

The Effect of Barrier Hops and Jump-to-Box Practices on Shooting Ability in Students at Persegrata Palembang Football School (SSB)

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Abstract: This research is an experiment with the pretest-posttest control group design method. The type of research used in this study is a type of experimental research with a quasi-experimental design. This research is experimental research and the research design used is a Quasi-Experimental Design, namely the Group Pretest Posttest Design. The sample used in this study were players aged 13-15 years, Persegrata Palembang football school (SSB) students in 2023, totaling 10 players. The sampling technique in this study used a systematic sampling technique and an ordinal pair system. This research as a whole used test, measurement, and documentation methods. The results of the study showed differences between the group of students who used the barrier hop training model and those who used the jump-to-box training model for their shooting abilities. This means that the training model has a significant role in shooting ability. Also, there are differences in passing and shooting skills between groups of students who receive the barrier hop training model and the group of students who receive the jump-to-box training model.

Keywords: Barrier Hops Drills, Football Shooting Skill, Jump To Box

A. Introduction

In the field of sports, Indonesia is able to compete with developed countries thanks to the achievements of badminton and archery athletes, but in the last decade, there have been almost no encouraging achievements from the Indonesian football national team. For this reason, it is necessary to study the factors that influence the performance of these soccer athletes. Soccer players can achieve success if they player has four factors, namely: genetic or hereditary factors, discipline factors, training factors, and luck factors (Josel, 2018). These factors must be taken seriously and of course, support from all relevant parties is needed, especially the Indonesian Football Association, as the parent organization for national football and the participation of the Indonesian people.

An important factor that influences and is needed in the game of football is the basic technique of playing football. Mastery of basic techniques is an important requirement that must be owned by every player in order to execute the game well. The technical factor is one of the factors that greatly influence the appearance of a

soccer player. Because with good technique, a soccer player can master and control the ball well. The basic movements or techniques of playing soccer include movements or techniques without the ball and movements or techniques with the ball (Amiq, 2018). Off-ball movements or techniques are movements without using a ball that is carried out in soccer games such as walking, on tiptoe, jumping, jumping, rolling, spinning, spinning, dodging, and sudden stops, while on-ball movements or techniques are movements or techniques in soccer games with mastery. ball, which includes the ability to identify the ball with the parts of the body, guard the gate, kick the ball into the goal, lead, and receive and control the ball. And controlling the ball), directing the ball with the head, feints, catching the ball (gliding tackle), throwing the ball in and kicking the ball, kicking the ball (Dandi, 2021).

In the game of football, one of the most dominant basic techniques is passing and shooting. According to (Centhini & Russel, 2019), passing is the art of transferring the momentum of the ball from one player to another. Passing is best done with the feet but can be done with any other body part. We can move the ball faster, so we can create a lot of open space and have the opportunity to make more shots if we can pass with great skill and accuracy. transitions require a lot of technique which is very important to stay in control of the ball. With good passing, we will be able to run into open spaces and control the game while building an attacking strategy.

According to Charles & Rook (2019), the most dominant movement in soccer is kicks. Only by kicking, children can play soccer. Players who have good kicking techniques will be able to play effectively. The aim of kicking the ball is to shoot at the goal (meeting scoring), and swinging (keeping the ball away from one's own goal), swinging to prevent opponent attacks (sweeping), and professional passing are required for maximum efficiency. The number of football schools (SSB) can be used as a barn for the Indonesian people to recruit promising and quality football athletes. At this soccer education school, children can learn various basic techniques for playing soccer. Even the famous Dutch actor Johan Cryuff said: "The formation of actors mostly occurs before the child is 14 years old". As mentioned Eko Valentin Nurcahyo in his thesis Luxbacher (2018) coaching football players need to start from a young age, namely in the age group of elementary school students. The results of field observations by researchers found that the SSB in Palembang, namely SSB Persegrata, is an SSB that was established in 1997 and trains talented children in the field of football to become quality players. SSB Persegrata, where the practice is in the field, namely in the SMA Negeri 22 Palembang environment, this SSB is under the leadership of head coach Mr. Yoyon Suprion and his assistant Syamsul Anwar.

SSB Persegrata often makes their partners make inaccurate passes and shots while playing. This is based on the long-term developmental athlete model (LTDA) the sports training category has levels, namely 1) 6-10 years of fundamentals, namely

basic patterns, 2) 10-12 years, namely learning to practice basic techniques, 3) 13-15 years of training for training, namely fluency of movement, 4) 16-18 years is training for competition, namely special training, and 5) 18+ years is training for winning, namely achievement. From the explanation above it can be seen that the researcher chose the age of 13-15 years, namely the smoothing of motion because of the researcher's training to improve technique. The results of the researchers' observations of players aged 13 to 15 years who often make passing mistakes. 25 players with poor basic technical skills, 13 players with the wrong foot position with the ball, 10 players with the wrong ball direction, and 20 players with weak hitting power.

