level to monitor their fitness progress after participating in a physical program organized by the school. Schools can also innovate in developing sports activity programs for students to meet the standard three times a week for 60-90 minutes with moderate intensity. This activity will help improve students' physical fitness.

## Discussion

In essence, every movement of physical activity performed by humans daily requires good physical fitness. The demands of physical fitness itself are very different. This difference is usually influenced by the type of activity or work performed. Physical fitness is very important for students to support the learning process or extracurricular activities. The physical fitness test is a test used by a teacher to determine students' physical fitness level at school. The Indonesian Physical Fitness Test (TKJI) compiled by the Minister of National Education in 2010 was grouped into four test groups based on the age category of students, namely 1) age 6-9 years, 2) age 10-12 years, 3) ages 13-15 years, and 4) ages 16-19. The Indonesian Physical Fitness Test (TKJI) consists of several test items, namely: sprinting, body lifting (pull-up), sitting-lying (sit-up), upright jump (vertical jump), and medium distance running. This test is differentiated by age group and gender to adjust students' development and growth level (Fenanlampir & Faruq, 2015).

Exercise has several advantages, including (1) increasing cardiorespiratory function, (2) decreasing risk factors for coronary artery disease, (3) decreasing morbidity and mortality, (4) decreasing anxiety and depression, (5) increasing feelings of well-being, and (6) improve work performance, recreational activities, and sports (Nugraha, 2015; Yuliatin et al., 2012). According to the author, the function of physical fitness is getting clearer: to achieve satisfying activities and have good physical fitness conditions. The condition of a person's physical fitness that can adapt to accept all physical and psychological burdens is the basis for achieving maximum productivity or work performance. Physical education programs should be linked to improving physical health and fitness so that students learn new skills and various sports.

Physical activity is some body movement caused by muscle contraction. However, in public health, physical activity refers to the type of movement with health benefits. These movements usually involve the body's large muscle groups and regular energy expenditure. Walking, running, jumping, throwing, catching, and many other activities are carried out daily. Physical activity is also called external activity that uses energy to perform various physical activities, such as walking, running, exercising, and others. Each physical activity determines different energy according to the length of intensity and the nature of muscle work. The results of this research can be used as a basis for school considerations to have a program to improve students' physical fitness. The suggestions are aimed at schools to provide appropriate training programs for students, especially when doing school programs. Schools can classify students based on their physical abilities. Also, schools are advised to conduct tests in a standardized setting so that test results are more accurate. Furthermore, students are advised to exercise to maintain health and support better school activities.

## CONCLUSION

Based on the research, the researchers concluded that the physical fitness profile of the eight-grade students of SMP Sekolah Alam Indonesia had not yet reached the good and excellent categories. Most of the student's physical fitness levels are still in the poor category. Because there are differences between students who are active in sports and those who are not active in their physical fitness profile, it can be concluded that the more active students exercise, the better their level of physical fitness will be. The results of this research can be used as a basis for school considerations to have a program to improve students' physical fitness. Students are expected to carry out school programs well and reduce risk by improving physical fitness.

## AUTHOR CONTRIBUTION STATEMENT

DHRR was responsible for participant recruitment, intervention management, design, data administration, and write-up. NS participated in the article's authoring, data analysis, and design. MTA helped with the writing, data analysis, and design.

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