



The Influence of Game-Based Learning Methods on Shooting Ability Learning Outcomes in Futsal Games at SMP Negeri 2 Babat Toman

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ABSTRACT

This research was motivated by the low shooting abilities of extracurricular students. Article History: This study aims to determine the effect of the target game method or target practice on the shooting ability of extracurricular students at SMP N 2 Babat Toman. This study is an experimental study with a One Group Pretest-Posttest Design. The population in this study were 20 students of SMP N 2 Babat Toman. The sampling technique used was Total Sampling where the population was used as all samples. The instrument in this study was a shooting test. Data analysis using SPSS 22 with the Shapiro-Wilk Normality Test with a sig level > 0.05, the study was declared significant because the Pretest sig value was 0.195 and the Posttest was 0.642 and with a hypothesis test, namely the T-paired samples test, it was declared significant if the t count > t table and the sig value < 0.05. The results showed that there was a significant effect of target practice on the shooting ability of extracurricular students at SMP N 2 Babat Toman with a t count of -5.699 > t table 2.093. This shows that there is a significant influence after being given training with the target game method. Thus, the hypothesis (Ha) which states "There is a significant influence of the target game method on the shooting ability of extracurricular students of SMP N 2 Babat Toman" is accepted.

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INTRODUCTION

Physical education is an integral part of overall education that is able to develop individuals as a whole in the sense that it includes physical (intellectual, emotional, moral and social) and spiritual (spiritual) aspects which in the learning process prioritize physical activity and healthy lifestyle habits (Fitron & Mu'arifin, 2022). Physical education emphasizes learning not only on psychomotor and cognitive aspects, but also on affective and social aspects (Hasan et al., 2015). The scope of physical education material in schools consists of sports games, development activities, self-test activities or gymnastics, rhythmic activities, aquatic activities, extracurricular education, and health. Sports games consist of athletics, caste, football, badminton, basketball, volleyball, futsal and other activities.

Shooting is a kick towards the goal. This technique looks easy but actually requires concentration and accuracy of the target so that the kick becomes a goal. That futsal shooting is the most powerful weapon for scoring goals. Shooting can be done in various ways, namely using the back of the foot, toes, and inner legs (Sari 2022). However, shooting with the back of the foot is more effective and is often done by players. Players must be able to shoot well and accurately under the pressure of the game and limited time, narrow space, tired physique and also guarded from opponents. The progress of futsal cannot be separated from the similarity of this game to football in general, this has an impact on the development of futsal which is still very popular throughout the world and the creation of a world-scale futsal league or competition indicates that this sport is also an alternative choice that is always a favorite sport. A number of basic techniques in futsal are the same as football, namely passing, dribbling, shooting, and so on (Fadhoil et al., 2023).

According to (Muchamad Ishak, 2018) who has discussed whether the game-based learning method has a significant influence on the learning outcomes of shooting at the goal of a soccer game. The research method used by the author is an experimental method on 20 male students of class XI MIA 1 and 2 of SMA YWKA Kota Bandung, the sampling technique uses a proportional technique. The instrument used is the Shooting test at the goal. The procedure and data processing technique use a statistical approach with the help of the Microsoft Office Excel 2010 program. The final test has a greater and more significant influence than the initial test with a t count of 18.2, as well as the control group, namely non-game-based learning from the results of the comparison of the average initial test and the final test has a greater and more significant influence than the initial test with a t count of 14.8.

Considering the importance of mastering basic techniques in futsal, especially shooting techniques, an appropriate learning approach is needed so that students' shooting abilities can develop optimally. One approach that has proven effective is the game-based learning

method, because this method not only improves students' technical skills, but is also able to foster interest, motivation, and increase social interaction in the learning process. In addition, this approach is in line with the characteristics of physical education which emphasizes physical activity and direct emotional involvement in learning. Thus, the application of game-based learning methods in shooting practice is expected to provide more significant results in improving students' skills compared to conventional or non-game methods.

THEORETICAL FRAMEWORK

Game-based learning includes learning that accommodates all existing learning theories. Learning with games can be used in general, both for behaviorism, cognitivism, and social psychology theories, because students feel happy to actively participate in the game. Another opinion about Physical Education, Sports, and Health (PJOK) Providing learning experiences is directed to guide and form a healthy and active lifestyle throughout life, (Firmansyah & Rahayu, 2016) while sports education is implemented in both formal and non-formal education through intracurricular and extracurricular activities.

Game-based learning model, Game Based Learning is a learning model that if translated into Indonesian can be interpreted as a game-based learning model. In this learning, students are required to learn, but with a playful approach (Syahputra, Rahmat & Carsiwan, 2022). The direct learning model is less effective in the physical education learning process, because currently students are increasingly intelligent and critical in following learning. Effective learning strategies can be carried out in various ways and one of them is to involve more roles in students actively, creatively and enjoyably, so that students can be more serious in following the learning process, especially in terms of cognitive, psychomotor and affective (Haris, 2018).

