

## THE INFLUENCE OF PUSH UP TRAINING ON THE RESULTS OF THROW IN

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### ABSTRACT

This study aims to determine the effect of push-up training on the long throw-in results of U-14 to U-16 SSB players Ogan Ilir 32. The method used in this study was. The research design used was One Group Pretest-Posttest Design. This sampling uses a total population sampling technique with a total sample of 30 players. The instrument of this research is the throw-in technique test. From the results of processing and analyzing data using the data normality test and testing the hypothesis with the T test formula, that the push up exercise has an effect on increasing the distance in the results of the throw-in in soccer players. This can be seen from the results of data analysis through the calculation of the t test formula with the criteria t count is greater than t table ( $13.730 > 1.70$ ) with a confidence level of 0.95 ( $\alpha = 0.05$ ) and the number of samples ( $N = 30$ ). Push-up exercises have an effect on increasing the results of throw-in for U-14 to U-16 SSB players Ogan Ilir 32.

**Keywords:** *Push Up*, Throw-In, Football.

### Introduction

In the game of soccer players must have a good physical and mental strength and also in playing soccer players must have a sense of responsibility and sportsmanship, and no less important players must master the basic techniques in playing soccer. All basic technical abilities in the game of soccer must also be supported by excellent physical condition (Destriani et al., 2021), To improve the physical condition, training is needed. According to Arifin (2018) the principles of exercise are such as the principle of overload, the principle of specialization, the principle of individuulization, the variation of exercise, the principle of intensity, the principle of intensity, the principle of quality, the principle of relaxation. Football has several basic techniques, these basic techniques must be mastered by a soccer player, in order to play well. The basic techniques are passing, controlling, dribbling, heading, shooting, kicking, throwing the ball, and seizing the ball. All of these basic techniques are very important to be mastered by players, but of all these basic techniques there is one technique that is often considered trivial or not so important to be given in practice. This technique is a throw-in or throw-in technique. The throw-in technique or throw-in is a basic technique that must be possessed by players, which can be used to assist in the process of attacking the opponent's area. As said by Mahardika (2020) Soccer players are required to be able to throw in correctly and accurately. Throws that are correct, good, strong, hard and right on target will create opportunities for goals.

Throw in is very useful for passing near and far distances according to the desired target. In this research, efforts were made so that the results of this throw-in would get good results. The farther the throw-in will benefit the team, the more goals it will score. In line with opinion Erfan (2020) this throw-in will be a profitable factor and have a very important role to play in creating a team victory, if a team when the match has entered extra innings or nearing the end of the game and the ball comes out of the field close to the opponent's goal, a throw-in can be

used to score goals with deep throw techniques that are far into the opponent's goal. (Victorian et al., 2022) The throw-in is the main strategy in a soccer match which is completed by using the hands from the outside of the field. Based on this, to throw into a player, a player must have strength, of course, in strong arm muscle strength so that the long throw is as desired by the player. To have good arm muscle strength is by training the arm muscles by doing push up exercises.

Hartati et al., (2019) exercise is a form of effort to improve the quality of the function of a person's bodily and psychological organs. Training must be prepared with a training program that will be a reference for its implementation. Different opinions are said Destriana, (2018) mengatakan bahwa latihan adalah proses meningkatkan kinerja atlet termasuk materi teoritis and practical with implementation methods and rules with a scientific approach, applying the principles that have been arranged so that the training objectives can be achieved to the fullest. Push up is an exercise that can increase the strength of the arm muscles and can increase the success of throwing in. Push-ups are a form of exercise that can increase throw-in, by doing weight training it is hoped that it can increase arm muscle power. There are four types of push up namely strich push up, wide hands push up, pike push up, archer push up (Bayu Hardiyono, 2022). *Good arm muscle power will provide good power so that you can maximize the throw-in.* According to Harsono (2015) *Push up are a form of exercise using your own body weight.* *The muscles that work when doing push up according* Saparuddin (2019) These are the rectus abdominis, latissimus dorsi, pectoralis major, anterior deltoid, biceps, and triceps muscles. The purpose of the push up exercise is to strengthen the arm muscles. Tight and strong arm muscles are not only beneficial for appearance, but also for carrying out daily activities, such as lifting objects and sports in a soccer game, namely throwing a throw-in (Hartati et al., 2021). Destriani et al., (2017) Arm muscle strength is increasing the pressure that is processed through a group of muscles to contract when holding a load. Differing opinion with Putra, Meirizal dan Destriani (2017) said that arm muscle power is the ability to withstand a load. such as when doing sports in the form of push-up movements and others.

