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TRAINING MODEL OF INDOOR HOCKEY PASSING TECHNIQUES FOR BEGINNERS

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Abstract

This study aims to create and implement an indoor hockey passing exercise model for beginners and to measure the effectiveness of the model made. The research will be applied to research subjects as many as 60 students who have the characteristics of novice players, male high school students, aged between 15-17 years who have never participated in indoor hockey training. This study uses a research and development model from Robert Maribe Branch, namely the ADDIE model (Analysis, design, development, implementation, and evaluation). The instrument used is an indoor hockey passing instrument created and developed by researchers. Based on the results of the study, the results of the pre-test were 21.12 and the post-test was 38.7. Significant difference test with SPSS obtained $t\text{-count} = 71.418$ $df = 59$ and $p\text{-value} = -0.00 > 0.05$ which means there is a significant difference to the results of indoor hockey passing exercises for beginners. Based on the results of statistical testing, it can be concluded that the model of indoor hockey passing technique training for novice players that was developed can effectively improve the indoor hockey passing technique for novice players.

Keyword: Passing; indoor hockey; model; ADDIE; beginner

INTRODUCTION

Basic technique is the most important component in sports (Naldi & Irawan, 2020). Developed countries in the field of sports can be seen through the process of nurturing sustainable athletes who are very concerned about mastering good and correct basic techniques. Rahmad (2016) stated that basic technical training and learning basic movement skills have been carried out from an early age, early childhood or young age development in sports can maximize the acquisition of a tiered and sustainable achievement. Study plans and exercise programs are periodically arranged from the easiest stages to the most difficult stages and continue to improve in the long term.

One of the sports that requires technique in playing it is hockey. Senaputra (2017) argues that hockey is a sport that is carried out by men and women using sticks and balls. Latifah (2019) argues that hockey is a team game in which each player uses a tool called a stick to hold, dribble, and hit the ball according to the game rules that have been set.

Subakti (2013) argues that hockey as a team sport, the cooperation factor is very important. It can be interpreted that hockey is a team sport that requires cooperation when playing it so that a team can score

goals and win. Nurlathifah (2017) bahwa hockey is a team game played by several people on one team.

Indoor hockey is different from outdoor hockey which, when viewed from the way the two sports are played, is almost similar, but the difference lies in the basic technique of passing the ball or passing, as mentioned by Konarski dan Strzelczyk (2009) In indoor hockey the ball may only be pushed and not hit or flicked.

Hockey is played on open fields such as grass and on carpets, played by 11 players in a team. While in indoor hockey the number of players in a team is 6 people (Langga & Supriyadi, 2016). Every player must understand every position they occupy. Ulum (2014) added, indoor hockey is played between two teams (6 players each) who each play holding a bat which is usually called a stick to move or play the ball, as well as one of the players who is the goalkeeper.

A player needs to master the basic techniques of hockey, while the basic techniques of hockey are as follows 1) Dribble, 2) Hit, 3) Push, 4) Flick, 5) Scoop, 6) Stop (Cahyad & Faruk, 2017). But, Rahayu & Daulay (2021) states that indoor hockey only a few basic techniques that can be used, namely: dribble, push, stop, flick. The push technique or pushing the ball,

when the game takes place can be termed as passing. Passing is the main technique used by hockey players to run the direction of the game and the rate of movement of the ball when playing.

Fadli (2014) Ricky stated that to be able to play hockey, players must master various techniques and abilities related to the game of hockey itself. Beginners of indoor hockey learn and practice all the basic techniques. Beginner players must practice with good and correct basic techniques by paying attention to the rules and training systems repeatedly so that in the end these basic techniques can be mastered correctly, so in order to play indoor hockey, beginner players are required to be able to master the basic techniques well (Hermanu, 2013).

Players who are just learning the game of indoor hockey will find it difficult to learn passing techniques. Hamzah (2021) The passing technique is one of the techniques that every indoor hockey player must master well. This is because playing indoor hockey is very dynamic and very fast, so passing is one of the determinants of the team's success in processing the ball and controlling the match so that it can win the match.

Technically, basic indoor hockey passing techniques can be trained in various forms and variations. The process of imitating movement exercises is still often

used as the basis for a hockey club or extracurricular coach to train a new technique, even though training by teaching the process of technical movement in a movement procedure will be more effective than doing a technique just by imitating the movement, because when a good movement procedure is known, understood, and can be applied to the movement, the movement will be better, the subject (hockey player) who is doing the passing exercise can understand how to do the right movement.

The hockey trainers have not yet implemented mass training aids, a simple tool that can have a big impact on the results of many kinds of training. Rubber resistance is one of the ideal tools and can be applied to the training process. Resistance rubber is made of rubber with various shapes and various tensile strengths, by using resistance rubber a movement that is trained will become more consistent and can be used as an additional load or training load during the training process.

Through the training model carried out in accordance with the movement procedure and coupled with the application of assistive devices in the form of resistance rubber, it is hoped that it can form a good foundation when a hockey player exercises basic passing techniques. This indoor hockey passing training model

uses resistance rubber as a support during practice.

The research that has been done on hockey is mostly done to analyze tactics, application of training media, posture, hockey training methods without looking at the movement procedures of the technique being trained. As research conducted by Valentino & Akbar (2018) on the effect of training using audio-visual media on push technique skills in hockey sports.

