



## Survey of Gross Motor Skills on Students of State Elementary School 2 Mojoroto, Kediri City

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### ABSTRACT

*Gross motor skills are abilities that must be possessed by any individual that begins to be developed at an early age. The age of 6-12 years is the age when each individual can master gross motor skills so it is necessary to know how the condition of their motor skills can be handled in the future. The purpose of this study was to find out how gross motor skills are in elementary school students. The research design used in this study is descriptive and quantitative with survey methods. The survey conducted by this study used tests and measurements in collecting data. The subjects in this study were 80 elementary school students who were male. The instruments in this study are coordination by throwing catches the ball, agility by using a shuttle run test, speed using a 30-meter sprint test, and balance using the Stork Stand Positional balance test. The results showed that motor skills in students of Mojoroto state elementary school in Kediri city are included in the good category with a percentage of 59%. Furthermore, in the excellent category, there are 2 students with a percentage of 3%, in the medium category there are 31 students with a percentage of 39%.*

**Keywords:** Skills; Gross Motor; Students; Survey.

### INTRODUCTION

*Motor ability* is the process by which an individual develops his or her motion ability into a coordinated, controlled, and orderly response. Students who have a good level of *motor ability* will tend to be easier to perform sports skills than those whose *motor ability* is not good (Dapp et al., 2021). Motor skills not only improve students' skills in sports but will also help make it easier for students to carry out daily activities. *Motor ability* can be interpreted as a person's capacity to be able to perform various movements that require courage in exercising (Bakke et al., 2019). The ability to move is the basic ability of a person to display various variations of movement in sports activities. Aspects of *motor ability* development are important to learn and understand both teachers and students during assessment learning because if students have good motion abilities, students will

have a basis for mastering special motion skills in the future. *Good motor ability* is very supportive of more complex sports movement skills for students (Ku, 2020).

Gross motor is a physical movement that requires balance and coordination between limbs, using large muscles, part or all of the limbs. Gross motor development is the development of gestures or body movements that use large muscles or most or all of the limbs that are affected by the maturity of the child himself (Burns et al., 2017). The age of the child is the age of development both physically and mentally. (Aye et al., 2018) mentions developments that occur at the end of childhood are physical development, intellectual development, language development, social development, emotional development, moral development, religious development; and motor development. The process of children's motor growth and development is related to the growth and development process of children's mobility (Kusumawardani et al., 2020). The development of children's motor abilities will be seen through the various movements and games that they can perform. Therefore, improving children's physical skills is also closely related to play activities which are the main activities of children. The movement of a child's limbs while playing has many benefits for the growth of other aspects of abilities for a child, such as aspects of cognitive development and aspects of the child's emotional and social development. In addition, improving children's movement and physical skills will play an important role in maintaining the health of the child's body, (Löf et al., 2019).

The development of motor abilities for elementary school students is very important because at the age of schoolchildren the elements of children's motor abilities are more often carried out by children such as jumping, running, even students can combine skills with the movements of their limbs such as throwing and catching (Jahagirdar et al., 2017). From the observations of researchers conducted at The State Elementary School 2 Mojoroto in Kediri City, it shows that elementary school students during leisure activities are known to be many active students and some students do not do their physical activities because they often do sedentary things, such as playing gadgets. When recess is usually for students in addition to using their time to buy food or do lunch from lunch brought from home, many students spend their rest time playing ball, playing traditionally, and playing chases on the school grounds. But some students use their rest time just to sit quietly in class to read books, draw, and also play electronic games.

In addition, many parents of students who do not allow their children to go to school on foot or cycling are also an obstacle to the development of children's

movements. Parents of students prefer to take their children due to the safety and security factors of students who go to and from school through crowded roads. The direct impact felt by such a lifestyle is whether it affects students' motor abilities. By seeing the importance of gross motor skills that must be possessed by elementary school students, therefore researchers intend to make direct observations of gross motor skills in students of State 2 Mojoroto elementary school in Kediri City.

