

The Effect of Agility, Speed, and Self Confidence Towards Dribbling Ability in Football Game

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ABSTRACT

The purpose of this research was to determine how much the influence of each independent variable (agility, speed and self-confidence) toward dribbling ability. This research used quantitative correlational methods with descriptive approaches through path analysis. The sample in this research were students of Bengkulu City 7 State High School which numbered 30 people. The sampling technique used was purposive sampling. The data analysis technique used was descriptive and inferential techniques with path analysis with the help of SPSS version 22.00. The results of data analysis show that: (1) The direct effect of agility toward dribbling ability is 0.541 or 54.1%. (2) The direct effect of speed toward dribbling ability is 0.196 or 19.6%. (3) The direct influence of self-confidence toward dribbling ability is 0.270 or 27.0%. (4) The indirect effect of agility toward dribbling through self-confidence is 0.185 or 18.5%. (5) The indirect effect of speed toward dribbling through self-confidence is 0.133 or 13.3%. Conclusion the results of the research showed a significant direct and indirect influence toward the dribbling ability of students Bengkulu City 7 State High School.

Keywords: *Agility, speed, self confident, dribbling, football game*

1. INTRODUCTION

Football is a very popular sport, as well as in Indonesia. In football games, there are many factors that can affect a player's abilities, such as physical, technical, tactical and mental conditions. Besides, there are some basic techniques that must be mastered by a player, one of which is the dribbling technique. Dribbling is a basic technique that must be mastered in the game of football perfectly, because dribbling is used to control the ball remains in the mastery of the team and change the direction of attack.

From the problems that occur in the field, the defeat experienced by the of Bengkulu City 7 State High School is due to the weak physical condition possessed by the players. This can be seen when players dribbled the ball, the could not control the ball when carrying out attacks on the opponent's defense. Players tend to be slow in doing dribbling in the future in an effort to carry out an attack, the movements carried out also still appear stiff or inflexible and are still less agile when making tricky movements when doing dribbling.

Allegedly, there are two factors that cause the low ability of basic techniques in the Bengkulu City 7 State High School especially on dribbling abilities namely internal factors and external factors. Internal factors are factors that come from within a person, such as physical condition, intelligence, ability to absorb information about

how to do dribbling, anatomical structure, beliefs, confidence and motivation. As stated by Gunarsa (1989: 89) personality aspects such as motivation, attitudes, concentration abilities, levels of tension-anxiety, and self-confidence, body condition, health, emotional intelligence, ability, physical condition, talents, interests, are factors psychology that is very influential for optimally displaying abilities ". External factors are factors that come from outside a person, such as facilities and infrastructure and the quality of the coach.

Physical conditions are very influential in every sport, both sports that have high or low intensity, both individual and team sports. As stated by Maliki et. al (2017) Each sport has its own characteristics and specialties so special physical conditions are needed, such as in football. Physical conditions that are very much needed in football include; endurance, explosive power, speed and agility.

Students' ability to absorb information related to students' understanding of information will have a positive impact on the learning process of football, the information gives them an idea of how to do dribbling in football games. The anatomical structure of a student's body is inadequate as a fat body becomes a burden because body shape is the main requirement. The confidence of students who are still lacking in dribbling for fear of the appearance of the technique is not as

nadequate facilities and infrastructures, so that the learning process will not be optimal. The quality of the trainer is related to his training competencies. The coach plays a very significant role for the progress of the team. To score a good player, a special ability is needed by the coach.

2. METHOD

The research method used in this research is a quantitative method, through a descriptive approach and path analysis. The purpose of this study was to determine the direct and indirect effects of agility, speed, and confidence in dribbling skills in football games of students of Bengkulu City 7 State HighSchool. The variables associated in this study are dribbling (Y), agility (X1), speed (X2), and confidence (X3).

The population in this research were students of class XI IPS IV and VI in Bengkulu City 7 State Hight School, which amounts to 60 people. The sampling technique in this study was conducted by purposive sampling. The reason for taking a purposive sample is because only 30 male students will be taken in this study.

Table 1. Population and Sample.

Local class	Gender		Total
	Male	Female	
XI IPS IV	15 people	15 people	30people
XI IPS VI	15people	15people	30 people
Total			60 people

This data collection techniques used were tests and measurements. The tests were carried out as a reference or measuring instrument to obtain data or information.

Data analysis techniques were carried out descriptively and inferentially, the use of descriptive data analysis techniques was to find out the characteristics of the distribution of scores / values of each variable under study. Descriptive analysis is used in terms of data presentation, central size, and size of spread. Presentation of data using frequency distribution lists and histograms. The central size includes the average (Mean), middle average (Median), and the value that often appears (Mode). The size of the spread includes variance and standard deviation. While inferential analysis / causal analysis is used to test the analysis and hypothesis requirements by using the Trimming path analysis model.

