SHOOTING PRACTICE MODEL IN HOCKEY GAMES ROOM

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Abstract
This study aims to produce innovative training training models for room hockey players that can provide benefits to athletes and room hockey coaches to convey varied training models and can understand and achieve the expected training results in order to play room hockey well. The method used in this research is the research and development method. The subjects in this study were UNJ hockey club athletes as small group trial subjects and Tangerang City hockey club athletes as large group trial subjects. The pre-test is carried out after conducting small group revisions and product trials. This pre-test is carried out before the research subjects are given treatment. After being treated with 16 models, variations of training models and models were evaluated, namely post-tests were carried out on 35 hockey athletes to find out whether there was an increase in accuracy. The pre-test data conducted before treatment was 16.28 After the test was carried out it was found that the accuracy of players increased, marked by increasing the post-test average of 24.14. This means that the exercise variation model has improved. So the conclusion is that there is a significant relationship.

Keywords: Practice; Shooting; Room Hockey.

INTRODUCTION

In this article there are several types of training variation models in hockey. Several factors affect the level of ability of an athlete, ranging from physical ability, mental tactics and strategies that players live according to the instructions that the coach conveys. Where this is closely related to the increase in performance required for an athlete or a club. Speaking of training, there are many things that must be mastered by athletes to support performance on the field. According to (Septianingrum &; Kristiyanto, 2018)"Physical Condition as a Contribution of Accuracy with Flick Drag Technique". There is also according to (Antonov et al., 2020) which explains about "Influence of the push &; flick "Methodology 64-76 on

the accuracy of the indoor hockey penalty corner". According to the description of the article above, it can be concluded that the shooting is owned by the player can determine the success of the achievements of an athlete or a team. Starting from physical training, tactical training, and strategies according to needs. Where hockey is a sport whose victory is determined through points after scoring a goal. Goals can be created because players shoot with good ability and accuracy.

In situations within the circle many possibilities occur. Starting from the ball directly into the goal, the ball out of the field, the ball is sidelined by the goalkeeper or the movement of players who shoot closed by the opponent. No exception is the ball produced from the edge of the goalkeeper or closed by the opposing defender. It must also be trained so that the resulting opportunities can be utilized properly.

All forms of shooting practice must be trained so that all possibilities that occur can be anticipated by players. Shooting is one of the basic techniques that determine the outcome of a hockey game, which is to collect as many numbers as possible by creating or shooting the ball into the opponent's goal. This shooting technique can be done by hit or push (Entang Hermanu, 2011).

The shooting ability is possessed by players because it is impossible for players to score goals without having this ability. The victory of a team is determined by the foresight of a player to see opportunities and shoot towards the goal accurately (Baginda Surya, Edi Purnomo, 2009). Players must cultivate the ability to shoot from varying distances. All players must be encouraged to shoot a lot from different distances during the game (Ilham Efendi Nasution, 2015). Hockey is a sport with a long history where it has undergone rapid changes, both in terms of ability and also the composition of athletes. As one of the team games that are fun, fast and require skill. (Marhadi, 2012) So mastery of basic techniques by every athlete is needed.

According to Borg and Gall (Meredith D. Gall, Joyce P. Gall, 2007) in their book said that "Research and Development is an industry-based development model in which the findings of research are used to design new products and procedures, which then are systematically field-tested, evaluated, and refined until they meet

specified criteria of effectiveness, quality, or similar standards". (Borg et.al, 2007, p.589).

In general, the training model can be interpreted as a pattern or form of exercise in which there are training steps that are in accordance with the training goals to be achieved (Ilham Efendi Nasution, 2015). In the process of sports training, of course, there are goals to be achieved. In the training process a trainer divides a training session into several doses both for physical, technical, tactical and mental training sessions (Baginda Surya, Edi Purnomo, 2009).

Training in the world of sports is a way to improve performance on the field so that it will have an impact on achieving achievements (Miftahul Muarif, Nazurty, 2021). Exercise is very important to do in helping to improve the performance of athletes. Training has significance in every sportsman because training can increase the fitness capacity and performance of the athlete himself (Utamayasa, 2019).

The victory of a team is determined by a player's foresight to see opportunities and make the right goal (Baginda Surya, Edi Purnomo, 2009). Players must cultivate abilities to from varying distances. All players should be encouraged to do a lot from different distances during the game (Ilham Efendi Nasution, 2015). With the passage of time, technological developments in sports today are very rapid, as evidenced by the many changes from sports infrastructure (Rifki Alamsyah, 2020). One of the supporting components in determining the achievements of players / athletes is the availability of good and adequate equipment or facilities and infrastructure (Rachman et al., 2017). There are so many training media that coaches can use in training sessions to make it easier to achieve the goals / targets of training. Even the exercises provided can be more effective and efficient due to support from existing exercise media (Raharjo et al., 2018).

