

Physical Fitness Assessment of Grade V Students at SD Negeri 6 Pemulutan Barat in 2025

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Abstrak

Penelitian ini bertujuan untuk menilai tingkat kebugaran fisik siswa kelas lima di SD Negeri 6 Pemulutan Barat pada tahun 2025. Pendekatan penelitian yang digunakan adalah deskriptif kuantitatif, dengan metode sampling total yang mencakup seluruh 32 siswa sebagai sampel penelitian. Alat pengumpulan data yang digunakan adalah Tes Kebugaran Fisik Indonesia (TKSI) Fase C, yang terdiri dari lima item tes: lari 40 meter, sit-up, tahan posisi tengkurap selama 30 detik, lompatan vertikal, dan lari 600 meter. Data yang dikumpulkan dianalisis menggunakan metode distribusi frekuensi untuk menentukan klasifikasi tingkat kebugaran fisik siswa. Hasil penelitian menunjukkan bahwa tingkat kebugaran fisik siswa kelas V di SD Negeri 6 Pemulutan Barat sebagian besar masuk ke dalam kelompok moderat (46,9%), sebagian diklasifikasikan sebagai buruk (25%), dan hanya sebagian kecil yang dikategorikan sebagai baik atau sangat baik. Hasil ini menyarankan bahwa kebugaran fisik siswa perlu ditingkatkan melalui pendidikan aktivitas fisik yang intensif, beragam, dan terstruktur.

Kata kunci: Penilaian Kebugaran Fisik, Siswa Sekolah Dasar, TKSI, Pendidikan Jasmani.

Abstract

This study seeks to assess the physical fitness levels of fifth-grade pupils at SD Negeri 6 Pemulutan Barat in 2025. The employed research approach was quantitative descriptive, utilising a total sampling methodology that encompassed all 32 students as the research sample. The data collection device employed the Indonesian Physical Fitness Test (TKSI) Phase C, comprising five test items: a 40-meter sprint, elbow bends, a 30-second prone hold, vertical jumps, and a 600-meter run. The collected data was analysed employing frequency distribution methods to ascertain the classification of students' physical fitness levels. The findings indicated that the physical fitness levels of grade V students at SD Negeri 6 Pemulutan Barat predominantly fell into the moderate group (46.9%), with a portion classified as bad (25%), and only a minority categorised as good or very good. The results suggest that pupils' physical fitness need enhancement through vigorous, diverse, and structured physical activity education.

Keywords: Physical Fitness Assessment, Elementary School Students, TKSI, Physical Education

1. INTRODUCTION

Physical fitness is crucial for developing healthy, resilient, and productive students. Physical fitness in education enhances physical abilities and supports students' cognitive, emotional, and social development. Sahadevan and Varghese (2025) state that physical fitness influences psychological factors like self-esteem, stress, and cognitive abilities in children. Kalata et al. (2025) assert that physical activity is crucial for the development of school-aged children, enhancing their physical health, psychological well-being, and resilience. Nurhadi and Prasetyo (2023) assert that physical education fosters sportsmanship, discipline, and cooperation, which are vital for character development in elementary students. Pristilia and Hanafi (2025) indicate a positive relationship between physical fitness levels and students' mental health, learning focus, and emotional stability. This shows a positive correlation

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between physical literacy (understanding, skills, motivation) and students' physical fitness in physical education (Ferdiansyah et al., 2025). Sormin et al. (2024) highlight that physical activity enhances both physical fitness and students' social-emotional development. Physical education simultaneously aids students' physical, social, and emotional development (Putri et al., 2024).

Regular physical activity fosters teamwork, discipline, and a sense of responsibility among students. Ma et al. (2026) indicate that physical activity positively correlates with students' social-emotional development and psychological well-being. Physical fitness is associated with enhanced mental health in students, leading to decreased anxiety, depression, and stress symptoms (Rocliffe et al., 2024). Sports enhance self-esteem, self-efficacy, and emotional management, crucial for children's psychosocial development (Dollaway et al., 2024). Siddik et al. (2024) found that structured physical education positively impacts motor coordination, muscle strength, and mental well-being in elementary students. Physical fitness enhances concentration, reduces stress, and boosts students' confidence in tackling academic and social challenges in school.

