

Futsal Dribbling learning model based to play for elementary school children

Deny Maryadi¹, Iman Sulaiman², Hernawan³, Taufik Rihatno⁴

¹⁻⁴ Postgraduate, Jakarta State University, Indonesia

Abstract

This study aims to determine the effect of futsal dribbling learning models based on play for elementary school children. Data was collected at SDN 09 Lenteng Agung, SDN Ciasmara 01 Pamijahan and SDN Kramat Begi Depok. The research method used is Research & Development (R& D). Data collection began with the interview of the Physical Education teacher at the elementary school, then conducted a preliminary test, the treatment of learning models and finally a final test. Hypothesis testing techniques used in this study use statistical analysis techniques t-test at a significant level $\alpha = 0.05$. The results showed that the dribbling learning model based play provided effective in futsal dribbling learning. This can be seen from the significance test of the difference with SPSS in the mean (1.03) showing the h-selection of the pre-test and post-test, the t-test results (72.03), df (59) and p-value (0, 00 < 0.05) which means there is a significant difference between before and after the treatment of play-based dribbling learning models.

Keywords: Learning model, futsal dribbling, playing

Introduction

Futsal is a sport that is popular among the people. Futsal is now juga used as a vehicle for entertainment, relieve fatigue and even the perpetrators themselves are now making futsal as a place to make money, which means that the perpetrators indoor soccer or futsal players can also be categorized worked. In addition, futsal has also entered the educational arena. This means that futsal has become one of the subjects taught at the school level. A futsal player, of course, must master the basic techniques in playing futsal, because the technical aspects in every sport are important, as well as in futsal sports. Mechanical dribbling is a technique most attention and is often in the spotlight, because the interesting thing in the game of futsal is when a player can play the ball to trick or outwit an opponent. An important and absolute skill that must be mastered by every futsal player is the dribbling technique. Futsal is a sport that requires players to have some basic technical abilities. One of the basic techniques that is absolutely essential for futsal players is dribbling. dribbling is one of the basic elements that is important in playing futsal. Dribbling is a skill in dribbling using the foot to push the ball so that the ball is continuously rolling to the ground. Good dribbling skills are very helpful in attacking and creating goals. (Tangkudung, 2015)^[30]. dribbling is the ability that every player has in controlling the ball before being charged to his friend to create opportunities in scoring goals. (Dewi & Pakpahan, 2018)^[8]. This basic dribbling technique is very suitable if it is introduced early to elementary school age children. Plus when its introduction is combined with a very fun game. Of course such a model will make children not get bored quickly and tend to make learning not monotonous.

Step - L -Step Mode I Development of Model Borg and Gall
The Borg and G all development model has 10 stages that are

used in the development process. The ten stages in the Borg and Gall research are set out in the following figure.

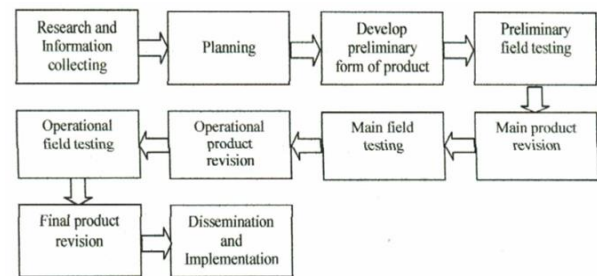


Fig 1: Intuctional Design R and D Borg and Gall Source: (Borg & Gall, 1983).

1. Preliminary Study (Research and Information Collecting)

This first step includes a needs analysis, literature study, literature study, small scale research and required report standards.

- Needs analysis and literature study.
- Study of literature
- Small-scale research

2. Research plan (planning)

After conducting a preliminary study, researchers can continue the second step, namely planning research. The R&D researchers' plans include: a) formulating research objectives; b) estimating funds, labor and time; c) formulating the qualifications of researchers and forms of participation in research.

3. Design development (Develop Preliminary of Product)

This step includes: a) determining the design of the product to be developed (hypothetical design); b) determine the research facilities and targets needed during the research and development

Process; c) determine the stages of carrying out design tests in the field; d) determine the job description of the parties involved in the research.

4. Preliminary Field Testing

This step is a limited product test. This step includes; a) conducting initial field tests on product design; b) is limited, both the substance of the design and the parties involved; c) initial field tests are carried out repeatedly in order to obtain a decent design, both substance and methodology.

5. Revised Results of Field Test Limited (Main Product Revision)

This step is an improvement of the model or design based on limited field testing. Refinement of the initial product will be carried out after a limited field trial. In this initial product improvement phase, more is done with a qualitative approach. The evaluation is done more on the evaluation of the process, so the improvements made are internal.

