

# Survey of Basic Motor Skills of Fifth Grade Students at Gugus Nusa Indah, Mranggen District, Demak Regency

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## Abstract

This study aims to analyze the basic motor skills of fifth-grade students in five elementary schools in the Nusa Indah Cluster, Mranggen District, Demak Regency. This study uses a quantitative descriptive method with data collection techniques in the form of basic motor skills tests covering various indicators, such as sprinting, shuttle runs, ball throwing and catching, and stand positional strokes. The results of the analysis show that the majority of students are in the “Moderate” category (41.94%), while a small number of students are in the “Very Good” (5.65%) and “Very Poor” (6.45%) categories. The variation in results between schools is due to several factors, such as the quality of school facilities, field conditions, and student motivation levels. Schools with better facilities, such as SD N Mranggen 2 and SD N Mranggen 4, showed higher student performance. However, SD N Mranggen 1 and SD N Mranggen 3 faced challenges in the form of a lack of student enthusiasm and inadequate fields. Based on these results, the study recommends improving sports facilities, student motivation programs, and the involvement of female students in physical activities. With the right interventions, it is hoped that the basic motor skills of students in these schools will improve and develop optimally.

**Keywords:** fundamental motor skills; motor skill tests; physical education

## 1. Introduction

Sports are inseparable from everyday human life. In addition, sports can build the national character of a nation, thereby establishing a national identity and self-confidence and becoming a source of national pride (Setyawan and Setiawan 2022). Physical activity refers to anything that involves the body or physical activity (Kusuma and Setyawati 2016). The goal of physical education is to optimize quality of life by encouraging students to make a long-term commitment to enjoyable physical activities and sports experiences that will meet the diverse needs of an ever-changing world and develop positive attitudes and behaviors (Hidayat, Pratama, and Hardiono 2020).

Physical education is organized as part of the educational process in both non-formal and formal education through extracurricular and intracurricular activities (Putri and Yuwono 2020). Through physical education, students can channel their desires and wishes to move, while also providing opportunities for students to be directly involved in various learning experiences through physical activities. Physical education provides students with the opportunity to learn good and useful things, including effective skills related to attitudes and behavior, cognitive skills in thinking, and psychomotor skills related to movement mastery (Hananingsih & Imran, 2020).

Elementary school students basically have basic movements that they have had since birth and begin to learn movements (while playing) in kindergarten, so that from these basic movements, elementary school students already have minimal basic movement skills that are very useful for adjusting to student life, especially those related to basic movements that are useful in everyday life (Maharani and Raharjo 2023). Movement skills are abilities that people commonly use to improve their quality of life. Movement skills are divided into four categories, namely: locomotor, non-locomotor, manipulative, and combination (Pamungkas and Rustiadi 2022).

Children at this age still enjoy simple movements such as jumping, skipping, running, throwing, and kicking (Nurtajudin, Rahayu, and Sulaiman 2015). Walking is the transfer of body weight between feet, which is done repeatedly from one foot to the other (Iswara and Yuwono 2021).

1. 4x10 meter Shuttle Run Test

The shuttle run is a form of exercise commonly used to improve agility, not just agility (Wirawan and Setiawan 2023). Agility is the speed of changing the direction of the body or limbs (Sudadik and Raharjo 2021).

2. Ball Throwing and Catching Test

Measures eye-hand coordination. Good coordination between the eyes and hands, as well as strong arm muscles, will improve accuracy in throwing the petanque ball. If arm muscle strength and eye-hand coordination are lacking, the accuracy of the ball hitting the target will be low (Asmarani and Setiawan 2020).

3. Stork Stand Positional Balance Test

Measures the time taken to maintain the left foot in its original position.

4. 30-meter Sprint Test

Speed is a genetic factor influenced by the nervous system and muscle fibers. It must be introduced to children at an early age, when their nervous systems are easily adaptable (Mahmudi 2023).

