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# THE EFFECT OF FEEDING DRILL TRAINING METHOD AND COORDINATION TOWARD ABILITY OF FOREHAND **GROUNDSTROKE DEPTH**

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## Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh metode latihan feeding drill terhadap kedalaman forehand groundstroke, hubungan antara koordinasi dengan kemampuan kedalaman groundstroke forehand, dan perbedaan kemampuan kedalaman forehand groundstroke atlet yang memiliki koordinasi mata-tangan tinggi dengan atlet yang memiliki koordinasi mata rendah. -tangan. Sampel penelitian ini adalah dua belas atlet tenis putra pemula Mandiri Tenis Club Singaraja Bali. Untuk mengukur koordinasi digunakan alat tes koordinasi dan untuk mengetahui kemampuan kedalaman groundstroke forehand digunakan tes kedalaman groundstroke. Hasil penelitian menunjukkan bahwa metode feeding drill berpengaruh terhadap kedalaman forehand groundstroke, terdapat hubungan yang kuat antara koordinasi dengan kemampuan forehand groundstroke depth atlet yang memiliki koordinasi mata tangan tinggi dan rendah, terdapat perbedaan kemampuan kedalaman forehand groundstroke atlet yang memiliki eye-hand tinggi koordinasi dengan atlet yang memiliki koordinasi mata-tangan yang rendah. Berdasarkan hasil analisis data dapat disimpulkan bahwa metode latihan feeding drill dapat meningkatkan kemampuan kedalaman groundstroke forehand dan tingkat koordinasi untuk mengetahui kemampuan kedalaman groundstroke atlet.

## Abstract

The purpose of this study was to know about effect of feeding drill Training method toward forehand groundstroke depth, correlation between coordination with ability forehand groundstroke depth, and difference forehand groundstroke depth ability athletes who have high coordination eye-hand with athletes who have low coordination eye-hand. Sampel of this study were twelve male tenis athlete tenis beginner Mandiri Tenis Club Singaraja Bali. To measure coordination used coordination test instrument and to know forehand groundstroke depth ability used groundstroke depth test. Result showed that feeding drill method has effect toward forehand groundstroke depth, there were strong correlation between coordination with ability forehand groundstroke depth athletes who have high and low eye-hand coordination, there were differences ability of forehand groundstroke depth athletes who have high eye-hand coordination with athletes who have low eye-hand coordination. Base on the result of the data analysis, it could be concluded that feeding drill training method could increase the ability of forehand groundstroke depth and the level of coordination to determine the ability of the athlete's groundstroke depth.

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### **PENDAHULUAN**

Field tennis is one of the most popular sports in the world. Game played on a rectangular court divided in half by a net. Meanwhile, the game of tennis is an individual game that can be played one on one or two against two, using a racket as a bat and a tennis ball as a hitting object. Now, tennis is no longer just looking for fitness or for recreation, but had also been used as a means of achieving achievement.

Some of the basic techniques in tennis include groundstroke, volley, service, lob, overhead, and halfvolley. Groundstroke is hitting with a forehand or backhand after the ball bounces towards the opponent's area or over the net. This was the form of tennis stroke that is most often performed and easiest to learn [7] There are so many basic techniques in the game of tennis, but one of the most important basic techniques that tennis athletes must mastering groundstroke, because in a game the technique of hitting was most often done by players. Not only can you do it, but a player must have good shot accuracy in order to get points and win the match. According to statistics, only 25% of all points of defeat were due to the correct and targeted blows from the opponent, so 75% of all the defeats are caused by one's own mistakes [9].

It was not only in matches, even in training, tennis players often make mistakes such as the ball hitting the net or the ball coming out of the field or out. Therefore tennis players must practice the accuracy of their strokes in order to have a precise and targeted shot and minimize their own mistakes. Accuracy of hitting was the key for a player to be able to win the match. In carrying out the Groundstrokes technique to support the success of the depth of the groundstroke stroke, a good biomotor component was needed, the biomotor components include: power, speed, strength, agility, flexibility and coordination [10].

One of the biomotor components that supports the success of performing forehand groundstroke techniques was the eye-hand coordination of a player in making a stroke. Good eye-hand coordination ability was being able to position the body in a good position when the ball comes towards our defensive field and hit the ball precisely on the racket head when the ball bounces, if the eye-hand coordination level was low then the success of being able to put the ball in the desired direction will be difficult to achieve. The same thing was also stated by Applewhite [1] that in practicing tennis skills not only to practice seeing the ball that will be hit, but also very important to pay attention to where the ball will be hit.

# METODE Participants

The research population were amateur tennis player who trained at Mandiri Tennis Club. The age of the subjects was in the range 12 to 14 years old. The number of population as many as 20 people. The technique of determined the sample using purposive random sampling and from that technique got 12 sample become one group. All of sample were tested before given treatment and after given treatment with groundstroke depth test to measure ability of groundstroke depth [5]. How to measure coordination tested with test eye-hand coordination [6].