6. Main Field Test

This step is a broader product test. This step includes a) testing the effectiveness of product design; b) design effectiveness tests, in general, use the repetition model experimental technique; c) the results of the field test obtained an effective design, both in terms of substance and methodology.

7. Revised Wider Field Test results (Operational Product Revision)

This step is the second improvement after conducting a field test that is broader than the first field test. Completion of the product from the results of this wider field test will further strengthen the product that we will develop, because the previous field trial stage was carried out with a control group. The designs used are pretest and posttest. This product improvement is based on evaluating the results so the approach used is a quantitative approach.

8. Feasibility (Operational Field Testing)

This step should cover a large scale: a) test the effectiveness and stability of the product design; b) testing the effectiveness and adaptability of designs involving potential product users; c) field test results are obtained design models that are ready to be applied, both in terms of substance and methodology.

9. Revised Final Feasibility Test Results (Final Product Revision)

This step will further enhance the product being developed. Improvement of the final product is deemed necessary for more accurate products being developed. At this stage a product whose level of effectiveness can be accounted for has been obtained. The final product improvement has a value of "generalization" that can be relied on.

10. Dissemination and Implementation of the Final Product (Dissemination and Implementation)

Provide or present research results through scientific forums, or mass media. Product distribution must be done after going through quality control. Data analysis techniques, steps in the research and development process known as the circle according to Borg and Gall consists of

- a. Examining the results of research relating to the product to be developed,
- b. Developing products based on research results,
- c. Field test,
- d. Reducing the divisions found in the field trial phase.

The models in its development have differences and similarities. In general, the difference between these models lies in

- a. Use of terms from each stage in the development process.
- b. The use of expert judgment during the development process.
- c. Development of the elements involved, some simple and some very detailed so it looks complex.

While the similarity lies in all activities that are linked by an integrated feedback system in the relevant model to allow for improvements in the learning system during development.

Learning model

The learning model is an important element in teaching and learning activities to achieve learning goals. Each learning model directs us to design learning so that it can help students in such a way that learning objectives are achieved (Trianto, 2007, 5). Model learning is a pattern or plan that has been planned in a way and used to draw up the curriculum, organize the subject matter, and give guidance to teachers (Joyce & Weil, 2013, 50). The learning model is a procedure in organizing learning experiences to achieve certain learning goals. Serves as a guide for learning designers and teachers in designing and implementing teaching and learning processes.

Futsal

Futsal is a game that is almost the same as football, but only five players in which two teams play and fight the ball between the players with the aim of being able to enter the opposing ball and maintain the goal of conceding the ball (Mahendro, 2005). To be able to play futsal, you must master the basic techniques of good futsal. To be able to produce an optimal futsal game, a player must be able to master the basic techniques in the game. The basic techniques that must be mastered in playing futsal are dribbling, shooting, passing and controlling. Mechanical dribbling is a technique most attention and is often in the spotlight, because the interesting thing in the game of futsal is when a player can play the ball to trick or outwit an opponent. Researchers observed that dribbling of futsal players in the implementation consisted of movements to the right, to the left, forwards, oblique to the right, and left quickly so that the opponent had difficulty seizing the ball (Ladon, & Martubung, 2017) [23]. Dribbling is a method of moving the ball from one point to another in the field using the feet, in other words, dribbling is moving the ball by moving it from one place to another by using the feet (Robert, 2007). The steps in dribbling are:

1. Master the ball and keep your distance from your opponent
2. Maintain balance when doing dribbling
3. Focus your eyes every time you touch the ball
4. The touch of the ball must use your feet continuously

Play

Play activities are activities that have no other rules except those set by the players themselves and no intended outcome in external

reality (Hurlock, 1997). Playing is an activity that has no other rule than the specified player himself and it has no end result that is intended in the outer reality (Hurlock, 1978). Play is a very important activity for the development and growth of children. Play must be done at the initiative of the child and at the child's own decision (Hernawan, 2017) [11]. Play is a physical activity of children carried out with a sense of fun, simple and the relationship of play as a vehicle for achievement with pleasure, as well as the relationship of playing as a vehicle for achieving educational goals (Sukintaka in Victor G Simanjuntak, et al 2008). Bermain can be used in the learning process. "Playing is a process of learning to adjust to the situation". (Kurniawan, 2016). Play can be used in a learning process, by adjusting the situations and circumstances needed in the learning process (Poerwanto & Firdiansyah, 2019) [17]. Many learning processes use play as an approach or method.

Characteristics of Elementary School Children

High school elementary school children (age range 9-12 years) have several characteristics:

1. His attention was focused on practical daily life
2. Want to know, want to learn and be realistic
3. Interest in special lessons arises
4. Children see grades as an appropriate measure of their learning achievement in school
5. Children like to form peer groups to play together, they make their own rules in the group.

