



Correlation of Eye and Foot Coordination with Dribbling Ability in a Football Game

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Abstract

The aim of this research is to determine the correlation between eye-foot coordination and dribbling ability in the game of soccer. The population in this study were all students of SMA Negeri 1 Wiwirano, totaling 290 students consisting of 143 men and 147 women. The sampling technique used purposive random sampling, namely based on consideration of the gender of men, numbering 143 people and who could do dribbling well. OK, and after that it was randomized, namely at random, so that there were 30 samples in this study. The instrument used in this research is the soccer wall volleyball test to measure dribbling ability. Meanwhile, for dribbling skills in soccer games, use the dribbling test. Data analysis used descriptive statistics, normality tests, linearity tests, and hypothesis testing using correlation tests with the help of SPSS version 20. The research results showed that there was a positive relationship between the coefficient of the coordination variable and dribbling ability, with an r value of 0.961 and a significance level of $0.000 < 0.05$. The coefficient of determination was calculated at 0.924, or 92%, indicating that dribbling ability is significantly related to eye-foot coordination.

Keywords: Coordination, Eyes And Feet, Dribbling, Football

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INTRODUCTION

Physical education is an integral part of education which involves physical learning, health and sports activities (Yudaparmita & Adnyana, 2020). Physical education is important in students' physical, mental, social and emotional development. It can also summarize the short-term and long-term goals of the curriculum. Values such as cooperation, discipline, courage, patience and self-confidence are instilled through physical education (Lengkana & Sofa, 2017).

The physical, health, and psychological benefits of participating in regular physical activity and exercise. This can include improving heart health, increasing physical fitness, increasing focus and concentration, and managing stress (Syafruddin et al., 2022). One of them is through playing football.

Football is a thrilling and global sport played by millions of people from various parts of the world. Known for its wide popularity and fanatical fans, football is not only a game, but has also become an integral part of global culture (Armanjaya et al., 2023). Football is not just a sport, it also has the power to unite people from different backgrounds, cultures and religions. On the field, this game teaches important skills such as cooperation, leadership, and discipline. Off the field, football is a tool to strengthen communities, promote peace and inspire millions of people around the world. One of the basic techniques that is often used is the basic dribbling technique.

Dribbling is one of the most important basic skills in football. This is the ability to move the ball quickly and under control using the feet, while maintaining complete control over the ball (Jud & Sariul, 2022). Skill in dribbling allows a player to get past opponents, open up space, and create attacking opportunities. In the game of football, dribbling has a key role in changing the game. The ability to dribble the ball well can make the difference between success and failure in attack or defense. With effective dribbling, a player can pass opponents, create space for teammates, and get close to the opponent's goal to score. To improve dribbling, the elements of supporting physical conditions are one of which is eye and foot coordination (Marsuna, 2024).

Eye and foot coordination is a key aspect that determines success and failure (Marta & Oktarifaldi, 2020). The ability to coordinate eye and foot movements plays a vital role in a player's ability to control the ball, get past opponents and take advantage of opportunities on the pitch. In fast game situations, a player must be able to see where the ball is and respond quickly and precisely using his feet (Afrinaldi et al., 2021). Eyes are key to understanding game situations, such as opponent positions, open teammates and available space. Eye and foot coordination allows players to utilize this information effectively in making decisions on the field (Jumaking, 2020). In situations of pressure from opponents, players who have good eye and foot coordination can maintain control of the ball while still paying attention to the movements of teammates and opponents (AF et al., 2021).

Effective control of soccer play is a basic skill that every player must have (Marsuna et al., 2024). Good eye and foot coordination allows a player to see the ball and respond quickly and precisely with their feet, allowing them to maintain complete control of the ball while dribbling (Husein et al., 2023). The ability to maneuver with the ball, such as changing direction or jumping over an opponent, relies heavily on coordination between the eyes and the feet (Gahafi et al., 2023). Players who have good coordination will be able to read the opponent's movements and the field situation better, so they can maneuver more effectively and accurately. In fast game situations, a player must be able to respond quickly to the movement of the ball and the players around him (Herman & Hasbillah, 2022). Good eye and foot coordination allows players to see and process information quickly, so they can make the right decisions and perform dribbling with the required speed (Rohmadani & Henjilito, 2023).

Effective dribbling often involves creativity in finding gaps between the opponent's defense (Yarmani, 2020). Players who have good eye and foot coordination will be able to see and utilize the available space better, so they can create better attacking opportunities for their team. Good eye and foot coordination also plays a role in increasing a player's confidence. Players who feel comfortable with their ability to control the ball and read game situations will tend to be more confident in dribbling and facing opponents (Bahar, 2023).

