



Journal of Physical Education for Secondary Schools

Journal homepage: <https://ejournal.upi.edu/index.php/JPESS>



The Effect of Modification of Football Game Learning on Football Playing Skills at SSB Permata Curgu Bogor Regency

Derry Renanda Putra Siahaan¹, Sucipto¹, Mudjihartono¹, Mochamad Ridwani¹, Helmy Firmansyah¹, Reshandi Nugraha¹

¹Faculty of Sport and Health Education, Universitas Pendidikan Indonesia, Indonesia

*Correspondence: E-mail: derryrenanda_siahaan@upi.edu

ABSTRACT	ARTICLE INFO
<p>This study aims to investigate the effect of learning modifications in soccer game instruction on the playing skills of students at SSB Permata Curug Bogor, specifically targeting players aged 14–15 years. The research employed a quantitative experimental method using a one-group pretest–posttest design, allowing the researcher to measure the impact of instructional interventions over time within the same group of participants. A total of 20 students were selected through purposive sampling, based on their active participation in soccer training programs. The intervention involved the implementation of modified learning strategies, supported by the use of the Game Performance Assessment Instrument (GPAI) to evaluate improvements in tactical and technical aspects of gameplay. Data were analyzed using SPSS version 22.0, and the results indicated a statistically significant improvement in football playing skills, as evidenced by a p-value of $0.00 < 0.03$, confirming that the applied modifications had a positive effect on the students' soccer performance. These findings suggest that incorporating structured modifications into soccer learning can effectively enhance skill execution and overall game performance in youth players. The study recommends conducting further research with larger and more diverse sample populations, across varied contexts and age groups, to generalize the applicability of modified learning in football education and coaching.</p>	<p>Article History: <i>Submitted/Received 01 Jan 2024</i> <i>First Revised 05 Jan 2024</i> <i>Accepted 27 Jan 2024</i> <i>First Available online 28 Mar 2024</i> <i>Publication Date 01 Apr 2024</i></p> <hr/> <p>Keyword: <i>modification,</i> <i>game learning</i> <i>football game,</i> <i>football playing skills,</i> <i>GPAI.</i></p>
© 2024 Kantor Jurnal dan Publikasi UPI	

1. INTRODUCTION

Physical Education, Sports and Health is an integral part of education as a whole, aimed at developing aspects of physical fitness, motor skills, critical thinking skills, social skills, reasoning, emotional stability, moral actions, aspects of healthy lifestyles and introduction to a clean environment through selected physical, sports and health activities that are planned systematically in order to achieve national education goals (Bailey, 2018). Education as a process of human development that lasts a lifetime, physical education, sports and health taught in schools has a very important role, namely providing opportunities for students to be directly involved in various learning experiences through selected physical, sports and health activities that are carried out systematically (Penney & Jess, 2004).

The purpose of Physical Education is to develop physical, mental, emotional and social fitness through physical activities. Physical education is an integral part of overall education that aims to improve individuals organically, neuromuscularly, intellectually and emotionally through physical activities. The opinion is clear that physical education has a complex part, therefore the provision of learning experiences is directed to foster better physical growth and psychological development, while forming a healthy and fit lifestyle throughout life (Costa et al., 2015). There is no education that does not have pedagogical targets and no education is complete without physical education, sports and health, because movement as a physical activity is the basis for humans to know the world and themselves which naturally develop in line with the development of the times. So far there has been a tendency to give meaning to the quality of education that is only associated with aspects of cognitive abilities. This view has resulted in the neglect of moral, ethical, character, art, psychomotor, and life skill aspects. In physical education, the element of play is also considered important, because playing with peers can develop psychomotor abilities (Mardotillah Mila & Zein Dian Mochammad, 2016).