Model Design

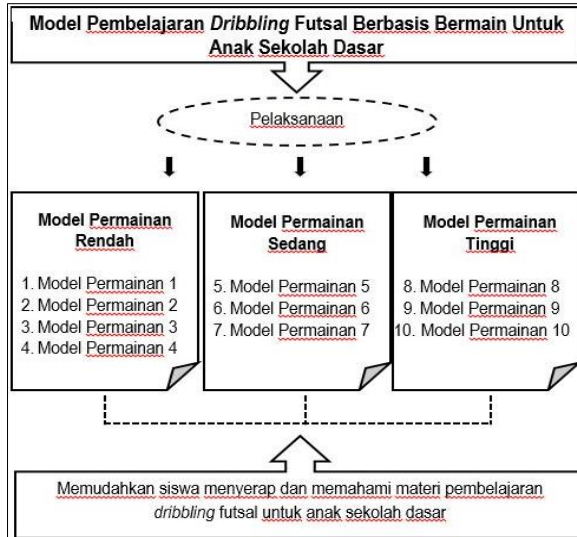


Fig 2

Method

The research methods used in this study are qualitative and quantitative methods. This research refers to the research and development developed by *Borg and Gall* which have ten steps in its development.

Data collection techniques in this study use:

1. Notes field to record the observation of the behavior of the subject of research at the time of the analysis of needs, during trials for a small group or a large group.
2. Questionnaire as a trial instrument for experts; the media, coaches.
3. Futsal *dribbling* test using instruments that have been prepared.

Table 1: The table Futsal Dribbling Test Norms

No	Amount of Values	Classification
1	41 -50	Well
2	31-40	Enough
3	21-30	Less
4	<21	Very less

Results and Discussion

Model validation

From the results of the interviews and the initial needs analysis discussion questionnaire it was concluded that there was a need for a play based futsal *dribbling* learning model for elementary school children. The results of the validation conducted on 11 learning models received 91% so that the use of the model in this study can be categorized as valid.

Effectiveness test.

Based on the results of the *output* using SPSS that the average value of futsal based play *dribbling* learning outcomes are as follows:

Table 2: Average Dribbling Values Paired Samples Statistics

		The mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre_Test	27,2500	40	1.67562	.26494
	Post_Test	44.7000	40	6,65717	1.05259

Before given the learning model the average is 27.25 and after being given treatment with a learning model of 44.70, it means that the average value of futsal dribbling is increasing. In the significance test the difference with SPSS in the mean (1.74) shows the difference between the pre-test and post-test, the results of t-count (16.35), df (39) and p-value (0.00 < 0, 05) which means that there are significant differences between before and after the treatment of play based dribbling learning models.

Table 2: Significance of Dribbling Differences

Paired Samples Test									
		Paired Differences					T	df	Sig. (2-tailed)
		The mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre_Test - Post_Test	-1.74500E1	6.67160	1.05487	-19.58368	-15.31632	-16,542	39	.000

Based on this information it can be said that the futsal dribbling learning model based on play in elementary school children is developed effectively and can improve futsal dribbling learning in elementary school children. The diagram below is a comparison of the average futsal dribbling test before treatment and after treatment:

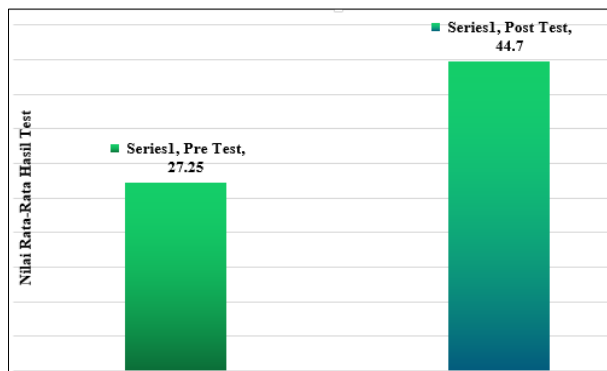


Fig 3: Product Effectiveness Test

The results of small group and large group tests can be concluded that the futsal dribbling learning model based on elementary school children can be used as a futsal dribbling learning process and is feasible and effective to improve futsal dribbling.

Cover

Conclusion

Based on the problems raised and supported by a description of the theory and framework of thinking and data analysis, the results can be concluded that:

1. By developing this play-based futsal dribbling learning model students can improve their futsal dribbling abilities effectively and efficiently.
2. Through this learning model, elementary school students can understand dribbling material quickly and correctly.

Suggestion

From the results of this study, the researcher wishes to convey the following suggestions:

1. This play-based futsal dribbling learning model product can be used as a teaching model by elementary school teachers, where in its use it is necessary to consider the situation, conditions and infrastructure.
2. The results of this play-based futsal dribbling learning model can be disseminated to all physical education teachers throughout Indonesia.

