

# Survey of Ankle Coordination and Driving Ability of Students of SMK Negeri 4 Makassar

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#### ABSTRACT

This research is a type of descriptive research that uses a "Survey" research design. This study aims to determine; To see and know the description of the level of eye-foot coordination and the ability to dribble in football games for students of SMK Negeri 4 Makassar. The population is all students of SMK Negeri 4 Makassar. The sample used was 20 people. The sampling technique is Simple Random Sampling. The data analysis technique used is descriptive analysis. The research results show that; 1) ankle coordination in students of SMK Negeri 4 Makassar is in the moderate category with a percentage of 40.00%. 2) The ability to dribble a football game for students at SMK Negeri 4 Makassar is in the moderate category with a percentage of 40.00%.

#### **ARTICLE HISTORY**

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# INTRODUCTION

Football is a game sport that uses a field played by two teams, each consisting of eleven players. The game of soccer in general aims to put as many balls as possible into the opponent's goal and defend the goal so that the ball does not concede. This game requires good teamwork and must be supported by good technique and physique.

According to Mustamant (2013) Football is a team game in the field, using soccer balls from two opposing groups, each consisting of eleven players, lasting 2 x 45 minutes, victory is determined by the goal difference that enters the opponent's goal. Football is a sport that is cheap and can be done by anyone and anywhere. Not infrequently, football is played on muddy, clay, rice fields, roads, or narrow alleys. Football is a game that requires a lot of energy, stimulates enthusiasm as well as gives joy through being together as a team.



The physical condition of soccer players is the main object to be fostered and developed by coaches, football in addition to technique, tactics, mentality and match maturity. Excellent physical condition and ready to face the match is an important element in the game of football. Excellent physical condition and good technical mastery can make a significant contribution to having the ability to play soccer.

In the process of training the elements of the physical condition occupy the leading position to be trained, before continuing the training of techniques, tactics, mentality and maturity to compete in achieving achievements. This shows that all sports, especially football, can be improved at a young age to achieve the highest achievements. Improving physical conditions in the sport of football can be built from the age of 12 years. A soccer player must own and master good playing techniques, especially techniques with the ball, which are needed when attacking, defending and controlling the ball. One of the techniques needed in football is the technique of dribbling.

The coordination needed by every player in a soccer game is ankle coordination, because the eye is a vital point to see the conditions around the field and the role of the foot as a ball processor when dribbling. Eye-foot coordination is the ability to integrate the eyes and feet simultaneously in carrying out a movement so that it is maximized.

Based on observations of Makassar State Vocational School 4 students, many players are not good at dribbling, they tend to be monotonous in dribbling, less skilled at passing opponents. It can be seen that when playing football, many players have difficulty getting past opponents, this is allegedly due to the lack of ankle coordination that each player has. Based on the description above, the authors want to conduct research entitled: Survey of ankle coordination and ability to dribble in soccer games for students of SMK Negeri 4 Makassar.

## MATERIALS AND METHODS

This type of research is descriptive. Descriptive is a method of researching an object to make a systematic, factual and accurate description, picture or picture of the facts, characteristics and relationships between the phenomena being investigated. The method used in this study is a survey method with test and measurement techniques. Research variables are symptoms/objects that are the focus of researchers to observe and data will be collected.

This research was conducted at SMK Negeri 4 Makassar. The implementation of the research is in November 2022. According to Suharsimi Arikunto (1992), says that: variable is the object of research or what is the point of attention of a research. In this study the single variable involved, namely the single variable ankle coordination and the ability to dribble which makes the object of the players at SMK Negeri 4 Makassar, will be identified in this study.

Ankle-foot coordination is a harmonious relationship of mutually influencing relationships between muscle groups during activity, various levels of skill will be measured by kicking the ball against the wall, namely how many kicks the ball can hit or be on target and succeed in returning within 30 second. Dribbling skills are kicking

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movements intermittently and slowly dribbling can be done with the inside of the foot, instep and outside of the foot, which will be measured by a zig-zag test or dribbling to avoid obstacles.

Sugiyono (2014) state that population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by researchers to be studied and conclusions drawn. So the population is not only people, but also objects and other natural objects. The population is also not just the amount that exists in the object/subject being studied, but includes all the characteristics/traits possessed by that subject or object. Based on the opinion above, the population of this study is all students of SMK Negeri 4 Makassar. However, the population is limited in order to have the same characteristics in terms of sex.

