



## The Effect of Zig-Zag Training Method on the Dribble Skill of SSB Satria Muda

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### Abstract

This study aims to determine how much influence zigzag training has on dribbling skills in soccer games at SSB Satria Muda. This research is an experimental study using a pretest-posttest control design with zig-zag training as the independent variable, the dependent variable being dribbling skills. The subjects in this study were Ssb Satria Muda athletes, athletes selected using the proportional stratified random sampling technique. The data collection method is a test. In each group, the test was given at the beginning before the treatment and at the end after the treatment. The treatment given to the experimental group was in the form of zig-zag exercise, after being given exercise for 4 weeks with a frequency of exercise 3 times a week. Based on data analysis by statistical t-test with a significant level of  $\alpha = 0.05$ ,  $t_{count} = 5,500$  and  $t_{table} = 2,048$ , if  $t_{count} > t_{table}$  then  $H_a$  is accepted and  $H_0$  is rejected. Thus, the proposed  $H_a$  can be accepted as true, that zig-zag training has an effect on improving dribbling skills in soccer games at SSB Satria Muda.

Keywords : Zigzag practice, Dribble skill in soccer game

### Introduction

Sport is a series of planned regular exercise that people do to achieve certain goals and objectives. Sport is something that has become a daily activity for humans, sports are much favoured by humans, both as actors or just fans.

Sport is an activity to train one's body fitness physically and spiritually, and is also one of the routine needs in daily activities or every week, so that human health is always maintained in optimal conditions, especially for one's physique. In its development, sport has become a necessity for people to maintain and improve their physical condition in order to remain enthusiastic in carrying out daily activities and have the ability to excel (Razbi, R.Y., Nurdin, A.A., Soleh. Moch, 2018: 2).

Modern sports are basically very diverse, for example, there are many sports that can be played starting from small ball games and big ball games. In accordance with the times, the big ball game is very popular in the world and also in Indonesia today is football. Football is a sport that is common among people with different backgrounds and ancestry, a bridge that connects economic, political, cultural, and religious levels (Joseph, 2011:1).

Football is a team game played by two teams, each team consisting of eleven players including the goalkeeper. The game can be played by

the whole body except with both hands. Almost all games are carried out using foot skills, except for the goalkeeper in playing the free ball using his limbs, with his feet and hands according to the rules. Smooth and controlled player movements express their individuality in team play (Joseph, 2011:1).

Techniques, physical conditions, tactical and mental development in football development must be studied really in depth and scientifically carefully. Basic technique is one of the foundations for someone to be able to play football. Football players must be taught basic techniques from an early age so that as adults they can carry out these techniques well. Basic techniques in football, there are several kinds of basic techniques that must be mastered, namely, kicking, snatching, throwing in, stopping, dribbling, heading. From these basic techniques, dribbling must also be mastered well.

In the game of soccer, the first major skill that will make players motivated and satisfied is being able to dribble past opponents without being seized and being able to create an opportunity to score a goal. Dribbling or dribbling in a soccer game is one of the important elements of basic techniques that must be mastered by a player, because the ability to dribble in a soccer game is useful for players to get past the opponent's defense, approach the shooting room, avoid the opponent's ambush, get space to pass. to a friend and can create an opportunity to score.

According to Udam (2017: 60) that the technique in the game of football includes 2 kinds of techniques, namely: the technique with the ball and without the ball. In the game of football there are several basic techniques that must be mastered, including kicking the ball, stopping the ball, controlling the ball, trickery, tackling, throw-in, and goalkeeping techniques.

According to Daryanto & Hidayat (2015: 202), there are several basic skills that football players need, namely: heading, dribbling, stopping, and shooting.

According to Tim (2012:124) basic techniques are all activities that are fundamental to the game so that with such capital a person can already play football. All activities in playing are carried out with movements, both movements without the ball and movements with the ball. In an effort to improve the quality of the game towards achievement, the technical problem is one of the decisive requirements. Thus, in improving the technique, it is necessary to describe the basic technical components of football.

According to Nuh, Muhammad (2014: 3) football is a team game, each team consists of 11 players and one of them is a goalkeeper. The goal of the game is to get the ball into the opposing team's goal. The team that scores the most goals will be the winner.

