

Analysis of Foot-Ankle Coordination, Agility, and Self-Confidence Towards The Ball-Drifting Skills Of Extra-Curricular Students of SMP Negeri 1 Binamu

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ABSTRACT

This type of research is path analysis, The subjects of this study were extracurricular students of SMP Negeri 1 Binamu, totalling 30 male students. Data analysis using SPSS 30.00 using descriptive tests, normality tests and hypothesis tests. It is known that there is a direct effect of Foot-Eye Coordination (X1) on Self-Confidence (X3) in extracurricular football students of SMP Negeri 1 Binamu, based on the results of the analysis obtained in the table shows that the coefficient value β is -0.313 with a calculated -0.800 and significance (p) = 0.067 ($p < 0.05$); (2) There is a direct effect of Agility (X2) on Self-Confidence (X3) in extracurricular football students of SMP Negeri 1 Binamu, based on the results of the analysis obtained in the table shows that the coefficient value β is -0.718 with a calculated T of -0.455 and significance (p) = 0.785 ($p < 0.05$); (3) There is a direct influence of foot-eye coordination (X1) on dribbling skills (Y) in extracurricular football students at SMP Negeri 1 Binamu, based on the analysis results obtained in the table showing that the coefficient value β is 0.126 with a T count of 1.911 and significance (p) = 0.067 ($p < 0.05$); (4) There is a direct influence of agility (X2) on dribbling skills (Y) in extracurricular football students at SMP Negeri 1 Binamu, based on the analysis results obtained in the table showing that the coefficient value β is 0.073 with a T count of 0.276 and significance (p) = 0.785 ($p < 0.05$); (5) There is a direct influence of Self-Confidence (X3) on Dribbling Skills (Y) in extracurricular football students of SMP Negeri 1 Binamu, based on the analysis results obtained in the table showing that the coefficient value of β is 0.033 with T count 1.025 and significance (p) = 0.315 ($p < 0.05$); (6) There is no influence of Foot-Eye Coordination (X1) through Self-Confidence (X3) on Dribbling Skills (Y) in extracurricular football students of SMP Negeri 1 Binamu with a beta coefficient value of -0.313 ($0.126 > -0.225$); (7) There is no influence of Agility (X2) through Self-Confidence (X3) on Dribbling Skills (Y) in extracurricular football students of SMP Negeri 1 Binamu, with a beta coefficient value of -0.799 ($0.073 > -0.718$)

ARTICLE HISTORY

Received: 2025/03/15
Accepted: 2025/04/25
Published: 2025/06/25

KEYWORDS

Foot-Eye Coordination;
Agility;
Self-Confidence;
Dribbling;
Football.

AUTHORS' CONTRIBUTION

A. Conception and design of the study;
B. Acquisition of data;
C. Analysis and interpretation of data;
D. Manuscript preparation;
E. Obtaining funding

Cites this Article : Ramadhan, Reynaldi. Hudain, Muh. Adnan; Yasriuddin, Y. Usman, Arifuddin; Syahrudin, S. (2025). Analysis of Foot-Ankle Coordination, Agility, and Self-Confidence Towards The Ball-Drifting Skills Of Extra-Curricular Students of SMP Negeri 1 Binamu. **Competitor: Jurnal Pendidikan Kepeleatihan Olahraga**. 17 (2), p.674-682

INTRODUCTION

Football is a game in a large ball played on a grass field by two teams or two opposing teams. The goal of the game of football is to put the ball into the opponent's goal as many times as possible and defend your area from the opponent's attack. Football is a game played by two different teams, with different player compositions on the field (Akhmad & Suriatno, 2018) (Adam Mappaompo et al., 2024). Football games involve the movement of physical, mental, gross motor and fine motor elements (Pratama & Nurrochmah, 2022; Sudirman et al., 2022).

The characteristic of the game is to play the ball with the feet or with all the limbs except the arms. Football itself is a sport that uses the ball in its game (Supriyanto et al., 2016). Football is one of the sports that is very popular with most people and even receives sympathy from the Indonesian people. Football is also loved by all levels of society from the regional, national, and international, children, and adults to the elderly. (Adam Mappaompo et al., 2024)

One of the basics that must be mastered is the ability to dribble the ball (Ardiansyah et al., 2023). However, to play soccer well and correctly, players must be equipped with good and correct techniques (Giordano et al., 2019). In the game of soccer, there are several basic techniques that we can learn and basic techniques that must be mastered by a student to play well (Aziz, 2020), the techniques in the game of soccer such as kicking the ball (kicking ball), heading the ball (heading ball), dribbling the ball (dribbling ball), stopping the ball (stopping ball), stealing the ball (tackling ball) (Erfayliana & Wati, 2020). To improve dribbling skills, techniques must be trained properly (Mappanyukki et al., 2023). Three elements of physical condition play a significant role in dribbling the ball, namely speed, flexibility and agility which are said to be biomotor components (Kolang et al., 2023; Supian, 2016). Speed is related to how quickly a player carries the ball forward, while flexibility is related to how flexible a player is in processing the ball with his feet and how flexible he is in passing obstacles, and agility is related to the speed of changing direction to avoid obstacles (Yamin et al., 2016; Yani, 2021).

