Forehand Lob Technique Model in Badminton Using Drill

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Abstract
Badminton is a popular sport in Indonesia for children to adults. This can be seen from many people in cities and villages who play badminton both in indoor and outdoor courts. The purpose of this study was to develop the basic techniques of forehand lob in badminton using the drill. The research method was research and development using Borg and Gall models. The process of collecting data used documents, questionnaires, observation and tests. Model analysis techniques used (1) trial in small and large groups; and (2) judgment expert. The results show that there are two types of net used in the development of the model namely standard net and multilevel net. Each type of exercise consists of 6 models which are model L, V, U, N, W, and M. Each level has three categories, namely easy, medium, and difficult.

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INTRODUCTION

Badminton is a popular sport for Indonesia's people, both for students in schools and the general public. Many badminton clubs become a centre of playing badminton. Badminton is one of the most popular sport in the world (Phomsoupha & Laffaye, 2015). Meanwhile, Jaworski & Zak (2015) states that badminton is one of the most popular racket sports. The high interest of the Indonesian people to play badminton is a driving force for donating proud achievements. A proud achievement by Indonesian badminton athletes was achieved in world championships, such as in the All-England championship, Thomas and Uber Cup, Sudirman Cup, Sea Games, Asian Games, and the Olympics.

Syahrulddin (2011) states that one of the keys to improving one's sporting achievement is a regular and continuous exercise which is carried out systematically. To achieve a proud achievement in badminton, exercise should start from a young age. Young age is a productive age that can be used as initial capital for badminton exercise. Badminton extracurricular clubs in Northern Sumatra are found in various schools. At school, students are trained by trainers about various types of basic technical punches in badminton games. One of the basic techniques in badminton games is forehand lob.

The lob shot is important to be mastered by a player because it is one of the hardest hits for beginners to hit the shuttlecock as high as possible and fall on the opponent’s pitch. It was stated that lob or long strokes were a very important skill in badminton after serving. This ability is intended to attack the opponent's field (Aji & Komari, 2018). In starting the basic technique of forehand lob (one part of a lob), beginners start in the middle of the field and backwards to hit the shuttlecock with a forehand lob type and return to the centre of the field. The centre of the field is where the trainer begins and ends the drill. The coach is always seen training the player like a single-player type, where every time he hits the shuttlecock, he must return to the centre of the field. Whereas in badminton, there are games single and double.

However, single and multiple players who practice in badminton extracurricular clubs in Northern Sumatra as a whole are still given the same training model especially in basic badminton forehand lob exercise techniques and only the intensity is different. This can be seen from the basic technical training, especially in badminton. The training model that is usually given is model I backwards straight, the model I left backwards oblique, the model I right backwards and V inverted slurry. These come from the researcher's perspective. All of these models tend to train players in a single game because this model is always started from the middle of the field and ends in the middle of the field. Even though children who practice later will not necessarily be single players, it could be a double play or both. As said Ivan, Oksana, & Maryan (2015) that badminton is one of the Olympic types of sport includes competitions in singles, doubles and mixed categories.

The results of observations and interviews related to badminton exercise conducted by trainers at 066668 Public Elementary School, Elementary School “Plus Darul Ilmi Murni” and Elementary School “Al-Fithriah” found some problem in badminton games. The first problem, the trainer in the school is also a physical education and health education teacher who has studied badminton during college and is not an athlete or former athlete and it does not have a certificate as a badminton coach because he has never attended a badminton coach training.

The second problem, trainers in schools have not written training programs to be trained and often use the command style (centred on the trainer) and demonstration when training. The third problem, the trainer at school sees that the players (trainees) like to practice badminton basic technical exercises, but in the implementation of technical exercises, the child feels bored because he waits too long to get a turn in doing the training material.

The fourth problem, trainer at school trains a forehand lob by feeding the shuttlecock to the player who is ready in the middle of the field and continues to move backwards (straight/right / left) to the back, then they hit the shuttlecock and return to the middle of the field, but the child looks difficult when hitting the shuttlecock that moves back to the left of the trainee and boredom arises because of the lack of training models that are trained.

The fifth problem, the trainer at school uses additional media/tools in the practice of only whistles and stopwatches, this can make training less attractive because of the lack of media/tools used. Trainers in schools have not used references either in the form of books/modules in training badminton. Then, coaches in schools still need alternative teaching materials that can be used to drill the basic techniques of forehand lob players based on drill easily and attractively to increase the ability of forehand lob punches and
the enthusiasm of players. The study has proven that audiovisual learning media provides a significant effect on the basic technical skills of student badminton (Cendra, Gazali, & Dermawan, 2019).