Hockey is played by moving a ball that is as small as a tennis ball with a 5 cm wide stick that is bent at the end and cannot be used back and forth." (Eko Prabowo &; Wismanadi, 2017). in playing hockey requires speed and agility (Wdowski &; Gittoes, 2013), the players must cover the game area during the game (Manna et al., 2012).

This indoor hockey sport is a competitive sport. As Vinson puts it "Indoor hockey is a highly competitive international sport, yet no research to date has investigated the key actions within this sport." (Vinson et al., 2013) Thus, indoor hockey sports games require the best team techniques and strategies. Room hockey is a sport adapted from field hockey. Room hockey is a variation of field hockey (Hollander et al., 2018), but the field used has a smaller scale.

METHOD

Borg and Gall's research and development has 10 stages. In each of these stages, we will discuss the products that will be researched for improvement from previous research or products. According to Borg and Gall in their book says that; "Research and Development is an industry-based development model in which the findings of research are used to design new products and procedures, which then are systematically field-tested, evaluated, and refined until they meet specified criteria of effectiveness, quality, or similar standards" (Meredith D Gall, 2007).

The stages to be carried out in the effectiveness test are: There were 17 people as a small group test and as many as 35 people as a large group. Pre-test the shooting accuracy of players who have been validated for instrument trials to find out the results of the initial test of player accuracy Applying the shooting practice model for 16 meetings.

Post-test implementation to measure the shooting accuracy of players after treatment in the form of 16 shooting practice models at the final stage Analyze the pre-test and post-test results using t-test statistics to determine whether there is a significant effect from the application of the shooting practice model after all stages are carried out.

RESULT AND DISCUSSION

In this chapter researchers will explain the results obtained in research, namely: Presented overall data (needs analysis, evaluation data and trial data) Effectiveness Results of discussion.

Results from group trials in small groups of 17 athletes, field trials / large group trials of 35 athletes.

Results of Needs Analysis

There are 2 objectives that must be known in the results of the needs analysis, namely: How important the shooting practice model is to accuracy in the game of room hockey

What obstacles and supports were encountered in the development of shooting practice models in indoor hockey games?

The shooting practice model in the room hockey game is made based on the problems that researchers find in the field through observation and interviews and researchers will try to provide solutions to these problems.

Researchers developed a variation of the shooting training model previously there was research from Okubo &; Hubbard on Basketball free-throw rebound motions (2011) in the journal Chiba Institute of Technology, 2-17-1 Tsudanuma, Narashino, Chiba 2750016, Japan bUniversity of California, Davis, CA, 95616, USA. Where players who have the ability in terms of bouncing balls can be one of the factors for the team to become a strong team. Therefore, researchers want to develop a shooting practice model to improve accuracy.

Model Feasibility

After going through the needs analysis stage in the field and obtaining data, the next stage is to make a plan and preparation for the shooting practice model. Where this is so that the exercise program can be arranged properly in accordance with the goals to be achieved. The step that researchers take is to conduct expert tests where the model that has been made will be tested for feasibility by 3 experts. Researchers have 3 experts who will conduct a feasibility assessment of the shooting practice model in the room hockey game that has been made by the researcher.

This development research uses the theory of Borg and Gall involving 52 subjects. Data collection using observation, documentation and tests.

Effectiveness Test Results

The shooting training model in the room hockey game has been revised by hockey experts and will proceed to the next stage, namely small group trials

evaluated by experts, then researchers revise the initial product and obtain 16 items of shooting practice models that will be used in large group trials.