Dribbling is useful for controlling the ball and mastering it until a teammate is free and gives it to him in a better position. Dribbling techniques include dribbling techniques using the inside of the foot, dribbling techniques using the torso of the foot, and dribbling techniques using the outside of the foot (Hasanuddin, 2018; Hasanuddin & Hakim, 2020). Factors that influence the success rate of dribbling in soccer games, in addition to the application of basic techniques, are also influenced by the athlete's physical condition, such as strength, speed, and coordination (Hasanuddin & Hakim, 2020). A player who is less agile in making a movement will find it difficult to avoid individual touches that can result in individual errors (Rudi, 2020). Someone who is able to change different positions at high speed with good coordination means that their agility is quite good (Supian, 2016). According to (Supriadi, 2015) coordination is the ability to display smooth and precise movements, often involving the use of feelings and associated with a series of muscle contractions that affect the combination of limbs and body position. Meanwhile,

according to (Marta, 2020) coordination is the ability to move limbs simultaneously. According to (Syafii 2019) eye and foot coordination is the ability of the eyes to integrate the stimuli received and the feet as a driving function to perform movements as desired.

METHODS

This research is quantitative research, namely research that emphasizes testing theories through measuring research variables with numbers and requires data analysis with statistical procedures. The type of research used is correlational research, which aims to determine and investigate the relationship or role of variables - variables that are predicted based on the correlation coefficient (Sugiyono, 2017). Based on the stated research objectives, this research is explanatory, namely research that aims to explain the position of the variables studied and the influence between one variable and another variable that is hypothesized (Sugiyono, 2017). The variables to be studied are: (1) Exogenous Variables (a) ankle-foot coordination, (b) agility, and (c) self-confidence; and (2) Endogenous Variables dribbling skills.

Every study requires a specific research design. This study uses a path analysis model because there is a relationship between the independent variables and the dependent variables that influence each other. There are three exogenous variables in this study, namely speed, agility and self-confidence, while the endogenous variable is the ability to dribble the ball. Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2017). The population in the study of students of SMP Negeri 1 Binamu who took extracurricular football activities totalling 55 people.

The sample is part of the number and characteristics possessed by the population (Sugiyono, 2017). The sampling technique chosen by the researcher in this study was a random sampling of 30 people with the criteria of male gender and healthy and fit physical activity.

RESULTS AND DISCUSSION

Result

Descriptive data analysis is conducted to provide an overview of the data, including the average, standard deviation, variance, maximum value, minimum value, and sum. Furthermore, testing is carried out on the requirements, and analysis, namely, normality and homogeneity of data. Hypothesis testing uses the t-test to determine the effect and differences in exercise results, with the provision that the data must be normally distributed and homogeneous.

Table 1.

Results of descriptive data analysis

	Foot-Eye Coordination	Agility	Self-Confidence	Dribbling Skills
Mean	27,73	0:00:06	80.67	0:00:20
Median	27.50	0:00:06	83.00	0:00:21
Std.Deviation	3.778	0:00:00	7.792	0:00:01
Minimum	22	0:00:05	68	0:00:18
Maximum	37	0:00:07	93	0:00:22

Descriptive analysis results of the analysis variables of eye-foot coordination, agility, and self-confidence towards dribbling skills in football games of students at SMP Negeri 1 Binamu, Jeneponto Regency. The conclusions in Table 1 can be described as follows:

1. Eye-foot coordination (X1)

Based on the results of the data in Table 1, it is known that the eye-foot coordination (X1) of extracurricular students at SMP Negeri 1 Binamu, Jeneponto Regency from 30 samples obtained a mean of 27.73, a median of 27.50, the lowest value of 22, the highest value of 37 and a standard deviation of 3,778.

2. Agility X2

Based on the data results in Table 1, it is known that the agility (X2) of extracurricular students of SMP Negeri 1 Binamu, Jeneponto Regency from 30 samples obtained a mean of 0.00:06, a median of 0.00:06, the lowest value of 0.00:05, the highest value of 0.00:07 and a standard deviation of 0.00:0.

3. Self-confidence X3

Based on the data results in Table 1, it is known that the self-confidence (X3) of extracurricular students of SMP Negeri 1 Binamu, Jeneponto Regency from 30 samples obtained a mean of 80.67, a median of 83.00, the lowest value of 68, the highest value of 93 and a standard deviation of 7.792.