The sample is simply defined as part of the population which is the actual source of data in a study. The notion of the sample is based on the view of Arikunto (1996) that: "The sample is a portion of the population taken using a particular technique called the sampling technique. Because the population in this study was relatively large, the researchers limited it to random selection using the "Simple Random Sampling" technique by lottery, so that a total sample of 20 students of SMK Negeri 4 Makassar was obtained.

After all the research data has been collected, the next step is to analyze the data, so that a conclusion can be drawn from the data. In this study, statistical analysis was used with the help of a computer through the SPSS version 21 program to find out how the ankle coordination and dribbling skills in soccer games for students at SMK Negeri 4 Makassar are used.

# **RESULTS AND DISCUSSION**

Empirical data obtained in the field through tests and measurements of ankle coordination and the ability to dribble football games on students of SMK Negeri 4 Makassar, were then analyzed using descriptive statistical techniques. Descriptive data analysis is intended to get an overview of the research data, then proceed with testing the analysis requirements, namely the data normality test in this study.

#### 1. Data Description

The summary of the results of the descriptive statistical calculations is presented as follows:

Table 1. Summary of research results								
Statistics	Statistics Leg Muscle Strength The ability to kick the ba							
Sample	20	20						
Average	17.60	21.405						
Median	17.50	21.65						
Standard Deviation	2.415	1.574						
Variance	5.831	2.477						
Range	9	6.02						
Minimum	13	18.10						
Maximum	22	24.12						

From table 1 above, it can be presented an overview of the data for each indicator on the following variables:

### Ankle Coordination in Students of SMK Negeri 4 Makassar

Based on research data on ankle coordination in students of SMK Negeri 4 Makassar obtained a minimum score of 13 times and a maximum value of 22 times with a range of 9 times. The average value is 17.60 times, has a median of 17.50 times with a standard deviation of 2.415 times, and a variance of 5.831 times.

Makassar								
No.		Interval Class		Absolute Frequency	Relative Frequency (%)			
	1	13	-	14	2	10.00		
	2	15	-	16	4	20.00		
	3	17	-	18	7	35.00		
	4	19	-	20	4	20.00		
	5	21	-	22	3	15.00		
		Amount			20	100.00		

 Table 2. List of Frequency Distribution of the results of leg muscle strength in students of SMK Negeri 4

 Makassar

#### The ability to dribble a soccer game on students at SMK Negeri 4 Makassar

Based on research data on the ability to dribble football games for students at SMK Negeri 4 Makassar obtained a minimum score of 18.10 points and a maximum score of 24.12 points with a range of 6.02 points. The average value of 21,405 points has a median of 21.65 points with a standard deviation of 1,574 points and a variance of 2,477 points.

Makassar								
No.		Interval Class			Absolute Frequency	Relative Frequency (%)		
	1	18.10	-	19.20	2	10.00		
	2	19.30	-	20.40	3	15.00		
	3	20.50	-	21.60	5	25.00		
	4	21.70	-	22.80	7	35.00		
	5	21	-	22	3	15.00		
		Amount	-		20	100.00		

**Table 3.** List of Frequency Distribution of the results of the ability to dribble students of SMK Negeri 4

 Makassar

1. Qualification Results of ankle coordination and the ability to dribble a soccer game on students of SMK Negeri 4 Makassar

#### Ankle coordination in students of SMK Negeri 4 Makassar

**Table 4.** List of percentage conversion scale assessment criteria for ankle coordination in students

 of SMK Negeri 4 Makassar

				- 5 -		
No	Category	Inter	val Cla	ISS	Absolute Frequency	Relative Frequency (%)
1	Very Well	Х	>	21.22	1	5.00
2	Well	21.22 ≥	х	> 18.81	5	25.00

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3	Currently	18.81 ≥	Х	> 16.39	8	40.00
4	Not enough	16.39 ≥	Х	< 13.98	5	25.00
5	Less Once	13.98	≥	х	1	5.00
		Ar	nount		20	100

#### The ability to dribble a soccer game on students at SMK Negeri 4 Makassar

**Tabel 5.** List of percentage conversion scale assessment criteria for the ability to dribble a football game for students at SMK Negeri 4 Makassar

No	Category	Inte	erval Cl	ass	Absolute Frequency	Relative Frequency (%)
1	Very Well	Х	<	19.04	2	10.00
2	Well	19.04 ≤	Х	< 20.62	4	20.00
3	Currently	20.62 ≤	Х	< 22.19	8	40.00
4	Not enough	22.19 ≤	Х	< 23.77	5	25.00
5	Less Once	23.77	≤	Х	1	5.00
			Amount	t	20	100