Teachers must be able to develop effective physical education learning, the learning process is made so that students are interested and enthusiastic, and eager to do it. If feelings of joy and happiness have arisen in students, then this will be effective in spurring the spirit of physical activity. Feelings of joy and happiness will arise in students when invited to play, (Nur, 2019). This is in line with what was stated by (Bavelier et al., 2010) who stated that playing is any activity that can cause pleasure for children. Playing is done by children willingly without coercion or pressure from outside. Playing is something that is very much needed by children, of course in this sophisticated era with the increasingly advanced world of technology, students are increasingly decreasing the level of playing with their peers. Playing in physical education makes students happy, happy which arises in themselves directly, so that students are more enthusiastic in the process of learning physical education. When talking about physical education, of course, we do not forget the element of sports, because there are many sports that are included in the realm of physical education, and one of them is football.

Football is a sport that is very popular with all groups, from children to adults, because the game of football involves many people (Cope et al., 2017). In line with the opinion of (Liu et al., 2015) explained that "football is a team game, each team consists of 11 players and one of them is a goalkeeper. This game is almost entirely played using the legs, except for the goalkeeper who is allowed to use his arms in the penalty kick area". Based on the explanation of the definition of the game of football, it can be seen that the game of football can be played in groups and almost all movements in the game of football use the legs, except for the goalkeeper. Nowadays, football games are not only played for recreation and to fill free time, but also as a means of education in this case learning about football playing skills.

Permendikbud no. 70 of 2013 concerning the basic framework and structure of the 2013 curriculum explains that one of the student learning outcomes is in the form of core competencies in the skills domain. The basic competencies are detailed as follows: "Processing, reasoning, and presenting in concrete and abstract domains related to the development of what is learned in school independently, and being able to use methods according to scientific principles". From these core competencies, the following basic competencies are derived: "Practicing variations and combinations of skills in playing one of the big ball games with good motor coordination". Based on the explanation of Permendikbud no. 70 of 2013, it is known that learning the game of soccer is included in a learning system to implement variations and combinations of skills in playing the game of soccer with good motor coordination.

According to (Bloomfield et al., 2007), basic skills in football consist of three types of skills, including:

1. Locomotor skills in playing soccer are movements that change places, such as running in all directions, jumping, leaping and sliding.
2. Non-locomotor skills in playing soccer are movements that do not change places, such as reaching, bouncing, bending, twisting.
3. Manipulative skills in playing soccer are movements such as kicking the ball, dribbling the ball, heading the ball, throwing the ball and catching the ball for the goalkeeper.

Based on the description above, the influence of skills is one of the factors that encourages individuals to carry out desired activities which are the basis for developing personality and abilities to achieve achievements, but not all students have the same skills between students and skills are a manifestation of the quality of coordination and body control in performing movements. Movement skills are obtained through the learning process, namely by understanding movements and performing repeated movements with the awareness of thinking about whether or not the movements that have been done are correct. Skills here are skills in learning soccer games, skills must also be considered because skills must be possessed by every student. Skills have an important role so that to achieve skills that are absolutely owned by students, students must practice continuously and consistently, but the facts on the ground are very different, students who feel bored with the standard learning process will make students lazy, therefore, the author offers modifications (Bloomfield et al., 2007).

Learning the game of soccer must be carried out with the right steps, and of course it requires the right planning program and strategy, to achieve effective and efficient learning, students are given a modified soccer game treatment. so that learning objectives can be achieved optimally. However, before determining the modification of learning, the characteristics of the students or the competencies that the students already have must be known first so that learning will be more appropriate and focused. Judging from the results of the author's observations, the solution to solving this problem is through modification. Modification is generally interpreted as an effort to change something in the most interesting way possible, so that students feel happy to follow physical education learning (Montesano & Mazzeo, 2019). The purpose of modification according to (Fairclough & Stratton, 2006) states: "Modification in physical education subjects is needed with the aim that: a) Students get satisfaction in following lessons, b) Increase the possibility of success in participating, c) Students can do movement patterns correctly".

