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## Improve Push Skills in Hockey Games Through Games Based Approach

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### Abstract

The purpose of this study was to determine the effect of Games Based Approach (GBD) on hockey push skills. The research method used is an experimental method with a one group pretest-posttest design. The population in this study were students consisting of 69 people using a random sampling technique. The instrument used is the hockey test push. Data processing was carried out using the paired sample T-test method in the SPSS version 23 application. The results of the data analysis using the paired sample test showed that a mean of 24.375 was obtained, which means that there was a difference in the score from the pretest posttest in the hockey ball push skill. In addition, statistical data shows a statistical price of  $t = 58.541$ , with  $df = 68$ , and a significant figure or  $p\text{-value} = 0.000 < 0.05$ . Thus learning the game based approach (GBA) has a significant influence on improving push skills in hockey games.

**Keywords:** game based approach, hockey, push

### INTRODUCTION

In Indonesia, the sport of hockey that is developing is field hockey and indoor hockey (Budiman, 2020). Hockey field is played in an open field such as on the grass and on the carpet played by 11 players in one team. Whereas in indoor hockey the number of players in a team is 5 people and in indoor hockey games it has its own or special rules which are partly different from field hockey games where in indoor hockey players may not use scoop techniques (lift the ball), hit (hit ball), and tapping (stopping the ball) (Budiman et al., 2022). Hockey is a unique sport by playing a small ball using a stick so that it can be used as a recreational sport. Hockey is a sports game played by two teams where each player uses a stick with a curved end (stick) and a ball.

Push is a passing technique commonly used in hockey. Push pass is usually used at a distance of 4.5 – 13.8 m. In the push pass there are important things that must be considered, namely accuracy, movement speed, and changing direction (Vinson & Peters, 2016). Next, the accuracy of the push pass is influenced by the position of the feet and body balance. Pushing is a form of basic technique by pushing the ball which in hockey is used to pass the ball to friends, from short or long distances and as a goal shot. One of the

successes in carrying out attacks is determined by mature passes through push passes (Hermanu, 2013). By taking this into account, it is clear that the skill of pushing is important in the game of hockey. Based on some of the opinions above, it is clear that skills in playing hockey are greatly supported by good basic technical skills (Timmerman et al., 2019).

Good basic technique will be one of the determinants besides playing skills (Abade et al., 2020). In addition, proper learning is also needed so that all basic skills and playing skills can be developed. One of the steps that can be taken is to carry out learning through various games or Game-Based Approach (GBA). In GBA learning (Jarrett & Light, 2018), theoretically knowledge construction occurs through active involvement of students in games and games that raise problems, questions, and discussions, as well as reflection on games and game development to develop them.

The game must be designed with media that supports the game. Game structure involves components such as equipment, number of players needed to play the game, boundaries, rules, and skills needed to succeed in the game (Zirawaga, Olusanya, & Maduki, 2017). Learning passing techniques is very important because it determines success in playing hockey. A player's lack of prowess in performing passing skills can disrupt the course of the game and the worst result can lead to defeat for the team. Good passing ability can support the game, especially in carrying out aspects of attack and defense in the game. Thus, poor passing ability will harm the team's performance.

Participation in non-traditional games and activities promotes lifelong recreation, decision making, problem solving, and communication skills (Maina et al., 2016, p. 29), non-traditional activities can have positive effects on interest, cognition, and levels of activity. Through various games many competencies can be developed. Experiences during the game both physically (Supriady, 2022), mentally and socially will be useful for the future (Stepanchenko & Briskin, 2018). So that one can gain a basic level of some basic movement skills through exploration and have the opportunity to do so, be involved, and have an appropriate environment with space, equipment and positive reinforcement that allows us to practice and learn (Barnett et al., 2013). However, not every individual has access to conditions that will encourage learning at an appropriate level or has the ability to learn independently even when environmental conditions are supportive. The results of field observations in hockey ball game lectures, student push technique skills on average are still not good and not used effectively in the game, due to a lack of understanding of push skills in hockey ball game lectures and the lack of effective use of learning methods. The purpose of this research is to improve push skills in hockey ball games through the

method *games based approach* so that every student gets the same opportunity to improve push skills in the game of hockey.

### METHOD

This study uses an experimental method by design *pretest and posttest control group design*. The participants in this study were 69 students. Hockey lessons are carried out for 16 meetings. The implementation of learning uses a variety of games to develop push skills in hockey games. The instrument used in this study was the hockey ball push test instrument (Nurhasan, 2005). The data obtained will be tabulated and processed using SPSS 23.