In the game of soccer, the first major skill that will make players motivated and satisfied is being able to dribble past opponents without being seized and being able to create an opportunity to score a goal. Dribbling or dribbling in a soccer game is one of the important elements of basic techniques that must be mastered by a player, because the ability to dribble in a soccer game is useful for players to get past the opponent's defense, approach the shooting room, avoid the opponent's ambush, get space to pass. to a friend and can create an opportunity to score.

According to Febri, Abdul (2020:20) Dribbling is one of the basic techniques of playing football which has an element of art and its own charm, when compared to other basic techniques. In principle, dribbling is a way of rolling the ball continuously on the ground. The movement of dribbling itself is making the most of the various parts of the foot (inside, outside, instep, and sole of the foot).

Dribbling itself has 3 techniques, namely:

- a. Using the inside of the foot, namely the technique of dribbling the ball to pass the opponent. By making use of the inside and most of the surface of the foot, better ball

control allows a player to pass the opponent more easily. Running motion is reduced to keep the ball in the protected area between the legs so it is not easily grabbed by the opponent.

- b. Using the outside of the foot, namely the dribbling movement by utilizing the outer cross section of the foot. The position of the ball will be more controlled. The form of error that is often made by novice players is dribbling with the tips of the toes. This model of error in addition to causing pain in the toe, also the shooting model will not be accurate. The advantage of dribbling the ball with the outside of the foot can provide a horizontal ball rotation and can also make the direction of the ball set to move, turn and dive.
- c. Using the upper leg or the back of the foot, namely the dribbling movement by utilizing the instep or the shoelace. The advantage of using this technique is that it provides accurate rotation. All three can be combined based on the needs on the field which in principle is possession of the ball from enemy interference and winning the game as the main goal.

According to Razbie (2018: 5) Dribbling is a goal to save the ball if there is no possibility to pass or pass the ball by freeing oneself from the opponent's pressure, thus the conclusion is that agility is the most important regarding dribbling technique.

According to Destriani (2021:146) Dribbling is one of the most important football skills you need to master. Simply put, if you don't know how your opponent dribbles, you won't know how to play football.

Based on the above opinion, it can be concluded that dribbling or dribbling is a basic technique of rolling, moving the ball from one place to another. Dribble or dribbling is an important basic technique in the game of football, there are several dribble techniques, namely: dribble with the inside, dribble with the outside and dribble with the back of the foot.

According to Udam (2017: 63) exercise is a work process that must be carried out systematically, repeatedly, continuously, and the longer the amount of load given increases, what is meant by systematic is planning, according to a schedule, according to certain patterns and standards, methodically. , from simple to more complex. Repeatedly means that the movements that were originally difficult to do

become easier, automatic, and reflective in their implementation so that they save more energy.

Exercise is all efforts to improve overall physical condition with a systematic and iterative process with an increasing number of training loads, with the aim of improving athlete performance (Reki, 2020: 51).

According to Witono (2019:23) physical exercise for a football player includes flexibility training, sprint training that is carried out repeatedly to improve anaerobic ability. In addition, the portion of marathon running training needs to be done to train heart strength while playing.

Based on some of the opinions above, the researcher can conclude that exercise is a physical activity that is carried out systematically, repeatedly, with certain methods in accordance with the desired goals. The process of exercise that is carried out regularly, planned, repeatedly and the longer the load increases, and starts from the simple to the complex.

The zig-zag running exercise is an exercise in the skill of changing the direction of body movement by turning in the shortest possible time, the way to do the exercise is based on the technique of running as fast as possible with a twisting trajectory, this exercise is included in agility training or can be called Agylity (Razbi, R.Y., Nurudin, A.A., Soleh. Moch, 2018).

According to Destriani (2021:146) Zig-zag is a running movement that turns following the track, zig-zag running can be used to improve agility, because the elements of motion contained in the zig-zag running exercise are components of agility motion, namely running by changing direction and body position, speed, balance which are also components of agility.

According to Fajar, Mutiara (2017:83) zigzag is running across the cone by dribbling in and out of the cone until it reaches the last cone, then turning backwards and dribbling back to the starting position, keeping the ball in control of the ball at all times. and finish it as fast as possible.

From the above opinion, it can be concluded that the zig-zag exercise is a running exercise that follows the prepared trajectory, the purpose of zig-zag running is to increase the ability to change direction as desired. This exercise can be used to improve dribbling skills in soccer games.