From this opinion, it can be concluded that modification can be used as an alternative tool for implementing physical education learning so that learning becomes interesting for

students. So that students feel more interested and not bored in learning soccer games with modified field sizes.

Based on the author's interview with the football coach at Ssb Permata Curug, "so far, football learning has used a standard training program determined by the Ssb coach, and has never made any modifications outside of that. Because the football learning process has been determined in a standard way, where the implementation process is the same for all age groups", then this cannot get maximum results. The process should not be like that, students in the age group 7 (seven) to 9 (nine) years are taught to play beginner level football such as passing and shooting, students in the age group 10 (ten) to 12 (twelve) years can be taught to play intermediate level football such as dribbling techniques, and students in the age group 13 (thirteen) to 15 (fifteen) years can be taught to play advanced level football such as strategy and so on. Likewise, students' physical abilities must be differentiated in getting football learning, because not all students have the same physique, some tend to be weak, some already have a physique that tends to be stronger like athletes. With the implementation of a football learning system like this, the author hopes that there will be many experts from among young Indonesians who can make the nation's name fragrant in the world through the national football scene. In essence, the current football learning method that equates differences in age, education, and physical condition is not appropriate to use if you want to get maximum results.

The purpose of this study was to determine the effect of modification of soccer game learning on soccer playing skills at SSB Permata Curug. The independent variable in this study is the modification of soccer game learning. The dependent variable in this study is soccer playing skills. So by using the training program as a control variable, the author will examine how the effect of modification of soccer game learning on soccer playing skills.

2. METHODS

This type of research is experimental quantitative research. An experiment is a research that is intended to determine whether or not there is an effect of something imposed on the subject of study, the method is by comparing one or more experimental groups that are given treatment with one or more comparison groups that do not receive treatment. states that experimental research is most appropriate for testing cause-and-effect relationships through hypothesis testing using an analytical quantitative approach. Research can be interpreted as a research method used to find the effect of certain treatments on others under controlled conditions.

Population

In his seminal work "Research Methods." As delineated on page 119, a population is defined as a generalized domain encompassing objects or subjects that possess specific attributes and characteristics. These elements are deliberately selected by researchers for in-depth examination, ultimately leading to the formulation of empirical conclusions.

Extrapolating from this theoretical framework, the researcher has identified the study population for the present investigation. The selected population comprises the student cohort enrolled in the SSB (Soccer School) Permata Curug, situated within the administrative boundaries of Bogor Regency. This demographic group has been deemed suitable for addressing the research objectives and hypotheses under consideration. The rationale for this population selection stems from its alignment with the study's focal points and its potential to yield meaningful insights into the phenomena being investigated. By concentrating on this specific subset of soccer school attendees, the researcher aims to generate data that are both

representative and pertinent to the broader context of youth soccer development in the region.

Data Analysis

The process of data analysis constitutes a fundamental aspect of empirical research, involving the systematic reduction and representation of complex information into more comprehensible forms. Who posits that "data analysis methodology encompasses the techniques employed to process research findings with the objective of deriving cogent conclusions and establishing robust analytical instruments."

At its core, data analysis can be characterized as a multifaceted procedure that aims to transform raw data into a more accessible and interpretable format. This transformation facilitates the extraction of meaningful patterns, trends, and insights from the collected information. The simplification inherent in this process does not imply a diminution of the data's intrinsic value or complexity; rather, it serves to enhance the clarity and coherence of the information, thereby augmenting its utility for both researchers and stakeholders.

The methodological approach to data analysis typically involves several interconnected stages, including data cleaning, normalization, categorization, and visualization. These steps collectively contribute to the distillation of large, potentially unwieldy datasets into more manageable and intellectually digestible units of information. This refined representation of data not only aids in the immediate comprehension of research findings but also facilitates more sophisticated analytical procedures, such as statistical modeling, hypothesis testing, and predictive analytics.

