

The Effect of Drilling Exercise Using Level Net and Standard Net to Improve Forehand Overhead Lob Technique for Badminton Beginner Players

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Abstract—This study aims to determine the effect of drilling exercise using level net and standard net on increasing the forehand overhead lob technique for badminton beginner players. This study uses an experimental method. A sample of 24 people is taken by using purposive random sampling from 35 total of population. The results show that there is an effect drilling exercise using a level net and standard net on increasing the forehand overhead lob technique for beginners. Furthermore, there is a difference in the effect of drilling exercise using level net and standard net on increasing forehand overhead lob technique for beginners. It means that the drilling exercise using a level net is better than the standard net to improve forehand overhead lob technique for badminton beginner players.

Keywords: *forehand overhead lob, level net, standard net, drill*

I. INTRODUCTION

Badminton is a popular sport which can be practiced by anyone regardless of age or experience [1]. Badminton could be played both indoors and outdoors [6]. However, until now, all official tournaments have been playing at indoor courts [6]. In Indonesia, children and adults alike fond of playing badminton. This can be seen by a large number of people in cities and villages playing badminton both in indoor court (closed court) and outdoor (open court).

The enthusiasm of the Indonesian people to play badminton is a stimulus to contribute a proud achievement to the country. There are numerous achievements of World Championships in Indonesia, such as at the All-England Championship, Thomas and Uber Cup, Sudirman Cup, Sea Games, Asian Games, and the Olympics. This accomplishment was achieved through hard and programmed training from the ages of children to adults. Therefore, it indicates that the achievement can be reached by involving

children and train them continuously. This is in line with Law Number 3 of 2005 concerning the National Sports System in article 27 paragraph 5, which states that coaching and development of achievement sports are carried out by involving potential young athletes from the result of monitoring, scouting and talent development as a regeneration process [11]. Thus, badminton training from an early age is needed as a regeneration process to obtain a proud achievement.

To achieve a proud achievement in badminton, indeed the training should be started at a young age. Young age is a productive age to get to know and start practicing badminton. Many young people, especially in North Sumatra, like to practice badminton. This can be seen from the number of children practicing in various badminton clubs and extracurricular at school. One of the schools that are practicing badminton extracurricular for beginners is Darul Ilmi Murni Plus School.

This school held badminton extracurricular in the afternoon. Researchers observed badminton training conducted from August 7, 2017 to November 13, 2017. It was seen that the training was still centered on the coach (Coaching Centered) and practiced forehand overhead lob with alternating drill players. The drill was done by a coach on the field, which uses a standard net by feeding the ball to the player to make the forehand overhead lob. The overhead lob forehand done by the player was still not good, where the shuttle was still low, and the shuttle did not reach the back of the field. Lob is one form of a shot in badminton games to fly the shuttle as high as possible and fall in the back of the opponent's field [12]. Thus the forehand overhead lob is a shot that flies the shuttle as high as possible, so it is not easily attacked, and the shuttle falls on the opponent's field.

Next, the researchers conducted tests and measurements of the forehand overhead lob to 10 players. From the test results, 70% (7 people) received bad grades, 30% (3 people) received good scores, and 0% (0 people) received good grades. From the results, the skills of players for this technique can

be categorized as less good. Therefore, researchers are encouraged to assist players in the overhead lob forehand exercises by creating a level net. The intended level net is installed above the standard net so that the net used is higher than the standard net. With this level of the net, the player is expected to gain an understanding that the overhead lob forehand must be high, and the shuttle must fall behind the opponent's field.