In carrying out the zig-zag exercise, the following must be observed:

- I. Facilities and facilities include: a flat and level field, stopwatch, whistle, cone.

- II. Personnel needed: signaling start and finish.

- III. The procedure for implementing the training participants includes: Before doing the zig-zag exercise, students must warm up, the implementation of the exercises is carried out one by one and is called sequentially according to the names of the sample sequences.

- IV. In the implementation of the exercise, namely: students stand up straight, place both hands by the side of the body and straight ahead, run back and forth to the right and left in the direction that has been determined, for obstacles you can use a cone tool.

- V. In this exercise, the training principles include the overload system (the training load is increasing day by day), systematic (from easy to difficult, from light to heavy), maximum reps must be considered.

- VI. Exercise duration: 4 weeks with 12 meetings and exercise frequency 3 times per week.

SSB (School of football) is the most appropriate youth football development forum, currently SSB has a very high appeal. This is a good phenomenon considering the role of football schools as the roots of fostering national and international football achievements.

Based on research that has been done by Melkianus Udam. 2017, with the title "The Effect of Shuttle-Run and Zig-Zag Exercises on Ball Dribbling Ability in SSB Imanuel Students Age 13-15 in Jayapura Regency" in the Journal of Physical Education, Sports and Health, volume 3, number 1, July 2017: 58-71. The problem in this study is that there are still many SSB Imanuel Sentani students aged 13-15 who seem lacking in terms of dribbling shuttle-runs and zig-zags on the ball dribbling ability of SSB Imanuel students aged 13-15 in Jayapura Regency. Based on the analysis, it can be concluded that 1) there is an effect of training using the shuttle-run training method on the dribbling ability of SSB Imanuel aged 13-15 years, 2) There is an effect of training using the zig-zag training method on the dribbling ability of SSB Imanuel aged 13-15 years old and 3) Training with the zigzag method is more effective in improving the ball dribbling ability of SSB Imanuel students.

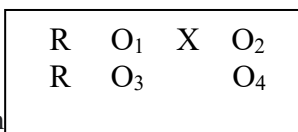
Based on the results of observations with the coach at SSB Satria Muda, researchers observed ongoing coaching and got an idea that there were still many athletes who were weak in dribbling so that the ball was easily snatched by the enemy, speed and agility when dribbling were still weak. Based on this

problem, the author wants to apply the zigzag training method which aims to improve dribbling skills in soccer games at SSB Satria Muda.

**Metohod**

In accordance with the purpose of this study, namely to determine the effect of zigzag training on the dribbling skills of SSB Satria Muda. This study uses a true experimental research method, because in this design, the researcher can control all external variables that affect the course of the experiment. The main characteristic of true experimental is that the samples used for the experiment as well as the control group are taken randomly from a certain population (Sugiyono, 2015: 75).

The research design used in this study is the Pretest-Posttest Control Design (Sugiyono, 2015:76). In this design, there are two groups that were chosen randomly, then given a pretest to find out if there was a difference between the experimental group and the control group in the initial state. Pretest results are good if the experimental group scores are not significantly different.



(Source:

Sugion

**Information :**

- R = Sample is taken randomly from a certain population
- O1 = Pretest result of the experimental group
- O2 = Posttest results of the experimental group
- O3 = Pretest result of control group
- O4 = control group posttest results
- X = Treatment given (zig-zag exercise)

This research will be carried out at the Satria Muda F. Trikoyo SSB Soccer Field, Tugumulyo District, Musi Rawas Regency, South Sumatra Province. This research was conducted from April 21 to May 21 for 14 meetings. By following the SSB Satria Muda training schedule at 15:00 – 17:30 WIB. The population and sample using 30 athletes were divided into a control group and an experimental group. The data collection technique used the soccer dribble test technique with a rating scale of 22.01 - 23.04 = Very Good, 23.05 - 25.07 = Good, 25.08 - 27.10 = Fairly Good, 27.11 - 29.23 = Enough, 31.14 - 33.16 = Less.