Based on the above description, the author is interested in conducting research on “Survey of Basic Motor Skills of Fifth Grade Students at Gugus Nusa Indah, Mranggen District, Demak Regency”.

## 2. Method

This study uses a survey method, which means that in solving procedural problems, the method used is to describe the object being studied, which can be a person, institution, community, and so on (Rofiatin and Akhiruyanto Andry 2020). Quantitative research is a type of research whose direction and focus is to construct a theory from existing data or facts.

The population taken in this study was fifth-grade students at Nusa Indah Elementary School in Mranggen District, Demak Regency, with a total population of five elementary schools, consisting of four public elementary schools and one private elementary school, namely SDN Mranggen 1, SDN Mranggen 2, SDN Mranggen 3, SDN Mranggen 4, and SD Terpadu Darunnajah.

The sampling technique was a portion of the population studied (Tanzeh and Arikunto 2014). A sample is a part and characteristic of the population (Sugiyono 2019). This study used a total sampling technique. The sample taken in this study was fifth-grade students of Gugus Nusa Indah Elementary School, namely 19 students from SDN Mranggen 1, 32 students from SDN Mranggen 2, 23 students from SDN Mranggen 3, 31 students from SDN Mranggen 4, and 19 students from SD Terpadu Darunnajah, for a total of 124 fifth-grade students of Gugus Nusa Indah Elementary School.

The data collection technique in this study used testing and measurement methods. The research instrument referred to the measurement of motor skills. The raw results needed to be converted to have the same scale. The replacement measurement unit used was the T-Score.

1. The T-Score formula for the shuttle run 4x10 meters test and the 30-meter sprint test. The calculation uses time units, where the less time required, the better the result obtained. The T-Score formula is as follows:

$$T - Score = 50 + \left[ \frac{M - X}{SD} \right] X 10$$

2. The T-Score formula for the Stork Stand Positional Balance test and the ball throw-and-catch test. The calculation uses time units and numerical units. The more time or the greater the number obtained, the better the result. The T-Score formula is as follows:

$$T - Score = 50 + \left[ \frac{X - M}{SD} \right] X 10$$

Explanation:

M = Mean (average value)

X = Score obtained

SD = Standard Deviation

The raw results that had been converted into T-Scores from the four tests were summed and then divided by the total number of tests. The result of this division served as the basis for determining the fundamental motor skills of the fifth-grade students at SD Gugus Nusa Indah, Mranggen Subdistrict, Demak Regency. The students' fundamental motor skills were categorized into five (5) categories, namely: very good, good, fair, poor, and very poor.

**Table 1. Categories of fundamental motor skills**

No	Class Interval	Category
1.	$X \geq M + 1,5 SD$	Very Good
2.	$M + 0,5 SD \leq X < M + 1,5 SD$	Good
3.	$M - 0,5 SD \leq X < M + 0,5 SD$	Fair
4.	$M + 1,5 SD \leq X < M + 0,5 SD$	Poor
5.	$X \leq M - 1,5 SD$	Very Poor

Explanation:

X = Score obtained  
M = Mean  
SD = Standard Deviation

To determine the number of students in each category of fundamental motor skills in the fifth grade at SD Gugus Nusa Indah, Mranggen Subdistrict, Demak Regency, the percentage formula from Anas Sudijono (2015: 40) was used.

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

Explanation:  
P = Percentage  
F = Score (frequency)  
N = Number of students

### 3. Result and Discussion

This study was conducted to determine the level of fundamental motor skills among fifth-grade students in the Nusa Indah Cluster, Mranggen, Demak. The total number of subjects in this study was 124 students. The students' fundamental motor skills were assessed using a series of tests: the 4x10 meter Shuttle Run Test, the 1-meter Ball Throw-and-Catch Test, the Stork Stand Positional Test, and the 30-meter Sprint Test. All descriptive analysis results in this study were processed using MS Excel software.