The problem of correlation between eye-foot coordination and soccer dribbling abilities in students can be an important challenge in developing their soccer skills. Some of the problems that students may face are experiencing difficulty in coordinating eye and foot movements effectively when dribbling, experiencing problems in controlling the ball properly while maintaining visual focus on the movement of the ball and the field situation. The anxiety and stress of being on the field can interfere with a student's ability to make good use of their eye-foot coordination. Feeling insecure or overwhelmed, reducing their ability to dribbling effectively. A lack of targeted and effective practice can hinder their ability to improve their skills in soccer.

Research highlights the importance of specific exercises designed to improve eye-foot coordination in the context of soccer dribbling. This includes exercises that emphasize dribbling techniques, ball control, as well as visual focus and information processing on the field (Gahafi et al., 2023). Research the importance of a sustainable approach in the development of dribbling skills. This includes regular drills integrated into the soccer training program, as well as ongoing

feedback from coaches to help students improve their technique over time. Studies also recognize the role of psychological factors such as self-confidence, motivation, and anxiety in influencing the correlation between eye-foot coordination and dribbling ability (Putra et al., 2024). Understanding these factors helps trainers and instructors in designing effective training programs. Several longitudinal studies have been conducted to track the development of dribbling skills in students over time. This helps identify patterns of change in the correlation between eye-foot coordination and dribbling ability along with the experience and training students receive (Hasyim & Jährir, 2024). So the aim of this research is to find out the correlation between eye and foot coordination and dribbling ability in the game of soccer.

METHOD

The research used quantitative methods, using a correlational design. The population in this study were all students of SMA Negeri 1 Wiwirano, totaling 290 students consisting of 143 men and 147 women. The sampling technique used purposive random sampling, namely based on consideration of the gender of men, numbering 143 people and who could do dribbling well. OK, and after that it was randomized, namely at random, so that there were 30 samples in this study. The instrument used in this research is the soccer wall volleyball test to measure dribbling ability (Setiawan, 2021). Meanwhile, dribbling skills in soccer games use a dribbling test (Setiawan, 2021). Data analysis uses descriptive statistics, normality tests, linearity tests, and hypothesis testing using correlation tests with the help of SPSS version 20.

RESULTS AND DISCUSSION

Result

Table 1. Descriptive Statistics of Eye-Foot Coordination (X) and Ability Dribbling in Football Games (Y)

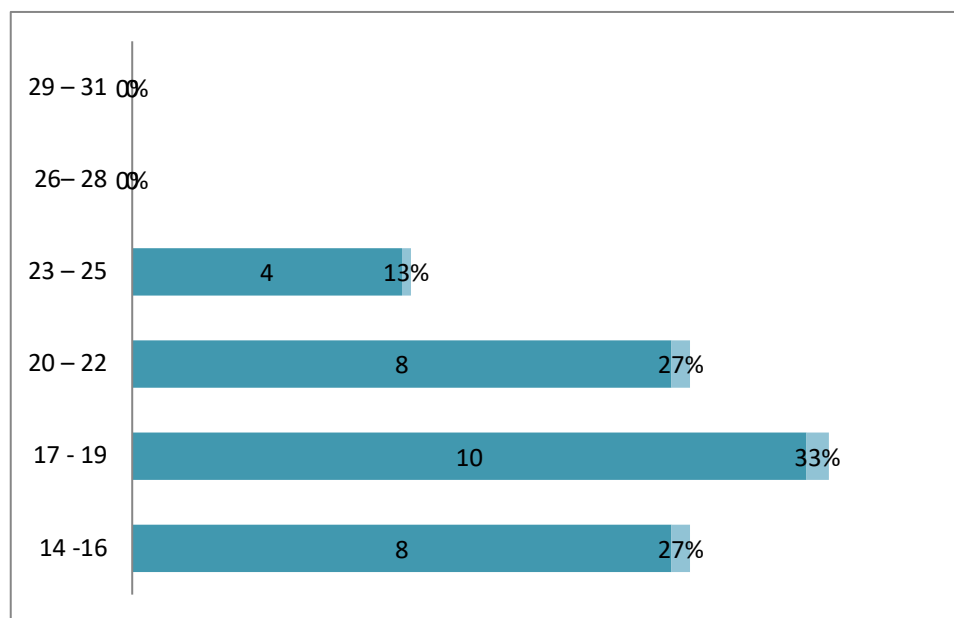
Variable	Mean	Standard Deviation	Maximum	Minimum
X	18.66	2.97	24.00	14.00
Y	1938.46	268.72	24.84	14.89

Based on the results of the descriptive analysis in table 1, it can be seen that the results of research regarding eye and foot coordination (X) obtained an average value (mean) of 18.66, a standard deviation value of 2.97, a maximum value of 24.00, and a minimum value of 14.00. Meanwhile, for dribbling ability (Y), the average value (mean) was 1938.46, the standard deviation value was 268.72, the maximum value was 24.84, and the minimum value was 14.89.