3. RESULTS

After processing and analyzing the data using the IBM SPSS Statistics 22 for Windows program, the next step is to discuss the research results. The results of the descriptive analysis in this study indicate that there is an increase in the average value of each student. Where during the pretest the average value obtained was 72.0, then after being given treatment and a posttest the average value increased to 78.2.

The results of the normality test of soccer playing skills show that the data is normally distributed so that research can be conducted. This is evidenced by the significance value at the time of the pretest $0.035 > 0.05$ and posttest $0.123 > 0.05$ which means that the data is normal.

The results of the homogeneity test of soccer playing skills show that the data is homogeneously distributed so that research can be conducted. This is evidenced by a significance value of $0.276 > 0.05$ which means that the data is homogeneous.

Based on the data processing carried out, the modification of football game learning has a positive effect on football playing skills at Ssb Permata Curug Bogor. This is evidenced by the sig value for the variable of football playing skills $0.003 < 0.05$ then H_0 is rejected. So the hypothesis is that there is an effect of modification of football game learning on football playing skills at Ssb Permata Curug Bogor.

This significant influence is in a positive way, who stated that "in a learning process, especially in physical education learning in schools, it can be done by using modifications. Modification is one of the efforts that can be made by teachers so that learning reflects developmentally appropriate practice, which means that the teaching tasks given must pay attention to changes in children's abilities and can help encourage these changes". From this opinion, modification is very necessary in game learning, in this case the author modified the

learning of soccer games to improve students' skills in soccer games. Who stated that "modification of sports games can be done by reducing the structure of the game. These structures include:

- 1) Field Size
- 2) shape
- 3) size and number of equipment used
- 4) type of skill used
- 5) rules
- 6) number of players
- 7) organization of the game
- 8) goal of the game".

From the explanation above, the author can conclude that the modification of soccer game learning functions to explore potential and develop skills that exist in each student. So it can be ascertained that the modification of soccer game learning has an effect on student skills, one of which is soccer playing skills.

4. DISCUSSION

This discussion refers to the results of data analysis using the IBM SPSS Statistics 22 for Windows program, which showed a significant increase in students' soccer playing skills after the implementation of learning modifications. Descriptive data showed that the average value of students' skills increased from 72.0 in the pretest to 78.2 in the posttest. This increase indicates that the learning modification is effective in improving students' skills in playing soccer. This is important because it shows that the intervention carried out not only has an impact on the average value, but also on students' practical abilities in playing soccer.

The results of the normality and homogeneity test of the data support the validity of the study because the data is normally distributed and homogeneous. In the analysis of normality and homogeneity of the data, the significance value > 0.05 indicates that the data has met the requirements for further analysis. This strengthens the credibility of the research results that will be taken regarding the conclusions about the effect of learning modifications to be accurate. Normal and homogeneous data are important prerequisites for valid statistical analysis so that the research results can be relied upon.

The positive suitability of learning modifications to soccer playing skills, in learning modifications, effective methods can be reflected from practices in accordance with student development. Modifications made such as adjusting the size of the field, equipment, and rules of the game help students better understand and master the skills taught. This also reflects an effort to make learning more relevant and in accordance with student needs, which in turn improves learning outcomes.

The positive suitability of learning modifications to soccer playing skills. In the context of learning modifications, effective methods are reflected in practices that are in accordance with student development. By making adjustments such as changing the size of the field, equipment, and rules of the game, students can more easily understand and master the skills taught.

These modifications help create a learning environment that is more relevant to students' needs. For example, adjusting the size of the field and equipment according to the age and abilities of students ensures that they can practice in a way that suits their skill level. It also helps them feel more comfortable and confident when practicing.

As a result, the modifications made contribute to improved learning outcomes. By adjusting learning elements to better suit students' needs and development, the learning

process becomes more effective. This effort supports students in achieving a better understanding and mastery of skills in playing soccer.

Overall, the results of this study confirm the importance of modification in the learning process to improve students' practical skills. Modification is not only useful in adjusting learning to students' abilities, but also optimizing learning outcomes by making activities more appropriate to the context and needs of students. By continuously implementing and evaluating modifications in learning, teachers can be more effective in developing students' skills and achieving better educational goals.

