



Enhancing Futsal Game Performance: A Tactical Game Model Implementation

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Article Info

Article History:
Received April 2022
Revised June 2022
Accepted July 2022
Available Online October 2022

Keywords:
Conventional model, futsal, tactical game model

Abstract

The application of a learning model is one of the variables affecting physical education learning outcomes, both in cognitive, affective, and psychomotor aspects. This study aimed to examine the effect of the tactical game model in improving learning outcomes. The pretest-posttest control group design with experimental method was used in this study. The participants of the study were 20 students who took part in the futsal extracurricular (10 male students and 10 female students). The instrument used in this study was Games Performance Assessment Instrument (GPAI) to measure futsal game performance. Based on data processing and analysis, the following results were found 1) both tactical and conventional learning models had an impact on improving futsal game performance, 2) the tactical game model had a higher and more significant effect than the conventional model on improving the learning outcomes, namely futsal game performance, proven by the results of the N-Gain percentage where the score of the tactical group was 63.5% while the score of the conventional group was 51.6%. Based on the result of the analysis, it implies that both models (tactical and conventional models) have an impact on increasing learning outcomes, specifically in futsal game performance, where the tactical game model has a higher impact and is more effective than the conventional model.

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INTRODUCTION

In essence, physical education can be understood as a journey that imparts to every child the engagement in diverse physical activities, the development of skills and knowledge, and the cultivation of positive attitudes. The ultimate aim is to encourage healthy, active, and enjoyable lifestyles (Dyson, 2014). Physical activity in physical education is a commercial activity that emphasizes the physical condition of students. This can be done through practicing various sports, including sports aimed at physical fitness and physical health. students (Darmawan 2017; Fikri 2017; Hodges, Wicke and Flores-Marti 2018; Rokhayati 2016).

In practice, physical activity can be carried out both into the teaching process that is integrated in the curriculum or class (internal) as well as in the process outside the classroom (extracurricular). Intercurriculars are the main educational activities which include teaching and learning activities as well as counseling, while extracurriculars are activities that aim to broaden students' knowledge (Wicaksono et al. 2020). Nurlathifah (2017) that physical education is practiced. Activities at school are sports activities that are part of the physical education curriculum, while extra-curricular activities are sports that are carried out outside school hours (Nurlathifah, 2017).

One of the most popular sports offered in almost all educational units is the extracurricular game of futsal (Mailani 2016; Kamnuron, Hidayat and Nuryadi 2020; Sucipto, 2020). Playing futsal is good for school children because movements in futsal can effectively encourage children's growth and development. Therefore, this is one of the reasons why futsal lessons exist and are held in almost every school. This is because the teacher does not set an example for students. According to Gumilar (2016), physical education teachers teach game material using methods or models that only emphasize basic techniques, making students bored when learning games. This may be the cause of students lacking playing skills because they are bored in learning.

According to Muazzam (2021), for physical education teachers to practice physical education, it is necessary to rely on the most effective forms of influence, techniques and pedagogical principles. Therefore, a working model must be provided to improve students' playing skills. In physical education, the method is selected in each case according to the content of the task and the movement material of each child, the level of student mastery, general development, physical condition, age and typological characteristics of each child.

Therefore, the definition of a learning model must be following the needs of students and this is very important for the success of learning objectives. Futsal itself is a sport, just like football. The approaches that are often used in-game sports are usually tactical (tactical game models) and conventional approaches (Chatzipanteli et al. 2016; Harvey and Pill 2016; Harvey et al. 2017; Ribeiro et al. 2019; Sucipto 2020; Sgro et al. 2021).

TGM is one approach that can be taken to sports games. One of them is futsal. If the teacher teaches the skills of a sport and at the same time teaches its application in playing situations, then the tactical approach is one of the right solutions to use. Thus a tactical approach can be used in futsal because this sport is a game sport. The technical approach itself is one of the approaches that can be taken in playing sports such as futsal.

The technical approach itself is used to focus on the basic elements. Through a technical approach focused on providing motion learning separately. The separate movement intends to focus movement on one of the basic technical skills first before moving on to the next stage. As explained by Yudiana (2015), the pattern of learning implementation is focused on mastering basic techniques first and then games. Thus the technical approach focuses more on the basic technical elements in stages before the actual form of the game.

The similarities between the two are that they both focus on the result of playing skills, on the other hand, there are differences in

tactical and technical approaches in the implementation of learning playing skills.

The tactical approach is implemented directly in the actual game with basic technical skills, while the technical approach is implemented gradually until it reaches the actual game stage. Both the tactical and technical approaches themselves influence the development of playing skills. In addition, Sucipto (2020) states that the tactical approach affects students' understanding and ability to play soccer. The findings of this research lead to the conclusion that both tactical and technical approaches have an impact on playing abilities.