#### Overall Test

**Table 2. Frequency distribution of overall test t-scores**

Category	Frequency	Percentage
Very Good	7	5,65%
Good	28	22,58%
Average	52	41,94%
Poor	29	23,39%
Very Poor	8	6,45%
Total	124	100%

Source: Primary data 2024

Of the total number of students, 7 students or 5.65% were in the Excellent category. This shows that only a small percentage of students achieved the highest level of qualification. A total of 28 students or 22.58% are in the Good category, indicating that nearly a quarter of the total students have shown satisfactory but not yet optimal achievement. The majority of students, namely 52 students or 41.94%, are in the Average category. This illustrates that most students have adequate qualifications, although there is still room for improvement. A total of 29 students or 23.39% were in the Poor category, indicating that more than a fifth of students did not meet expectations and needed further improvement. Meanwhile, 8 students or 6.45% were in the Very Poor category,

indicating that a small number of students were at a very low level of qualification and needed special attention.

At SDN Mranggen 1, the majority of students were in the Average category with 12 students (63.16%), followed by 4 students (21.05%) in the Below Average category and 3 students (15.79%) in the Good category. No students were in the Very Good or Very Poor categories.

**Table 3. Frequency distribution of t-scores for the SDN Mranggen 1 test**

Category	Frequency	Percentage
Very Good	-	-
Good	3	15.79%
Average	12	63.16%
Poor	4	21.05%
Very Poor	-	-
Total	19	100%

Source: Primary data 2024

At SDN Mranggen 2, the distribution of student abilities is more evenly distributed, with 10 students (31.25%) in the “Good” and “Fair” categories, while 9 students (28.13%) are in the ‘Poor’ category and 2 students (6.25%) are in the “Very Poor” category. Only 1 student is in the “Very Good” category (3.13%).

**Table 4. Frequency distribution of t-scores for SDN Mranggen 2 tests**

Category	Frequency	Percentage
Very Good	1	3.13%
Good	10	31.25%
Average	10	31.25%
Poor	9	28.13%
Very Poor	2	6.25%
Total	32	100%

Source: Primary data 2024

SDN Mranggen 3 has the highest percentage of students in the Moderate category, with 8 students (34.78%), and 7 students (30.43%) in the Good category. The Poor category is filled by 4 students (17.39%) and the Very Poor category by 3 students (13.04%), while only 1 student is in the Very Good category (4.35%).

**Table 5. Frequency distribution of t-scores for SDN Mranggen 3 tests**

Category	Frequency	Percentage
Very Good	1	4.35%
Good	7	30.43%

Average	8	34.78%
Poor	4	17.39%
Very Poor	3	13.04%
Total	23	100%

Source: Primary data 2024

At SDN Mranggen 4, there are 5 students (16.13%) who have excellent basic motor skills, while 11 students (35.48%) are in the “Average” category and 10 students (32.26%) are in the “Poor” category. The “Good” category is filled by 3 students (9.68%) and the “Very Poor” category by 2 students (6.45%).

**Table 6. Frequency distribution of t-scores for SDN Mranggen 4 tests**

Category	Frequency	Percentage
Very Good	5	16.13%
Good	3	9.68%
Average	11	35.48%
Poor	10	32.26%
Very Poor	2	6.45%
Total	31	100%

Source: Primary data 2024

SD Terpadu Darunnajah, the majority of students are in the moderate category with 11 students (57.89%), followed by 5 students (26.32%) in the good category, and 2 students (10.53%) in the poor category. Meanwhile, only 1 student is in the very poor category (5.26%), and no students are in the very good category.

**Table 7. Frequency distribution of t-scores for SD Terpadu Darunnajah test**

Category	Frequency	Percentage
Very Good	-	-
Good	5	26.32%
Average	11	57.89%
Poor	2	10.53%
Very Poor	1	5.26%
Total	19	100%

Source: Primary data 2024

#### 4 x 10 Meter Shuttle Run Test

The 4x10 meter shuttle run test aims to measure agility in changing direction. The less time taken, the better the result.