### RESULT AND DISCUSSION

#### Result

**Tabel 1. Paired Samples Test**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-Posttest experiment	24.37	4.55	.356	21.32	27.469	58.54	68	.000

Based on the data above, it can be seen that the sig 2-tailed value is  $0.0000 < 0.05$ , so it can be concluded that there is a significant difference or increase in average from the pretest with treatment using the game based approach (GBA) model to the posttest results of push skills hockey ball. So it can be concluded that the game based approach (GBA) model has a significant influence on hockey ball push skills.

Table *paired sample test* shows that a mean of 24.375 is obtained, which means that there is a difference in the score of the pretest posttest results of the skills of pushing the hockey ball game. In addition, statistical data shows a statistical price of  $t = 58.541$ , with  $df = 68$ , and a significant figure or  $p\text{-value} = 0.000 < 0.05$ . Thus there are differences in the results of the hockey ball push skills after being treated with Game Based Approach (GBA) learning.

#### Discussion

The Game Based Approach (GBA) is very good to use to provide an example to students if a trainer feels lacking in exemplifying push skills so that learning objectives can be achieved optimally and in accordance with what is expected.

The results showed that there had been good changes in the experimental group. Treatment using the Game Based Approach (GBA) playing model significantly improves the push skills of hockey players. This happens because through games students feel happy so that what is done is done unconsciously by carrying out various physical activities (Fitri

et al., 2016). In addition, in the play approach students are given the freedom to express their abilities towards predetermined learning objectives. By playing, it is expected that students can have creativity and initiative to solve problems that arise during the learning process. Through play, a competitive element is also developed, so that students compete with each other to show their abilities (Prasetyo, 2016). (Frost et al., 2012) suggested that children enjoy these group activities and sports, are proud of their uniforms, and look forward to the games and performances. If handled properly by adults, exercise can have positive effects, including the social experience of being part of a group (supriady et al., 2022). Nonetheless, sports activities are organized and led by adults, and physical activity is limited to that related to sports.

According to (Butler & Griffin, 2010) by learning skills through games, students gain a deeper understanding of how to apply their skills in game situations. This ability is useful for communicating and applying knowledge in a number of different situations. This is one of the main principles of physical literacy. According to (Roach & Keats, 2018) the active play approach provides more advantages over basic movement skills. This indicates that playing actively can improve basic movement skills. In addition, basic movement skills are also influenced by physical activity and gender. (Jarvis et al., 2018) identified gender-specific components of physical activity that differentiated children with different levels of basic movement skills. Through proper physical activity, basic movement skills can be improved, in this case, hockey push skills. Physical activity guidelines and position statements stress the importance of 'muscle and bone strengthening activities' and research shows that resistance training impacts basic movement skills (Collins et al., 2019). Through a guide like in this study using a play model significantly improves basic movement skills.

The findings from this study indicate that the Game Based Approach (GBA) model provides opportunities for all students to play and improve their skills. In addition, students who demonstrated a higher level of competence in skills *object control* engage in more moderate to vigorous physical activity after doing this method (Cohen et al., 2014). Games and group directions allow students to interact with their peers and encourage them to work together and develop teamwork. Games can also be used to inject fun and enjoyment and add variety to warm-up and cool-down activities (Ministry of Education, 2013). Through this game students can be trained and improve basic movement skills in a fun way.

The game model has the following potential: (1) to facilitate the development of technical skills and tactical knowledge; (2) empowering children to learn independently and be responsible; (3) assessing tactical transfer across games; and (4) increase the fun and enjoyment in playing games (Wang & Ha, 2013). The playing approach is loaded with

teaching assignments given to students, stimulating students to think and find for themselves the reasons that underlie the movements of their performances. This approach gives a lot of understanding to students about the benefits of every action and behavior. Thus students are given the widest possible opportunity to assess themselves and their abilities during the learning process takes place (Singgih, 2012). Games provide an opportunity to gain knowledge about something, train imagination, provide opportunities to interact with the surrounding environment, and to express oneself in ways that are socially acceptable (Suherman, 2014). Through various games students will improve their basic movement skills in hockey. For most sports, the game model provides benefits and overall experience in various activities (Byl & Kloet, 2014). By having basic movement skills, it will be easier for someone to adapt to sports branching techniques, in this case the hockey push technique. This study applies the game model Game Based Approach (GBA) and they can significantly improve hockey game push skills.

### **CONCLUSION**

Based on the results of data processing and analysis, from the conclusions of this study it can be concluded that the Game Based Approach (GBA) learning model has an influence on the mastery of basic push skills in hockey game lectures. That is, after being given learning using the Game Based Approach (GBA) the skills of the push technique get better or there is an increase in the push technique itself.

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