In light of this, the implementation of the Game-Based Learning model in the context of physical education is not only relevant but also strategic in addressing the challenges of 21st-century education. This model effectively bridges the need for meaningful and enjoyable learning experiences while also fulfilling competency targets in the cognitive, affective, and psychomotor domains. By creating contextual and interactive learning environments, students are encouraged to actively engage, think critically, and develop social skills through collaboration and communication during gameplay. Therefore, Game-Based Learning should be considered an effective and innovative pedagogical approach to enhance the quality of Physical Education, Sports, and Health instruction across various educational levels.

Futsal is the most popular and loved sport by Indonesian people, especially men from children, teenagers, to adults. This is proven by the fact that in society, both in urban and rural areas, they prefer futsal compared to other sports. In addition, schools ranging from junior high schools, high schools, to universities, futsal sports are growing rapidly.

In the game of futsal, skills are needed that must be possessed by each player. The techniques in futsal are the same as the techniques in football, starting from passing, dribbling, control, chipping, and shooting techniques (Srinivasan, 2014). Futsal is a sport that is very similar to football. Shooting is the most important part of the technique in the game of futsal because this technique must be mastered by the players. A player must master the basic skills of kicking the ball and then improve the accuracy of shooting and scoring goals from various positions on the field, then improve the accuracy of shooting and scoring goals from various positions on the field. According to Sarmento (2016) futsal game analysis should not only include game actions on the field, but must include futsal players who can be produced from the field, especially patterns or strategies for creating goals.

Thus, the development of futsal skills should not be limited to technical aspects alone, but must also incorporate the cognitive and tactical dimensions of the players. While mastering shooting techniques is essential, their effectiveness is largely influenced by the player's ability to understand game situations, anticipate the movements of opponents and teammates, and make quick and accurate decisions. Therefore, futsal training should be designed holistically, encompassing the enhancement of individual skills, comprehension of game strategies, and the ability to collaborate effectively within a team. The synergy between technique and tactics is the key to shaping futsal players who are not only skilled but also competitive across various levels of competition.

1. Futsal Game Rules

1) Ball

In futsal, the ball used is different from the ball usually used in soccer. The size of the international standard ball used in futsal is smaller than the ball used in soccer. There are several ball rules that must be observed.

2) Number of Players in a Futsal Game Team

1. The maximum number of players to start a match is five players, one of whom is the goalkeeper.
2. The minimum number of players to end a match is two players, one of whom is the goalkeeper.
3. Maximum number of reserve players: 7 people.
4. Number of referees: 2 people.
5. Number of linesmen: 0 people.

6. Limitation on the number of substitutions: unlimited.
7. Method: "floating substitution" (all players except the goalkeeper may enter and leave the field at any time; goalkeeper substitutions may only be made when the ball is not in play and with the referee's approval).
8. And the referee may not step foot into the field, only outside the field lines, unless there is a violation that requires entering the field.

3) Futsal Game Equipment :

1. Numbered Shirts

Numbered shirts are a fundamental part of the futsal uniform, allowing for the easy identification of each player by referees, coaches, spectators, and match officials. The numbers help in recording match statistics, tracking player performance, and identifying players involved in fouls or other significant game events. These shirts are usually made of lightweight, breathable material to ensure player comfort and optimal movement during gameplay.

2. Shorts

Futsal shorts are designed to facilitate freedom of movement, which is essential for quick sprints, directional changes, and ball control. Made from stretchable and sweat-wicking fabrics, they help maintain comfort and mobility throughout the game. Like shirts, shorts are typically uniform in color and design to match the team's overall kit.

3. Socks

Socks are not only part of the team uniform but also serve protective and supportive functions. They help secure shin guards in place and reduce friction between the foot and shoe, preventing blisters. High-quality futsal socks provide compression support to enhance blood circulation and reduce muscle fatigue during intense play.

4. Knee Protectors

Knee protectors are especially important for players who often perform defensive maneuvers such as slides or dives. These protectors cushion the knees against impact with the hard indoor surface, thereby reducing the risk of bruises, abrasions, or joint injuries. They are commonly made of foam or gel-padding with elastic support for comfort and stability.

5. Rubber-Soled Footwear

Futsal footwear must feature non-marking rubber soles designed for indoor court surfaces. These shoes offer superior grip, preventing slips and falls, and provide the agility needed for fast-paced movements. The low-profile design enhances ball control, while the cushioned insole offers shock absorption to protect joints during high-impact activities.

6. Towel (for personal hygiene)

Players are encouraged to bring personal towels to maintain hygiene and comfort during training or matches. Towels help wipe off sweat, keeping the face, hands, and body dry to prevent distractions and improve grip. Regular use of a towel also reduces the accumulation of sweat on the court, which could lead to slippery conditions.

