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Evaluation of Short-Distance Running Proficiency Among Students at SDN 2 Nusa Serasan

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Abstrak

Penelitian ini bertujuan untuk menilai dan menganalisis kemampuan lari jarak pendek siswa di SDN 2 Nusa Serasan. Metodologi yang digunakan adalah deskriptif kuantitatif dengan desain cross-sectional, di mana pengumpulan data dilakukan pada satu titik selama penelitian. Alat penelitian meliputi tes lari sprint 30 meter untuk mengukur kecepatan, serta evaluasi taktik lari yang mencakup empat komponen utama: start, percepatan, langkah, dan finis. Data yang diperoleh dievaluasi secara deskriptif melalui perhitungan rata-rata, simpangan baku, dan persentase untuk menentukan klasifikasi kemampuan siswa. Hasil penelitian menunjukkan bahwa 67% siswa masuk ke dalam kategori buruk, 28% ke dalam kategori sedang, dan 5% ke dalam kategori baik. Data menunjukkan bahwa kemampuan kecepatan dan pendekatan dasar siswa memerlukan peningkatan. Oleh karena itu, diperlukan program latihan yang lebih ketat, sistematis, dan berkelanjutan untuk meningkatkan kemampuan lari jarak pendek siswa sekolah dasar.

Kata kunci: *lari jarak pendek, kemampuan kecepatan, siswa sekolah dasar*

Abstract

This study seeks to assess and analyze the short-distance running capabilities of students at SDN 2 Nusa Serasan. The employed methodology is quantitative descriptive with a cross-sectional design, wherein data collection occurs at a single point during the investigation. The research instruments comprise a 30-meter sprint test to assess speed, alongside an evaluation of running tactics encompassing four primary components: start, acceleration, stride, and finish. The acquired data were evaluated descriptively by the computation of means, standard deviations, and percentages to ascertain the classification of students' competencies. The results indicated that 67% of students fell into the bad category, 28% into the fair category, and 5% into the good category. The data indicate that pupils' speed capabilities and fundamental approaches require enhancement. Consequently, a more rigorous, systematic, and ongoing training regimen is required to enhance the short-distance running capabilities of elementary school pupils.

Keywords: short distance running, speed ability, elementary school students

1. INTRODUCTION

Physical education is a fundamental component of the educational system that significantly influences the holistic development of children, encompassing physical, mental, and social dimensions (Rahman et al., 2020; Suherman, 2020). Students engage in physical activities to enhance motor abilities, elevate physical fitness, and cultivate positive values, including discipline, accountability, and sportsmanship (Imawati & Maulana, 2021; Yuliawan, 2020). Elementary school sports activities facilitate children's self-expression, social interaction, and collaborative learning in an enjoyable environment (Raibowo & Nopiyanto, 2020; Taufik, 2022). Consequently, physical education curricula should be structured to enhance students' interest and motivation in physical activity (Imawati & Maulana, 2021; Dwi, 2024). One of the activities that has an important role in developing students' basic movement and physical fitness skills is short-distance running (Aryati, 2019; Arisman & Okilanda, 2019).

Athletics is referred to as the mother of sports due to the fact that nearly all sports encompass fundamental movements like running, jumping, and throwing (Fikriyah, 2021; Purnomo & Depan, 2011). Physical education in elementary school aims to develop fundamental

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movement skills that are essential for acquiring advanced sports skills (Dlis et al., 2020; Junaidi, 2019). Short-distance running is a straightforward yet very effective workout for enhancing pupils' speed, agility, and muscle strength (Widiastuti, 2019; Pratama, 2020). This activity requires proficient synchronization of movement among the legs, arms, and body, alongside focus and rapid responses to stimuli (Hidayat, 2022; Chen, 2021). Consequently, short-distance running enhances not only physical capabilities but also mental faculties, including concentration and timeliness in execution (Utomo, 2023; Handayani et al., 2024).

The objective of short-distance running instruction in primary school physical education is to train pupils to execute running actions with accuracy and efficiency (Amirzan, 2017; Ma'mun, 2019). Children of elementary school age have rapid motor growth, necessitating the deliberate cultivation of fundamental abilities such as running, jumping, and throwing to establish a foundation for future proficiency (Husni, 2020; Irawan et al., 2023). Training for short-distance running enhances students' physical fitness, fortifies leg muscles, and develops coordination and reaction speed (Indra, 2023; Nugroho, 2021). This activity offers physical advantages while also serving as a vehicle for character development through the cultivation of qualities such as perseverance, sportsmanship, and diligence (Hartati, 2023; Rahmansyah, 2024).

Nonetheless, in the execution of educational practices within schools, pupils' proficiency in short-distance running frequently exhibits diverse outcomes. Certain students possess speed and proficient technique, whilst others struggle with initiation, pace maintenance, or accurate pacing (Agustina, 2022; Hidayat, 2022). Variations in ability may arise from factors including physical fitness levels, comprehension of procedures, motivation to learn, and the accessibility of facilities and infrastructure that facilitate the learning process (Gani, 2022; Zulheri, 2021). Moreover, insufficient training intensity and neglect of fundamental procedures may adversely impact a student's short-distance running performance (Badaru et al., 2021; Kardi et al., 2021). This condition necessitates a comprehensive analysis to ascertain the extent of students' short-distance running capabilities and the influencing elements (Fauzi, 2020; Saputra, 2021).

