THE DEVELOPMENT OF BADMINTON OVERHEAD LOB MODEL THROUGH VARIOUS EXERCISES ON NOVICE ATHLETES OF PB. ANUGRAH PADANG SELASA PALEMBANG

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Abstract
The purpose of this study: (1) develop the badminton overhead lob model through various exercise on novice athlete, (2) acknowledge the effectiveness of the overhead lob model. Brog and Gall model is used for this study. The subject is 10 novice athletes of PB. Anugrah Padang Selasa Palembang. Questionnaries used as the instrument of this study to collect data at the stage as follows (1) Analysis of Necessity (2) The Expert Evaluation (Initial Product Evaluation) (3) The Limited Testing (small group testing) (4) The Main Testing. The Overhead Lob is conducted 3 times of experiments in the effectiveness testing to get the best value. In order to get the result of model effectiveness, used the statistic t-test, re-observation with a significant level $\alpha = 0.05$. Based on the results, concluded that: (1) Trainers need the overhead lob development through various exercise (2) This product is effective to be implemented by the trainers in overhead lob practice. (3) It is proven empirically that the development of badminton overhead lob model through various exercise on novice athletes of PB. Anugrah Padang Selasa Palembang is very effective based on the result.

Keywords: Exercise Model Development, Badminton Overhead Lob, Various Exercises, Novice Athlete

INTRODUCTION
Badminton is one of the popular sport. According to Zarwan (2012:1), badminton is a group game both played indoor or outdoor court with a certain measure. It is played by either two opposing players (singles) or two opposing pairs (doubles). The players strike the shuttlecock with their rackets so that it passes over the net and into the opponents' half of the court. The rally ends once the shuttlecock touches the ground: every stroke must be played as a volley.

Badminton offers a wide variety of basic strokes such as forehand, backhand, overhead lob, serve, and smash besides physical and mental condition, a rally is won when a shuttlecock hit over the net and onto the floor of opponent's court and there are many outstanding athletes in Indonesia.

Basic stroke techniques are serve (straight serve and wide serve), overhead (overhead lob, backhand, forehand, smash, drop shot) etc. Lob overhead is a stroke from the right or left that soar to the back, which hit the floor next to the back line, in order to restore the position, or to drain the opponent's energy. It can be done from the top of the head. It is a stroke over the head which is necessarily performed by the players. Unfortunately, novice athletes are having a difficulty in performing the stroke. The opposing player can easily performed a smash if the shuttlecock does not bounce to the
According to the observation over the training activity in PB Anugrah Padang Selasa, found that some novice athletes are not performing the Overhead Lob properly. The trainer is required to be able to develop variety in the training which aim to motivate, to eliminate the repetition and to improve the performance of the athletes. (Mubarrok, Sapto Adi. 2017 : 126).

The preliminary data found that there are only 2 players who are able to perform the overhead lob over 10 selected samples. A good stroke is when the shuttlecock hit the opponent’s court which almost hit the line. It makes it hard for the opponent to strike back.

**METHODOLOGY OF RESEARCH**

A development model is the assessment and development of process programs and outcomes which can reach the internal criteria, consistency and effectiveness.

This study is using the research and development / R&D from Borg and Gall which consists of 10 steps.


The main purpose of this study is to produce an effective product. It is expected to be applied on the training process for achieving the goal set by the athletes.

Needs analysis is the beginning of research process in developing the model of exercise. At this stage the authors conducted interviews, observations and charging questionnaires on trainers and athletes in order to understand the obstacles during the exercise.

Planning of model development

The research and development model is adapted by Bord and Gall with 10 major steps as follows:

1. Determining the issues or potential underlying the development of the model.
2. Research and information collecting as the basis to a draft.
3. Developing preliminary form of product. Overhead Lob is the design of the product.
4. Design validating or preliminary field testing which is undertaken by the experts.
5. Main product revision (design validation).
6. Main field testing, by practicing the overhead lob model in the court.
7. Operational product revision.
8. Operational field testing with a group of 20 subjects involved.
9. Final product revision. At this stage, the expert obtains the final product.
10. Dissemination and implementation. The model can be produced.

Subject of the research

The subject of this study is all the novice athlete of PB Anugerah Padang Selasa Palembang.

Time and Place of the Research

Place
This study is conducted at PB Anugerah Padang Selasa Palembang Sumatera Selatan and all the novice athletes as the subject for the study.

Time 3 months research based on research and development adapted by Borg and Gall, but the author needs 1 month only to finish it instead.

Data Analysis Techniques

The study of the overhead lob model development is using qualitative analysis and descriptive quantitative percentage. Qualitative analysis techniques is used to analyze data from experts in the form of feedback, comments, criticism and suggestions. The results of data analysis become the basis in perfection of product development.

Quantitative descriptive analysis techniques is the percentages used to analyze the results of data collection from small group testing and large group testing. The percentage formula used by researchers to process the data is as follows:

The formula model is to process data of the subjects using the t-test procedure and the SPSS 16 application.

\[
\frac{\overline{x}_1 - \overline{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}
\]

Explanation:
Model Development Result
The result of the model development is written in the form of a script that can present the overhead lob training model through various exercise on the novice athletes.

Initial Result / Small Group Testing
The practice model has to do stage 1 revision after being evaluated by expert and will have a small group testing with 5 subjects on it afterwards.

After exceeding the small group testing, researcher will be testing the large group as well. And according to limited testing result (small group testing) which has been evaluated, researcher will be doing the initial product revision and obtaining practice model with overhead lob through various exercise used in a large group testing. Next step is to do stage 2 revision and continued with the large group testing which consists of 10 novice athletes.

Mean

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pretest</td>
<td>2.90</td>
<td>10</td>
<td>.738</td>
<td>233</td>
</tr>
<tr>
<td>posttest</td>
<td>4.80</td>
<td>10</td>
<td>.442</td>
<td>.133</td>
</tr>
</tbody>
</table>

Based on the output results using SPSS 16, the average value before getting exercise model is 2.90 and after getting it is 4.80, which mean that the average value increased.

Corelation Coefficient

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<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td>-0.71</td>
<td>845</td>
</tr>
</tbody>
</table>

According to the output result, the correlation coefficient before and after given the model is -0.71 with p-value is 0.00 < 0.05 which means significant.

Significance of difference
The significance of difference with SPSS 16 shows that the results are t-count = -6.862, df = 9 and p-value = 0.00 < 0.05 which means there is significance of difference on overhead lob before and after the model.

Based on the description above, the overhead lob practice model with various exercises can effectively improve the stroke of overhead lob techniques for novice athletes.

RESULT AND DISCUSSION
According to the results, researcher can conclude that the variety of overhead lob techniques can be used to improve the movement ability for the athletes. There is a significant comparison that indicates the progress in every particular process with 48 data obtained which means that the overhead lob model can effectively improve movement skills of overhead lob on athletes.

Conclusion
Based on the obtained data from small group testing, large group testing and the description of research results, concluded that:

The overhead lob model development with the various exercises can improve movement skills and the training ability effectively and efficiently.
The Overhead lob model development can help the trainers to acknowledge proper new models of the training in order to improve the performance of the athletes.

**REFERENCE**