Physical education is crucial for developing students' fitness early on. Physical activity helps children understand their bodies, improve coordination, and develop healthy habits. Suherman (2021) states that physical education in elementary schools aims to establish a foundation for an active lifestyle, impacting children's health behaviours in adulthood. Students are encouraged to incorporate physical activity into their daily routine through enjoyable learning suited to their developmental stages. Movement habits established early in life contribute to children becoming healthy, productive individuals who recognise the importance of lifelong physical fitness. Rusmayani et al. (2025) argue that creative and contextual learning improves PE effectiveness and increases student engagement. Rahman et al. (2025) argue that PJOK teachers' creativity in adapting learning to limited facilities demonstrates their responsiveness to students' needs. Pahlawani and Nining (2023) argue that teacher creativity and innovation improve the quality of sports education, including PJOK, which positively affects student learning outcomes. Elementary school students' physical fitness requires significant attention from physical education teachers and schools. In the digital age, children's physical fitness often declines. Children increasingly engage in passive activities at home, like using gadgets or watching television, instead of playing or exercising outdoors. Widiastuti et al. (2022) found that reduced daily physical activity in children directly affects their physical fitness, particularly endurance and muscle strength.

This phenomenon presents a challenge for education in fostering a healthy and fit generation. Physical education in elementary schools should focus on enhancing sports skills and improving students' physical fitness. Widyanto et al. (2025) note that traditional teacher-centered methods may result in low student motivation and passive engagement, whereas a cooperative approach fosters active participation. Nurhasan (2020) outlines that the primary goals of physical education are to enhance physical fitness, motor skills, and sportsmanship via structured activities. Guo et al. (2025) assert that teacher support for basic psychological needs, such as autonomy, competence, and relatedness, it enhances student engagement and motivation in PE. A teaching style that allows students to explore movements reduces passive behaviour and enhances intrinsic motivation in learning (Rachmawati & Ridwan, 2025). Kurniawan and Sinulingga (2025) noted that engaging and pertinent learning methods enhance student participation and diminish passive learning activities. Harackiewicz and Hulleman (2021) observed that low motivation hinders students' physical and social development, reducing the effectiveness of learning in physical education. PE teachers'

innovative learning strategies boost student motivation, demonstrating their adaptability to student needs (Ansharullah et al., 2026). Physical education teachers must create varied and engaging lessons to motivate students to be active.

Physical fitness comprises several components: strength, endurance, speed, agility, and flexibility. The five components are crucial for supporting an individual's physical capacity to perform daily activities (Ministry of National Education, 2020). During elementary school years, physical fitness development is significantly affected by activity patterns, nutrition, and environmental factors. Children's physical fitness components will not develop optimally without movement. The Indonesian Student Fitness Test (TKSI) has been developed by the Ministry of Education, Culture, Research, and Technology to assess the physical fitness of elementary school students according to their developmental stage. The Ministry of Education and Culture (2022) states that TKSI Phase C is designed for students in grades IV–VI of elementary school, comprising five measurement items: a 40-meter run, 30-second push-ups, 30-second sit-ups, vertical jump, and a 600-meter run. This test assesses students' overall fitness, focusing on strength, endurance, and speed.

SD Negeri 6 Pemulutan Barat is an elementary school in Ogan Ilir Regency, South Sumatra, that regularly conducts physical education lessons per the established curriculum. Initial observations indicate that some students quickly tire during physical activities and show less enthusiasm for physical education lessons. This suggests that students' physical fitness levels are likely still low. Suryadi (2021) indicates that elementary school students' low physical fitness levels may result from insufficient physical activity outside school and limited variety in physical education. Assessing students' physical fitness is essential for planning learning activities. Understanding students' physical fitness levels enables physical education teachers to create tailored exercise programs that align with their needs and abilities. Research on physical fitness not only evaluates learning but also maps the physical condition of elementary school children. Research findings can assist schools and education agencies in developing extracurricular activities, sports competitions, and fitness coaching programs. Physical fitness is a collective responsibility within school culture, promoting an active and healthy lifestyle beyond just physical education teachers (Putra, 2022).

The researcher aimed to conduct a study titled “The Physical Fitness Level of Fifth Grade Students at SD Negeri 6 Pemulutan Barat in 2025.” This study assesses students' physical fitness levels using the Indonesian Student Fitness Test (TKSI) Phase C to provide an accurate representation of their physical condition, informing enhancements in physical education quality in schools.

2. METHOD

This research employs a quantitative descriptive approach to objectively describe a phenomenon using numerical data collected from the field. Sugiyono (2019) states that quantitative descriptive research analyses data by presenting it as collected, without drawing general conclusions. This approach was selected to assess the physical fitness levels of students without administering specific treatment.