Furthermore, research from Sugihartono (2021) on the body movements of hockey players when passing. Then research from Hamzah (2021) about the study of the height criteria of hockey players. Hasnor (2018) about the analysis of passing tactics in hockey games. Hidayat (2019) about the level of basic push and stop technique skills in hockey athletes. Hermanu (2013) discusses the comparison of the results of indoor hockey and field hockey training on the mastery of basic push and dribble techniques in hockey games. Mardiyanto (2017) discusses increasing push ability seen from the motor skills of hockey players.

METHOD

This study aims to create and implement an indoor hockey passing exercise model for beginners and to measure the effectiveness of the model made. The research will be applied to research subjects as many as 20 children per

school with a total of 60 students who have the characteristics of novice players, on this occasion are male high school students, aged between 15-17 years who have never participated in indoor hockey training. This study uses a research and development model from Robert Maribe Branch, namely the ADDIE model (Analysis, design, development, implementation, and evaluation) (Wenly, Pelana, & Wasan, 2021).

This study uses the ADDIE model which consists of 5 phases described: 1) Analysis, needs analysis to determine the right problem and solution. 2) Design, determine specific competencies, methods, materials, and problem solving strategies that have been determined. 3) Development, producing programs that will be used in problem solving. 4) Implementation, the implementation of the program made after going through the previous three processes. 5) Evaluation, conduct an evaluation after the product is applied to correct errors and improve the product to be applied (Suryanata et al., 2021). The instrument used is an indoor hockey passing instrument created and developed by the researcher.

RESULT AND DISCUSSION

Result

Analysis Results

Based on the results of the needs analysis and field findings above, the

researchers saw the need for a model of indoor hockey passing technique training which would later be useful for coaches and indoor hockey beginners.

Design Stage

The next stage is the design stage. In this discussion, researchers develop a draft model through two stages. Phase 1 model consists of 17 exercise models. Stage 2, as many as 17 models were analyzed and evaluated so that the models that were not feasible would be deleted. Phase 2 is the final model that is ready to be implemented and distributed to mediums and agencies related to the sport of indoor hockey, resulting in 13 model items. Where this design is predicted according to the needs of high school students.

Development Stage

The practice model for indoor hockey passing techniques for novice players has gone through the process and stages of data collection and drafting of the model design which of course carries out expert tests with the aim of obtaining the feasibility or validation of the developed model. Product validation is carried out by 3 experts in the field of indoor hockey.

The validation process is carried out by means of three validators providing an assessment of the initial model design compiled by the researcher. Expert tests carried out on all model designs certainly get suggestions and input. The conclusion

from the suggestions and inputs given by the experts can be seen from the following explanation:

- 1) The use of resistance rubber is very good because it will support the desired shape of the movement pattern.
- 2) The exercise model with and without the ball will provide a variety of different training models.
- 3) An 8-step core stability training model is needed to support good body shape when passing.
- 4) The practice model for items 3 and 7 no longer needs to be used because it is already in items 4 and 8.
- 5) The exercise model for items 12 and 13 is not needed because there is already an exercise form in item model 14.

Table 1.

Conclusion of Expert Tests on the Practice Model of indoor Hockey Passing for Beginners

Model name	Expert	Explanation
Model 1	✓	Good
Model 2	✓	Good
Model 3	✓	Good
Model 4	✓	Good
Model 5	✓	Good
Model 6	✓	Good
Model 7	✓	Good
Model 8	✓	Good
Model 9	✓	Good
Model 10	✓	Good
Model 11	✓	Good
Model 12	✓	Good
Model 13	✓	Good

Implementation stage

Test the effectiveness of the experimental group conducted with the subject of 60 students extracurricular hockey. The application of a indoor hockey passing technique training model for novice players that has been revised and is ready to be implemented. The data for the assessment carried out on the 60 experimental group subjects produced can be seen from the following table.

Table 2

Average value

Paired Samples Statistics			
	Mean	N	Std. Deviation
Pre Test	21,1167	60	3,55629
PostTest	38,7000	60	4,00973

The average value generated from the passing test assessment before the passing technique training model treatment was carried out was 21.12 and after the passing technique training exercise model treatment assessment was carried out, the average value obtained was 38.7. The average value generated from the passing technique test carried out has a difference which describes a significant increase.

Significant Difference

Table 3.

Results Paired Samples Test

Paired Samples Test					
Paired Differences					
	Mean	Std. Deviation	Std. Error	t	Sig. (2-tailed)
	17,58333	1,90709	,24620	71,418	,000

Significant difference test with SPSS obtained t-count = 71.418 df = 59 and p-value = -0.00 > 0.05 which means there is a significant difference in the results of indoor hockey passing exercises for beginners. Based on the information above, it can be said that the indoor hockey passing technique training model for beginners developed can effectively improve the indoor hockey passing technique for novice players. The experimental test results can be concluded that the indoor hockey passing technique training model for novice players can be used to train passing skills effectively and is feasible to apply.

CONCLUSION

Through the data obtained from the results of research consisting of expert validation and effectiveness tests, it can be concluded that:

1. The indoor hockey passing technique training model for novice players developed by the researcher consisted of 13 model items. This model can provide innovation to learn and carry out indoor hockey passing technique exercises effectively and efficiently.
2. The results of the effectiveness test the average value of the results of the indoor hockey passing technique exercise for novice players in the initial test phase (pretest) is 21.1167 while the average value of the results of the indoor hockey passing technique exercise for novice

players in the final test phase (posttest) equal to 38.7 means that after the research, the significant difference test with SPSS 20 obtained the results of t -count = 71.418 df = 59 and p -value = 0.00 > 0.05 which means there is a significant difference to the results of the hockey passing technique training indoor for novice players developed.

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