According to Agustini (2017), and Mileke (2017), the passing ability is mandatory for a soccer player. Due to the lack of drill variety, players may not be able to master basic passing techniques. The training program is oriented using different basic technique training methods and physical training methods combined with games so that the trainees don't get bored while participating in the exercises. According to Mutohir (2019) explains that the practice of passing the ball short distances can be done with barrier hop and jump to box exercises. because it will train ball passing that is directed and hard, the researchers added plyometrics exercises for maximum training. Because when making passing movements, passing movements use leg muscle strength so that the passing speed is as high as possible. Therefore, one of the plyometric training methods can be used. Plyometric training material to increase leg muscle explosive power is a hurdle. Show jump (show jump) and jump to the box. By practicing for 1 week 3 times, it is hoped that SSB Persegrata students can develop faster in playing soccer (Aulia & Muhammad, 2015).

Based on the background of the problems above, the researcher will conduct a study entitled The Effect of Barrier Hops and Jump to Box Exercises on Shooting Ability in Persegrata Palembang Football School Students (SSB).

B. Methods

The type of research used in this research is experimental research with a quasi-experimental design. The purpose of this study was to determine the effect of Barrier Hops and Jump to Box exercises on the shooting skills of Persegrata Palembang soccer students. This research is experimental research using a Quasi research design Experimental design (Sugiyono, 2018). The design in this study used an experimental research design using a 2x1 factorial design. The population of this research is the Persegrata Football School (SSB) students. Palembang Age 10-12 years, a total of 18 people, Persegrata Football School (SSB) students. Palembang 13-15 years totaling 8 people, Persegrata Football School (SSB) students. Palembang 16 – 23 years with a total of 2 people. So, a total of 10 people. The sample used in this

study were players aged 13 to 15 years, Persegrata Football School (SSB) students. Palembang in 2023 with a total of 10 players. This research as a whole uses test methods, measurement, and documentation methods. The research was conducted on Persegrata Palembang Football School (SSB) students. The research time was determined after the researcher received a research permit from PSSI Palembang. The data analysis method is a method used to obtain or analyze the data obtained. Data analysis aimed at the reality of the hypothesis. The hypothesis will be accepted or rejected based on the results of the data. The data analysis technique used in this study was the t-test with a 95 % confidence level. Percent increase = average difference X 100% (Allen, 2018) that means pretest different = posttest average - pretest average

C. Results and Discussion

The application of this study used an experimental method involving independent variables, namely the barrier hops training method and the barrier hop training model. In contrast, the dependent variable was the passing ability of Persegrata Palembang Football School Students (SSB). The training method as the independent variable being manipulated is divided into two, namely the barrier hops training method and the jump to box training method while shooting as the dependent variable is measured after the treatment has been completed (Firlando et al, 2020; Fernando et al, 2021).

Table 2. Shooting Ability Score Data

No.	Exercise Models			
	Barrier Hops		Jump to Box	
	Tall	Low	Tall	Low
1	37	30	34	24
2	37	29	34	24
3	37	29	33	24
4	36	29	33	23
5	36	28	33	23
6	36	28	32	23
7	36	28	32	22
8	35	27	32	22
9	35	27	31	22
10	35	27	31	21

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independent variable was divided into two, namely the barrier hops training method and the jump to box training method, while the shooting ability as the dependent variable was measured after the treatment was completed. Based on the results of data analysis, the results of hypothesis testing, and the results of the research discussion obtained, several conclusions, research implications, and suggestions can be explained 1) there is a difference between the group of students who use the barrier hop training model and the group of students who use the jump-to-box training model for shooting abilities; 2) there are differences in shooting ability skills between groups of students who receive the barrier hop training model treatment and the group of students who receive the jump to box training model treatment (Santoso, 2018; Nurmansyah, 2021).

D. Conclusions

The results of this study can be concluded that there is a difference between the group of students who use the barrier hop training model and the group of students who use the jump to box training model on shooting abilities. This means that the training model has a significant role in shooting ability, as well as, there are differences in shooting ability skills between groups of students who receive the barrier hop training model treatment and the group of students who receive the jump to box training model. Based on the results of the research conclusions and the implications that have been described, suggestions emerge: Deepen and sharpen research results to develop methods that can improve learning processes and outcomes and add studies for the development of research results.

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