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# The Effect of Training Methods and Eye-foot Coordination on the Dribbling Skills of Diklat Bintang Pelajar Players

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#### **Abstract**

The development of modern football, technical level, physical condition and tactical development are studied in depth and scientifically carefully. Technical factors are the most vital in football, including the technique of dribbling. The dribbling training method used needs to be studied to determine whether or not it affects the athlete's dribbling ability. The purpose of this study was to analyze the effect of training methods and eye-foot coordination on the dribbling skills of student star training players. The method used is an experimental method with a factorial design in the form of a pretest posttest group with a sample of 40 football athletes. The analysis technique used is normality test, homogeneity test, and hypothesis testing. The results of this study are that there is an influence between the Massed Practice training method with an average value of 43.75 and the Distributed Practice training method obtained an average value of 42.00 on dribbling skills. There is an effect of eye-foot coordination on dribbling skills. Athletes who have high eye-foot coordination with an average score of 14,5500 and athletes who have low eye-foot coordination with an average score of 10,700. There is an interaction between the Massed practice and Distributed Practice training methods on the dribbling skills of the Bintang Pelajar Training players in Semarang Regency. The conclusion of this study is that there is an influence and interaction between the training methods and eye-foot coordination on the dribbling skills of the Bintang Pelajar training players, Semarang Regency.

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#### **INTRODUCTION**

The development of modern football, technical factors, physical conditions and tactical development are studied in depth and scientifically carefully. Technique in sports is the ability to carry out movements quickly, precisely and harmoniously. Technique in sports is a human skill and ability to move economically and according to purpose. This is the starting point for achieving the highest achievement. Soekatamsi in Hartini (2019) said that the basic techniques of football are all movements with the ball that are needed to play football. Or in other words, the basic technique of playing football is the ability to make movements or do something that is completely independent from the game of football.

Optimal improvement of football playing skills requires a form of training that is in accordance with the conditions of the players. Frank McGuire (1986: 14) explains that "The right approach to providing training begins with training on basic skills in order to achieve the correct basic skill performance. A good player is a player who has good basic skills". Weaknesses that are seen in football playing skills are passing the ball, dribbling, and shooting the ball into the goal.

The existence of basic technical weaknesses, one of which is dribbling, players of the Semarang Regency Student Star Education and Training are improving themselves in mastering the basic techniques of playing football properly and correctly. So far, the training methods used are still not maximized to improve the ability of players in mastering the technique of playing football skills, often players are only trained to do without the aim of innovation and creation and football coaches are needed, especially in determining and choosing the right training method according to with the characteristics and essence and the material to be trained. The choice of method also only considers the availability of the facilities and tools needed. The need for an efficient method in practicing

football skills is based on several reasons, namely first, efficiency will save time, energy or cost, secondly efficient methods will allow players to maintain a higher skill level (Rusli Lutan in Udam, 2017). Football games have a strategic function for players if the football game practice approach can be designed in a conducive training process it will produce an efficient and clear training program that aims to improve football playing skills for players. The role of the coach in an effort to increase the ability of players to master the skills of playing football is very dependent on the creativity of the coach in empowering all the potential that exists in the football school. The creativity of the coach playing football is reflected in choosing and determining the method of training in football games according to the abilities and facilities available at the football school, so that it can provide adequate stimulation so that players can participate actively according to their potential.

The application of the right training method in the process of practicing football playing skills will also provide opportunities for coaches to make maximum use of the available facilities so that there is no excuse for football coaches because of the delay in the football game training process and the factor of inadequate football facilities available at the time. football school.

Determining the right exercise method is closely related to the practice situation. Consideration of the use of certain training methods must pay attention to the conditions under which the training process is carried out. Training conditions are also related to the characteristics and training material to be trained because the characteristics of the training material must also be considered in choosing the training method. The dribbling ability of the players is still low and less agile so that it is often snatched by the opponent.

Selection and application of methods in football playing skills training for Bintang Pelajar Education and Training players in Semarang Regency so that the methods applied are able to improve the results of players' training in mastering football playing skills, this study will try two kinds of methods that are applied in the process of practicing football playing skills. Bola, namely the method of massed practice and distributed practice.

Schmidt's training method in Frank (2015) suggests that "training with massed practice methods and distributed practice methods which are often referred to as continuous training and training methods interspersed with rest periods. In its development, these training methods are often applied to certain sports. In the football branch, to improve football playing skills, you can use modified training methods for the development of football playing skills".