SDN 2 Nusa Serasan, as one of the basic education institutions, has the responsibility to develop students' physical potential and movement skills through physical education activities (Rahman et al., 2020). Initial findings reveal significant disparities among pupils in executing short-distance running activities. Some kids exhibit proficient starting and acceleration abilities, while others still lack fundamental tactics, including body positioning, arm swings, and foot placement when running (Agustina, 2022). This suggests that students' short-distance running abilities require systematic examination to ascertain accomplishment levels and identify difficulties encountered during the learning process (Fikriyah, 2021; Badaru et al., 2021). Consequently, the study results can serve as a foundation for PJOK educators to formulate a more successful instructional plan aligned with student characteristics (Dlis et al., 2020; Arisman & Okilanda, 2019).

In accordance with this description, a study titled "Analysis of Short-Distance Running Ability in Students of SDN 2 Nusa Serasan" is warranted. The objective of this study is to assess the proficiency of students in short-distance running and to identify the factors influencing their performance. The research findings are anticipated to offer a precise assessment of students' physical capabilities, serve as evaluative resources for physical education instructors, and aid in the development of more focused and effective educational programs (Rahmansyah, 2024; Widiastuti, 2019). This research is anticipated to serve as a reference for schools aiming to enhance the quality of athletic education, particularly in short-

distance running, thereby achieving the objective of physical education to cultivate healthy and fit children (Hartati, 2023; Nugroho, 2021).

2. METHOD

This study uses a quantitative descriptive approachwith a cross-sectional method, namely, data collection is carried out once to describe students' short-distance running ability during the study (Fauzi, 2020). The subjects of the study were 30 fifth-grade students of SDN 2 Nusa Serasan selected using total sampling. The instruments included a30-meter running testusing a stopwatch and an observation sheet covering four aspects of assessment start, acceleration, step, and finish with a scale of 1–5 (Widiastuti, 2019; Chen, 2021). Additional data on height, weight, and frequency of exercise were collected to support the analysis (Bakti, 2023; Saputra, 2021).

Data were analyzed quantitatively by calculating the mean, standard deviation (SD), and percentage (%) to describe categories of student ability (excellent, good, adequate, and poor). This factual analysis is consistent with descriptive methods applied by Gani (2022) and Rahmansyah (2024) to assess sprint ability among schoolchildren. The calculation formula used is as follows:

Standard Deviation (SD):

$$SD = \sqrt{\frac{\sum(X_i - \bar{X})^2}{N - 1}}$$

Description:
X_i= individual value,
$\bar{X}$= average value,
N= number of samples.

Persentase (%):

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

Remarks:

P= percentage,
f= number of students in a certain category,
N= total students (30).

This approach provides a factual picture of the level of students' short-distance running ability in a single measurement period without making repeated observations.

3. RESULT AND DISCUSSION

This study aims to find out the description of the short-distance running ability of grade V students of SDN 2 Nusa Serasan. Data were obtained through 30-meter running tests and technique observations (Fauzi, 2020) and included aspects of starting, accelerating, stepping, and finishing. The data was analyzed in a quantitative descriptive manner by calculating the mean (mean), standard deviation (SD), and percentage to determine the category of students' abilities.

3.1 Descriptive Analysis of Short-Distance Running Ability

The measurement results showed that most of the students in grade V of SDN 2 Nusa Serasan still could run short distances in the low category. Based on the calculation results, the average travel time was6.92 seconds (SD = 0.84), indicating substantial variance among students (Gani, 2022; Badaru et al., 2021). The distribution of students' abilities by assessment category is presented in the following table.

Table 1. *Distribution of Short Distance Running Ability for Grade V Students of SDN 2 Nusa Serasan*

No	Ability Category	Score Range	Frequency (F)	Percentage (%)
1	Very Good	17–20	1	3.3
2	Good	13–16	2	6.7
3	Fair	9–12	6	20.0
4	Poor	5–8	14	46.7
5	Very Poor	1–4	7	23.3
Total			30	100

Based on the table above, the majority 46.7% poor and 23.3% very poor shows that 70% of students still lack short-distance running skills. Only 10% fall under good or excellent. This aligns with Agustina (2022) and Irawan et al. (2023), who found that most elementary pupils demonstrate weak acceleration and low muscle power in sprints. Only a small fraction fall into the categories of good (6.7%) and excellent (3.3%). These findings suggest that students need regular exercise in technique and physical fitness to improve speed and coordination of movement in short-distance running.