II. THEORETICAL FRAMEWORK

A. Badminton

Badminton is a popular sport in which the foot and its movements play an important role since the sport requires jumps, lunges, and quick changes in direction [5]. Badminton is one of Olympic kinds of sports that include competitions in singles, doubles and mixed categories [2]. Badminton is a racket sport for two or four people, with a temporal structure characterized by actions of short duration and high intensity [4]. Badminton is a racquet sport in which leaps, veers, and quick arm movements are needed [3]. Thus, it is necessary for a badminton player to practice leg movements related to speed, agility, and reaction speed. Playing, competing and practicing can be done easily in the direction desired by this exercise. In addition to good physical condition, technical skills are also needed in playing badminton. Mastery of this basic technique is crucial because it is considered a foundation in playing badminton. The technique must be mastered by badminton players, with the aim and be able to restore the shuttlecock in the best possible way.

B. Lob Tehnique

The lob is one of the basic techniques that must be done by hitting the shuttlecocks as far as possible towards the back of the field on a double line in badminton. Lob technique is fundamental in controlling badminton and are very good at preparing for an attack or fixing a difficult position when the player gets pressure from the opponent [7]. Lob is one form of shot in the game of badminton to fly the shuttlecock as high as possible which leads and falls on the back of the opponent's field [12]. This lob can be done from the top of the head (overhead), or from below (underhand), both with the forehand and with the backhand [12]. The practice of mastering a proper lob technique is determined by the precision of the lob target and the direction of the hull (high or slightly horizontal). As a result, players can attack opponents or push positions towards the back of the field [7]. Thus, the overhead lob forehand intended in this study is a shot that hits the shuttle as high as possible and falls towards the back of the opponent's field so that the opponent is pushed back and it is difficult to attack.

C. Net

Net is a barrier that is mounted transversely dividing the badminton field into two parts. The net is a barrier that runs between two fields tied to a pole [12]. The net must be stretched tight and strong between the poles and must have a width of 76 cm (2 feet 6 inches) [6]. The top end of the net should be 152 cm (5 feet) from the floor in the middle of the field and 155 cm (5 feet 1 inch) from the floor on the poles [6]. Thus, the standard net in this study is a net mounted to divide the badminton field into two game fields with a height of 155 cm above the pole and 152 in the middle of the field and a net width of 76 cm. While the level net in this study is a net mounted to divide the badminton field into two game fields with the first net height 155 cm above the pole and 152 in the middle of the field and net width measuring 76 cm, then adding one net above 76 cm wide, so the net becomes stratified with a height of 231 cm above the pole and 228 cm in the middle of the field and the net width becomes 152 cm. The following are the Standard netd and Level net images used in this study as follows:



a. Standard Net

Fig. 1. Standard Net



b. Level Net

Fig. 2. Level Net

D. Drilling Method

The drilling method is a training method to instill certain habits, as well as a means to acquire dexterity, accuracy, opportunity, and skills [8]. The characteristic of this method (drill method) is the activity in the form of repetitive actions so that the stimulus and response association becomes very strong and is not easy to forget [9]. Thus, a skill (knowledge) is formed which is ready to be used by the person at any time [9]. The drill method is an activity to do the same thing over and over again and thoughtfully to perfect a skill to become permanent [10]. Thus, the drilling method in this study is a forehand overhead lob exercise that is done by

repeating it using a level net and a standard net, so that the forehand overhead lob is repeated well-controlled.

III. RESEARCH METHOD

This research is a type of experimental research method. This research was carried out on January 21, 2019, to February 28, 2019 at Beginners Badminton Extracurricular Players Plus SD Darul Ilmi Murni. The sample in this study was 24 people taken by purposive random sampling from a total of 55 people. Data collection techniques for the results of forehand overhead lob are obtained by tests and measurements, according to James Poole. Data analysis was performed using SPSS version 20 for windows.

IV. RESULTS AND DISCUSSION

A. Results with a Level Net

TABLE I. THE RESULTS OF PRE-TEST AND POST-TEST DATA USING SPSS IN THE FOREHAND LOB TRAINING GROUP WITH A LEVEL NET.