Safuruddin et al., (2022) Football is one of the sports given in physical education learning from an early age. This sport is played by two groups of eleven players from one team. The goal is to put the ball into the opponent's goal and try not to concede the ball from the opponent. In the game of soccer each player must have good individual, physical and technical skills when playing soccer. Throw-in is throwing the ball into the field using the hands by throwing it over the head. According to Hidayat (2016) Throw-in is a throw made by one of the players who throws the ball with both hands when the ball is out of bounds. Hasyim et al., (2022) Throw-in techniques include swinging the ball using both hands, feet facing the court with toes on the edge of the line, arching the back, starting behind the head and releasing the ball with a flick of the wrist.

At SSB U-14 to U-16 Ogan Ilir 32 is a soccer training ground in the Ogan Ilir district. Based on the observations that I encountered while doing internships and doing group exercises, players who took part in training at SSB U-14 to U-16 Ogan Ilir 32 to throw in most of the players when doing so were not far away and very inaccurate or inaccurate. Seeing the lack of soccer skills in SSB U-14 to U-16 Ogan Ilir 32, especially in the throw-in technique, it is necessary to do maximum training in order to get long throw-in results. Of all the players I observed, only 7 players were able to throw their technique correctly and throw it to their friends, then the players when throwing their technique were correct but their throws didn't reach their friends totaled 10 people, and players whose throwing technique was wrong and didn't reach their friends. to his friends totaling 8 people. The throw-in technique performed by

players cannot throw too far because during practice, they lack arm muscle training and they don't pay too much attention to the correct throw-in technique. In order to have good throw-in technique skills for SSB players, it is necessary to develop a push-up training method that can stimulate the biceps, triceps and chest muscles. This is the right way to develop throw-in technique skills.

Based on previous research conducted by Susetya (2015) entitled The effect of push-up training on the ability to throw in a soccer game for students at the Gemilang Ponggok Soccer School, Ponggok District, Blitar Regency, shows that the results of this study show that there is a significant effect of sit-up and push-up exercises on throw-in ability. From some of the opinions above, it can be concluded that the push-up exercise really helps to increase the distance of the throw-in during a soccer game, because the throw-in can be used as a technique for attacking the opponent's area. Based on observations, researchers wanted to conduct research with the title "The Influence of Push Up Exercise on the Result of Throwing In at SSB U-14 to U-16 Ogan Ilir 32.

## Method

Penelitian ini menggunakan jenis penelitian yaitu eksperimen dan menggunakan rancangan penelitian *pretest* dan *posttest one group*. Tujuan penelitian ini mengetahui ada tidaknya pengaruh variabel bebas terhadap variabel terkait (Sugiyono, 2019). The variables in this study consisted of the independent variable, namely push-up exercises, and the dependent variable, which was the result of a throw-in or throw-in in soccer. The population in this study was 30 athletes and the sample used for this study was 30 athletes or using the total population sampling technique. The instrument for collecting this data is to measure the distance of the throw-in in the game of football both from the pretest and posttest. The analysis technique used in this study is the T test using the data normality test, homogeneity test and hypothesis testing using the SPSS 22 composting program.

## Discussion

Based on the data from the throw-in pretest and posttest test results, it is known that the throw-in pretest results are. The highest throw-in result was 8.7, the smallest was 8, the range was 0.7, the test mean was 8.38, and the standard deviation was 0.22. The posttest data results for the largest throw-in are 10.7, the smallest data is 9.1, the range is 1.6, the test mean is 9.93, and the standard deviation is 0.50. Based on the results of the pretest and posttest it is known that there is a difference for the mean of 1.55. Normality test using One Sample Kolmogorov Smirnov on pretest data of 0.059 and posttest of 0.176, then the results obtained for these data are normally distributed. Homogeneity test results obtained  $0.170 > 0.05$ , then the results are homogeneous. The results of the pretest and posttest hypothesis testing using the "t test" yielded 13.730, while the T table was 1.70 which was obtained from the T dispersion table with  $dk = 39$  and a 95% certainty level ( $= 0.05$ ) recorded in the table. The standard speculation test admits  $H_1$  If  $T_{hitung} > T_{table}$  (-1), and rejects  $H_0$  if  $T_{hitung} < T_{table}$  (1-), because  $T_{hitung}$  (13.730)  $>$   $T_{table}$  (1.70), then there is a big difference between posttest and pretest. In this way  $H_0$ 's theory is rejected and  $H_1$ 's speculation is accepted. This means that there is an effect of push-up training on the results of the long throw-in at SSB U-14 to U-16 Ogan Ilir 32.