Number.	Aspect	Yes	No
1.	Students line up and get ready		
2.	Students begin to dribble the ball outwards and inwards according to a predetermined path, after there is a 'yes' signal.		
3.	Both arms keep balance		
4.	Student enters the finish line with a controlled ball		
5.	Students take the test 3 (three) times and the fastest time is taken		

Instrument table

**Research result**

**Research result**

This research was conducted at SSB Satria Muda. This SSB is located in the village of F. Trikoyo, sub-district. Tugumulyo, Musi Rawas Regency, the research was carried out directly by the researcher. This research was started from April 22 to May 21 2022 from 15.00 to 17.30 WIB. The sample of this research is SSB Satria Muda athletes totaling 30 athletes. The sample was divided into two groups, namely the experimental group of 15 athletes and the control group of 15 athletes. The experimental group

was given a Zig-Zag training program while the control group did not follow the Zig-Zag training program but still participated in the training program at the SSB Satria Muda.

Before the training program was carried out, both groups of athletes carried out initial tests and carried out rankings. After going through a zig-zag training program for 12 meetings, then a final test was carried out on the two groups. In conducting the test, the researcher was assisted by someone as documentation and someone else as a data logger. Even though the assistant staff has not been maximally biased in helping the research carried out. Before this test was carried out by each sample, the researcher first gave an explanation to the sample so that later the sample could easily understand and not hesitate in doing the test so that the tests carried out could run smoothly.

The study used the normality test of the Liliefors method to determine whether the data was normally distributed or not, the homogeneity test used the Barlet method, and the hypothesis test used the t-test.

Number.	Name	Pretest	Posttest
1	Iqbal	24,15	24,05
2	Restu	24,30	25,25
3	Faiz	24,45	25,49
4	Ipin	25,59	26,03
5	Zidan	26,19	25,10
6	Galuh	26,25	26,01
7	Rehan	26,45	26,49
8	Vandi	26,55	26,07
9	Aldo	27,05	26,59
10	Dhoni	27,15	27,43
11	Yoga	27,30	27,08
12	Tedi	27,55	27,45
13	Anjar	28,10	28,44
14	Fudin	28,37	28,10
15	Farhan	30,55	30,05

Table of Pretest and Posttest Control Group

Number	Name	Pretest	Posttest
1	Aji S	24,05	22,05
2	Al Ayubi	24,90	22,25
3	Arya	24,05	23,12
4	Bintang	26,15	23,45
5	Putra	26,30	23,51
6	Ilham	26,45	23,67
7	Agus	26,50	23,91
8	Rio	26,95	24,06
9	Rama	27,66	24,10
10	Faried	27,77	24,40

11	Wahyu	27,82	24,49
12	April	28,01	25,45
13	Tarmizi	28,40	25,55
14	Chairul	29,60	26,65
15	Budi	29,90	27,95

Table Pretest and Posttest Experiment Group

### Normality test

The normality test was used to determine whether the data obtained were normally distributed or not. The calculation of normality test results is presented in the following table.

Number	Data	$L_{table} (N=15, \alpha=0,05)$ Distribution ( $L_{count} < L_{table}$ )		Conclusion
1.	Pretest Control Group	0,1066	0,2200	Normal
2.	Pretest Experiment Group	0,0869	0,2200	Normal
3.	Posttest Control Group	0,1808	0,2200	Normal
4.	Posttest Experiment Group	0,1822	0,2200	Normal

Data Normality Test Table

Based on the table above, the results of data processing with the data normality test, obtained  $L_{count} < L_{table}$  at the real level = 0.05, thus it can be concluded:  $H_0$  is accepted, because the sample is normally distributed.

### Data Homogeneity Test

The homogeneity test of the data was carried out to determine whether the data sample came from a homogeneous sample. Bartlet test was used to determine the homogeneity of the data. Homogeneity test needs to be done to prove the similarity of the class variants that make up the sample. To test the homogeneity used Bartlet test. The calculation of homogeneity test results is presented in the following table.

No	Data	$X^2_{table} (dk=k-1, \alpha=0,05)$ Distribution ( $X^2_{count} < X^2_{table}$ )		Conclusion
1.	Pretest	-	3,841	Homogen

		0,322 3	0	
2.	Posttest	- 0,644 7	3,841 0	Homogen

Homogeneity Test Table

Based on the table above, the results of data processing with the data normality test, obtained  $X^2_{count} < X^2_{table}$  at a real level = 0.05, thus it can be concluded: Ho is accepted, because the sample comes from a homogeneous population.