## METHOD

The method used in this study was a survey test. The study was conducted to find the results used to determine gross motor skills in students of state elementary school 2 Mojoroto, Kediri city. The subjects in this study used purposive sampling techniques, namely, researchers will take 80 students who are male and students who are in grades 3 to 6 at the Mojoroto public elementary school 2, Kediri city. The method used in this study is a survey with a rough motoric skill test and measurement approach. The instruments in this study have four tests, namely the agility test with a 4x10 meter shuttle run, the coordination test by throwing a catch of the ball with a distance of 1 meter with the wall, the balance test with the stork stand positional balance test, the speed test with the 30-meter Sprint test. The data obtained on each test item is a form of raw data obtained from the results of each test. Furthermore, the data is converted via *t-score* and the data is interpreted by categorizing the data.

$$T = 10 \left( \frac{m-x}{SD} \right) + 50 \quad (\text{inversion data})$$

$$T = 10 \left( \frac{x-m}{SD} \right) + 50 \quad (\text{regular data})$$

The data has been converted into a *t-score*, and then the data is interpreted by categorizing the data. The data is grouped into five categories: excellent, good, sufficient, less and very less. This category has 5 references to normal limits according to (Sudijono, 2011), as follows:

**Table 1.**  
Category Scores

No.	Norm Range	Classification
1	$x > M + 1.5SD$	Very Good (BS)
2	$M + 0.5SD \leq x \leq M + 1.5SD$	Good (B)
3	$M - 0.5SD \leq x \leq M + 0.5SD$	Medium (S)
4	$M - 1.5SD \leq x \leq M + 0.5SD$	Less (K)
5	$x < M - 1.5SD$	Less once (KS)

The next step is when the profile of the physical condition of women's football player Candra Kirana is grouped based on 5 categories, such: very good, good, medium, less, less once, then it will be possible to determine how big the percentage is, calculate the percentage with the formula:

Percentage of results (%):

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

## RESULTS AND DISCUSSION

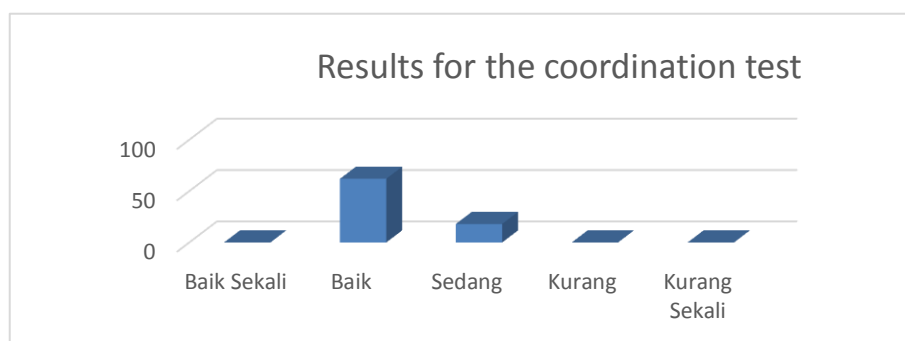
This research is a descriptive study, therefore the current condition of the object will be discussed based on the data that has been obtained. Research on a rough motoric survey of students of State Elementary School 2 Mojoroto, Kediri city. The data was obtained from the implementation of the test, thus getting a varied score. To solve this problem, the data is processed using a t-score, so that data with the same units is obtained. From the t-score data, the average score was obtained, and this data was grouped based on five categories that had been conveyed in the previous discussion. Each type of test is also calculated, so you will get the results of the rough motoric skills to survey at the State Elementary School 2 Mojoroto, Kediri City. The following is a description of the results of the research data.

Coordination assessment using the ball capture throwing test on students of public elementary school 2 Mojoroto Kediri city obtained a maximum score= 17, minimum score= 10, average= 14.73, and elementary school= 1.73. The following is a description of the research data on the capture throw test on students of state elementary school 2 Mojoroto in Kediri city, along with the bar chart.

**Table 1.**

Table of student coordination test results of SD Negeri 2 Mojoroto, Kediri city

No.	Category	Value	Frequency
1	Very Good	>18	0
2	Good	14 – 17	62
3	Moderate	9 – 13	18
4	Less	5 – 8	0
5	Less Once	<4	0



**Figure 1.**

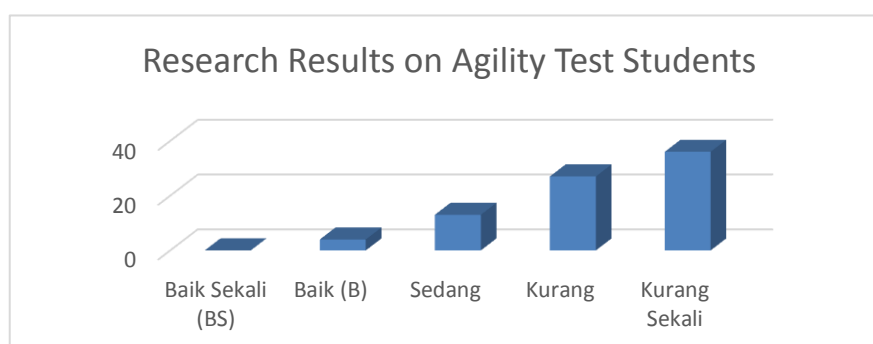
Diagram of Research Results for the coordination test for students of State Elementary School 2 Mojoroto, Kediri City

Agility Assessment using shuttle *run* test on students of public elementary school 2 Mojoroto Kediri city obtained a maximum score: of 19:55, minimum score: of 13:10, average= 16.79, and elementary school= 3,350. The following is a description of the research data on the capture throw test on students of state elementary school 2 Mojoroto in Kediri city, along with the bar chart.