Massed practice is a training session in which the amount of practice time in an experiment is greater and in that amount between trials which ultimately leads to fatigue in various tasks, while distributed practice is between exercises performed there is a break that equals or exceeds the amount of time in experiments that lead to a more relaxed sequence. Both of these training methods will be applied in football playing skills. So that the training method that will be applied can be designed properly, the factors that affect the basic technical skills of playing football are first explored. To perform football skills properly and correctly, elements of physical condition are needed such as speed, flexibility, balance, accuracy, endurance, agility, coordination and good muscle explosive power.

Gallahue in Salehi (2021) coordination is a person's ability to assemble or integrate several movements into one movement pattern that is harmonious, efficient and electil with purpose. Meanwhile, Harsono in Dharna (2020) explains that coordination is closely related to speed, strength, endurance and flexibility. Coordination is a very complex biometric skill which in its implementation consists of several physical elements that interact with each other.

Coordination has a close relationship with the movement performed. Coordination is a fundamental skill for a child to move, coordination skills are needed by someone in learning movement skills. Good coordination can be seen from the movement ability it has.

A person's level of movement coordination is reflected in his skills to perform a movement quickly and efficiently. A child with good coordination is not only able to perform a skill perfectly, but also can easily and quickly perform a new skill. In addition, it can also change and move quickly from one movement pattern to another so that the movement becomes efficient.

Eye-foot coordination is one of the most influential physical abilities in the game of football. Many movements in football require coordination and one of these coordination is eye-foot coordination. This coordination is the basis for achieving a high skill in playing football. Sri Haryono in Hidayat (2016) explains that coordination is the ability to combine two or several components in a complete movement. Meanwhile, according to Ismiyarti's opinion (2008: 53-54) Coordination is a harmonious relationship and a relationship of mutual influence between muscle groups during work, which is indicated by various skill levels.

In football games, eye-foot coordination skills are needed because it will be very supportive to master the game, eyefoot coordination is the basis for achieving high skills in kicking, dribbling and controlling the ball. The skill of dribbling is a fairly complex movement because dribbling is a combination of elements of running, touching and seeing the field situation. Dribbling skill is the ability to carry the ball with the feet while standing. Players are also required to integrate the movement of pushing and controlling the ball as well as running movements and must have good eyefoot coordination so that a player will be able to perform dribbling skills well as well.

Success in football playing skills is a player factor. Differences in ability mainly occur due to different physical qualities (Sugiyanto in Adiyatama, 2017). In line with this, Rusli Lutan in Candra (2016) said that the factors that influence the process of practicing football skills are 1) internal conditions; and 2) external conditions. Based on the background of the problem that has been stated above, this research is entitled "The Effect of Training Methods and Eyefoot Coordination on Dribbling Skills" (Experimental Study of Differences in Massed Practice and Distributed Practice Methods in Bintang Pelajar Training Players in Semarang Regency.

#### **METHODS**

This research is a quantitative research, this study uses an experimental method with the aim of knowing and analyzing the effect of the training method and the effect of the ankle on the dribbling skills of student star training players in Semarang district. The research design used was a factorial design with a pre-test and post-test group research design.

The variables of this research are independent variables consisting of methods (massed practice and distributed practice) and eye-foot coordination (high and low), the dependent variable is football playing skills. The implementation of football skills training with the massed practice method, where players are instructed to perform basic football skills repeatedly and continuously. Players are not given the opportunity to rest until the specified time limit runs out. While

the method of distributed practice, the exercise is done with interspersed rest between training times. Eye-foot coordination is a classification of eye-foot coordination which is calculated above the average of the results of eye-foot coordination measurements in the research sample.

The data collection technique used in this research is by conducting tests and measurements. Data on eye and foot coordination were tested using the Football Wall Volley Test (Barker, 2010), then data on dribbling skills were tested with a football playing skills test from Plooyer (1970). Then the reliability test was carried out using ANOVA.

The data analysis technique used a 2 (two) way design ANOVA variance analysis technique at = 005. To find out the assumptions in the ANOVA technique, a normality test (Kolmogrov Smirnov test) and homogeneity test were carried out. Furthermore, the analysis used parametric statistical analysis.

#### RESULT AND DISCUSSION

The effect of training methods and eyefoot coordination on dribbling skills for star training players in Semarang district is described based on test achievement and measurement of eye-foot coordination and dribbling skills using massed practice and distributed practice methods.

The effect of the training method on the skills of dribbling football players in the star training of students in the student districts, the data obtained from the research

Table 1. Effect of Massed Practice Training Method on Dribbling Skills of Football Players

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.573a	.605	.650	1.472		

a. Predictors: (Constant), Massed Practice

Based on the output model summary, it is known that the influence value (Adjusted R Square) is 0.650. This figure means that

massed practice affects dribbling skills by 65.0%. While the rest (100% - 65.0% = 35.0%) is influenced by other variables.