Tabel 1. Uji *Paired T-Test*

Variabel	t-hitung	Sig.	Level of Significant
<i>Pre-test &amp; Post-Test</i>	13,73	0	0,05

**N: 30**

**Sumber: SPSS 22**

Based on the results of this study, it was found that push-up exercises could be used to increase the distance of the throw-in in SSB U-14 to U-16 Ogan Ilir 32. This is because, it can be seen that there was an increase from the pretest and posttest after being given treatment in the form of exercises push up. The results obtained from the pretest average 8.7 and the average posttest results are 10.7. Based on the research conducted Zainuddin et al., (2022) the result of the throw-in pretest was 14.10 and the final throw-in posttest was 15.30. It was concluded that just doing push-up exercises can affect the distance of the throw-in compared to before doing push-up exercises. Given that this exercise is allowed for one and a half months with repetitions carried out 3 times in 1 week. The purpose of this research is to increase the distance of the throw-in results of SSB U-14 to U-16 Ogan Ilir 32 players. This push up exercise aims to train arm muscle strength. There fore this push up exercise is very good for training arm muscle strength so that it can provide stronger power, so this exercise can contribute to the long throw-in results for soccer players. Arm muscle strength can be increased with several strength exercises for example full ups, push up and others. As said by Rafi (2021) that one form of exercise that can increase strength is by way of a form of push up exercise which will have an impact on muscle enlargement which will automatically increase the ability of the muscle strength either by pushing or pulling. Push up exercises are a way of exercising that can be done anywhere and anytime, you don't have to need assistance (Kusmindari & Muzakir, 2015). Based on the description that has been explained, it can be concluded that only push-up exercises are physical exercises that prioritize to train the arm muscles which are very effective to be done anywhere and anytime, and without the need for assistance.

The results obtained show that push-up training can be given to SSB U-14 to U-16 Ogan Ilir 32, because it has a positive impact on increasing the distance of throw-in results for soccer players. The ability in this throw-in basically requires procedures and the ability of arm muscle strength and specifically the increase in this throw-in is adjusted to the quality and support needed by the players. As said by Agustina (2020) The throw-in is the only technique in the game of football that can be done using the hands and is done from outside the field. According to Ikhsan (2021) The muscles involved in the throw-in are the pectoralis major, serratus anterior, oblique abdominis, rectus abdomis, and oblique muscles. This technique is also easy to play, so it can make it easier for players to carry out attacks from the opponent's defense area. The throw-in technique must be mastered by every soccer player (Erfan, 2020). This throw-in technique really needs arm muscle power in order to produce a strong and precise throw, so that it can be used as an opportunity to score goals against the opponent's goal. Widiastuti (2019) Throw-in has the goal of carrying out an attack into the opponent's area which can eventually be used as a goal scorer. Kusuma (2021) A throw-in is something that is done by an attacking player, if the ball goes out of the field through the side line, either bounces or rolls and the ball was last touched by a defender.

Based on previous research conducted by Zainuddin et al., (2022) The results show that only push-up exercises can affect the distance of the throw-in in a soccer game. Agree also research conducted by Ismail (2015) with the title "The Effect of Push Up Exercise on

Increasing the Ability of Long Throws In in Football Sports for Extracurricular Students of SMP Negeri 1 Bonggomeme which results that only from doing push up can increase the distance of throwing results. So from the description above that has been explained, that only push-up exercises can increase the distance from the throw-in.

## Conclusion

Berdasarkan hasil penelitian dan analisis data yang sudah didapatkan, maka dapat disimpulkan bahwa saja latihan *push up* dapat berpengaruh terhadap peningkatan jauhnya hasil lemparan ke dalam pada SSB U-14 sampai U-16 Ogan Ilir 32. Hasil penelitian ini diperoleh bahwa saja latihan *push up* dapat digunakan sebagai metode latihan untuk meningkatkan jauhnya hasil lemparan ke dalam.

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