Table 2. Interval Class Distribution, Frequency and Percentage of Eye and Foot Coordination Data (X)

Interval Class	Frequency	Percentage
14 -16	8	27%
17 - 19	10	33%
20 – 22	8	27%
23 – 25	4	13%
26– 28	0	0%
29 – 31	0	0%
Total	30	100%

Based on the table above, it can be seen that the sample group has the following interval class, frequency and percentage of eye and foot coordination: In the interval class 14 - 6, the frequency is 8 with a percentage of 27%. In the interval class 17 – 19 it has a frequency of 10 with a percentage of 33%. In the interval class 20 – 22 it has a frequency of 8 with a percentage of 27%. In the interval class 23 – 25 it has a frequency of 4 with a frequency of 13%. The interval class 26 – 28 has a frequency of 0 with a percentage of 0%. The interval class 29 – 31 has a frequency of 0 with a percentage of 0%. To make it clearer graphically, the frequency distribution of eye and foot coordination data can be seen in the following graph:

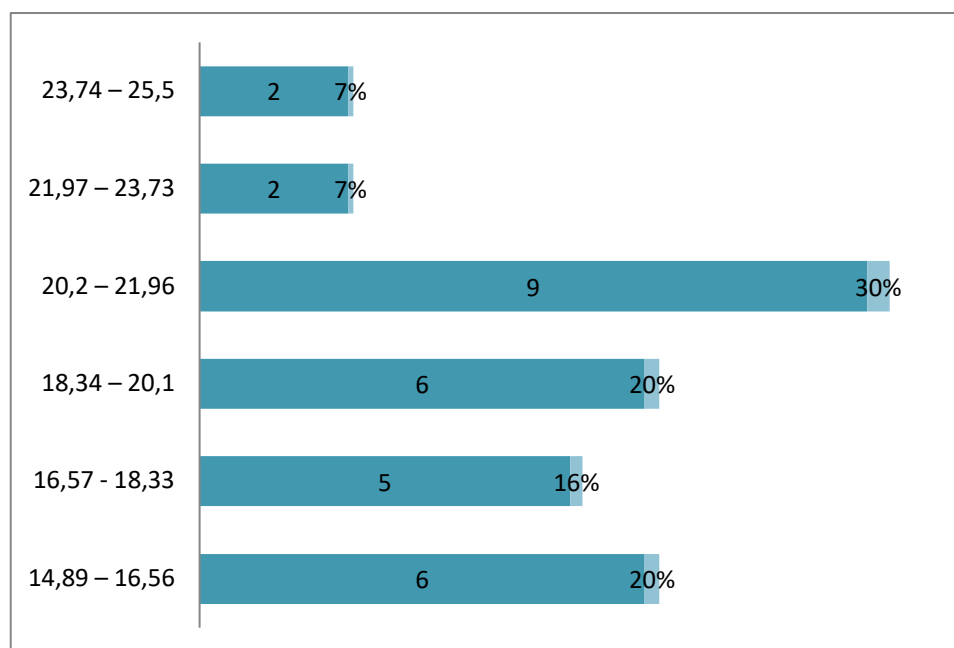


Picture 1. Histogram of Frequency Distribution of Eye and Foot Coordination Data.