After making observations at the UPI Laboratorium School (Elementary School), there are still many students who have a poor ability to play futsal, so students feel bored and less active when extracurricular playing futsal. This is due to monotonous learning with only an emphasis on basic abilities. Thus the researcher tries to apply the appropriate learning method or model approach for extracurricular futsal games to the fullest and can improve futsal game performance.

The learning model approach is a form of learning that is illustrated from start to finish which is presented in a unique way by the teacher. Two learning models, the tactical learning model (TGM) and the technical approach learning model, appear to be suitable for implementation in futsal games. The selection of these models is based on the similarity between futsal and football as sports games. Furthermore, previous research in the field of football provides evidence of a correlation between tactical and technical approaches and their impact on playing skills. With these two models, it can be seen between the comparisons in the process of playing futsal skills.

METHOD

This study was an experimental study using a pre-test and post-test control group design. The participants in this study consisted of 20 students who took part in the futsal extracurricular at the UPI Laboratorium School

(Elementary School). Samples were randomly divided into two groups. Group 1 (10 students) applied TGM and group 2 (10 students) applied the conventional model. This study conducted two tests (pre-test and post-test).

After the pre-test and before the post-test, participants apply a tactical approach and a technical approach. Learning model intervention for 5 weeks, consisting of 3 meetings per week and 120 minutes for each meeting. The instrument used to measure students' badminton playing skills in this study is Game Performance Assessment Instrument (GPAI) which was translated into Indonesian as the Playing Performance Assessment Instrument (IPPB) (Oslin, Mitchell, and Griffin 1998).

Data Collection Technique

The data in this study were carried out correctly to obtain valid and relevant data. The technique used to collect data in this study consisted of three steps, namely pretest, treatment, and posttest. Before being given treatment, an initial test was carried out using GPAI in the tactical and technical groups to identify students' futsal game performance before being given treatment.

The treatment given in this study is to apply a tactical approach and a technical approach. The treatment was carried out for five weeks, with three meetings a week. After being given treatment to the tactical and technical groups, a posttest/final test was carried out to assess badminton skills using instruments such as the pretest/initial test, namely the GPAI. Data are reported descriptively as mean \pm standard deviation.

Data were checked for normal distribution using the Shapiro-Wilk test. Paired sample t-test was performed to determine the significant effect and an independent sample t-test was performed to determine significant differences. The significance level was set at $p < 0.05$. To see the level of effectiveness in the two approaches, the N-Gain score test was carried out. Statistical analysis of this study was carried out using statistical software SPSS ver-

sion 25.

RESULT

The data obtained after the implementation of this study were the scores of the students' futsal game performance who took part in the futsal extracurricular at the UPI Pilot Laboratory Elementary School, divided into two groups, namely tactical and technical as the research sample. The following can be seen in table 1.

Table 1. Paired Sample T-Test

Variable	Sig.
technical	0,000
tactical	0,000

Based on table 1, regarding the results of the Paired Sample T-Test, it was found that the sig value was $0.000 < 0.05$, so it can be concluded that there is an influence of the technical approach on the futsal playing skills of the UPI Pilot Laboratory Elementary School players who take part in futsal extracurriculars. Meanwhile, in the tactical group, a sig value of $0.000 < 0.05$ was found, so it can be concluded that there is an influence of the tactical approach on the futsal playing skills of the UPI Bandung Pilot Laboratory Elementary School players who take part in futsal extracurriculars. Thus it can be concluded that the tactical group has a greater influence than the technical group, because the tactical group has a greater mean difference than the technical group.

After testing the analysis using the t-test (Paired Sample T-Test), then proceed with the analysis of the t-test (Independent Sample T-Test). This can be seen in Table 2.

Table 2. Independent Sample T-Test

Variable	Sig.
technical	0,004
tactical	

Based on Table 2, regarding the results of the Independent Sample T-Test on measuring students' Futsal playing skills between before and after applying the technical approach and tactical approach with a sig value of $0.004 < 0.05$, it can be concluded that there is a difference futsal playing skills between before and after applying the technical approach to the tactical approach of UPI Laboratory School players who take part in futsal extracurriculars. The following is table 3 regarding the N gain score:

Table 3. N-Gain Score

Variable	N-Gain	Percentage	N	Information
technical	0,51	51,6%	10	less effective
tactical	0,63	63,5%		effective enough

Based on table 3 regarding the results of the N-Gain Score test on measuring futsal game performance, the technical approach has an N Gain value of 0.51 which indicates that the N gain value of the technical approach is in the high category because > 0.7 . Then the N Gain present on the technical approach is 51.6% which indicates that the influence of the technical approach is less effective on futsal game performance because the percentage N Gain score is $< 56\%$.

The tactical approach has an N Gain value of 0.63 which indicates that the N Gain value of the tactical approach is in the high category because > 0.7 . Then the N Gain present on the tactical approach is 63.5% which indicates that the tactical approach is quite effective in influencing futsal game performance because the N Gain Score percentage is $> 56\%$. So it can be concluded that there is a tactical approach that has a fairly effective effect compared to a technical approach on the playing skills of UPI Laboratory School players who take part in extracurricular futsal.