No.	Player	Sample	Average Score	Sig. (2-tailed)
1	Pre Test	12	10,25	0,000
2	Post Test	12	20,92	

Based on the results of the analysis using SPSS version 20 from the table, it proves that the average result of the player's overhead lob forehand ability before being given drilling exercise with a level net is 10.25. Meanwhile, after being given drilling exercise with a net, the average level of results was 20.95. Furthermore, based on the significance value, the value obtained is 0,000. The basis for decision making: If the significance value (2-tailed) <0.05, then there is a significant difference between the pre-test and post-test data, and if the significance value (2-tailed) > 0.05, then there is no significant difference between pre-test and post-test data. Thus, it was found that the Sig (2-tailed) value of 0,000 <0.05. These results indicate that there are significant differences between pre-test and post-test data. So it can be concluded that there is an influence of drilling exercise using a level net on increasing forehand overhead lob technique for badminton beginner players.

B. Results with a Standard Net

TABLE II. THE RESULTS OF PRE-TEST AND POST-TEST DATA USING SPSS IN THE FOREHAND LOB TRAINING GROUP WITH A STANDARD NET.

No.	Player	Sample	Average score	Sig. (2-tailed)
1	Pre Test	12	11,00	0,000
2	Post Test	12	15,25	

Based on the results of the analysis using SPSS version 20 from the table, it proves that the average

result of the player's overhead lob forehand ability before being given drilling exercise with a level net is 11.00. Meanwhile, after being given drilling exercise with a net, the average level of results was 15.25. Furthermore, based on the significance value, the value obtained is 0,000. The basis for decision making: If the significance value (2-tailed) <0.05, then there is a significant difference between the pre-test and post-test data, and if the significance value (2-tailed) > 0.05, then there is no significant difference between pre-test and post-test data. Thus, it was found that the Sig (2-tailed) value of 0,000 <0.05. These results indicate that there are significant differences between pre-test and post-test data. So it can be concluded that there is an influence of drilling exercise using a standard net on increasing forehand overhead lob technique for beginners.

C. Results of the Effect of Drilling Exercise to Forehand Overhead Lob with Level and Standard Net

TABLE III. POST TEST RESULT BETWEEN DRILLING EXERCISES WITH LEVEL AND STANDARD NET USING SPSS

No.	Result	Forehand Overhead Lob Exercise Group	Sample	Average Score	Sig. (2-tailed)
1	The result of Forehand Overhead Lob	With Level Net	12	20,92	0,014
		With Standard Net	12	15,25	

Table III shows the average results of the ability of forehand overhead lob for players who are trained with drilling forehand overhead lobs with a level net of 20.92. Meanwhile, the average forehand overhead lob ability of players trained with drilling forehand overhead lobs with a standard net of 15.25. This means descriptively that the players ability of forehand overhead lob who are trained with drilling exercise using a level net is higher than those who use the standard net. Furthermore, the significance value indicates the level of significance (2-tailed) or p-value = 0.014 / 2 = 0.007. Thus, the Sig (2-tailed) value of 0.007 <0.05, which means Ho is rejected. Thus, the hypothesis proposed is tested by the data so that it can be concluded that the ability of forehand overhead lob beginner badminton players who are trained with drilling exercise using a level net is higher than those using the standard net.

V. CONCLUSIONS AND SUGGESTIONS

A. Conclusions

Based on data analysis and discussion of research results, the following conclusions are drawn:

1. There is an influence of drilling exercise using a level net on improving the technique of forehand overhead lob for beginners.
2. There is an influence of drilling exercise using a standard net on improving the technique of forehand overhead lob for beginners.
3. Drilling exercises using a level net is better than a standard net on increasing forehand overhead lob technique for badminton beginner players.

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B. Suggestions

1. Players are suggested to take care of their health and nutritional needs. This is so that players do not get sick easily so that training is maintained and the results of the training are getting better.
2. Coaches and parents are suggested to pay attention and guide the players both during practice and when outside training, so that the player's training results are getting better.
3. For further scientific development, research can be conducted related to the effect of drilling exercise using a level net and standard net on improving forehand overhead technique for badminton beginner players.

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