**Table 8. Distribution of t-scores for the 4 x 10 m shuttle run test at SDN Mranggen 1**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	24.57
Maximum Score	63.94

Source: Primary data 2024

The results of the 4 x 10 meter Shuttle Run test conducted at SDN Mranggen 1 show that the average (mean) score achieved by students was 50.00. This indicates that the overall performance of students in this test was around that number. The standard deviation recorded was 10.00, which shows the level of dispersion of student scores relative to the mean; the higher this value, the greater the variation in performance among students. The minimum score obtained was 24.57, indicating the lowest performance achieved by a student in this test, while the maximum score recorded was 63.94, representing the highest performance achieved. This data provides an overview of the range of students' physical abilities in this speed and agility test, with a significant variation between the lowest and highest performances.

**Table 9. Distribution of t-scores for the 4 x 10 m shuttle run test at SDN Mranggen 2**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	24.89
Maximum Score	71.62

Source: Primary data 2024

Based on the results of the 4 x 10 meter Shuttle Run test conducted at SDNegeri Mranggen 2, the results were converted into a T-Score for the average completion time of 50.00. This shows that, in general, the students' ability in speed and agility tests was at that level. The recorded standard deviation of 10.00 indicates that there is considerable variation in the students' abilities, with some students completing the test faster or slower than the average. The minimum score achieved was 24.89, which was the fastest time among all participants, while the maximum score of 71.62 indicates the longest time achieved by a participant. With a fairly wide range of results, it can be concluded that there are significant differences in the levels of agility and speed among students.

**Table 10. Distribution of t-scores for the 4 x 10 m shuttle run test at SDN Mranggen 3**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	15.68
Maximum Score	57.68

Source: Primary data 2024

The results of the 4 x 10 meter Shuttle Run test at SDN Mranggen 3 show that the average (mean) score achieved by students was 50.00. This reflects the general ability of students in this speed test. The variability in student performance, as measured by the standard deviation, was 10.00, indicating that there was a significant difference between the best and lowest results of students in this test. The minimum score recorded was 15.68, indicating that there were students whose performance was well below average. Meanwhile, the maximum score achieved was 57.68, showing that some students performed very well, above the expected average. Thus, these results illustrate the wide range of student abilities in the Shuttle Run test at SDN Mranggen 3.

**Table 11. Distribution of t-scores for the 4 x 10 m shuttle run test at SDN Mranggen 4**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	20.24
Maximum Score	67.81

Source: Primary data 2024

Based on the results of the 4 x 10 Meter Shuttle Run test conducted at SDN Mranggen 4, the average score obtained by students was 50.00, which indicates the overall performance of this group of students. The variation in the test results is reflected in the standard deviation of 10.00, which indicates a significant variation in results among students. The lowest score recorded in this test was 20.24, while the highest score achieved was 67.81. The difference between the minimum and maximum scores illustrates a considerable difference in the physical performance of the students, with some students demonstrating much better abilities than others.

**Table 12. Distribution of t-scores for the 4 x 10 m shuttle run test at SD Terpadu Darunnajah**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	14.02
Maximum Score	58.34

Source: Primary data 2024

The results of the 4 x 10 meter Shuttle Run test at SD Terpadu Darunnajah show that the average (mean) achieved by the students was 50.00, with relatively large variations in performance, as reflected in the standard deviation of 10.00. The minimum score recorded in this test was 14.02, indicating that some students were able to complete the test very quickly. On the other hand, the maximum score recorded was 58.34, indicating significant differences in student abilities.

### 30 m Sprint Test

The 30-meter sprint test aims to measure running speed by calculating the time taken to run a distance of 30 meters.

