

The Contribution of Body Reaction Speed And Eye-Foot Coordination To Dribbling Skills In The Game of Football

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ABSTRACT

This study aims to determine the contribution of body reaction speed and eye-foot coordination to dribbling skills in football games. This research includes the type of descriptive research. The population of this study were all SSB Telkom Makassar players with a total sample of 30 people selected by random sampling. The data analysis technique used was correlation and regression analysis using the SPSS Version 22.00 system at a significant level of 95% or $\alpha_{0,05}$. Starting from the results of data analysis, this study concluded that: (1) body reaction speed has a contribution to dribbling skills in football games, amounting to 42.1%; (2) eye-foot coordination contributes to dribbling skills in football games, amounting to 52.8%; and (3) body reaction speed and eye-foot coordination contribute to dribbling skills in football games, amounting to 53.5%.

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- A. Conception and design of the study;
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INTRODUCTION

The sports world is no stranger to the media. Nowadays, the frequent sports shows in the television media, the large number of sports news in newspapers both international, national and local can reflect that people are used to and are no

longer familiar with the world of football (Nirwandi, 2017). Sports are not tied to a group, age, gender, religion, culture, even sports do not look at one ethnicity differently from other ethnicities (Jamalong, 2014). Everyone in the world knows sports and almost everyone has

done sports, especially football games (Ciremay & Kartiko, 2020).

One of the important elements or factors to achieve an achievement in sports is physical condition, in addition to mastery of techniques, tactics, and mental abilities (Bramasko & Kafrawi, 2016). How important and influential it is on the achievement of an achievement of a sporting achievement depends largely on the needs or guidance of each sport (Pradana & Bulqini, 2018). On the other hand, there are also many sports that require physical conditions. Meanwhile, there are sports whose achievements are determined by the mastery of physical, technical, mental conditions as in the game of football (Mas & Faruk, 2013). Therefore, to know the form of physical condition needed and how much level of physical condition is needed and how to improve it through exercise, it is necessary to have a comprehensive understanding of physical condition (Bryantara, 2016).

Physical ability is the ability to function body organs in carrying out physical activity. Physical abilities are essential to support developing psychomotor activity. Skillful movements can be done if the physical ability is adequate (Bayu, 2017). Physical condition is a whole of components that cannot be separated casually, both in improvement and maintenance (Sinurat, 2019). This means that in an effort to improve physical condition, all these components must be developed (Hutama & Yuliasrid, 2017), although here it is carried out with a priority system according to the circumstances or status of each component and for what purposes the circumstances or status needed are (Mubarok & Ramadhan, 2019). The physical condition must be improved so that in playing football it becomes good. Each coach must improve and nurture the physical condition of his athletes

(Pranata, 2017). If a football athlete is going to achieve an optimal achievement, he must have complete physical, technical, mental development and champion maturity (Putra & Dinata, 2019). Physical condition will decrease faster than improvement if no training is given at all (Sugiarto & Rahmatullah, 2019).

The importance of the physical condition of athletes should be realized by the coaches as well as the athletes themselves (Bayu, 2017). Coaches should always control the physical condition of the athlete, so that it can be detected early if the athlete experiences a disorder that will later affect the performance of the athlete's achievements and performance in competing (Maliki et al., 2017).

Athletes who have good basic techniques, these athletes tend to be able to play football well anyway (Busyairi & Ray, 2018). The basic techniques that football athletes need to have are kicking, passing, shooting, stopping, dribbling, throw-in, and goal keeping (goal keeping) (Kusuma, 2017). To become a good football athlete, not only good technique and tactics are needed in playing, but also must have a good physical condition as well (Nosa & Faruk, 2013). There are four kinds of elements that need to be possessed, if a person is going to achieve an optimal achievement, these elements include physical development (physical build-up), technical development (technical build-up), mental development (mental build-up), and champion maturity (Santoso, 2014).