Before testing hypotheses, first testing the requirements analysis includes testing the regression estimation error normality, testing the significance and linearity of a simple regression model. The normality test for regression estimation errors is done by the liliefors technique and the significance and linearity test of the regression model with Anava.

3. RESULT

Normality test

The results of the calculation of agility data normality test using the Kolmogorov-Smirnov test through the help of SPSS 22.00 obtained the value of P-Value = 0.341.

Due to the value of P-Value> from the significance level of 0.341> 0.05 then it can be interpreted that agility data came from populations that were normally distributed.

The results of the calculation of the speed data normality test using the Kolmogorov-Smirnov test through the help of SPSS 22.00 obtained the value of P-Value = 0.122. Because the value of P-Value> from the significance level is 0.152> 0.05 then it can be interpreted that the data from the population is normally distributed.

The results of the calculation of the self-confidence data normality test using the Kolmogorov-Smirnov test through the help of SPSS 22.00 obtained the value of P-Value = 0.245. Because the P-Value> of the significance level is 0.245> 0.05, it can be interpreted that the agility data comes from populations that are normally distributed.

The results of the calculation of the data normality test of dribbling ability using the Kolmogorov-Smirnov test through the help of SPSS 22.00 obtained the value of P-Value = 0.296. Because the value of P-Value> from the significance level is 0.296> 0.05, it can be interpreted that the data on dribbling ability comes from populations that are normally distributed.

Linearity test

Based on the results of the agility variable linearity test (X1) on the variable dribbling ability (Y) which is processed through the SPSS version 22.00 program assistance obtained fcount = 4.755 with a significance of 0.112, based on the results of the calculation obtained ftable = 8.62. Because fcount<ftable, it can be concluded that the model of the relationship between agility variables (X1) and dribbling ability(Y) capabilities is linear.

Based on the results of the speed variable linearity test (X2) on the variable dribbling ability (Y) which is processed through the help of the SPSS version 22.00 program assistance obtained fcount = 4.011 with a significance of 0.093, based on the results of the calculation obtained ftable = 5.77. Because fcount<ftable, it can be concluded that the relationship model between speed variables (X2) and dribbling ability (Y) is linear.

Based on the results of the self-confidence variable linearity test (X3) on the variable dribbling ability (Y) which is processed through the SPSS version 22.00 program assistance obtained fcount = 3.061, with a significance of 0.067, based on the results of the calculation obtained ftable = 3.41. Because fcount<ftable, it can be concluded that the model of the relationship between variables of confidence (X3) and dribbling ability (Y) is linear.

Based on the results of the agility variable linearity test (X1) with dribbling ability (Y) through self-confidence (X3) which is processed through the SPSS version 17.00 program assistance obtained the value of fcount = 5.237 with a significance of 0.098, based on the calculation results obtained ftable = 8.62. Because fcount<ftable, it can be concluded that the relationship model between Agility variables (X1) and dribbling (Y) ability through self-confidence (Y) is linear.

Based on the results of the linearity test the variable speed of confidence (X3) with dribbling ability (Y) through self-confidence (X3) which is processed through the SPSS version 22.00 program, the calculated value =

1 a significance of 0.007, based on the calculation results obtained $f_{table} = 5.77$. Because $f_{count} < f_{table}$, it can be concluded that the model of the relationship between speed variables (X2) with dribbling ability (Y) through self-confidence (X3) is linear.

Table 2. Substructure Testing Hypothesis 2 Correlation matrix.

	X1	X2	X3	Y
X1 Pearson Correlation	1	,946	,966	,987
Sig. (2-tailed)		,000	,000	,000
N	30	30	30	30
X2 Pearson Correlation	,946	1	,945	,963
Sig. (2-tailed)	,000		,000	,000
N	30	30	30	30
X3 Pearson Correlation	,966	,945	1	,978
Sig. (2-tailed)	,000	,000		,000
N	30	30	30	30
Y Pearson Correlation	,987	,963	,978	1
Sig. (2-tailed)	,000	,000	,000	
N	30	30	30	30

Based on the table above, it can be seen that the index of correlation of agility to speed is 0.946, agility to confidence is 0.966, speed of confidence is 0.945, agility to dribbling ability is 0.987, speed of dribbling ability is 0.963, and confidence in dribbling ability 0.978. All correlation coefficients between variables are positive. This means that there is a positive relationship between variables in substructure 2.

Table 3. Anovabtesting result.