The results of this study indicate that a technical approach and a tactical approach can have a significant influence on the results of

playing futsal skills, this is proven through hypothesis testing through the Independent Sample t-Test which indicates that the sig. $0.04 < 0.05$, meaning that both approaches have a significant impact on improving skills in playing futsal. Based on data processing using the Paired Sample t-test hypothesis test in the technical group, the results found that there was an influence in improving playing skills, this was because the application of a technical approach to futsal game performance had a sig $0.00 < 0.05$.

On the other hand, seen from the N-Gain Score test, the presentation of the technical approach is $< 56\%$, which is 51% , this indicates that the technical approach is less effective in improving playing skills. This is because the technical approach makes the learning situation look monotonous, through the tactical approach students get drilling exercises that emphasize basic techniques before moving on to the next stage, this causes students to experience the real game situation during the training process.

The technical approach is carried out in a step-by-step manner starting with improving skills, simple games, and then to more complex games. So that through a technical approach students cannot practice directly to the actual game situation, but students must go through phase by phase to reach the real game situation. This has an impact on learning situations and conditions that tend to be monotonous and boring so it does not stimulate students' interest in learning. In developing student skill competence, what is of concern is that students do not enjoy repeated practice in isolated skill practice conditions. Repeated practice is the key to success in developing skill competencies, but students are almost unmotivated (Gumilar et al 2021).

Learning must be given in stages from the simple to the increasingly complex because the learning process occurs in stages which gradually become consistent and movements become proficient. Apart from that, complex movements become easier because they are giv-

en from simple stages to more complex ones (Subarjah, 2010; Aprianova, F & Hariadi, 2017; Winarni, S. W. 2008).

In addition, students become less concentrated and tend to affect motivation in the futsal training process. Students in the technical group only received training related to the emphasis on basic futsal techniques so they did not understand the actual game of futsal. Playing skills are not only about technique but include understanding patterns of playing futsal which allows students to learn a lot.

Whereas in the tactical group, there was a significant influence on futsal game performance with a sig value of $0.00 < 0.05$. Judging from the N-Gain Score test the tactical group produced a percentage of $> 56\%$, which was 63.5% , this indicated that the tactical group had a fairly effective influence on improving skills in playing futsal. In the tactical approach, the implementation or activity steps are carried out in real game situations, so that students are required to be able to analyze and solve a problem and play an active role in carrying out the motion tasks that are carried out so that they explore and develop the motion tasks in playing futsal.

Through a tactical approach, students are encouraged to solve game tactics problems (Sucipto, 2020). In this case, the context of learning, especially in the context of learning skills, namely futsal, that the more opportunities to do skills, the more opportunities there are practice skills and be motivated to want to do the skills (Hadiana, 2020; Gumantan, & Fahrizqi, 2020).

The tactical approach applied can improve technical mastery skills and student understanding (Budi, Hidayat, Febriani, 2019; Ridwan, Darmawan, & Indiarsa, (2017). Research that is in line with this research is Festiawan, R. (2020) which states that tactical and technical approaches influence skills.

Understanding game patterns is familiar with solving a problem in a futsal playing situation which makes the tactical approach more effective in improving futsal game perfor-

mance. The aim of the tactical approach is for students to be able to combine mastery of the basic techniques learned with their playing abilities while at the same time instilling confidence in students to be able to apply playing tactics that are in line with the increase in their skills (Sivaganesan, Chandrasekaran, & Ruban, 2016). Thus it can be concluded that both tactical and technical approaches have an increasing impact on futsal game performance.

But on the other hand, it has a significant comparison, where the tactical approach has a greater influence than the technical approach in the process of improving skills in playing futsal, then the tactical approach has results that are effective enough to be used in improving skills in playing futsal compared to the technical approach which is less effective, this can be seen from its treatment, where the tactical approach has a process of solving game problems while the technical approach is more monotonous towards basic things. These findings support some of the results of studies conducted by (Chatzipanteli et al. 2016; Darmawan 2017; Fikri 2017; Harvey et al. 2017; Harvey and Pill 2016; Hodges, Wicke, and Flores-Marti 2018; Mailani 2016; Sundaru, 2017; Ribeiro et al. 2019; Rokhayati 2016; Sgrò et al. 2021; Sobarna, Hambali, and Koswara 2020; Wicaksono et al. 2020) that it have an influence improving skills in playing futsal.

CONCLUSION

Based on the results of data analysis and research findings that have been carried out, it can be concluded that TGM and the conventional model influence improving skills in playing futsal. In practice, there is a significant comparison between TGM and the conventional model for improving skills in playing futsal. TGM tends to have a higher impact than conventional models.

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