**Table 13. Distribution of the 30 m sprint test at SDN Mranggen 1**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	32.52
Maximum Score	68.30
Source: Primary data 2024	

The results of the 30-meter sprint test at SDN Mranggen 1 show that the average (mean) score obtained by students was 50.00, which reflects the overall performance of students in this test. The standard deviation of 10.00 indicates that there is a significant variation or spread of scores among students, with some students scoring well above or below the average. The lowest (minimum) score achieved was 32.52, while the highest (maximum) score was 68.30. This range of scores shows a considerable difference in ability among students in the 30-meter sprint test.

**Table 14. Distribution of 30-meter sprint test results at SDN Mranggen 2**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	30.22
Maximum Score	74.58
Source: Primary data 2024	

Based on the results of the 30-meter sprint test at SDN Mranggen 2, the average score obtained by students was 50.00, which indicates the overall performance of students on the test. The standard deviation of 10.00 indicates variation in test results, with some students showing abilities that differ significantly from the average. The minimum score achieved was 30.22, indicating the lowest performance of the students, while the maximum score obtained was 74.58, reflecting the highest results achieved. This shows that there are significant differences in the running speeds of students at SDN Mranggen 2.

**Table 15. Distribution of 30 m sprint test results at SDN Mranggen 3**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	25.95
Maximum Score	65.66
Source: Primary data 2024	

The results of the 30-meter sprint test at SDN Mranggen 3 show that the average time achieved by students was 50.00 seconds. This value reflects the average time required by all students to complete the sprint test. Data variability was measured by a standard deviation of 10.00, which indicates a significant spread of student times around the average. In terms of individual achievement, the student with the fastest time recorded 25.95 seconds, while the longest time achieved was 65.66 seconds. This shows that there are considerable differences in student performance, from those who are very fast to those who take longer to complete the test.

**Table 16. Distribution of the 30 m sprint test at SDN Mranggen 4**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	25.74
Maximum Score	73.68

Source: Primary data 2024

Based on the results of the 30-meter sprint test conducted at SDN Mranggen 4, the average (mean) time achieved by the students was 50.00 seconds. This shows that the average time to complete the sprint test was at that figure. Meanwhile, the standard deviation obtained was 10.00, which describes the level of dispersion or variation in the students' test results. The minimum value recorded in this test was 25.74 seconds, while the maximum value achieved was 73.68 seconds. From these results, it can be interpreted that there was considerable variation between the fastest and slowest times achieved by the students, with a significant spread of data.

**Table 17. Distribution of the 30 m sprint test at SD Terpadu Darunnajah**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	23.97
Maximum Score	63.47

Source: Primary data 2024

The results of the 30-meter sprint test at SD Terpadu Darunnajah show that the average time taken by students was 50.00 seconds, which reflects the overall performance of all test participants. The distribution of test results can be seen from the standard deviation of 10.00, which indicates variation in the time taken by students to complete the sprint. The fastest time achieved was 23.97 seconds, while the slowest time was 63.47 seconds. This data provides an overview of the range of students' physical abilities, with some students showing quite good abilities and others needing improvement in terms of running speed.

## Standing Stroke Test

**Table 18. Distribution of standing stroke test results at SDN Mranggen 1**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	30.29
Maximum Score	59.16

Source: Primary data 2024

The results of the Stork Stand Positional test conducted at SDN Mranggen 1 show that the average score (mean) obtained by students was 50.00, with a standard deviation of 10.00. This illustrates a moderate variation in the distribution of scores achieved by test participants. The minimum score achieved was 30.29, indicating that there were students who performed relatively lower than other students. Meanwhile, the maximum score achieved was 59.16, reflecting the best performance obtained in the group. This score distribution shows a significant difference between the highest and lowest performances among the students who took the test.