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	287,721	3	95,907	636,106	,000 ^b
Residual	3,920	26	,151		
Total	291,641	29			

a. Predictors: agility, speed and confidence
b. Dependent Variable: dribbling skill

Based on the table above, it can be seen the simultaneous influence between agility, speed and confidence in dribbling abilities, namely by comparing the value of f_{count} with f_{table} . The value of f_{count} shown in the table is 636,106, with $DK = 3$ versus 26 the value of $f_{table} = 2.98$ is obtained. with $f_{count} > f_{table}$, it can be interpreted that there is a significant simultaneous effect

on agility, speed and confidence in dribbling abilities. As such, individual testing can be continued.

Table 4. Test result of Coefficients^b.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-17,716	1,156		-15,322	,000
X1	1,520	,270	,541	5,632	,000
X2	,755	,292	,196	2,589	,016
X3	,070	,025	,270	2,832	,009

a. Predictors: (Constant) agility, speed and confidence
b. Dependent Variable: dribbling skill

The results of the first hypothesis test on substructure 2, obtained the agility t value of 5.632, the path coefficient value between X1 to Y (β_{yx1}) = 0.541 and the value of Sig. 0,000. It turns out the value of Sig. < value α is 0,000 < 0.05, then path analysis coefficient is significant, meaning that there is a significant direct effect between agility to dribbling ability or in other words reject H0 and accept H1. Then it can be said the magnitude of the direct influence between agility towards dribbling ability is equal to 0.541 or 54.1% (significant)

The results of the second hypothesis test on substructure 2, obtained t value of 2.589, the value of path coefficient between X2 to Y (β_{yx2}) = 0.196 and the value of Sig. 0.016. It turns out that the value of Sig. < value α is 0.016 < 0.05, so path analysis coefficient is significant, meaning that there is a significant direct effect between speedtowards dribbling ability or in other words reject H0 and accept H1. Then it can be said the magnitude of the direct effect between speedtowards dribbling ability is equal to 0.196 or 19.6% (significant)

The results of the third hypothesis test in substructure 2, obtained a confidence value of 2.832 path coefficient value between X3 to Y (β_{yx3}) = 0.270 and the Sig. 0.009. It turns out the value of Sig. < value α is 0.009 < 0.05, then path analysis coefficient is significant, meaning that there is a significant direct effect between confidence in dribbling ability or in other words reject H0 and accept H1. Then it can be said the magnitude of the direct influence between confidence in dribbling ability is equal to 0.270 or 27.0% (significant)

Table 5. Substructure Mode Trimming Anova^b.

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	4151,149	2	2075,575	224,566	,000 ^b
Residual	249,551	27	9,243		
Total	4400,700	29			

a. Predictors: (Constant), agility, speed
b. Dependent Variable: confidence

Based on the table above, it can be seen the indirect effect of agility and speed on dribbling ability, namely by

the calculated value with the table. The calculated value shown in the table is 636,106, with $DK = 3$ versus 26, the value of $f_{table} = 2.98$. with $f_{count} > f_{table}$, it can be interpreted that there is a significant indirect effect between agility and speed on dribbling ability. As such, individual testing can be continued.

Table 6. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	25,925	7,554		3,432	,002
agility	7,493	1,544	,686	4,852	,000
speed	4,440	2,118	,496	2,097	,046

- a. Predictors: (Constant), agility, speed
- b. Dependent Variable: confidence

The results of the fourth hypothesis test on the substructure 2 trimming model, the indirect effect of agility on dribbling skills through self-confidence is the multiplication between the direct effect of agility on confidence (β_{13}) with a direct influence of confidence in dribbling ability (β_{33}). Where $= 0.686 \times 0.270 = 0.185$. Then it can be said the magnitude of the indirect influence between agility towards dribbling ability through self-confidence is equal to 0.185 or 18.5% (significant).

The fifth hypothesis test results on the substructure 2 trimming model, the indirect effect of agility on dribbling skills through self-confidence is the multiplication between the direct effect of speed on confidence (β_{23}) with a direct influence of confidence in dribbling ability (β_{33}). Where $= 0.496 \times 0.270 = 0.133$. Then it can be said the magnitude of the indirect effect between speed toward dribbling ability through self-confidence is equal to 0.133 or 13.3% (significant).

Table 7. Effective Donations of Exogenous Variables to Endogenous Variables.

Variable	Path coefficient	Influence		
		Directly	Indirect	Total
(X ₁)	0.541	0.541	0.185	0.726
(X ₂)	0.196	0.196	0.133	0.320
(X ₃)	0.270	0.270	0.000	0.270

Based on the table above, the effective contribution of exogenous variables (agility, speed and confidence) to endogen (dribbling ability), namely agility (X₁) of 0.726 or 72.6%, speed (X₂) of 0.320 or 32.0%, confidence (X₃) of 0.270 or 27.0%.