**Table 2.**

Table of agility test results for students of SD Negeri 2 Mojoroto, Kediri city

Score	Men's Shuttle Run	Criterion	Frequency
5	<12.10	Very Good	0
4	12.11 - 13,53	Good	4
3	13,54 - 14,96	Moderate	13
2	14,97 – 16,41	Less	27
1	>16.41	Less Once	36



**Figure 2.**

Diagram of Research Results on Agility Test Students of State Elementary School 2 Mojoroto, Kediri City

Speed assessment using the 30-meter sprint test on students of Mojoroto State Elementary School 2 Kediri City obtained a maximum score: of 4.5, minimum score: 4, average: 41.86, and elementary school: 39.20. The following is a description of the

research data on the 30-meter *sprint* test on students of state elementary school 2 Mojoroto in Kediri city, along with the bar chart.

**Table 3.**  
Table of agility test results for students of SD Negeri 2 Mojoroto, Kediri city

Score	Men's Speed	Criterion	Frequency
5	<4.0	Very Good	19
4	4.2 – 4.0	Good	35
3	4.4 – 4.3	Moderate	26
2	4.6 – 4.5	Less	0
1	>4.5	Less Once	0

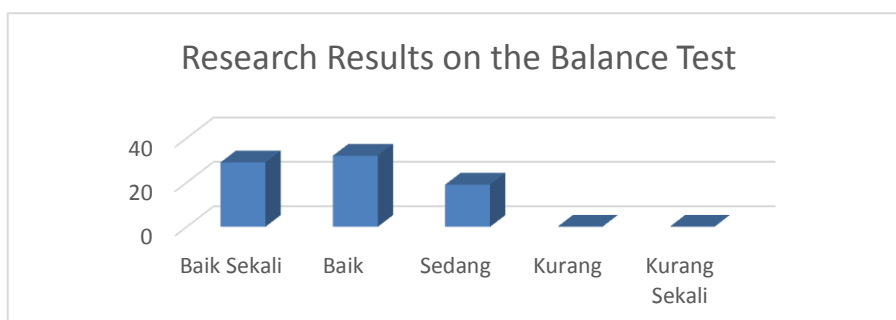


**Figure 3.**  
Diagram of Research Results for The Speed Test for Students of State Elementary School 2 Mojoroto, Kediri City

Balance selection using the *Stork Stand Positional Balance test* on students of state elementary school 2 Mojoroto, Kediri city obtained a maximum score: 65, minimum score: 30, average: 45.12, and elementary school: 77.19. The following is a description of the research data on the *Stork Stand Positional Balance test* on students of state elementary school 2 Mojoroto, Kediri city, along with the bar chart.

**Table 4.**  
Table of balance test results for students of SD Negeri 2 Mojoroto, Kediri City

No.	Category	Value (Second)	Frequency
1	Very Good	>50	29
2	Good	40 – 50	32
3	Moderate	25 – 39	19
4	Less	10 – 24	0
5	Less Once	<10	0



**Figure 4.**

Diagram of Research Results on the Balance Test for students of State Elementary School 2 Mojoroto, Kediri City

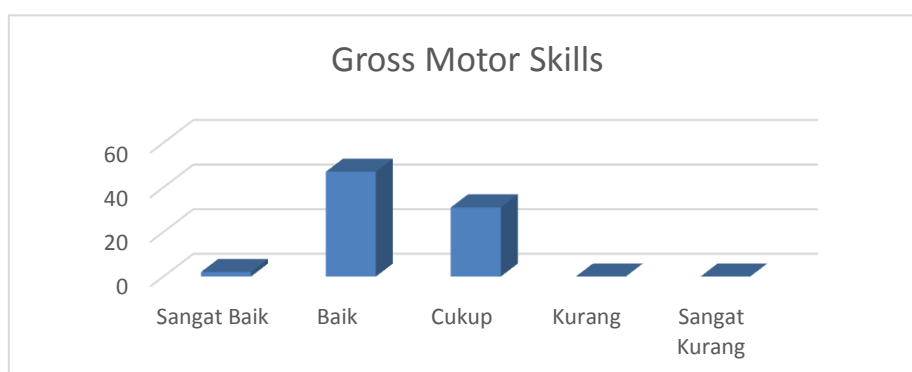
Based on the formula category that has been applied, data analysis obtained gross motor skills in students of state elementary school 2 Mojoroto, Kediri city, then categorization was carried out based on data that had been inputted and analyzed into 5 categories.

