

Relationship of Absolute Speed and Sixtydriving Liability

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Abstract: *Research This study aims to identify the relationship between absolute speed and agility towards the ability to dribble in the students participating in the 2020 GSI SMP Yogyakarta City level selection. This research is a correlational study. The method used was a survey with data collection techniques using an absolute speed test (10 m run), agility test (Illinois test), and dribbling test (dribbling test). The research subjects were 48 students participating in the GSI SMP Yogyakarta City level selection in 2020. Data analysis techniques used partial test analysis and simultaneous testing. The results showed that there is a partial significant relationship with the absolute speed of 72.4% and agility of 87.6% and simultaneously 77.3% of absolute speed and agility abilities to the ability to dribble has a close relationship with absolute speed and agility of 77.3%, the remaining 22.7% is from other factors outside of this study such as psychological factors or mental maturity and flexibility of the legs.*

Keywords: Absolute speed, agility, dribbling

1. Introduction

The Covid-19 virus is currently sweeping the entire world, including Indonesia. During this pandemic, the Government recommends staying at home to break the chain of spreading the covid-19 virus. As a result, all activities including various championships are not allowed, including soccer sports championships. Various championships ranging from junior to senior were canceled. The Indonesian Student Gala is a championship whose concept is a selection for players at the junior high school level, it is still held for the sake of accelerating the development of national football, although the concept changes. The National Achievement Center Kemdikbud in collaboration with PSSI continues to hold selections ranging from school to national levels in the middle school level Indonesian Student Gala. Since three years ago, GSI was held as a step to attract talented football talents aged 13-14 years at the junior high school level. Two years of selection were held by competing with all the players from the school level at the sub-district then district, provincial to national level.

The selection format during the pandemic was changed according to conditions; the selection that is usually observed directly in matches is now only the selection of individual players' techniques from home. Then the test video results are sent to the committee for assessment. However, one of the techniques that are important in the basic techniques of football, namely dribbling skills is not assessed. Dribbling or dribbling is the ability of a player to control the ball and be able to dribble to pass the opponent, directing the ball into space, breaking away from the opponent's control, opening space for friends, and creating opportunities to shoot into the opponent's goal (Komarudin (2011): 50) (Mulyono, 2017: 54). Huijgen et al. (2010: 11) added that this technique can be done by dribbling using

the inner leg, dribbling using the outer side of the foot, and dribbling using the foot turtle.

Based on the understanding and objectives in the match, dribbling techniques are very important to know the abilities of each player. This is important as an understanding of individual abilities for trainers as valuable information to optimize individual and team training programs (Bereira, 2013: 47). In the process, not only the basic techniques in the field or this case the dribbling technique, but also have to be seen from the foundation. In the pyramid of peak performance, the physical condition has a role as a foundation before the basic technique of the player. This means that the dribbling technique also needs to be assessed from the physical condition of the player. This is reflected in the selection process to get superior players. Physical components need to be prepared, including size, speed, strength, power, flexibility, coordination, agility, and endurance.

In every moment, players need speed and agility. Widiastuti, (2017: 125) explains that speed is the ability to perform similar movements in succession in a short time or the ability to cover the distance in the shortest possible time. In this case, what is relevant to the selected instrument is the absolute speed of the player within 10 meters. Then agility (Agility) is the ability to change the direction and position of the body or its parts quickly and precisely (Ismaryati, 2008: 76). The elements of speed and agility are seen in the ability to dribble and keep or escape from opponents. It is not uncommon for a player to use speed to leave the opponent and nimbly change direction past the goalkeeper to score. Then when fighting for the wild ball the player uses absolute speed to win the duel and nimbly secures the ball in control. This means that the factors of speed and agility have a supporting role in the ability to dribble in addition to ball control and balance.