4. Ball dribbling skills (Y)

Based on the data results in table 1, it is known that the ball dribbling skills (Y) of extracurricular students of SMP Negeri 1 Binamu, Jeneponto Regency from 30 samples obtained a mean of 0.00:20, median of 0.00:21, lowest value of 0.00:18, highest value of 0.00:22, and standard deviation of 0.00:01.

Table 2.

Data normality test results

Group	Nilai Sig. KS	Sig.α Value	Description
Foot-Eye Coordination	0.147	0,05	Normal
Agility	0.128	0,05	Normal
Self-Confidence	0.011	0.05	Normal
Dribbling Skills	0.200	0.05	Normal

Data normality testing can use Kolmogorov-Smirnov with the help of the SPSS version 30 program with the provision that if the significant value is >5% (0.05) then the data has a normal distribution but if the significance value is <5% (0.05), then the data does not have a normal distribution. The results of the data normality test of the analysis variables of eye-foot coordination, agility and self-confidence towards dribbling skills in football games can be described as the Sig.KS value of eye-foot coordination, agility, self-confidence and dribbling skills, $\alpha = 0.05$ then the data distribution is stated to meet the assumption of normality.

Table 3.

Data Multicollinearity Test

Group	Tolerance	VIF	Description
Foot-Eye Coordination for Dribbling	0.977	1,024	No Multicollinearity
Agility for Dribbling	0.992	1,008	No Multicollinearity
Confidence for Dribbling	0.970	1.031	No Multicollinearity

The multicollinearity test is used to determine whether the regression model is found between independent variables and dependent variables. For the results of this multicollinearity test, the high value of the variables in the sample means that the standard error is large, as a result when the coefficient value is tested, the t-count will be smaller than the t-table. A good regression model is one with no correlation or free from multicollinearity symptoms. Variance Inflation Factor (VIF) and tolerance are used to determine whether or not there is multicollinearity in the regression model with the provisions. If the VIF value > 10 or tolerance < 0.10 , then it can be stated that there are symptoms of multicollinearity. If the VIF value < 10 or the tolerance is > 0.10 then it can be stated that there are no symptoms of multicollinearity

It is known that the calculation results determine that the tolerance value is > 0.1 or the VIF value < 10 . It can be concluded that the regression model equation does not experience multicollinearity problems, which means that there is no significant correlation between the independent variables so it is suitable for further

Table 4.

The heteroscedasticity test

Group	Sig.Spearman	Sig. α Value	Description
Foot-Eye Coordination	0.147	0.05	No Heteroscedasticity
Agility	0.128	0.05	No Heteroscedasticity
Self-Confidence	0.011	0.05	No Heteroscedasticity
Dribbling Skills	0.200	0.05	No Heteroscedasticity

The heteroscedasticity test is used to test whether there is an inequality of variance in a regression model from one study to another. In this study, Sperman's Rho's test is one of the methods in the heteroscedasticity test, which is from the Classical Assumption Test. The Spearman's Rho test is one way to detect symptoms of Heteroscedasticity accurately. If symptoms or problems of heteroscedasticity occur, it will result in doubt (inaccuracy in the results of a regression analysis). A good regression model does not experience symptoms of Heteroscedasticity.

Spearman Rho Test Sig. Value 2-tailed (> 0.05) then the conclusion is that there are no symptoms of Heteroscedasticity. If the Sig. Value 2-tailed (< 0.05) then the conclusion is that there are symptoms of Heteroscedasticity.

From the test results in Table 4, it can be seen that the significant value of all variables is $> \alpha = 0.05$ then the conclusion is that there are no symptoms of Heteroscedasticity in the regression model.

Discussion

Based on the results of testing all hypotheses that have been carried out in the hypothesis testing section with the variables of the influence of foot-eye coordination, agility and self-confidence on the dribbling skills of extracurricular students of SMP Negeri 1 Binamu can be described as follows.

The results of the first hypothesis test show that there is a direct influence between foot-eye coordination (X1) on self-confidence (X3). Based on the results of the analysis,

the data obtained showed a beta coefficient value of -0.313 with a T count of -0.800, and significant ($p = 0.067$ ($p < 0.5$)). This shows that there is a significant influence between foot-eye coordination (X1) on self-confidence (X3). Self-confidence is highly expected when athletes want to do movement activities, and the impact on athletes will get maximum movement when doing activities. By moving quickly, athletes are expected to be able to increase their self-confidence due to what the goal when moving can be achieved by using maximum movement. The results of this study are in line with Kurniawan's findings that there is a positive influence on the self-confidence of SSB Putra Wijaya Padang athletes (Kurniawan, 2018).