### Design and Data Analysis

This research is a quantitative study using a quasi experimental research method with one group pretest posttest design [11]. Sample were placed in one group. In the group sample were tested with groundstroke depth to measure ability of theirs groundstroke and then threatment feeding drill were given to samples. After 8 weeks all sample were tested again as posttest to know the effects the treatment had been given. Subsequently, the data obtained were analysed using paired t-test with a significance level of 5% assited by the spss 23 program. Before paired t-test was carried out, it was necessary to conduct a precondition test, namely the data normality test using the Shapiro-Wilk test which is aim to determine that one group have same variance.



### **HASIL**

Base on the analysed data using paired t-test with significance level  $\alpha = 0.05$ . The significance value of the feeding drill method contribute on groundstroke forehand depth is 0,00, with the sig (0,00) <  $\alpha$  (0,05) so the hypothesis is accepted. So base on that sig it means there is a effect feeding drill method toward groundstroke forehand depth. Fore more details look at the results table below of paired t-test.

Table 1. Paired T-Test Of Feeding Drill Method Toward Ability Groundstroke Depth

Paired differences								
Groundstrok e forehand- pretest- posttest		O.		95% Confi		<u>-</u>		C:-
	Mean	St d. de v	Std. error mean	dence interval difference	of	t	df	Sig 2 tailed
		•		Lower	upper	-		
	30.583	10. 790	2.203	26.027	35.140	13.886	23	.000

Base on the analysed data using paired correlation with significance level  $\alpha=0.05$ . The significance value of groundstroke forehand ability toward coordination is  $\alpha=0.024$ , with sig (0.024)  $<\alpha=0.05$  so the hypothesis is accepted. So base on that sig it means there is a correlation between ability groundstroke forehand with coordination. For more details look at the results table of paired correlation.

Table 2. Paired sample correlation of groundstroke forehand ability with coordination

	10	N	Correlation	Sig.
Groundstroke coordination	forehand	ability-	0,64	0,024

Base on the analysed data using paired differences with significance level  $\alpha=0.05$ . The significance value of the groundstroke forehand ability on level coordination is 0.00, with the sig (0.00)  $<\alpha=(0.05)$  so the hypothesis is accepted. So base on that sig it means there is difference groundstroke forehand ability between atletes who have high eye-hand coordination with low eye-hand coordination. Fore more details look at the table below of paired differences.

Table 3. Paired differences of ability groundstroke with level coordination

	Mean	Pa Std. deviatio	Std. Error mean		nfidence of	f t	đf	Sig. tailed)	(2
		n		lower	Uppe r				
Groundstroke ability- level coordination	34.883	10.924	2.972	28.293	41.37 4	11 .7 22	11	.000	

### **DISCUSSION**

Groundstroke is one of many technique that are in tenis. It is done often time by tenis player when played singles or double. Sukadiyanto [14] state that groundstroke there are two kind, It are



gorundstroke forehand and groundstroke backhand. It is important to study because the player do frequently.

Various training methods that can done by player and coach to increase ability groundstroke or coach would like to improve theirs athlete ability especially for increasing groundstroke forehand. Nila [12] who compare two training methods between drill method and games method state that drill method is more better than game method. At the others research on volley ball sport drill method also applied and the result there were an effect of drill method on forearms passing skill volleyball [2]. It mean drill method have same function in others sports, it is not only specific at one sport but on others sport drill methode also could to increase and improve ability that have at an athlete especially on tenis athlete. On the same opinion stated by David [4] on the drill method coach and player can specifically practice to justify wrong technique become right technique and develop stroke and grip. On the other hand as the coach have to notice biomotoric component that have on athlete like strength, speed, agility, power, endurance, flexibility, and coordination [10].

Coordination is compatible relation between groups muscle as long as doing work, that pointed various level skill [6]. Coordination is one of biomotoric ability that could not sparated with others element namely speed, strength, endurance and flexibility. Martha [3] who compare training method and eye-hand coordination stated that there is a difference in the ability of a three minutes rally with eye-hand coordination. On the others research that have difference sport stated that there is difference in the effect of high and low coordination on the accuracy and dropshot in badminton athletes [13]. Base on others research above that had same conclusion with this research, so coordination that have on every single athletes although on differences kind of sport ability of athlete is effected by biomotoric component especially coordination because if athlete have good coordinaton it would be easier someone especially athlete in faced situation and condition that fluctuate, namely diference court when compete at various county that is not same as with area where they often time train.

### **KESIMPULAN**

Base on result and discussion above, feeding drill method effective in develop and improve groudstroke forehand ability an athlete, it is not only feeding drill also have contribute on determine ability but there are many aspect that contribute, namely speed, endurance, power, stenght, flexibility, agility and most the important is coordination, because coordination is a series of groups muscle that work simultaneously to can do motion activity. Reffering to this conclusion, it is suggested that tenis coach who would like increase groundstroke forehand ability can use this training method.

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