**Table 5.**

Frequency Distribution of motor skills kasar students of SD Negeri 2 Mojoroto kediri city

Interval	Category	Frequency	Relative Frequency	Percentage Frequency
$x >$	95,37	Excellent	2	3%
$45.39 < x <$	95,37	Good	47	59%
$-4.60 < x <$	45,39	Enough	31	39%
$-54.58 < x <$	-4,60	Less	0	0%
$x <$	-54,58	Very Lacking	0	0%
<b>Total</b>			<b>80</b>	<b>100%</b>

Overall, the gross motor skills survey on students of state elementary school 2 Mojoroto, Kediri city, is included in the good category with 47 students with a percentage of 59%, overall the results of the rough motor skills survey on students of State Elementary School 2 Mojoroto, Kediri city, are, as many as 31 students are included in the sufficient category in 31 players with a percentage of 39%, and the category is very good 2 students with a percentage of 3%. The gross motor skills survey on students of public elementary school 2 Mojoroto, Kediri city, can be described through a diagram can be seen in the figure below



**Figure 5.**

Diagram of Gross Motor Skills of students of State Elementary School 2 Mojoroto in Kediri City

## Discussion

The results of the gross motor skills survey research on students of state elementary school 2 Mojoroto, Kediri city, are known to have all the results that can be in a good category (59%). One of the factors that greatly influence the development of students related to their gross motor skills includes learning factors and habits. The learning and habits carried out by this student can have an impact on him to improve his abilities. Learning motion skills (Huseyin, 2019) states that students during the school period get motion experience from the subject matter at school, especially subject matter that focuses on physical development. Habits that contribute to the development of their movements according to (Allsabab et al., 2022) state that the habitual factors carried out by students in their activities play an important role in improving their movement ability because in the habits carried out by students there is a phase where students make a distinction of the skills they have.

Elementary school students must always improve their skills as a provision at the time of maturity, as revealed (Lander et al., 2020) states that students must have mastery of skills as a process of development towards a more mature age. Furthermore (Skowroński et al., 2019) stated Physical education at the time of learning in school is a material that introduces skills to students who are in school. In the process of developing gross motor skills carried out by students every day, it is necessary to monitor the development of gross motor skills as a result of the learning carried out by the student in each of his activities through monitoring gross motor skills. This study was for gross motor skills in elementary school students. The results of this study showed that each component of gross motoric skills such as coordination, agility, speed, and balance with the results of the study showed that gross motor skills in students of State Elementary School 2 Mojoroto, Kediri City, in each of these components received their categories, including Coordination in the good category of 62 students with a percentage of 78%, agility in the category of less once as many as 36 students with a percentage of 45%, speed in the good category were 35 students with a percentage of 44%, and the balance in the Good category was 32 students with a percentage of 40%.

The results obtained from this study can make new knowledge, and motivation for students and teachers to improve gross motor skills to be even better than the current results, besides that these results become evaluation material for teachers to improve their students' motor skills in a learning or a *treatment* about improving gross motor skills to



improve skills and prepare at a more mature age. This study is a current description of a person or group in the form of a situation regarding the state of the student's motor skills he has, (Akin, 2019), explaining that Where motor skills are a skill that must be possessed by each individual, these motor skills are obtained from the age of children as a basis for preparation in their development towards a more mature age.

## CONCLUSIONS AND SUGGESTIONS

The development of motor ability is very important to be mastered by students through physical education learning because through this students have good movement abilities, and students will have the basis to master special motion skills in the future. The development of motor abilities for elementary school students is very important because at the age of schoolchildren the elements of the child's motor abilities are more often carried out by children. In the research that has been carried out on students of State Elementary School 2 Mojoroto, Kediri City, students of State Elementary School 2 Mojoroto, Kediri City, the gross motor skills students have are very good, meaning that students have no problems regarding the development of their movements. One of the factors of this can happen because physical education or sports learning plays a very important role in maintaining the motor skills mastered by students

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