Football athletes are required to have good physical condition because they are required to be able to play or compete for 2 (two) rounds (2 x 45 minutes) sometimes if the match uses a knockout system, they must also undergo an extra time round of 2 x 15 minutes (D. N. Pratama & Nurrochmah, 2022).

Football athletes in defense and attack sometimes have to face hard impacts (body contact), or have to move, run at full speed or agility / struggle in avoiding opponents, until they move or stop suddenly to control and play the ball (kicking, dribbling, heading, catching, throwing, etc.) (Sari & Nurrochmah, 2021). The benefit of physical condition for football is that athletes can play with good stamina during the game. Because in a football match the two teams played for 45 minutes for two rounds, namely the first half and the second half (R. R. Pratama, 2019). With the size of the field and the length of the match, football athletes must be able to manage their energy so that they are not drained in the first round (Hendra & Putra, 2019). The need for physical condition dominates the needs of a football athlete in general. Endurance needs tend to be long, so on average every athlete uses the energy needs of general endurance or aerobic endurance. The elements of physical condition in football include, strength, endurance, speed, flexibility, agility, reaction. This element of physical condition is needed by football athletes in order to play well (Mulya & Millah, 2019).

In analyzing and carrying out sports activities, it is inseparable from the discussion of physical abilities (Hadi et al., 2016). To perform a sports movement physical elements are the main actors of the activity. Therefore, physical ability is one of the factors that determine to achieve an achievement (Hasan et al., 2020). In the game of football almost all limbs react and work, however the most dominant elements are the legs (Supriyanto et al., 2016; Heri, 2017).

Dribbling in a football game is something that needs a lot of attention (Ihsan et al., 2021), in dribbling is determined by good possession of the ball, namely the ball must be as close as possible to the feet and by being carried

and processed (Erfayliana & Wati, 2020). To be able to improve dribbling skills in football games (Saputra & Maidarman, 2007), relevant physical abilities are needed to be able to develop player skills (Agussalim et al., 2018), so that in carrying out dribbling movements do not appear rigid and there is no waste of energy besides that there is a need for good coordination in one's own limbs in an effort to control or control (Akhmad & Suriatno, 2018). Players who have this and master the dribbling technique itself, will be able to overcome the situation (Supriyanto et al., 2016).

Reaction speed is the ability of a person to act immediately as soon as possible in response to stimuli that come through the senses, nerves or other feelings VV (Bangkit Gala Persada, 2019). It is also necessary to distinguish between reactions and reflexes. A reflex is an answer to an unconscious stimulus while a reaction is an answer to a conscious stimulus. Both reflexes and reactions both have stimuli and answers. Judging from the reflex constraints it is clear that the answer to stimuli that do not pass through the center of consciousness while the reaction will inevitably pass through the center of consciousness first (Sudirman et al., 2022). While eye-foot coordination has a big role, the ball that is dribbled by the player sometimes his eyes are only focused on the ball so that when making passes to friends or carrying (dribbling) always run aground and be dispelled by the opponent. A player who has a football spirit is certainly no longer just focusing on the ball when carrying the ball but sees more of the position of friends and opponents, so that no more mistakes occur (Asfanza et al., 2019). Automatically the foot has a big role, so there is a need for coordination between the eyes and feet in dribbling. Coordination of eye and foot movements

is the motion that occurs from information integrated into the motion of the limbs. All foot movements must be controllable by sight and must be precise, according to the planned order in which to perform the dribbling movements (Burhanuddin et al., 2022). Dribbling the ball, all require a number of inputs that can be seen, then the input is integrated into motor motion as an output, so that the result is a flexible coordinated movement (Sahabuddin, 2020). A football player who has good eye-toe coordination, so he is able to coordinate the components of body movement, muscles, tendo and joints as the main components in the game of football, especially in carrying out dribbling techniques.

In this case, what is intended is the speed of the body's reaction and the coordination of the eyes and feet in performing dribbling techniques in a football game. These two things are factors that are very closely related to herding skills. The body's reaction speed is the ability to master and reach stimuli in order to take action as soon as possible. The game of football sometimes a player is not ready to anticipate both the arrival of the ball and when passing by the opponent carrying the ball.