This must be identified in a real way to know how the absolute speed and agility relate to the players or students participating in the GSI SMP Yogyakarta selection in 2020. These results will later serve as important information for coaches at the next level to find out not only basic techniques such as passing control, shooting, coordination, etc. but also the supporting factors. Based on this description, the researcher is interested in further examining the research entitled "the relationship between the ability of acceleration speed and agility to the ability to dribble in the students participating in the GSI SMP Yogyakarta City level selection in 2020"

2. Methods of Research

This research is a correlation study that aims to determine the relationship between speed ability. Acceleration and agility towards the ability to dribble in the students participating in the GSI Junior High School selection for Yogyakarta City in 2020. The research design is as follows:

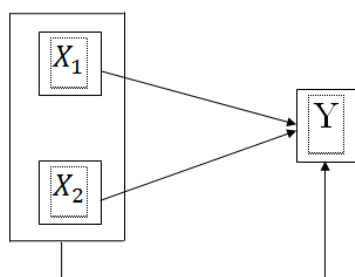


Figure 1: Research Design

Description:

X₁: Absolute Speed

X₂: Agility

Y: Ability to Dribble

—————> : Relationship between the two variables

The research subjects were 48 students participating in the GSI SMP Yogyakarta City level selection in 2020. The time of the research was carried out in August 2020. Research instruments included:

1. Absolute speed was measured using a 10 m sprint test (GSI, 2020)
2. Agility test was measured using the Illinois agility test (GSI, 2020)
3. Ability test to dribble using the dribbling test (Nurhasan)

The correlation analysis technique is a statistical analysis technique regarding the relationship between two or more variables (Sudjono, 2009: 188). The analysis uses correlation analysis with the help of SPSS for Windows 21. Before testing the hypothesis, the data normality test was conducted to test the normality of the data using the Kolmogorov Smirnov test and linearity test, then the partial correlation test was a significant relationship between absolute velocity (X₁) and agility (X₂) on the ability to dribble (Y) and continued. with multiple correlation tests to test the significant relationship between

absolute speed (X₁) and agility (X₂) on the ability to dribble (Y).

3. Results and Discussion

The results of measuring the absolute speed, agility, and ability to dribble the students participating in the 2020 GSI SMP Yogyakarta City level selection are in units of time (seconds). The description of the research results is as follows:

Table 1: Descriptive Data on the Measurement Results of Absolute Speed, Agility and ball Mneggiring Ability

Descriptive	X ₁	X ₂	Y
N	48	48	48
Mean	2.0237	16.9773	17.8433
Std. Deviation	1.75096		.12172
Variance	.015	3066	5284
Minimum	1.75	14:00	14:01
Maximum	2:31	21:17	22:00

Based on Table 1 it can be seen that out of 48 students obtained an average speed of 10 meters absolute run average of 2, 02 seconds later, the fastest time of 1.75 seconds, and the longest time is 2.31 seconds. Data resulting from the average agility ability is 16.97 seconds, then the fastest time is 14.00 seconds and the longest time is 21.17 seconds. The data on the ability to dribble an average of 17.84 seconds then the fastest time is 14.01 seconds and the longest time is 22.00 seconds. To determine whether there is a relationship between absolute speed, agility, and the ability to dribble, it can be seen in the partial and multiple correlation analysis with the help of SPSS version 21.

The data normality test is one of the statistics used to test data obtained from research results that are normally distributed or not. If the distribution is normal, then to test the hypothesis in this study, parametric statistics can be used (in this case, regression analysis). In connection with the normality test of this data, Kolmogorov Smirnov used it, if the probability is greater than the error level used, it can be concluded that the data is normally distributed. Data normality test results are shown in Table 2.

Table 2: Results of data Normality Test

Variable	Value	Value Sig	Criteria
X ₁	0.995	0.275	Normal
X ₂	0.751	0.625	Normal
Y	0.910	0.379	Normal

Based on the table it appears that the probability of normality test results greater than 0.05, which means that the data is normally distributed. To test the linearity of the regression line between the speed with dribbling and agility with dribbling, it can be seen from the results of the F test as in table 3. From the results of this analysis, if the F value is obtained with a probability of more than the error level (0.05) it can be concluded that there is a linear relationship between the absolute speed with dribbling and agility with dribbling.

Table 3: Results of the Linearity Test

for the relationship with the	F	Sig.	Criterion
X ₁ . Y	1.491	0.167	Linear
X ₂ . Y	1.702	0.74	Linear

Partial test using person analysis to test the partial relationship between absolute velocity on the ability to dribble and agility towards the ability to dribble. Partial test results can be seen in Table 4 below:

Table 4: Person Test Results

Correlation	Sig.	The value of r _{count} The	value of table	Criteria
X ₁ . Y	0.00	0.724	0.320	There is relationship a significant
X ₂ . Y	0.00	0.876		There is a relationship. Based significant

On the results of the partial correlation test using person, it was found that there was a significant relationship between absolute speed (X₁) and the ability to dribble (Y) students participating in the GSI selection for SMP Yogyakarta City level in 2020 with a sig value of 0, 00 <0.05 and the value of $r_{count} = 0.724 > r_{table (df46)} = 0.320$. Then there is a significant relationship between the Agility ability (X₂) to the ability to dribble (Y) the students participating in the GSI Junior High School selection for Yogyakarta City in 2020 with a sig value of 0.00 <0.05 and the value of $r_{count} = 0.876 > r_{table (df 46)} = 0.320$.