According to Schmidt (1991:74) massed practice is a training session where the amount of training time in an experiment is greater than the amount of rest between trials which ultimately leads to fatigue of various tasks. By doing repetitive and continuous movements, there automatically be an improvement in the quality of the nervous system, which leads to an improvement in the movement pattern of dribbling skills. As stated by Yusuf Adisasmita and Aip Syaifudin in Bustamam (2012) states "the continuous method will improve the athlete's self-control when doing tiring efforts or exercises, and his ability to stimulate muscle groups that play an important role in the implementation of sports". Football skills training with massed practice has advantages in terms of utilizing movement memory. Skills training with massed practice has the advantage of having short-term memory.

Based on the results of analytical calculations using SPSS, it shows that Massed Practice has an effect on the Skills of Dribbling Football Players in Semarang Regency Student Stars by 65.0%, which is supported by existing theory, it can be concluded that the training method using Massed Practice can improve athletes' dribbling skills. Semarang Regency Student Stars Football Training.

Table 2. The Effect of Distributed Practice Training Method on Dribbling Skills of Football Players

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	639a	.515	.566	1.388		

a. Predictors: (Constant), Distributed Prectice

Based on the output model summary, it is known that the influence value (Adjusted R Square) is 0.566. This figure means that distributed practice has an effect on dribbling skills by 56.6%. While the rest (100% - 56.6% = 43.4%) is influenced by other variables.

The distributed practice method is a form of exercise that is interspersed with rest between training times. According to Iwan Setiawan in Doewes (2012) states "the practice of a learned sport skill is carried out in a relatively short time and often interspersed with rest periods". According to Schmidt (1991:74) that in distributed practice on the sidelines of the experiment, there is an equal rest. or overtime in the experiment leading to a more relaxed sequence".

This distributed practice method has several advantages for both coaches and athletes. Foss and Keteiyan in Himawanto (2010 stated that there are two main advantages in using distributed practice training programs, namely: (1) Distributed practice training programs can allow coaches to specialize in a more thorough training program for each athlete, devoted to the

dominant energy system for sports that administered and carried out at a level of physiological stress that optimizes success in performance (2) A distributed practice training program is implemented from day to day, so that athletes can observe their progress and are flexible in their implementation.

Based on the results of analytical calculations using SPSS, it shows that Distributed Practice has an effect on the Skills of Dribbling Football Players in Semarang Regency Student Stars by 56.6%, which is supported by existing theory, it can be concluded that the training method using distributed practice can improve athletes' dribbling skills. Semarang Regency Student Stars Football Training.

Based on the above analysis, there is an increase in dribbling skills in the Bintang Pelajar Football Training athlete in Semarang Regency after being given the Massed Practice training method with the Distributed Practice Training Method, which is in line with research conducted by Relli Hardian Saputro (2015) that there is a significant

difference in the effect between the training approaches. massed practice and distributed practice on the ability to shoot horizontally in football games. This proves that the provision of the Massed Practice method of training with the Distributed Practice Training Method to the Bintang Pelajar Football Training and Education athletes in Semarang Regency can improve their dribbling skills.

Furthermore, the factor tested in this study is the coordination between the mass and the legs. According to Harsono in Jamaludin (2017) explains that coordination is closely related to speed, strength, endurance and flexibility. In addition, coordination is the ability of muscles to

control motion precisely in order to achieve a specific physical task (Grana and Karlenak in Sukadiyanto 2005:58). Coordination skills are needed to integrate several movement patterns into harmonious movements in carrying out movement tasks.

Football games require eye-foot coordination because it will be very supportive to master the game, eye-foot coordination is the basis for achieving high skills in kicking, dribbling and controlling the ball. The skill of dribbling is a fairly complex movement because dribbling is a combination of elements of running, touching and seeing the field situation.

Table 3. Effect of High Eye-foot Coordination on Football Players' Dribbling Skills

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.530a	.609	.659	1.393		

a. Predictors: (Constant), Mata kaki tinggi

Based on the output model summary, it is known that the influence value (Adjusted R Square) is 0.659. This figure means that high

eye-foot coordination affects dribbling skills by 65.9%. While the rest (100% - 65.9% = 34.1%) is influenced by other variables.

Table 4. Effect of Low Ankle Training Method on Dribbling Skills of Football Players

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.602a	.510	.545	1.468

a. Predictors: (Constant), Mata Kaki Rendah

Based on the output model summary, it is known that the influence value (Adjusted R Square) is 0.545. This figure means that low ankles affect dribbling skills by 54.5%. While the rest (100% - 54.5% = 45.5%) is influenced by other variables.