7. Goalkeeper Gloves

Goalkeeper gloves are essential for players in the goalkeeper position, offering grip enhancement and hand protection. The gloves are equipped with padding to absorb the impact of powerful shots and often feature finger protection technology to prevent hyperextension. A good pair of gloves can significantly improve a goalkeeper's ability to catch, deflect, and distribute the ball effectively.

8.Calf Protectors (Braces)

Calf protectors or braces are used to stabilize the calf muscles, particularly during rapid movements or recovery from injury. These supports can help prevent strains and cramps by providing compression and reducing muscle vibration. They are especially beneficial for players with a history of muscle fatigue or those engaged in high-intensity play over extended periods.

Game Technique is a way of presenting learning materials through various forms of games (Indarwati, 2017). As an activity, playing can also help achieve complete development, both physical, intellectual, social, moral, and emotional (Hadini, 2017). Based on several opinions of experts, it can be said that games are activities that some experts can say that games are activities carried out by some students with the aim of forming personality processes and helping students achieve physical, intellectual, social, moral, and emotional development with a happy atmosphere.

Target games are a form of throwing or kicking a ball towards a target (Widodo, 2023). Target games are games that require high concentration, calmness, focus, and precision in the game

(Nuriawati et al., 2020). This game is actually the basis for other games, because almost every game has a target (Alamsyah et al., 2019). For example, basketball, soccer, futsal, or volleyball (Aini, 2021). Basically, this game is a form of precision game to put objects into targets. The goal of this game is the accuracy of putting objects into the target (Puriana, 2020).

The results of Priatno's research, (2014) showed that there was a significant influence between the target playing method and shooting ability. Another study, Sumana, (2015) stated that there was a significant influence between the target game training model and increasing the accuracy of shooting kicks. Target games can be used to help players train their concentration and target accuracy, so that players can be trained to shoot at targets correctly (Zanurdi et al., 2022). Although research on target games has been widely studied nationally, very few have applied the game to junior high school students.

METHOD

This experimental study used a one-group pretest and posttest design. This study only involved one group. The effect of the treatment can be known by comparing the test results before the treatment was given and the test results after the treatment was given. Research design structure

RESULTS

Data analysis in this study was carried out by testing several steps of statistical data testing. The prerequisite test used the Shapiro-Wilk test with the aim of determining the normality of the data and the hypothesis test used the paired sample t test, Statistical analysis used the SPSS 22 application.

1) Test Procedure

Table 1.Shapiro-Wilk Normality Test

Normality Test						
	Kolmogorov-Smirnova			Shapiro Wilk		
	Statistics	Df	Signature.	Statistics	Df	Signature.
Pre-exam	,181	20	,085	,935	20	,195
Posts	,139	20	,200	,965	20	,642

(Source: SPSS 22)

Based on Table 1. above, it can be seen that the normality test using Shapiro-Wilk with the help of SPSS 22 pretest-posttest data The shooting ability of extracurricular students

of SMP N 2 Babat Toman has a p (sig) value. > 0.05 , then the variable is normally distributed. The Shapiro-Wilk test shows a sig value greater than 0.05 of 0.195 pretest and 0.642 posttest. If the data is not normally distributed because the sig value is less than 0.05, it can be concluded that the data is not normally distributed. With this normality test, it can be concluded that the pretest and posttest data have a significant relationship with data processing using the SPSS 22 application.

2) Initial Hypothesis

Table 2. Paired Samples T Test

Paired Sample Test							
Difference in pairs						df	
	Means	Standard Deviation	Std.Emror Meaning	95% Confidence /ntenal Difference		T	Signature (2-tald)
				Lower	On		
Pair 1 Pre-test Post-test	-3,700 thousand	2,904 people	,649	-5.059	-2,341 years	-5,699 US dollars	19 ,000

(Source: SPSS 22)

Based on the analysis results in Table 4.3 above, a Paired samples t test was conducted using SPSS 22 to compare the average of two paired data groups, namely before and after treatment. The test results show that the difference in the average pretest-posttest values in the table above obtained a t value of -5.699 with a sig (2-tailed) of 0.000, which means that there is a difference between the pretest and posttest values, so the t value calculation was carried out. With this data processing, the pretest and posttest results have a significant difference because the sig (2-tailed) value is less than 0.05 and is explained in the table of mean values of -3.700, Std. Dev of 2.904 and the calculated t value of -5.699 with df 19, then the results of this t test indicate an alternative hypothesis (H_a) which reads "There is a significant influence on the results of shooting ability by using target game training for students of SMP N 2 Babat Toman", accepted.

CONCLUSION

Based on the comparison of the results of the mean difference and the mean pretest, it can be seen that the percentage increase in the shooting ability of futsal extracurricular participants at SMP N 2 Babat Toman was 18.69% after being given training treatment with the

target game method. To find out whether the target game method has an effect on shooting ability, it can also be seen by comparing the t-count value with the table, based on the table. From the results of the analysis, it can be seen that $t\text{-count} = 5.699 > + (0.05) (19) = 2.093$. This shows that there is a significant effect after being given training with the target game method.

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