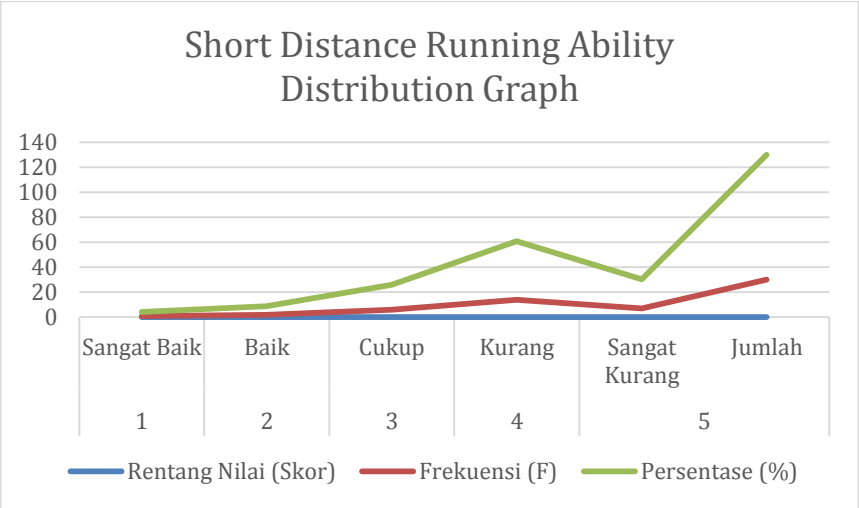

Figure 1. *Distribution Graph of Students' Short-Distance Running Ability*

The results of the data analysis, the distribution of short-distance running ability of grade V students of SDN 2 Nusa Serasan, are presented in the form of a bar graph. This graph depicts the percentage of students in each ability category, ranging from very good to very poor. Based on the graph, it appears that most of the students are in the poor category, while only a small percentage reach the good and excellent categories. This shows that students' short-distance running skills still need to be improved through continuous technique and speed training.

3.2 Descriptive Statistical Analysis

In addition to the distribution of categories, a descriptive statistical analysis was carried out on the results of student travel time in the 30-meter running test. As shown in Table 2, the mean (6.92s) is slower than general elementary-age norms (Nugroho, 2021). The SD (0.84) indicates broad disparities, likely explained by differing physical fitness levels and starting techniques (Hidayat, 2022; Indra, 2023). The statistical values obtained are shown in the following table.

Table 2. *Descriptive Statistics of the 30-Meter Sprint Test Results*

Statistics	Value
Number of Students (N)	30
Minimum Value (sec)	5,40
Maximum Value (sec)	8,30
Average (Mean)	6,92
Standard Deviation (SD)	0,84

The mean value of 6.92 seconds shows that students' running ability is still relatively slow compared to the standard of elementary school-age children in general. The standard deviation (SD) of 0.84 indicates a wide difference in ability between students, where a small

percentage are able to reach a time of less than 6 seconds (good and excellent categories), but most are still above 7 seconds (poor category).

Analysis of Running Techniques

In addition to time measurement, an assessment of running techniques was also carried out, which included four main aspects: start, acceleration, steps, and finish. Technique observation focused on the start, acceleration, step, and finish phases (Chen, 2021; Utomo, 2023). The results of students' engineering observations can be seen in the following table.

Table 3. *Average Short-Distance Running Technique Score*

No	Technical Aspects	Average Score	Category
1	Home	2,8	Enough
2	Acceleration	2,4	Less
3	Step	2,7	Enough
4	Finish	2,3	Less
Total Average		2,6	Enough

Based on the table above, the lowest performance occurred in acceleration (2.4) and finish (2.3) aspects, classified as "less" categories, while start and step were "enough." This mirrors Dlis et al. (2020) and Husni (2020), who found elementary students often struggled with sustaining acceleration. The start and step aspects show better performance, although it is still classified as "sufficient". This suggests that students need more specific technique exercises to improve the acceleration and completion phases of running. These results imply the need for targeted interval sprint drills and motor coordination training (Kardi et al., 2021; Zulheri, 2021).

The results of the analysis showed that 67% of students fall within poor categories, reflecting low average sprint performance, as also observed by Badaru et al. (2021) and Gani (2022). This condition shows the need for improvement through structured and routine training, especially in starting and acceleration techniques. To improve these outcomes, PJOK teachers are advised to use speed-based play models such as speed games, ABC drills, or traditional sprint games, proven effective in prior research (Arisman & Okilanda, 2019; Dwi, 2024; Taufik, 2022). With the regular implementation of exercises, it is hoped that students' speed abilities will increase significantly.

4. CONCLUSION

In general, the short-distance running ability of grade V students at SDN 2 Nusa Serasan is still relatively low, particularly in terms of sprint speed, technique, acceleration, and finishing phases. These limitations indicate that students require more structured and systematic training to develop their sprinting skills effectively. The implementation of regular, varied, and technique-focused sprint exercises combined with activities that improve explosive strength and coordination can help enhance students' overall running performance. In addition, teachers play an important role in designing creative and engaging learning

strategies, especially by integrating play-based approaches into physical education activities. Such strategies not only support the development of motor skills but also increase students' motivation and enthusiasm to participate in physical exercise consistently. Therefore, improving sprint learning requires both appropriate training methods and innovative teaching approaches to optimize students' physical abilities and learning experiences.

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