The test results proved that there was a significant difference in the effect of high and low eye-foot coordination on the skills of dribbling football players in Semarang Regency Student Star Training. Based on the results of the analysis using SPSS, it shows that high eye-foot coordination has an effect on the skills of dribbling football players in the Semarang District's Star Training and Education Program by 65.9%. Meanwhile, low eye-foot coordination affects the skills of

dribbling football players in Semarang Regency by 54.5%. So it can be concluded that high eye-foot coordination has a greater influence on the skills of dribbling football players in Semarang Regency Student Star Training.

The essence of sports activities is the human movement itself. Athletes move to throw, run, kick and dribble. But human motion in sports has motion that is carried out in a planned and organized manner. Execution of movement effectively and efficiently is only possible if the movements performed can be coordinated properly. The level of coordination of players is reflected in their ability to perform a movement smoothly, precisely and efficiently (Harsono

in Permana, 2010). An athlete with good coordination is not only able to perform a skill perfectly, but also easily and quickly can perform a skill that is still new to him. He can also change and move places quickly.

Therefore, eye-foot coordination in dribbling skills for football players in Semarang Regency is very important and influential in the game, both individually and as a team. Because with good coordination, the ability to control the game situation becomes optimal.

After knowing the effect of training methods and eye-foot coordination on the

ability to dribble on student star training players, this research also looks for the relationship or correlation of training methods (Massed Practice and Distributed Practice) and eye-foot coordination (high and low) on dribbling skills in students. football player training star students in Semarang Regency. This needs to be done because through this comparison it will be known which training method is most appropriate to do to obtain the optimal effect. The following correlation results are shown in tabular form.

**Table 5.** The Correlation of Massed Practice and Destributed Practice Training Methods and High and Low Eye-foot Coordination on Dribbling Skills

Correlations						
		Massed Prectice	Distributed Prectice	High Eyes- Foot	Low Eyes- Foot	Dribbling
Manad Duration	Pearson Correlation	1	.056	.101	.463*	073
Massed Practice	Sig. (2-tailed)		.813	.673	.040	.760
	N	20	20	20	20	20
Distributed	Pearson Correlation	.056	1	.180	.209	.339
Practice	Sig. (2-tailed)	.813		.448	.376	.543
	N	20	20	20	20	20
High Even Engl	Pearson Correlation	.101	.180	1	.184	.330
High Eyes-Foot	Sig. (2-tailed)	.673	.448		.438	.556
	N	20	20	20	20	20
Low Eyes-Foot	Pearson Correlation	.463*	.209	.184	1	.102
	Sig. (2-tailed)	.040	.376	.438		.668
	N	20	20	20	20	20
Dribbling	Pearson Correlation	.073	.339	.330	.102	1
Dribbling	Sig. (2-tailed)	.760	.543	.556	.668	
	N	20	20	20	20	20

Correlation is significant at the 0.05 level (2-tailed)

Based on the data in Table 4.9 above, the calculation using the output table above, obtained the value of Sig. (2-tailed) between the massed practice method and dribbling skills is 0.760 > 0.05 meaning H\_0 is rejected, it can be concluded that there is a positive and

strong relationship between the massed practice method and dribbling skills. Then the value of Sig. (2-tailed) between the destributed practice method and dribbling skills is 0.543 > 0.05 meaning H\_0 is rejected, it can be concluded that there is a positive and

strong relationship between the destributed practice method and dribbling skills.

Obtained the value of Sig. (2-tailed) between high eye-foot coordination and dribbling skills is 0.556 > 0.05 meaning H\_0 is rejected, it can be concluded that there is a positive and strong relationship between high eye-foot coordination methods and dribbling skills. Then obtained the value of Sig. (2-tailed) between low eye-foot coordination and dribbling skills is 0.668 > 0.05 meaning H\_0 is rejected, it can be concluded that there is a positive and strong relationship between low eye-foot coordination methods and dribbling skills.

The conclusion from the data above is that there is an interaction between the Massed practice training method and the Distributed Practice exercise on the Skills of Dribbling Football Players in Semarang Regency Student Star Training. The increase in the average number of samples who have dribbling skills with the Massed practice method is better than the samples that have the skill level of dribbling with the Distributed Practice training method.

#### **CONCLUSSION**

In accordance with the results of research on student star training football players in Semarang Regency, it can be concluded, There is an influence between massed practice training methods and distributed practice training methods on the dribbling skills of Bintang Pelajar training players in Semarang Regency. Furthermore, there is an effect of eye-foot coordination on the dribbling skills of the Bintang Pelajar training players in Semarang Regency. There is an interaction between the Massed practice and Distributed Practice training methods on the dribbling skills of the Bintang Pelajar training players, Semarang Regency.

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