METHODS

The method used in this study is the correlational descriptive method. The research variable to be studied in this study is a free v ariabel consisting of bodyreaction and eye-foot coo, while variabel is bound, namely dribbling in a football game. The population in the study was SSB Telkom Makassar players andthe sample used was 30 players with random sampling techniques. The data collected in this study include: Body reaction speed test, eye-foot coordination, and dribbling skill test in football games.

The collected data needs to be analyzed statistically descriptively, as well as infrencially for the overall statistical data analysis used in general using the SPSS program analysis version 22.00 with a significant level of 95% or $\alpha_{0.05}$

RESULTS

Descriptive analysis of research data consisting of test scores of body reaction speed, eye-foot coordination and dribbling skills in football games is seen in the summary of the results of the descriptive analysis listed in the following table:

Table 1. Results of descriptive analysis

Statistics	Speed foot reaction	Coordination eye-foot	Dribbling
N	30	30	30
Sum	1253.00	1021.00	1765.99
Mean	20.8833	17.0167	29.4332
Std.	5.74926	2.92558	2.42883
Range	25.00	13.00	11.52
Max	34.00	23.00	32.94
Min	9.00	10.00	21.42

Normality requirements with *the Normality Plots With Test* test. From the results of the *Normality Plots With Test* test carried out, it is obtained according to the following table:

Table 2. Data normality test results

Variable	Kolmogorov Smirnov		Shapiro Wilk		α
	Statistics	P	Statistics	P	
X1	0.106	0.093	0.967	0.101	0.05
X2	0.115	0.122	0.963	0.063	0.05
Y	0.080	0.200	0.956	0.134	0.05

Correlation and regression analysis is performed to determine the relationship of each free variable with the bound variable. The correlation analysis used is a single correlation analysis (r) and regression (R) at a significant level of 95% or $\alpha_{0.05}$. The complete results of the analysis can be seen in the appendix, while the summary of the analysis results is listed in the following table:

Table 3. Results of correlation and regression analysis

Hip.	N	r/R	Rs	F	t	Sig.
rX1Y	30	0.649	0.421	42.231	6.499	0,000
rX2Y	30	0.726	0.528	64.797	8.050	0,000
Rx1.2Y	30	0.731	0.535	32.730	3.092	0,000

There is a contribution of the body's reaction speed to dribbling skills in football games in SSB Telkom Makassar players. Based on the results of testing data analysis of the body's reaction speed to dribbling skills in football games on SSB Telkom Makassar players, a regression value (R 0) of 0.649 was obtained with a probability level (0.000) $< \alpha_{0.05}$, for an R Square value (coefficient of determination) of 0.421. This means that 42.1% of dribbling skills in a football game are explained by the body's reaction speed. From the Anova test or F test, it was obtained that the calculated F was 42,231 with a significance level of 0.000. Since the probability (0.000) is much smaller than 0.05α , a regression model can be used to predict dribbling skills in a football game (applicable to the population in which the sample is taken). From the t test obtained 6,499 with a significance level of 0.000. Because the probability (0.000) is much smaller than 0.05α . Then H_0 is rejected and H_1 is accepted or the coefficient of regression is significant, or the speed of reaction of the body really has a significant effect on dribbling skills in a football game. Thus, it can be concluded that the contribution of the body's reaction speed to dribbling skills in football games in SSB Telkom Makassar players is 42.1%.

