



## The Effect of Target Shooting Training on the Results of Shooting Accuracy in Soccer Athletes

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### Abstract

This research aims to determine the effect of shoot on target on football shooting results in football school athletes. Students in this study were limited to 12-14 years old. This study uses an experimental method with a "one group pretest post test" design. The population in this study is 30 students of the Rajawali Nusantara Football Club Palembang Football School. The sample was taken from the results of purposive sampling, with the criteria of children aged 11-12 years. Based on these criteria, 20 people who have an age of 11-12 years. The test instrument for the shooting results was the accuracy of Nurhasan's goal kick. Data analysis carried out by normality test and homogeneity test, the results obtained by the researcher t-count  $6.17 > t\text{-table } 1.9$ , the percentage increase in shooting results from the pretest and post test was 78.28%. So it can be concluded that there is a significant influence on shoot on target practice on football shooting results.



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## INTRODUCTION

Football is a very popular sport today. Of the many sports, football is the most popular sport in the world. According to (Novan et al., 2015) this sport has spread to the lower and upper classes. Football fans include all groups, from children, adults, to the elderly in almost all circles. As time goes by, the game of football is increasingly famous and developing in Indonesia, due to the many football championships from early age to adulthood (Sarmiento et al., 2014). Seeing the many football championships in Indonesia, so that it is able to produce great players who can raise football achievements at the national and international levels. In Law Number Undang Undang Republik Indonesia Nomor 11 Tahun 2022 Tentang Keolahragaan, (2022) concerning national sports, it is stated that under sports achievements are carried out through a planned, tiered, and sustainable coaching and development process with the support of sports science and technology so that to realize optimal achievements, instant coaching, through a long, planned and balanced process. One of the breedings that has succeeded in creating great players in football at an early age is the emergence of football school coaching.

This football school activity aims to channel the talents and interests possessed by children with the intention of fostering competence from an early age. Football schools have the main goal of accommodating and providing opportunities for their students to develop their potential and talents to become quality players, able to compete with other football schools, accepted by the public and able to maintain the survival of the organization. In addition, football schools also provide a strong foundation on how to play football well and

correctly, including forming good attitudes, personalities, and behaviors, while achievement is a long-term goal.

One of the requirements to be able to play football well, players must be able to master the basic tennis of football and good physical condition as well. According to Casal et al., (2015) the basic skills of the football game are to have various types such as stopping, kicking the ball towards the goal (shooting), passing the ball (passing), heading the ball (heading), and dribbling (dribbling), especially the basic technique that is very influential in football is kicking the ball towards the goal (shooting) because the purpose of the football game is to make a goal to the opponent's goal and prevent the goal from going to one's own goal (De Silva et al., 2018). When shooting, in addition to the tennis factor, a good physical condition is needed to kick the ball. There are several types of components of good physical condition such as endurance, accuracy, strength, speed, flexibility, power, and agility. Elements of physical conditions that affect shooting ability, including power and accuracy, because shooting is a way to put the ball into the goal using the strongest leg and work the ball into the goal.

Given the importance of the skill of kicking the ball (shooting) which aims to put the ball in the goal so that the team gets points, this skill of kicking the ball must receive serious attention in coaching football achievements (Widianto et al., 2020). Every soccer player needs to be trained in shooting skills. Likewise for football school players spread across regions in Indonesia. In order to improve their achievements, the shooting practice of the players must be improved. Coaches must provide intensive shooting practice with the right training program. The training given must pay attention to

physical condition factors that affect shooting ability (Klocker et al., 2018).

Shooting is a way to put the ball into the goal using the strongest leg and push the ball into the goal, so the coach must increase the accumulator so that the player's shooting results will be better. According to Maderer et al., (2014), it is stated that accuracy is the control of movement on a target, because shooting aims to put the ball towards the goal, so an effective practice is shoot on target. So, we can understand that training to improve accuracy can use shoot on target so that the accuracy of the kick has good quality. Exercise as a systematic sports activity carried out repeatedly over a long period of time accompanied by a gradual and continuous increase in load according to the ability of each individual, the aim is to shape and develop physiological and psychological functions. Exercise is a work process that is carried out systematically and continuously (Susanto & Lismadiana, 2016)

One of the effective soccer training coaching containers for children is through the Soccer School. The purpose of Soccer School is to produce athletes who have good abilities, are able to compete with other Soccer Schools, can satisfy the community, and maintain the survival of an organization (Muslimin & Hidayat, 2017). Soccer School is one of the effective soccer training platforms for young players to hone their skills and abilities. Based on the facts on the field, as happened according to the observation of researchers, the average soccer school player has less effective kick accuracy, this can be seen during training and matches. The acupuncture factor that is still lacking is something that needs to be improved during training so that the shooting results go well. Related to the above, a form of shoot on target practice is offered to train the accuracy of football shooting results.