**Table 19. Distribution of the SDN Mranggen 2 stork position test**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	40.08
Maximum Score	73.53

Source: Primary data 2024

In the analysis of the Stork Stand Positional test results at SDN Mranggen 2, the average score obtained was 50.00 with a standard deviation of 10.00. The minimum score recorded in this test was 40.08, while the maximum score reached 73.53. This shows that there was considerable variation in the test results, with some students scoring lower or higher than the average. The relatively large standard deviation indicates significant differences in student performance, suggesting that the test results are uneven and requiring further evaluation to understand the factors influencing the distribution of scores.

**Table 20. Distribution of stork stand positional test results at SDN Mranggen 3**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	37.94
Maximum Score	65.26

Source: Primary data 2024

In the analysis of the results of the Stork Stand Positional test at SDN Mranggen 3, the average (mean) score obtained was 50.00, with a standard deviation of 10.00. The minimum score recorded in this test was 37.94, while the maximum score achieved was 65.26. This data shows that there was significant variation in the test results, with most students obtaining scores that were close to the average, but there were still some students who achieved scores that were higher or lower than the average range.

**Table 21. Distribution of the stork stand positional test at SDN Mranggen 4**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	36.60
Maximum Score	70.86

Source: Primary data 2024

Based on the results of the Stork Stand Positional test conducted at SDN Mranggen 4, the following data was obtained: the average (mean) test score was 50.00 with a standard deviation of 10.00. The range of scores obtained by students varied, with the minimum score achieved being 36.60 and the maximum score reaching 70.86. This data shows a significant variation in results among students, with a standard deviation that indicates a considerable difference from the average score. This range of scores illustrates the distribution of student performance in the test, where most scores are around the average, but there are also quite high and quite low scores, reflecting a wide range of abilities among test participants.

**Table 22. Distribution of the stand positional stroke test at SD Terpadu Darunnajah**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	34.07
Maximum Score	65.76

Source: Primary data 2024

The results of the Stork Stand Positional test at SD Terpadu Darunnajah show that the mean score is 50.00 with a standard deviation of 10.00. The scores obtained by students vary from a minimum score of 34.07 to a maximum score of 65.76. These figures reflect a significant spread of scores among students. The standard deviation of 10.00 indicates considerable variation from the mean score, indicating a wide range of abilities among the test participants. This range of scores illustrates that although the mean score is in the middle of the range, there are students with both low and high performance, reflecting diversity in test results at the school.

### Ball Throwing and Catching Test

**Table 23. Distribution of ball throwing and catching test results at SDN Mranggen 1**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	40.29
Maximum Score	69.49

Source: Primary data 2024

The results of the Ball Throwing and Catching test at SDN Mranggen 1 show an average (mean) score of 50.00 with a standard deviation of 10.00. The minimum score obtained by students was 40.29, while the maximum score reached 69.49. This data indicates that there is significant variation in the test results. A standard deviation of 10.00 indicates a wide range of scores from the mean, which means that there are considerable differences in performance among students. This range of scores shows that even though the mean score is in the middle of the range, there are still students with scores well below and above the mean, indicating diversity in ball throwing and catching abilities among students.

**Table 24. Distribution of ball throwing and catching test results at SDN Mranggen 2**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	30.52
Maximum Score	76.92

Source: Primary data 2024

The results of the Ball Throwing and Catching test at SDN Mranggen 2 show an average (mean) score of 50.00 with a standard deviation of 10.00. The minimum score obtained by students was 30.52, while the maximum score reached 76.92. This variation in scores illustrates a fairly wide distribution of test results. The standard deviation of 10.00 indicates a significant difference from the mean score, reflecting differences in ability among students. This wide range of scores shows that although the mean score is in the middle, there are students with very low and very high performance, indicating great diversity in the test results at this school.