Table 3. Interval Class Distribution, Interval Class Frequency, Frequency and Percentage Dribbling Ability Data in Football Games (Y)

Interval Class	Frequency	Percentage
14,89 – 16,56	6	20%
16,57 - 18,33	5	16%
18,34 – 20,1	6	20%
20,2 – 21,96	9	30%
21,97 – 23,73	2	7%
23,74 – 25,5	2	7%
Total	30	100%

Based on the table above, it can be seen that the sample group has an interval class, frequency and percentage of dribbling ability in soccer games as follows: In the interval class 14.89 - 16.56, the frequency is 6 with a percentage of 20%. In the interval class 16.57 - 18.33 it has a frequency of 5 with a percentage of 16%. In the interval class 18.34 – 20.1 it has a frequency of 6 with a percentage of 20%. In the interval class 20.2 - 21.96 it has a frequency of 9 with a percentage of 30%. In the interval class 21.97 – 23.73 it has a frequency of 2 with a percentage of 7%. In the interval class 23.74 - 25.5 it has a frequency of 2 with a percentage of 7%. To make it clearer graphically, the frequency distribution of dribbling ability data in a soccer game can be seen in the following graph:



Picture 2. Histogram of Frequency Distribution of Dribbling Ability Data in a Football Game (Y)

Normality test

Table 4. Normality Test Calculation Results

Variable	Asymp. Sig	Alpha Level	Conclusion
Eye and Foot Coordination	0,063	0,05	Normal
Dribbling Ability	0,200	0,05	Normal

Based on the table above, it is known that eye and foot coordination data was obtained by Asymp. Sig (2-tailed) $0.063 > 0.05$, so it can be interpreted that the data is normally distributed. Dribbling ability data in soccer games Asymp results. Sig (2-tailed) $0.200 > 0.05$, so it can be interpreted that the data is normally distributed. So the hypothesis states that the sample is based on a normally distributed population.

Linearity Test

The aim of the linearity test is to find out whether the independent variable and dependent variable are linear or not. Criteria for linearity testing using the help of an ANOVA table, if the significance value is > 0.05 , it can be concluded that the relationship is linear, conversely, if the significance value is < 0.05 , it can be concluded that the relationship is not linear.

Table 5. Linearity Test Calculation Results

Variable	Significance	Conclusion
Eye and Foot Coordination with Dribbling Ability	0,064	Linear

Based on the table above, it was found that the results of the linearity test found that the relationship between.

Table 6. Correlation Test Results of Eye and Foot Coordination (X) with Dribbling Ability in Football Games (Y)

Correlation Type	R Count	Sig 0.05	R Square	Description
X-Y	0,961	0,000	0,924	Significance

Based on the table above, it can be seen that the correlation coefficient between eye and foot coordination and dribbling ability in the game of soccer (r_{xy}) is 0.961, so the r_{xy} value obtained is compared with the correlation table value at a significant level of $0.000 < 0.05$, which means there is The significant relationship between eye and foot coordination and dribbling

ability in soccer games (r^2) is 0.924, in other words, 92% of dribbling ability in soccer games is determined by eye and foot coordination.

Discussion

The correlation between eye-foot coordination and dribbling ability in soccer is an important concept in understanding how players can improve their skills in controlling the ball on the field. The eyes play an important role in the dribbling process. Players need to be able to track the position of the ball, teammates, and opponents as they move around the field. The ability to see quickly and accurately helps players make the right decisions when it comes to dribbling, such as when to change direction or choose to pass the ball. In dribbling, coordination between the eyes and the feet is very important.

Players must be able to coordinate their foot movements to control and manipulate the ball according to the visual information obtained from their eyes. This includes the ability to maintain balance while controlling the ball and avoiding pressure from opponents (Marta & Oktarifaldi, 2020). Improving the correlation between eye and foot coordination in the context of dribbling, specific exercises can be performed. This may include exercises that focus on developing visual skills, such as visual reaction drills or exercises to improve visual acuity. In addition, various dribbling exercises can help players hone the coordination between their eyes and feet (Gahafi et al., 2023). The correlation between eye and foot coordination is also related to the development of motor responses.

Players who have good coordination between eyes and feet tend to have faster response times and are more efficient at carrying out complex motor tasks such as dribbling. Therefore, exercises that develop motor responses may help in improving this correlation. Apart from physical aspects, psychological factors can also influence the correlation between eye and foot coordination in dribbling. For example, a player's level of concentration, focus, and confidence can influence how well they can coordinate their eye and foot movements when dribbling on the pitch. By paying attention to the correlation between eye-foot coordination and dribbling ability, coaches and players can design effective training programs to improve this skill. A holistic approach that includes physical, technical and psychological aspects will help players reach their potential when it comes to dribbling.

CONCLUSION

Research has shown that there is a significant correlation between eye-foot coordination and dribbling ability in soccer. The better the coordination between a person's eyes and feet, the better their dribbling ability. This is because dribbling requires good motor control, which involves coordination between the eyes to track the ball and the feet to control it. Therefore, exercises that improve eye-foot coordination can help soccer players improve students' dribbling abilities.

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