### Hypothesis testing

#### Pretest Hypothesis Test

No.	Data	$t_{table} (dk=n_1+n_2-2, \alpha=0,05)$ Distribution ( $t_{count} \leq t_{table}$ )	Criteria
1.	Pretest	-0,8409 2,048	Accept Ho

T-Test Table Pretest Data

Based on the table above, it is obtained that  $X_{count} < X_{table}$  at the real level = 0.05, thus it can be concluded: Ho is accepted, because the experimental class dribble time has no difference or is the same as the control class dribble time.

#### Posttest Hypothesis Test

No.	Data	$t_{table} (dk=n_1+n_2-2, \alpha=0,05)$ Distribution ( $t_{count} > t_{table}$ )	Criteria
1.	Posttest	5,500 2,048	Accept Ha

T-Test Table of Posttest Data

Based on the table above, it is obtained that  $t_{count} > t_{table}$  at a significant level of = 0.05, thus it can be concluded: Ho is rejected and Ha is accepted, because the experimental class dribble time is more than the control class dribble time.

### Discussion

The author carried out research at SSB Satria Muda which was carried out in the F Trikoyo field with a total of 30 athletes. This study is a true experimental study with the aim of knowing whether after being given treatment with zigzag training, it can improve dribbling skills in SSB Satria Muda athletes. The results of hypothesis testing prove that the results of the posttest t-test calculations where

$t_{count} = 5,500 > t_{table} = 2,204$  at a significant level of 5% with a degree of difference  $dk = n_1+n_2-2 = 28$ , then Ha is accepted. Thus, "there is an effect of zigzag practice on SSB Satria Muda's dribbling skills" is accepted.

The previous relevant research in this study was carried out by Melkianus Udam. 2017, with the title "The Effect of Shuttle-Run and Zig-Zag Exercises on Ball Dribbling Ability in SSB Imanuel Students Age 13-15 in Jayapura Regency" in the Journal of Physical Education, Sports and Health, volume 3, number 1, July 2017: 58-71. The problem in this study is that there are still many SSB Imanuel Sentani students aged 13-15 who seem lacking in terms of dribbling shuttle-runs and zig-zags on the ball dribbling ability of SSB Imanuel students aged 13-15 in Jayapura Regency. Based on the analysis, it can be concluded that 1) there is an effect of training using the shuttle-run training method on the dribbling ability of SSB Imanuel aged 13-15 years, 2) There is an effect of training using the zig-zag training method on the dribbling ability of SSB Imanuel aged 13-15 years old and 3) Training with the zigzag method is more effective in improving the ball dribbling ability of SSB Imanuel students.

Ruslan, Faturrahman Sangadji. 2021, with the title "Zig-Zag Practice For Football Dribbling Ability" in Jambura Journal of Sports Coaching volume 3 (1), January 2021: 33-38. Class VIII students of SMP Negeri 1 Tilongkabila have problems with the basic techniques of dribbling and still cannot carry out basic techniques properly and correctly. This study aims to determine the effect of zigzag running training on dribbling skills in soccer. The method used in this study is an experimental technique with a quasi-experimental approach with a one group pretest posttest design with a sample of 20 students. Based on data analysis using normality test using lilefors test and hypothesis testing using t-test. The result is that there is an effect of 36.88% zig-zag running training on the ability to dribble in the soccer sport at SMP Negeri 1 Tilongkabila.

Alchony Harika Fitri. 2021, entitled "The Effect of Practice Variations on Dribbling Ability in Football Games" in Dharmas Journal of Sport volume 1 (1), March 2021: 9-14. The problem in this research is the ineffectiveness of the training program implemented by the trainer. This study aims to determine the effect of training variations on the dribbling ability of soccer. The method used in this research is called literature study research. Based on the results of previous studies, it can be concluded that there is an increase in training variations, one of which is zigzag training on dribbling skills in soccer.

## Conclusion

Based on the results of research and data analysis, it can be concluded that zig-zag training is a form of exercise that can improve dribbling skills. This can be seen from the difference in the results of the posttest dribble of the experimental group and the control group. The results showed a positive effect, after testing the hypothesis with a statistical t-test, with a significance level of 0.05, the t-count was 5.500, while the t-table was 2.048, t-count > t-table. Zig-zag exercise has an effect on improving dribbling skills in SSB Satria Muda athletes.

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