The research was conducted at SD Negeri 6 Pemulutan Barat, Ogan Ilir Regency, South Sumatra. This study's population consists of 32 grade V students from SD Negeri 6 Pemulutan Barat. The research employs total sampling, utilising the entire population as the sample (Arikunto, 2020). The study comprises 32 students as samples. The Indonesian Student Fitness Test (TKSI) Phase C, developed by the Ministry of Education, Culture,

Research, and Technology (Kemendikbudristek, 2022), is the research instrument used to assess the physical fitness of upper-class elementary school students. The components of the TKSI Phase C test can be seen in the following table:

Table 1. *Components of the TKSI Phase C Test*

Yes	Test Item	Measured Components	Unit	Test Objectives
1	40-meter dash	Speed	Second	Knowing a student's running speed ability
2	30-second push-ups	Arm muscle strength and endurance	Sum	Measure arm and shoulder muscle strength
3	30-second sit-ups	Abdominal muscle strength and endurance	Sum	Measuring the strength of the abdominal muscles
4	Loncat tegak (Vertical Jump)	Limb muscle explosiveness	Cm	Measuring the explosive ability of leg muscles
5	Lari meter 600	Heart and lung endurance	Minutes/second	Measuring cardiovascular endurance

(Source: Ministry of Education and Culture, 2022)

The test was carried out in the school field by following the official instructions from the TKSI Phase C guidelines. Each student then carried out the five test items in order with sufficient rest time between each item so that there was no excessive fatigue. The results of each test are recorded by the examiner, then compared to the TKSI Phase C assessment norm table to determine the category of physical fitness results of each student. The following is a table of assessment norms for the Indonesian Student Fitness Test (TKSI) Phase C for ages 10–12 (adjusted to grade V elementary school students):

Table 2. *TKSI Phase C Assessment Norms*

Category	Run 40 m (s)	Push-ups (30 seconds)	Sit-ups (30 seconds)	Vertical Jump (cm)	Run 600 m (min:s)	Score
Excellent	≤ 6.5	≥ 25	≥ 30	≥ 45	≤ 2:20	5
Good	6.6 – 7.4	20–24	25–29	40–44	2:21 – 2:40	4
Keep	7.5 – 8.4	15–19	20–24	35–39	2:41 – 3:10	3
Less	8.5 – 9.4	10–14	15–19	30–34	3:11 – 3:40	2
Very Less	≥ 9.5	≤ 9	≤ 14	≤ 29	≥ 3:41	1

(Source: Ministry of Education and Culture, 2022; Fajrila, 2020)

The final score of a student's physical fitness is obtained by summing the scores of the five

test items then dividing by five to get the average. The average results are then categorized according to the following scale:

Tabel 3. *Assessment Categories*

Average Score	Category
4.5 – 5.0	Excellent
3.5 – 4.4	Good
2.5 – 3.4	Keep
1.5 – 2.4	Less
1.0 – 1.4	Very Less

(Sumber: Fajrila, 2020)

The data obtained from the results of TKSI measurements were analyzed using quantitative descriptive analysis with a percentage formula to determine the distribution of students' physical fitness categories.

Formula used:

$$P = \frac{f}{N} \times 100\%$$

Information:

P = Percentage

f = Frequency (number of students in each category)

N = Total number of samples

The results were presented in tables and diagrams for easier analysis. According to Riduwan (2021), descriptive percentage analysis provides an overview of the research object based on collected data without generalizing conclusions. To ensure accuracy, the TKSI was administered by two examiners, and the instrument validated and standardized by the Ministry of Education and Culture (2022) is nationally recognized for assessing student fitness.

3. RESULTS AND DISCUSSION

This study was conducted to determine the level of physical fitness of grade V students of SD Negeri 6 Pemulutan Barat in 2025 using the Indonesian Physical Fitness Test (TKSI) Phase C, which consists of five test items, namely 40-meter sprint with bent elbows (pull-ups), 30-second lying down (sit-up), vertical jumps and 600-meter runs. The number of research subjects is 32 students. The measurement data of each test item was converted to a score based on the TKSI Phase C assessment norms with the categories of Very Good (5), Good (4), Medium (3), Less (2), and Less Once (1). Here are the research results for each test item:

Table 4. *Frequency Distribution of 40 Meter Sprint Test Results*

Category	Shoes	Frequency (f)	Percentage (%)
Excellent	5	3	9,4
Good	4	6	18,8

Keep	3	12	37,5
Less	2	8	25,0
Less Than Once	1	3	9,4
Sum	-	32	100

Most of the students were in the medium category (37.5%), which shows that the student's running speed is quite good but not optimal. These results illustrate that the average speed ability of elementary school students still needs to be improved through explosive exercises and agility.