## **METHODS**

In this study, the researcher used an experimental method. One of the important tasks in research is to determine the existence or absence of causal relationships between phenomena and to draw laws about those causal relationships. Experimental research is a research that is always carried out with the intention of seeing the consequences of a treatment that has been given in a certain time (Suharsimi, 2013). This experimental research uses a one-group pretest and posttest design, because it can be known more accurately by comparing the conditions before being given treatment according to Sugiyono (Sugiyono, 2016). The study involved only one group. The effect of treatment can be determined by comparing the test results before the treatment is given and the test results carried out after the treatment is given. This research carried out 12 meetings, namely the provision of treatment in the form of shooting at the goal 10 times and 2 meetings for the implementation of pretest and posttest.

### **Participants**

The population in this researcher is 50 children of SSB Rajawali Nusantara Football Club (RAN FC) Palembang.

### **Sampling Procedures**

As for determining the size of the sample to be studied, the researcher uses the purposive sampling technique to determine the sample with certain considerations according to (Sugiyono, 2018). In this study, the age of children aged 12-14 years is considered only, so that in the group of children aged 12-14 years there are only 20 people. So the researcher will take a sample of 20 people aged 12-14 years who take part in SSB

Rajawali Nusantara Football Club (RAN FC) Palembang.

### Materials and Apparatus

This study uses a test instrument that is carried out to measure the shooting results, namely by shooting the ball at the target that has been determined 5 times and then the results are summed. The test used in this study is the test of shooting the ball to the target (Nurhasan, 2006). This test aims to measure the ability to shoot results.

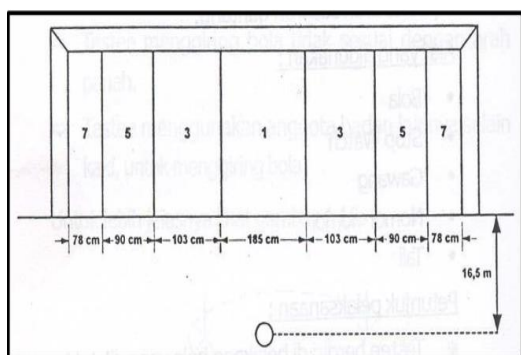


Figure 1. Test Instruments

### Procedures

The research procedure is a procedure for answering research questions (Laili et al., 2023), The following are the stages in this research process; a) Choosing a sample of football school participants at Rajawali Nusantara Football Club Palembang. b). Licensing stage to the Rajawali Nusantara Football Club Palembang football school, c). The stage of instrument preparation, d) the stage of research implementation, this stage is carried out by providing treatment for 12 meetings, e). The stage of calculating the data of the numbers obtained to find out how much the effect of the shoot on target exercise is, f). The interpretation stage of the calculation of the research results.

### Design or Data Analysis

Qualitative data analysis is inductive, namely an analysis based on the data obtained, then developed into a hypothesis according to Sugiyono, (2016). Before hypothesis testing is carried out, it is necessary to conduct a prerequisite test. Testing the measurement data related to the research results aims to help the analysis to be better. For this reason, in this study, a normality test will be used to use a curve with the kart person coefficient formula, a homogeneity test using a variance test or standard deviation of X and Y variables and a hypothesis test using a "t test".

### RESULT

From the results of the pretest shooting results carried out by 20 sample people 5 times per trial and obtained an average (mean) of 8.9 standard deviation is 2.966 the highest score of 15 lowest score 5 more details can be seen in table 1 below:

Table 1. Distribution of pretest football shooting results.

variab le	N	Lowest Rate	High est Sco res	Mean	Sb
Pretest shooti ng result s	20	5	15	8,9	2,966

From the results of the post test, the results of shooting conducted by 20 people sampled 5 times and obtained an average (mean) of 15.75, the standard deviation is 4.655, the highest score is 23, the lowest score is 8, more details can be seen in table 4.2 below:

**Table 2.** Distribution of test results of football shooting post test.

variable	N	Lowest Rate	Highest Scores	Mean	Sb
Shooting post test results	20	8	23	15,75	4,655

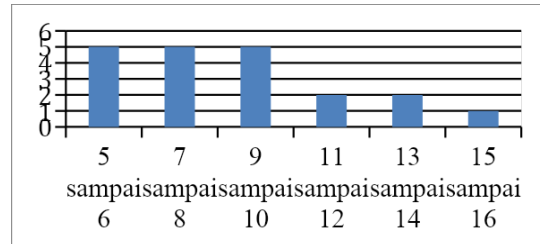
This research was carried out by 20 subjects, a pretest was carried out after which they were given shoot on target exercises for 4 weeks with fereques meeting 3 times a week. The results of the initial test (pretest) of football shooting results obtained the highest score of 15, the lowest score of 5 and the average (pretest) is 8.9. After being given the treatment of shoot on target training for 4 weeks with frekuensi 3 meetings in a week, it turned out that there was an average increase of 6.85 from the results of the last test (post test) with the initial test (pretest), the results of the final test (post test) obtained the highest score of 32, the lowest score of 8 and the average (post test) was 15.75.