The results of the second hypothesis test show that there is a direct influence between agility (X2) on self-confidence (X3). Based on the results of the analysis, the data obtained shows a beta coefficient value of -0.718. With a T count of -0.455 and significance ($p = 0.785$ ($p < 0.5$)). This shows that there is a significant influence between Agility (X2) on self-confidence (X3). Athletes who have self-confidence will not doubt their athlete's abilities. (Komarudin, 2013) stated that athletes who have self-confidence always think positively to show their best abilities and allow themselves to believe that they are capable so that their achievements remain good. Self-confidence is very important in sports, such as football, because it makes people confident to succeed so that they change negative perceptions into positive ones. Therefore, one of the main capital and absolute requirements for achieving achievement in the sport of football is to have self-confidence.

The results of the third hypothesis test show that there is a direct influence between speed (X1) on dribbling skills (Y). Based on the results of the analysis, the data obtained showed a beta coefficient value of 0.126 with a T count of 1.911 and significance ($p = 0.067$ ($p < 0.05$)). This shows that there is a significant influence between eye-foot coordination (X1) on dribbling skills (Y).

The results of the fourth hypothesis test showed that there was a direct influence between agility (X2) on dribbling skills (Y). Based on the results of the analysis, the data obtained showed a beta coefficient value of 0.073 with a T count of 0.276 and significance ($p = 0.785$ ($p < 0.05$)). This shows that there is a significant influence between agility (X2) on dribbling skills (Y).

The results of the fifth hypothesis test show that there is a direct influence between self-confidence (X3) on dribbling skills (Y). Based on the results of the analysis, the data obtained showed a beta coefficient value of 0.033 with a T count of 1.025 and significance ($p = 0.315$ ($p < 0.05$)). This shows that there is a significant influence between self-confidence (X3) on dribbling skills (Y). Self-confidence plays an important role in achieving sports achievements. Athletes who have self-confidence will be able to reflect on their abilities through achievements and will not be influenced by the past. Therefore, self-confidence is also important for soccer players so that when faced with problems on and off the field, they can overcome all their problems. The better your self-confidence, the better your dribbling skills. This means that soccer players who have high self-confidence will appear more skilled at dribbling the ball, passing the ball to their teammates, and even being able to score goals when attacking. This is in line with the

study (Kurniawan, 2018) that there is a positive influence between self-confidence and dribbling skills in soccer games (Y) at SSB Putra Wijaya Padang athletes. Furthermore, Fajri said that there is a positive relationship between self-confidence and dribbling skills. This means that the better your self-confidence, the better your dribbling skills. Conversely, the lower your self-confidence, the lower your dribbling skills will be. Thus, self-confidence is one of the variables that is closely related to dribbling skills (Arif Fajri, 2016).

The results of the sixth hypothesis test show that there is no significant effect of speed (X1) through self-confidence (X3) on dribbling ability (Y). Based on the results of the hypothesis test, a beta coefficient value of -0.225 was obtained, which has a smaller value when compared to the beta coefficient of the direct effect of foot-eye coordination on dribbling skills, which is 0.126, so the proposed hypothesis is rejected. This means that dribbling skills in soccer games that are influenced by foot-eye coordination will not experience a significant increase if they are also influenced by self-confidence.

The results of the seventh hypothesis test show that there is no significant effect between agility (X2) through self-confidence (X3) on dribbling skills (Y). Based on the results of the hypothesis test, a beta coefficient value of -0.799 was obtained, this value is smaller when compared to the beta coefficient of the direct effect of agility on dribbling skills, which is 0.073, so the proposed hypothesis is rejected. This means that dribbling skills in soccer games that are influenced by agility will not experience a significant increase if they are also influenced by self-confidence.

CONCLUSION

Based on the research results and discussions that have been presented, the following conclusions can be drawn:

1. There is a direct influence of foot-eye coordination on the self-confidence of extracurricular students at SMP Negeri 1 Binamu
2. There is a direct influence of agility on the self-confidence of extracurricular students at SMP Negeri 1 Binamu
3. There is a direct influence of foot-eye coordination on the dribbling skills of extracurricular soccer students at SMP Negeri 1 Binamu.
4. There is a direct influence of agility on the dribbling skills of extracurricular soccer students at SMP Negeri 1 Binamu.
5. There is a direct influence of self-confidence on the dribbling skills of extracurricular soccer students at SMP Negeri 1 Binamu.
6. There is no influence of foot-eye coordination through self-confidence on the dribbling skills of extracurricular students at SMP Negeri 1 Binamu.
7. There is no influence of agility through self-confidence on the dribbling skills of extracurricular soccer students at SMP Negeri 1 Binamu.

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