There is a contribution of eye-to-foot coordination to dribbling skills in football games in SSB Telkom Makassar players. Based on the results of testing the analysis of eye-foot coordination data on dribbling skills in football games on SSB Telkom Makassar players, a regression value (R 0) of 0.726 was obtained with a probability level (0.000) of $< \alpha_{0.05}$, for an R Square value (coefficient

of determination) of 0.528. This means that 52.8% of dribbling skills in a football game are explained by eye-foot coordination. From the Anova test or F test, it was obtained that the calculated F was 64,797 with a significance level of 0.000. Since the probability (0.000) is much smaller than 0.05α , a regression model can be used to predict dribbling skills in a football game (applicable to the population in which the sample is taken). From the t test obtained 8,050 with a significance level of 0.000. Because the probability (0.000) is much smaller than 0.05α . So H_0 is rejected and H_1 is accepted or significant regression coefficient, or eye-foot coordination really has a significant effect on dribbling skills in a football game. Thus, it can be concluded that the contribution of eye-foot coordination to dribbling skills in football games in SSB Telkom Makassar players is 52.8%.

There is a contribution of body reaction speed and eye-foot coordination to dribbling skills in football games in SSB Telkom Makassar players. Based on the results of data analysis tests between the body's reaction speed and eye-foot coordination of dribbling skills in football games in SSB Telkom Makassar players, a regression value (R 0) of 0.731 was obtained with a probability level (0.000) of $< \alpha_{0.05}$, for an R Square value (coefficient of determination) of 0.535. This means that 53.3% of dribbling skills in a football game are explained by the body's reaction speed and eye-foot coordination. From the Anova test or F test, it was obtained that the calculated F was 32,730 with a significance level of 0.000. Since the probability (0.000) is much smaller than $\alpha_{0.05}$, a regression model can be used to predict dribbling skills in a football game (applicable to the population in which the sample is taken). From the t test obtained 3,092 with a significance level of 0.000. Because the

probability (0.000) is much smaller than 0.05α . Then H_0 is rejected and H_1 is accepted or the coefficient of regression is significant, or the speed of the body's reaction and eye-foot coordination really have a significant effect on dribbling skills in a football game. Thus, it can be concluded that the contribution of body reaction speed and eye-foot coordination to dribbling skills in football games in SSB Telkom Makassar players is 53.5%.

DISCUSSION

The contribution of the body's reaction speed to dribbling skills in football games in SSB Telkom Makassar players was 42.1%. This proves that in the game of football requires a speed of reaction of the body when performing dribbling skills. Dribble in a football game is the ability of a player to carry the ball to make an attack in possession of the foot in a football game. Basically, football players are required to react quickly both in controlling the field and placing more accurate balls. Dribbling in a game of football, it is sought to keep interacting between the feet and the ball. In terms of reaction speed the body will be very helpful in moving and responding to circumstances both avoiding opponents and achieving desires for each player.

The contribution of eye-to-foot coordination to dribbling skills in football games in SSB Telkom Makassar players was 52.8%. Doing dribbling and other football techniques, all require a number of inputs that can be seen, then the inputs are integrated into motor motion as outputs, so that the result is a flexible coordinated movement.

The contribution of body reaction speed and eye-foot coordination to dribbling skills in football games in SSB Telkom Makassar players was 53.5%. This proves that every football player needs the physical element of the body's reaction speed and eye-foot coordination

that he must have to be able to improve his dribbling skills in football games. Basically, football players are required to react quickly both in controlling the field and placing more accurate balls. The basic technique of dribbling cannot be achieved properly when the acceleration ability to do so without the support of the body's reaction speed and eye-foot coordination. The body's reaction speed is the driving force of any physical activity to be able to perform the slightest movement in a short time. For this reason, in carrying out dribbling techniques in football games, the body's reaction speed is the ability of the limbs to be able to interact with the ability of body balance that carries the weight point in a stable state and the ability to smoothly accelerate game patterns in carrying the ball is a combination of accommodating all movements made, avoiding control or grabbing the ball and moving well if the three components can be owned well. While coordination is a combination of eye-foot to accommodate all movements made while balance helps stabilize the position of the body when carrying the ball and avoiding the opponent's control. Players can avoid controlling or grabbing the ball and move well if the three components can be owned properly.

CONCLUSION

According to the results of the hypothesis testing analysis based on the problem posed, the following conclusions can be drawn: The contribution of body reaction speed and eye-foot coordination to dribbling skills in football games in SSB Telkom Makassar players was 53.5%.

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