5. CONCLUSION

Based on data processing and analysis using the IBM SPSS Statistics 22 for Windows program, this study shows a significant increase in students' soccer playing skills at Ssb Permata Curug Bogor. The results of the descriptive analysis indicate that the average value of soccer playing skills increased from 72.0 in the pretest to 78.2 after being given treatment and posttest. The normality and homogeneity tests show that the data distribution is normal and homogeneous, with a significance value that supports the validity of the research results.

Modification of soccer game learning has been shown to have a positive effect on students' soccer playing skills, as indicated by a significance value of 0.003 which is smaller than 0.05. This indicates that the research hypothesis stating that there is an effect of modification on soccer playing skills can be accepted. In other words, the modifications applied in learning have succeeded in significantly improving students' skills.

Regarding the importance of modification in learning to reflect the development of children's abilities, the results of this study confirm that modification of game learning, such as reducing the structure of the game and adjusting various game elements, is effective in improving students' skills. These modifications help in exploring potential and developing students' skills, ensuring that the learning methods applied are in accordance with students' needs and abilities, and facilitating the improvement of football playing skills.

5. REFERENCES

- Bailey, R. (2018). Sport, physical education and educational worth. *Educational Review*, 70(1), 51–66. <https://doi.org/10.1080/00131911.2018.1403208>
- Bavelier, D., Green, C. S., & Dye, M. W. G. (2010). Children, wired: for better and for worse. *neuron*, 67(5), 692–701. <https://doi.org/10.1016/j.neuron.2010.08.035>
- Bloomfield, J., Polman, R., & O'Donoghue, P. (2007). Physical demands of different positions in FA Premier League soccer. *Journal of Sports Science and Medicine*, 6(1), 63–70.
- Cope, E., Bailey, R., Parnell, D., & Nicholls, A. (2017). Football, sport and the development of young people's life skills. *Sport in Society*, 20(7), 789–801. <https://doi.org/10.1080/17430437.2016.1207771>
- Costa, H. J. T., Abelairas-Gomez, C., Arufe-Giráldez, V., Pazos-Couto, J. M., & Barcala-Furelos, R. (2015). Influence of a physical education plan on psychomotor development profiles of preschool children. *Journal of Human Sport and Exercise*, 10(1), 126–140. <https://doi.org/10.14198/jhse.2015.101.11>
- Fairclough, S. J., & Stratton, G. (2006). Effects of a physical education intervention to improve student activity levels. *Physical Education & Sport Pedagogy*, 11(1), 29–44. <https://doi.org/10.1080/17408980500467613>

- Liu, H., Gómez, M. A., & Lago-Peñas, C. (2015). Match performance profiles of goalkeepers of elite football teams. *International Journal of Sports Science and Coaching*, 10(4), 669–682. <https://doi.org/10.1260/1747-9541.10.4.669>
- Mardotillah Mila, & Zein Dian Mochammad. (2016). Silat: identitas budaya, pendidikan, seni bela diri, dan pemeliharaan kesehatan. *Jurnal Antropologi: Isu-Isu Sosial Budaya*, 18(2), 121–133.
- Montesano, P., & Mazzeo, F. (2019). Improvement in soccer learning and methodology for young athletes. *Journal of Physical Education and Sport*, 19(3), 795–801. <https://doi.org/10.7752/jpes.2019.s3113>
- Nur, N. A. (2019). Factors influencing students' enthusiasm in speaking class. *English Language Teaching for EFL Learners*, 1(1), 24. <https://doi.org/10.24252/elties.v1i1.7420>
- Penney, D., & Jess, M. (2004). Physical education and physically active lives: A lifelong approach to curriculum development. *Sport, Education and Society*, 9(2), 269–287. <https://doi.org/10.1080/1357332042000233985>