Therefore, this study concerned to improve the ability of basic techniques forehand lob in badminton for beginner players. Efforts are made to help beginners by developing a training model for the basic techniques forehand lob. The model of basic techniques forehand lob in badminton developed is a suitable model for players who are beginners, not those for players who already have good forehand lob abilities. Because training forehand lob techniques cannot be compared to players who are beginners with players who have been trained before. Where, the player who is said to be trained can hit the shuttlecock from his backcourt to the opponent's backcourt, while the player who is said to be a beginner cannot hit the shuttlecock from his backcourt to the opponent's backcourt. Badminton player's leg movements have a different kinesthetic response (Yu, 2017).

Thus, the development of the forehand lob basic technical training model in this study is only limited to the development model of the forehand lob basic technical training for novice players. The training model will be packed taking into account the knowledge and abilities of the novice player. Therefore, this research will develop a training model related to the basic techniques of forehand lob in badminton with a wide variety of variations of training models to be used in improving the ability of beginner badminton.

METHODS

The approach of research used mixed methods research by combining qualitative and quantitative methods (Creswell, 2012). Furthermore, the research method used the research and development (R & D) method. The chosen development design is referring to the development proposed by Borg and Gall which consists of 10 stages (Gall, Gall, & Borg, 2010). The 10 steps of research and development are divided into 2 main parts, including preliminary research and evaluation.

RESULTS AND DISCUSSION

The result of the needs analysis data, document, and observation have been gotten the model design of the forehand lob technique model in badminton using the drill. Here is the model design:

![Picture 1](Forehand Lob Technique Model in Badminton Using Drill)

![The Form of Forehand Lob Technique Model in Badminton](Step I: Drill 1 Using Standard Net)

![Step II: Drill 2 Using Multilevel Net](Model Variation)

Model Categories

Model L | Easy
Model V | Medium
Model U | Medium
Model N | Medium
Model W | Difficult
Model M | Difficult

Picture 1. Forehand Lob Technique Model in Badminton for Beginner Player

Picture 1 describes the design of the forehand lob technique model in badminton as a basic technique for beginner players. The model consists of 2 (two) stages. In the first stage consists of 6 (six) variations of the drill model which in its implementation uses a standard net. Whereas, in the second stage also consisted of 6 (six) variations of the drill model which in its implementation used a multilevel net. In the first and second stage of the model, the categories of each model are: (1) the category of easy models is the exercise model variations of L and V model; (2) the category of medium models is the drill model variations of U and N model; (3) the category of difficult models is the exercise model variations of W and M model.

However, the implementation of the second forehand lob basic technique model is more difficult than the first forehand lob basic tech-
nique model. Because the second stage of the drill model uses a multilevel net, the shuttlecock must be hit high up so that the ball can cross the net. Therefore, badminton players must also pay attention to the ability of lunges and jumps (Hu, Li, Hong, & Wang, 2015). Besides, lower limb kinematics and foot pressure in the backcourt forehand stroke must also be noted. Professional badminton players and amateur players have contact with the ground above the front legs without midfoot and heels (Zhao & Li, 2019).

While the first stage of the model only uses a standard net and the shuttlecock that is hit is not as high as the second model which can already pass the net. Even so, the player must keep trying to hit the shuttlecock as high and as far as possible to the target area behind the playing field. Because badminton drill requires exercises that increase reaction time by considering the characteristics of badminton characteristics such as how fast the speed and stimulus are constantly visual (Yüksel & Tunç, 2018).

The model arranging evaluates to know the effectiveness of the model. A small group trial was conducted on 30 beginner players as model users consisting of 10 extracurricular students at State Elementary School 066668 Medan, 10 people from extracurricular students at Al-fithriah Private Elementary School, and 10 people from extracurricular students at Private Elementary School Plus Darul Ilmi Murni. The results of the small group trial phase concluded that all the models of basic technique forehand lob in badminton drill can be applied by players with the assistance and supervision of a trainer. In this small trial phase, the revision is generally no longer on the content and substance of the model, but it leads to the use of the model empirically. In general, the revision of the model as a small trial result, namely: 1) the coach has to arrange beginner players in the order they do not compete in making a model by sorting players and reminding players to return on cone 1 and it is past the side/outside of the field. 2) The coach has to feed the ball in the direction of each cone which is easy for the player to do the forehand lob, and for the player to hit the cock to the target basket. 3) The target basket is not a benchmark for determining the success of a game. The portion and duration of the exercise need to be added.