**Table 25. Distribution of ball throwing and catching test results at SDN Mranggen 3**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	42.35
Maximum Score	72.30

Source: Primary data 2024

The results of the Ball Throwing and Catching test at SDN Mranggen 3 show an average (mean) score of 50.00 with a standard deviation of 10.00. The minimum score obtained by students was 42.35, while the maximum score reached 72.30. This data shows that there is significant variation in the test results. The standard deviation of 10.00 indicates a considerable difference from the mean score, signifying variation in ability among students. This range of scores illustrates that although the mean score is in the middle, there are students with varying performance levels from fairly low to fairly high, reflecting the diversity of ball throwing and catching abilities among students at the school.

**Table 26. Distribution of ball throwing and catching test results at SDN Mranggen 4**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	43.33
Maximum Score	74.98

Source: Primary data 2024

The results of the Ball Throwing and Catching test at SDN Mranggen 4 show an average (mean) score of 50.00 with a standard deviation of 10.00. The minimum score achieved by students was 43.33, while the maximum score reached 74.98. This data shows that there is significant variation in the test results. The standard deviation of 10.00 indicates a wide difference from the mean score, reflecting the diversity of abilities among students. This range of scores shows that although the mean score is in the middle, there are students with varying performances, from relatively low to very high scores, reflecting the variation in ball throwing and catching abilities at the school.

**Table 27. Distribution of ball throwing and catching test results at SD Terpadu Darunnajah**

Average ( <i>Mean</i> )	50.00
Standard Deviation	10.00
Minimum Score	42.26
Maximum Score	73.83

Source: Primary data 2024

The results of the ball throwing and catching test at SDN Darunnajah showed an average (mean) score of 50.00 with a standard deviation of 10.00. The minimum score obtained by students was 42.26, while the maximum score reached 73.83. This variation in scores reflects significant diversity in the test results. The standard deviation of 10.00 indicates a considerable difference from the mean score, which shows a wide variation in ability among students. This range of scores illustrates that although the mean score is in the middle of the range, there are students with fairly low to very high performance, reflecting diversity in ball throwing and catching abilities at the school.

## 5. Conclusion and Recommendation

Based on the results of descriptive analysis of the basic motor skills of fifth-grade students in five elementary schools in the Nusa Indah Cluster, Mranggen District, Demak Regency, it can be concluded that 52 students have basic motor skills in the “Moderate” category (41.94%), followed by 29 students in the “Poor” category (23.39%), and 28 students in the “Good” category (22.58%). Only 7 students were in the “Very Good” category (5.65%) and 8 students in the “Very Poor” category (6.45%). The order of difficulty of the movements from the most difficult to the easiest was the 4 x 10 Meter Shuttle Run, 30 Meter Sprint, Strok Stand Positional, and Ball Throw and Catch. The most difficult movement was the Shuttle Run because it required high agility. Factors such as school facilities, field conditions, and student motivation proved to play a significant role in the results of this test. Schools with better facilities, such as SDN Mranggen 2 and SDN Mranggen 4, showed higher results, while SDN Mranggen 1, SD Terpadu Darunnajah, and SDN Mranggen 3 faced challenges that affected student performance, such as low enthusiasm and inadequate field conditions.