Table 5. *Frequency Distribution of Bending Elbow Hanging Test Results*

Category	Shoes	Frequency (f)	Percentage (%)
Excellent	5	2	6,3
Good	4	4	12,5
Keep	3	10	31,3
Less	2	10	31,3
Less Than Once	1	6	18,8
Sum	-	32	100

Most students were in the medium and low category (31.3%). These results show that the strength of students' arm and shoulder muscles is still relatively low, in line with the findings of Sajoto (2019) who stated that elementary school-age children generally have upper muscle strength that is still developing and require systematic exercise.

Table 6. *Frequency Distribution of Sit-Up Test Results*

Category	Shoes	Frequency (f)	Percentage (%)
Excellent	5	2	6,3
Good	4	6	18,8
Keep	3	14	43,8
Less	2	7	21,9
Less Than Once	1	3	9,4
Sum	-	32	100

Most of the students were in the medium category (43.8%), indicating that the strength of the students' abdominal muscles was quite good but not optimal. These results support Harsono's (2018) view that abdominal muscle strength is very important in supporting physical fitness and body stability when moving.

Table 7. *Frequency Distribution of Vertical Jump Test Results*

Category	Shoes	Frequency (f)	Percentage (%)
Excellent	5	3	9,4
Good	4	7	21,9
Keep	3	13	40,6
Less	2	6	18,8
Less Than Once	1	3	9,4
Sum	-	32	100

A majority of students fell into the medium category (40.6%), suggesting a need for improvement in the explosiveness of their leg muscles. Plyometric training effectively enhances lower-limb muscle power in children and adolescents, according to recent research. Ramirez-Campillo et al. (2020) found that structured plyometric exercises enhance explosive strength and jumping performance in youth.

Table 8. *Frequency Distribution of 600 Meter Running Test Results*

Category	Shoes	Frequency (f)	Percentage (%)
Excellent	5	1	3,1
Good	4	4	12,5
Keep	3	10	31,3
Less	2	12	37,5
Less Than Once	1	5	15,6
Sum	-	32	100

Most students are in the poor category (37.5%), indicating that students' heart and lung endurance is still low. This condition is in line with the opinion of Giriwijoyo & Sidik (2012) who stated that elementary school children tend to do less aerobic activity outside of class hours, so that cardiorespiratory capacity has not developed optimally.

Table 9. *Recapitulation of Students' Physical Fitness Level*

Category	Frequency (f)	Percentage (%)
Excellent	2	6,3
Good	5	15,6
Keep	15	46,9
Less	8	25,0
Less Than Once	2	6,3
Sum	32	100

Based on the recapitulation, it can be concluded that the majority of students (46.9%) have a level of physical fitness in the moderate category, while some others are classified as less (25%) and only a few reach the good and excellent category. In general, the results of the study show that the level of physical fitness of grade V students of SD Negeri 6 Pemulutan Barat in 2025 is in the medium category. This condition illustrates that even though students have participated in Physical Education learning regularly, the intensity and duration of physical activity carried out are not optimal. According to Giriwijoyo and Sidik (2012), physical fitness is influenced by physical activity that is carried out regularly, planned, and continuously. Elementary school students need varied physical activities, such as children's athletic games or traditional games that demand high motor activity, in order for physical fitness to develop better. In addition, the results of the 600-meter run test which tend to be low indicate that students' cardiovascular endurance needs more attention. Harsono (2018) emphasized that regular aerobic exercise such as jogging, running, and group games are very important to increase children's heart and lung endurance.

Environmental factors and motivation also affect physical fitness results. The lack of sports infrastructure in schools and the low awareness of students to exercise outside of class hours are the main causes of suboptimal fitness results. This is in accordance with the opinion of Sajoto (2019) that a person's physical fitness is not only influenced by biological factors, but also by environmental, social, and daily living factors. Thus, an active role of Physical Education teachers is needed in designing active, fun, and high-physical activity-based learning models, such as traditional games or athletic kids, so that students are more motivated to move and practice consistently.

4. CONCLUSIONS

Based on the results of the study using the Indonesian Physical Fitness Test (TKSI) Phase C on 32 grade V students of SD Negeri 6 Pemulutan Barat in 2025, it was found that most students (46.9%) have a level of physical fitness in the medium category, while some others are classified as less (25%), and only a few reach the good and very good category. These results show that students' physical fitness in general is not optimal and still needs to be improved through PJOK learning that is more active, programmed, and involves various physical activities such as athletic games and fun extracurricular activities..

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