4. DISCUSSION

Agility has direct effect toward Dribbling Ability

The research findings show that agility has a significant direct influence on the dribbling ability of students in Bengkulu City 7 State High School. These findings are reinforced by the results of the research of Samsudin (2017), the results of the analysis show that there is an effect of agility training on dribbling skills in

the game of football. As stated by Daryanto et al. (2015) "Agility is one component of motor fitness that is very necessary for all activities that require the speed of changes in body position and its parts".

Speed has direct effect on Dribbling Ability

The research findings show that speed has a significant direct influence on the dribbling ability of students of Bengkulu City 7 State High School. This finding is strengthened by the results of the research of Kurniawan R (2018). The results of the analysis show a positive influence between speed towards dribbling ability. As stated by Kurniawan R (2018) states that, the element of speed is needed in every sport including football such as when doing dribbling. This shows that speed can have an influence in dribbling for a player, so it can be assumed that students who have good speed will create good dribbling skills.

Self-Confidence Has a Direct Effect Toward Dribbling Abilities

The research findings show that self-confidence has a significant direct influence on the dribbling ability of students of Bengkulu City 7 State High School. This finding is reinforced by the results of a study by Kurniawan R (2018). The results of the analysis show that there is a positive effect between confidence and dribbling ability. This means that the better the student's confidence, the better the player's dribbling skills will be. Based on the description of the definition of confidence, it can be seen that self-confidence can improve one's performance, especially athletes (Mirhan et al., 2016).

Agility has an indirect effect toward dribbling ability

The findings of the research are based on structure model 2 and trimming model, it is known that agility variables besides direct influence, also have an indirect influence on dribbling skills through self-confidence. The findings of this study explain that the contribution of influence given agility through self-confidence can indirectly contribute to the dribbling ability of students of Bengkulu City 7 State High School. According to Kurniawan et al (2016) agility is one component of motor fitness that is very necessary for all activities that require a speed of change in body position and its parts. Therefore a player who wants to achieve good results in a football game must be supported by good self-confidence.

Speed has an indirect effect toward dribbling abilities

The findings of the study based on structure model 2 and trimming models, speed variables besides having a direct effect, also cannot be directly related to dribbling skills through self-confidence. The findings of this study explain that the variables given speed through indirect learning can improve the ability of students of Bengkulu City 7 State High School. According to Kurniawan et al (2016) running speed is needed by a football player, especially when driving a football ball. Therefore, a player who wants to achieve good results in football games must be supported by good self-confidence.

5. CONCLUSION

From the discussion above, it can be concluded that (1) Agility gives a significant direct and indirect influence

g skills in football games in the students of Bengkulu 7 High School. (2) Speed provides a significant direct influence on dribbling skills in football games of the students of Bengkulu 7 High School. (3) Confidence gives a significant direct influence on dribbling skills in football games in the students of Bengkulu 7 High School. (4) Agility also has an indirect effect on dribbling skills through self-confidence in football games in Bengkulu City Senior High School 7 students (5) Speed also has an indirect effect through confidence in dribbling skills in football games in Bengkulu City 7 High School students.

REFERENCES

- [1] Daryanto, Zsyah Porja. dan Hidayat, Khairul. 2015. Pengaruh Latihan Kelincahan Terhadap Kemampuan Menggiring Bola. *Jurnal Pendidikan Olahraga*, Vol. 4, No. 2, Desember 2015.
- [2] Gunarsa, Singgih. D. Dkk.1989. *Psikologi Olahraga Prestasi*. Jakarta. PT.BPK. Gunung Mulia.
- [3] Kurniawan, D. Et.al. 2016. Hubungan Antara Kecepatan Lari Dengan Kemampuan Menggiring Bola Sepak Pada Siswa Usia 13-14 Tahun Ssb Unibraw 82 Malang. *PENDIDIKAN JASMANI*, Volume 26, Nomor 02, Tahun 2016, Halaman 381-397. Retrived from : <http://journal.um.ac.id/>
- [4] Kurniawan, R. 2018. Pengaruh Keseimbangan, Kecepatan dan Percaya Diri Terhadap Kemampuan Dribbling dalam Permainan Sepakbola pada Atlet SSB Putra Wijaya Padang. *UNES Journal Of Education Scienties*. Volume 2, Issue 1, May 2018. ISSN 2598 – 4985.
- [5] Maliki, Osa, et. al. 2017. Analisi Kondisi Fisik Pemain Sepak bola Klub Persepu UPGRIS Tahun 2016. *Jendela Olahraga*. ISSN: 2527-9580. Volume 2, Nomor 2, Juli 2017.
- [6] Mirhan,dkk.2016.Hubunganantara Percaya Diri dan Kerja Keras dalam Olahraga dan Keterampilan Hidup. *Jurnal Olahraga Prestasi*. Volume 12. Nomor 1.Januari 2016.