**Table 3.** List of Pretest and Post Test Results

Result	N	Lowest Rate	Highest Scores	Mean	Increase in mean pretest and Post Test
pretest	20	5	15	8,9	6,85
Post test	20	8	23	15,75	

The results of the pretest shooting test were conducted from a sample of 20 people before being given treatment, each sample conducted a shooting test with as many as 5 kicks all kicks got points, then from all points were summed. The data can be seen from 20 people shooting the

results of 5 students who obtained grades 5-6, 5 students who obtained grades 7-8, 5 students who obtained grades 9-10, 2 students who obtained grades 11-12, 2 students who obtained grades 13-14, and 1 student who obtained grades 15-16.



**Figure 2.** Pretest frequency graph

From the results of the pretest and posttest with calculations, the results of the range, interval class, class length, average, standard deviation, and curve slope can be seen.

**Table 4.** Normality Test Results

It	Result	Miles	Normality Test
1	Pretest	0,13	Usual
2	Post test	0,32	Usual

### Homogeneity Test

From the calculation, the result of  $F_{cal}$  1.56 was obtained and from the graph of the distribution list F with the numerator  $dk = 3-1 = 2$ . Denominator =  $20-3 = 17$ . And  $\alpha = 0.05$  and  $F_{table} = 3.59$ . This means that  $F_{cal} 1.56 < F_{thick} 3.59$ , then the data can be homogeneous.

**Table 5.** Homogeneity test results

Sampl e	F	X	$x^2$	Fcal	Ftabel
$\Sigma$ Pretest	20	63	731,5	1,56	3,59
$\Sigma$ Postes	20	99	1791		

### T-Test Hypothesis Test

The test of the research hypothesis was carried out using a t-test if  $t\text{-count} < t\text{-table}$  means that there is no significant influence on the experiment and vice versa if  $t\text{-count} > t\text{-table}$  means there is a significant influence on the experiment. Thus from the result of  $t\text{-count} = 6.98 > t\text{-table} = 1.739$ . This means that there is a significant influence on shoot on target practice on football shooting results in football school students with an increase in the percentage of shooting results is 77.14%.

**Table 6.** Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before Treatment	8,7500	20	2,84466	,63609
	After Treatment	15,5000	20	4,27354	,95559

**Table 7.** Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Before Treatment & After Treatment	20	,314	,178

**Table 8.** Paired Samples Test

		Std. Error Mean	Paired Differences 95% Confidence Interval of the Difference		t
			Lower	Upper	
Pair 1	Before Treatment - After Treatment	,96757	8,77514	4,72486	6,176

### DISCUSSION

Based on the results of this study, shoot on target practice has a significant influence on football shooting results in football school students. According to (Hidayat, 2019), stating that accuracy is the control of movements on a target, then

target shooting practice can be used to improve the accuracy of kicks towards the goal.

The main factor in carrying out training activities must be carried out repeatedly accompanied by an increase in the load that is carried out gradually and repeatedly (Trecroci et al., 2015). According to (Hidayat et al., 2020), the principles of training are what athletes think is a reflection of what the coach has given in training. Training principles are things that must be obeyed, done or avoided so that the training goals can be achieved in accordance with expectations. According to Pignato et al., (2019) by understanding the principles of training, it will support efforts to improve the quality of training. In addition, it will be possible to avoid athletes from pain and injury during the training process.

### CONCLUSION

Based on the results of the research that has been obtained, it is concluded that there is a positive and significant influence on the effect of shoot on target training on the results of football shooting in football school students, this can be seen from the results of the percentage increase in shooting results obtained by the results of 77.14% which is significant. From the calculation data of the slope of the pretest curve there was a result of 0.13 and the slope of the post test curve there was a result of 0.32 the data was declared to have contributed normally, while in the homogeneity test from the pretest and post test data the results of  $F\text{-count} 1.56 < F\text{-table} 3.59$  then the data was homogeneous, and from the results of the hypothesis test it was obtained that there was a definite influence on the shoot on target practice on the results of football shooting with the results of the pretest and post test data

obtained the results of Thical 6, 17 > Ttable 1,739. The results of this study can be stated that there is an effect of shoot on target training on football shooting results in football schools, so this exercise can have implications if athletes and coaches shoot athletes are lacking, then this exercise can be used for a variety of training forms so that athletes do not experience boredom.

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