These results mean that students who have a high absolute speed or a fast time will also be followed by the least time in dribbling, on the contrary with a low speed will be followed by a long time in dribbling. Then students who have high agility or fast time will also be followed by the least time in dribbling, on the contrary with low speed will be followed by a long time in dribbling.

The simultaneous test is intended to determine the relationship between absolute speed and agility towards the ability to dribble the students participating in the GSI Junior High School Yogyakarta selection in 2020. The results of multiple regression analysis are shown in the following table:

Table 5: Simultaneous Test Results

Correlation	R	R square	Value r table Calculate	value of table (df 2.45)	Means
X ₁ .X ₂ . Y	0.879	0.773	76.477	0.320	Significant

Based on this analysis, obtained by $76.477 F_{count} > F_{table (df 2, 45)} = 0.320$ with a probability of $0.000 < \alpha = 0:05$, which means significant. This means that simultaneously absolute speed (X₁) and agility (X₂) have a relationship with dribbling (Y) students participating in the GSI Junior High School selection for Yogyakarta City in 2020 and partially shows that agility has a greater relationship than speed. absolute.

Based on the table, it appears that the relationship between them is 0.879, while the contribution of absolute speed and agility to the results of dribbling can be seen from the R square value, which is 0.773 or 77.3%. This means that the results of dribbling are influenced by speed and agility by 77.3%, the remaining 22.7% from other factors outside of this study such as psychological factors or mental maturity, leg muscle strength, and ball control.

Dribbling is the ability of a player to control the ball and be able to dribble the ball to pass opponents, directing the ball into space, breaking away from opponent's control, opening space for friends, and creating opportunities to shoot into the opponent's goal. This technique is one of the most practiced in games and is considered to be very decisive in match performance (Ali, 2011).

The ability to dribble in biomechanics is influenced by speed, agility, and leg muscle strength (Padriyaya, 2012: 04). Based on the results of the study, it was found that there was a significant relationship between absolute speed (X₁) and the ability to dribble (Y) of the students participating in the GSI selection for SMP Yogyakarta City level in 2020 with a sig value of 0.00 <0.05 and a value of $r_{count} = 0.724 > r_{table (df46)} = 0.320$. With high absolute speed, a person can get the ball during a melee duel by getting the ball first then the opposing player, or quickly counterattacking (Maliki, et al, 2017: 2).

Then based on the results of the study, it was found that there was a significant relationship between the Agility ability (X₂) and the ability to dribble (Y) of the students participating in the GSI selection for SMP Yogyakarta City level in 2020 with a sig value of 0.00 <0.05 and the value of $r_{count} = 0.876 > r_{table (df 46)} = 0.320$. Gusnanda (2012) states that agility will have a major effect on dribbling techniques, not only carrying the ball along the ground and straight ahead but facing opponents who are quite close and close. Then with high agility players can free themselves from the opponent's control by changing direction quickly or tinkering with the opponent's defense (Maliki, et al, 2017: 2).

Based on the table, it appears that the relationship between them is 0.879, while the contribution of absolute speed and agility to the results of dribbling can be seen from the R square value, which is 0.773 or 77.3%. This means that the results of dribbling are influenced by absolute speed and agility by 77.3%, the remaining 22.7% from other factors outside of this study such as psychological factors or mental maturity and flexibility of the legs. This result is in line with what Orer&Arslan (2016: 29) states that acceleration, agility, dribbling speed, sprint ability, and vertical jump have a close relationship in football skills.

4. Conclusion

Based on the results of the research and discussion, it can be concluded that there is a partially significant relationship with the absolute speed of 72.4% and agility of 87.6% and simultaneously 77.3% of absolute speed and agility abilities to the dribbling ability of students

participating in the GSI selection. Yogyakarta City Junior High School 2020.

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