While large group trials are carried out for 2 months (March to April 2019). A large group trial was conducted on a drill-based forehand lob basic badminton training model product consisting of 12 exercise models that had been tested previously. The results of trials in large groups show that the models are feasible to use.

Thus, the badminton lob forehand technique model that is trained with the new drill model is better than the old drill model. This might be due to fewer variations of the old badminton lob forehand drill model compared to variations of the new drill model. Whereas the old drill model was only 4 variations, and there were 2 variations of the drill model that were difficult for players to do, namely variations of the drill model that moved to the left of the player. While the variation of the forehand lob drill model is 12 models or more than the old model variation. Variations in forehand lob drill models are a bit boring for beginner players, thus affecting the results of the players’ drill.

The drill is not monitored and varied, many athletes will have difficulty coping with physical and psychological stresses including drill at each step of the development process that not only helps athletes develop new abilities, but also prevent injury and avoid boredom (Tangkudung & Puspitorini, 2012). Thus, drills that are monitored and varied will develop the ability of players and can avoid boredom during exercise. Therefore, the development of a new badminton lob forehand basic technique model is better than the old training model because the training model is more varied.

This study has advantages that affect on the quality of forehand lob technique in badminton playing. It produces the book whose contents are variations in the drill model of the forehand lob technique in badminton. The product contributes to the enrichment of badminton learning materials specifically about the basic techniques of forehand lob. Furthermore, the various drill contained in this research and development product have simpler procedures and novice players as direct users of this product will find it easier to adapt to the various forehand lob basic technical motion tasks that exist in each variation. Each variation model also contains drill principles that are adapted to the concept of motion exercises that are the stages of motion in each variation model starting from the new easy to the more difficult, so that with this principle will make it easier for users of this model to master the basic techniques of forehand lob properly.

Besides that, the product has a disadvantage. It requires preparation in implementing this model, in addition to preparing the costs required to buy the media/tools used in the model also requires the trainer’s readiness to pair variations of each model such as; target basket mounting, cone mounting, and multilevel net installation. This
Here is the picture of the drill model for forehand lob technique in badminton game.
drill model is still moving from the new coach’s right to the coach’s left because novice players are still having trouble moving left to hit the shuttlecock. This training model should also be used for novice players, in the sense that players are still low on the results of their forehand lob basic technique skills, so it is necessary for model users to first identify the players in finding out the characteristics and results of the forehand lob basic technique skills initially.

The results of this study have a novelty that is different from previous studies. The development research product has the novelty of the forehand lob technique in badminton using the aspect of variation drill and the media used. Variation of the drill is models L, V, U, N, W, and M with standard net and multilevel net. Variation in the drill model is more dominant for the preparation of single players and multiple players. These models have more muscular activity and more precise punching performance in badminton (Sakurai & Ohtsuki, 2000).

Besides that, the number of basic technical drill practice has been determined in each variation of the model. The position of making a basic forehand lob technique is only at 18 (eighteen) points. Another finding that there is communication between players in the implementation of basic technical drills which look reminiscent of each other to be positioned to do technical training. The model has additional tools used such as cone, target basket, and multilevel net. Like as Maftel (2017) concluded that the construction of an innovative electronic device designed to improve reaction times, speed and to help players learn the specific paths of the badminton court.

The same study shows the IoT sensor badminton training system helps measure training time according to player movements, making it possible to collect objective outcome data with fewer errors than conventional flag signal based methods by coaches (Sung, 2017). Thus, the electronic device model in badminton playing has an important role. With use individual media, the athlete can be understanding more with repeating material based on athlete want (Firdaus, Sugiyono, & Purnama, 2018).

CONCLUSION

Based on the findings and discussion, it is concluded that the basic technique of forehand lob in a practice-based badminton game has two types of exercises, exercises that use the standard net and multilevel net. There are 6 training models for the forehand lob technique in badminton, namely L model, V model, U model, N model, W model, and M. These models are divided into two net, namely standard net and multilevel net.

This model gave a significant impact on beginner players in badminton, especially to master the forehand lob technique. The results of the development of this model as a reference, reference and model to accelerate the understanding and ability of novice players in learning the basic techniques of badminton lob forehand.

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