# DISCUSSION OF RESEARCH RESULTS

#### Coordination of the ankles in students of SMK Negeri 4 Makassar

The very good category was obtained by 1 (5.00%) person who had a score greater than 21.22. Based on the assessment of ankle coordination in students of SMK Negeri 4 Makassar, the samples had ankle coordination movements above the average value of 17.60 times. The good category was obtained by 5 (25.00%) people who had a value in the class interval that was smaller than the value of 21.22 and greater than the value of 18.81. Based on the assessment of ankle coordination in students of SMK Negeri 4 Makassar, the samples had ankle coordination movements above the average value of 18.60 times.

The average category is obtained by 8 (40.00%) people who have a value in the class interval that is smaller than the value of 18.81 and greater than the value of 16.39. Based on the assessment of ankle coordination in students at SMK Negeri 4 Makassar, the samples had leg muscle strength movements in class with an average value of 16.60 times. The less category was obtained by 5 (25.00%) people who had scores in class intervals smaller than the value of 16.30 and greater than the value of 13.98. Based on the assessment of ankle coordination in students of SMK Negeri 4 Makassar, the samples had ankle coordination movements in the class below the average value of 17.60 times.

The less category was obtained by 1 (5.00%) person who had a value in the class interval that was smaller than the value of 13.98. Based on the assessment of ankle coordination in students of SMK Negeri 4 Makassar, the samples had ankle coordination movements in the class below the average value of 17.60 times. Based on each of these

categories, the ankle coordination category of students at SMK Negeri 4 Makassar is moderate with a percentage of 40%.

#### The ability to dribble a soccer game on students at SMK Negeri 4 Makassar

The excellent category was obtained by 2 (10.00%) people who had the ability to dribble a soccer game at class intervals smaller than 19.04. Based on the assessment of the implementation of the ability to kick a soccer ball in Makassar 4th Vocational High School students, the samples had the ability to dribble a soccer game faster than the class average value of 21,405 in the ability to dribble a soccer game. Meanwhile, from the observation aspect of dribbling carried out by each of these samples, it shows that the ability to dribble past obstacles is very good.

The good category was obtained by 4 (20.00%) people who had the ability to dribble football at class intervals smaller than 20.62 and greater than 19.04. Based on the assessment of the implementation of the ability to kick a soccer ball in Makassar 4th Vocational High School students, the samples had the ability to dribble a soccer game faster than the class average value of 21,405 in the ability to dribble a soccer game. Meanwhile, from the observation aspect of dribbling carried out by each of these samples, it showed good ability to dribble past obstacles.

The average category is obtained by 8 (40.00%) people who have the ability to dribble football at class intervals smaller than 22.19 and greater than 20.62. Based on the assessment of the implementation of the ability to kick a soccer ball in Makassar 4th Vocational High School students, the samples had the ability to dribble a soccer game faster than the class average value of 21,405 in the ability to dribble a soccer game.

Poor category obtained 5 (25.00%) people who have the ability to dribble football game points at intervals smaller than 23.77 and greater than 22.19. Based on the assessment of the implementation of the ability to kick a soccer ball in Makassar 4th Vocational High School students, the samples had the ability to dribble a soccer game faster than the class average value of 21,405 in the ability to dribble a soccer game.

In the very poor category, 1 (5.00%) person has the ability to dribble a soccer game at intervals greater than 23.77. Based on the assessment of the implementation of the ability to kick a soccer ball in Makassar 4th Vocational High School students, the samples had the ability to dribble a soccer game faster than the class average value of 21,405 in the ability to dribble a soccer game. Based on each of these categories, the category of students' ability to dribble the ball at SMK Negeri 4 Makassar is moderate with a percentage of 40%.

#### CONCLUSION

Leg muscle strength in students of SMK Negeri 4 Makassar is in the moderate category, with a percentage of 40.00%. The ability to kick a soccer ball for students at SMK Negeri 4 Makassar is in the moderate category, with a percentage of 40.00%.

The trainer is expected to be able to provide reinforcement and maintain ankle-foot coordination, so that it can improve ankle-foot coordination in students at SMK Negeri 4 Makassar. The coach is expected to be able to provide strengthening of the ability to dribble soccer football games by paying attention to contact with the ball with the feet and obstacles so that they can improve the ability to dribble soccer games for students at SMK Negeri 4 Makassar.

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