The data from 35 subjects' assessment of the effectiveness of the shooting practice model are shown in the following table:

Table 1. of Shooting Accuracy Results Before Pre-test and Post-test

Name	Pre Test	Post Test	Different Values
Subject 1	15	21	6
Subject 2	17	22	5
Subject 3	16	23	7
Subject 4	12	21	9
Subject 5	19	27	8
Subject 6	18	26	8
Subject 7	14	22	8
Subject 8	14	23	9
Subject 9	17	21	4
Subject 10	19	25	6
Subject 11	20	27	7
Subject 12	20	26	6
Subject 13	21	27	6
Subject 14	16	21	5
Subject 15	17	22	5
Subject 16	14	21	7
Subject 17	13	21	8
Subject 18	12	22	10
Subject 19	11	21	10
Subject 20	11	21	10
Subject 21	15	23	8
Subject 22	14	24	10
Subject 23	17	27	10
Subject 24	18	26	8
Subject 25	19	28	9
Subject 26	17	25	8
Subject 27	15	24	9
Subject 28	16	23	7
Subject 29	17	25	8
Subject 30	19	28	9
Subject 31	20	28	8
Subject 32	17	27	10
Subject 33	19	28	9
Subject 34	16	25	9
Subject 35	15	24	9
Average	16,28	24,14	

The table above shows the pre-test and post-test results. The pre-test is done before the small group test. Pre-test is carried out before the model is applied as many as 16 items of shooting practice models. The test is done to determine the results before and after treatment. The average test result of 17 samples before being treated was 16.28 After being given the model treatment, 16 shooting exercise variations were evaluated and validated, then a post-test was carried out to find out whether there was accuracy in the research subjects. After taking the post-test data, it was found that the increase in record results with an average was 24.14. Based on the description above, it is found that the difference in results from shooting training variations between pre-test and post-test that the endurance training variation model developed is effective and increases player accuracy.

Table 2. Results of the Kolmogorov-Smirnov Test One-Sample Normality Table Distribution

Kolmogorov-Smirnov				Statistics Shapiro-		
	Statistics	Df	Sig.		Wilk Df	Sig.
Pretest	.120	35	.200*	.963	35	.278
posttest	.145	35	.060	.893	35	.003

Based on the table above, it is known that after using SPSS, the results of the Kolmogorov-Smirnov Test obtained pre-test normality data of 0.200 and posttest data of 0.060, both of which are greater than alpha 0.05. Thus it can be concluded that both data come from normally distributed populations. Table of Paired Sample Statistic Results (Pre-test) and After given Treatment (Post-test) Paired Samples Statistics

Table 3. Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 pretest	16.2857	35	2.66316	.45016
posttest	24.1429	35	2.52217	.42632

The average score of athletes before being given the training model was 16.28 and the value after being given the shooting training variation model treatment was 24.14 which means that there was an improvement resulting from the

pre-test and post-test. After the whole series of stages, it can be concluded that the shooting practice model is effective. This is based on the effectiveness test obtained after treating the research sample as many as 16 meetings, the results of this effectiveness test are to compare the pre-test and post test shooting accuracy of the research subjects where the results show that under the influence of the shooting training variation model given is significant in improving the quality of shooting accuracy of athletes.

This shooting practice model was developed based on preliminary studies and literature studies as well as needs analysis. Literature study in the form of summarizing the literature or theories read, besides that researchers also conduct needs analysis through observation and interviews.

The hope is that the shooting training model product that the researchers produce can be a source of reference for players and especially hockey coaches. If this shooting training variation model is done well, then there is great hope to make players have good shooting accuracy skills, because room hockey is a sport that gets points by scoring goals, and must have good accuracy so that the chances of goals are created greater. The application of this training variation model can be done at each stage in the training period, coaches can use this model in improving shooting accuracy in indoor hockey games.

CONCLUSION

Based on the results of needs analysis, expert validation, field trials, effectiveness tests and discussion of research and development results on the product development of shooting practice variation models in indoor hockey games, the following conclusions can be drawn:

Models of shooting practice variations can be developed and applied in indoor hockey training This developed shooting training model is effective for increasing the accuracy of athletes in indoor hockey games Some suggestions that will be put forward by researchers are related to the products developed. These suggestions include utilization suggestions, dissemination and suggestions for further development.

Utilization Suggestions

The shooting training model in indoor hockey games is one variation of the shooting training model that can be applied to hockey athletes in clubs and can be used as a reference by coaches in compiling training materials. In its utilization, it is very necessary to consider the situation, conditions and infrastructure.

Dissemination Advice

Dissemination and this product to a wider target, researchers provide suggestions including:

Before publication, it is better for the shooting practice model in the room hockey game to be rearranged for the better, especially the content of the material and packaging that will be developed again. This shooting training model is so that it can be used by hockey coaches, so that later the coaches can know and understand it well.

Further Development Suggestions

Researchers have several suggestions in order to develop this research in a further direction, namely as follows: For the subject of research should be carried out on a broader subject The results of making a rebound tool-based shooting training model in room hockey games can be disseminated to all hockey coaches in Indonesia.

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