## References

- Asmarani, Dias Ayu, and Ipang Setiawan. 2020. “Pengaruh Latihan Koordinasi Mata Tangan Dan Kekuatan Otot Lengan Terhadap Akurasi Lemparan Bola Petanque.” *Indonesian Journal for Physical Education and Sport* 1(2): 496–501. <https://journal.unnes.ac.id/sju/index.php/inapes/article/view/42088>.
- Hidayat, Arif, Riyan Pratama, and Bayu Hardiono. 2020. “Peningkatan Kemampuan Gerak Dasar Atletik Dengan Menggunakan Metode Sirkuit Pada Siswa Sekolah Dasar.” *Jurnal Pendidikan Jasmani Indonesia* 16(1): 92–100. doi:10.21831/jpji.v16i1.30792.
- Iswara, Citra Laksa, and Cahyo Yuwono. 2021. “Pengembangan Smart Speed Flag Materi Variasi Gerak Dasar Jalan, Lari, Lompat, Dan Lempar Pada Siswa Kelas IV Sekolah Dasar.” *Indonesian Journal for Physical Education and Sport* 2(2): 611–16.
- Kusuma, Bayu Aji, and Heny Setyawati. 2016. “SURVEI FAKTOR-FAKTOR YANG MEMPENGARUHI MINAT OLAHRAGA REKREASI AKHIR PEKAN DI ALUN-ALUN WONOSOBO.” *Journal of Physical Education, Sport, Health and Receptions* 5(2): 68–73.
- Maharani, Anggita Putri, and Hermawan Pamot Raharjo. 2023. “Indonesian Journal for Physical Education and Sport Survei Kemampuan Gerak Dasar Siswa Kelas Atas Di SD Negeri 2 Bojasari Kecamatan Kertek Kabupaten Wonosobo.” 4: 484–91.
- Mahmudi, Deny Ali. 2023. “Deny Survei Profil Kondisi Fisik Kekuatan, Kecepatan & Daya Tahan U-14 (Survei Pada Pemain SSB Bina Muda Juwana Pati Tahun 2021).” *Indonesian Journal for Physical Education and Sport* 4(2): 661–69. doi:10.15294/inapes.v4i2.56404.
- Nurtajudin, Tandiyoh Rahayu, and Sulaiman. 2015. “Pengaruh Latihan Koordinasi Mata-Kaki-Tangan Dan Tingkat Keseimbanganterhadap Motorik Kasar Anak Usia Dini.” *Jpes* 4(2): 154–58. <http://journal.unnes.ac.id/sju/index.php/jpes>.

- Pamungkas, Dimas Dwi, and Tri Rustiadi. 2022. "Survey Kemampuan Gerak Dasar Siswa Siswi Kelas Atas Sekolah Dasar Negeri Sambirejo 2 Kecamatan Plupuh Kabupaten Sragen." *Indonesian Journal for Physical Education and Sport* 3(2): 430–38. doi:10.15294/inapes.v3i2.59225.
- Putri, Alvia Pratiwi, and Cahyo Yuwono. 2020. "Ketersediaan Sarana Dan Prasarana Pendidikan Jasmani Sekolah Dasar Se-Kecamatan Blado Kabupaten Batang." *Indonesian Journal for Physical Education and Sport* 1(1): 389–97.
- Rofiatin, Itsna Zulia, and Akhiruyanto Andry. 2020. "Manajemen Pengelolaan Wisata Edukasi Gondang Outbound Lamongan Sebagai Wahana Pendidikan Olahraga & Rekreasi." *Journal.Unnes* 1(1): 188–96.
- Setyawan, Adi, and Ipang Setiawan. 2022. "Indonesian Journal for Physical Education and Sport Kondisi Fisik Dan Teknik Atlet Pencak Silat Pagar Nusa Kabupaten Temanggung." *Indonesian Journal for Physical Education and Sport* 3(2): 449–60.
- Sudadik, and Hermawan Raharjo. 2021. "Tingkat Perkembangan Kemampuan Motorik Siswa Sekolah Menengah Pertama Di Kecamatan Todanan Kabupaten Blora ." *Indonesian Journal for Physical Education and Sport* 2(1): 17–25.
- Sugiyono, P D. 2019. *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Bandung: CV. Alfabeta.
- Tanzeh, Ahmad, and Suharsimi Arikunto. 2014. "Metode Penelitian Metode Penelitian." *Metode Penelitian*: 22–34.
- Wirawan, Bayu, and Ipang Setiawan. 2023. "Kontribusi Metode Latihan Shuttle Run Terhadap Tendangan Mawashi Geri Dalam Karate Dojo Inkai Sidoharo Sragen." *Indonesian Journal for Physical Education and Sport* 4(2): 605–11. doi:10.15294/inapes.v4i2.55799.