References

1. Alili Selim. *Journal of Sport Science: Relationship Between Power and Specific Motor Test - Ball Fast Dribbling With Football Players*. 2016; 9(1):85-86
2. Arikunto Suharsimi. *Research Procedure A Practical Approach*. Jakarta: Rineka Cipta, 2010.
3. Personally Benny. *Learning System Design Model n*. Jakarta: PT Dian Rakyat, 2009.
4. Bavh Ozhan. *Journal of Education and Training Studies: Effects of Different Core Exercises Applied During the*

- Season on Strength and Technical Skills of Young Footballers. 2018; 6(5):72-76.
5. Borg WR, Gall MD. *Educational Research: An Introduction, Fifty Edition*. New York: Longman, 1989.
6. Caesar Umberto. *Journal of Sports Sciences: Revealing The Decision-Making Of Dribbling In The Sport Of Futsal*, 2016, 1-8.
7. Caglayan Atakan. *International Journal of Applied Exercise Physiology: The Effects of Trainings with Ball Futsal on Dribbling and Passing Skills on Youth Soccer Players*. 2018; 7(3):2322-3537.
8. Dewi, Rahma, Muhammad Taqwa Pakpahan. *Journal of Achievement: Development of Dribbling Test Instruments in Futsal Sports*. 2018; 2(3):1-6.
9. Emzir. *Quantitative and Qualitative Education Research Methodology*. Bandung: Rajagrafindo Persada, 2012.
10. Gelen Ertugul. *Journal of Strength and Conditioning Research: Acute Effects of Different Warm-up Methods on Sprint, Slalom Dribbling and Penalty Kick Performance in Soccer Players*. 2010; 2(4):950-956.
11. Hernawan H. *The Application of Creative Playing Methods To Enhance The Ability Of Chest-Style Swimming In Class Iii Islamic Students Al-Azhar Kelapa Gading North Jakarta*. In *Proceedings of the Seminar and Workshop of the Faculty of Sport Science, Jakarta State University*. 2017; 2(01):80-83.
12. Jasri Iqbal, Firmansyah Dlis, Hidayat Humaid. *Journal of Physical Education, Health and Recreation: Dribbling Learning Models On Sports Games For Student School Student League Students*. 2018; 3(1):36-42.
13. Mathavan S Binthu. *International Journal of Sports and Physical Education: Short Term Training Program's Impact on the Variables of Dribbling and Kicking Performance among University Men Soccer Players*. 2015; 1(1):23-28.
14. Mohammed Zerf, Bengoua Ali. *European Scientific Journal: The Dimensional Impact Of Delimiters On Test and Training Dribbling in Young Soccer (Under 15 Years)*. 2015; 1:200-208.
15. Mohammed Zerf, Bengoua Ali. *International Journal of Educational: Dimensional Effects Of Delimiters On Implementation of Speed, Balance and The Agility In Dribbling Among Soccer (Under 15 Years)*. 2015; 5(5):67-72.
16. Pizzaro Alba. *Journal of Kinesiology: The Effects Of A Comprehensive Teaching Program On Dribbling And Passing Decision-Making And Execution Skills Of Young Footballers*. 2017; 49(1):74-83
17. Poerwanto S, Firdiansyah B. *Effectiveness Of Game Model On Tsunami Disaster Anticipation In Two Provinces Of Indonesia, Year 2019*. *Science of Tsunami Hazards*, 2019, 38(4).
18. Putra Nusa. *Research and development Research and development: an introduction*. Jakarta: Rajagrafindo Persada, 2011.
19. Rizkiyanto Sugiharto, Tommy Soenyoto. *Journal of Physical Education and Sport: The Effect of Exercise and Agility on Speed Dribbling Extracurricular Football MTs Al-Uswah Semarang*. 2018; 7(1):95-99.
20. Saparia Andi. *Journal of Educational Sciences: Improving Dribbling Skills Through the Zig-Zag Run Training Method*

- in Soccer Games in Class V Students of SD Negeri Toboli. 2013 ; 2(4):142-164.
21. Silassie Andualem G, Tesfaye Demena. Journal of Physical Education Research: A Study Of Agility, Coordination And Speed As Related To Dribbling And Kicking Performance Of Jimma, Woliso And Sebeta Town Male Football Players. 2016; 3(1):47-55.
 22. Singh, Thingnam. Journal of Undergraduate Research and Innovation: Biomechanical Variables of Sprinting and Dribbling Performance Highlight Gender Differences in Football Players. 2013; 3(1):74-82.
 23. Siregar Yan Indra Paulus Mardianto. Achievement Journal: Differences in the Effects of Counting Finger Training Exercises with Donkey Tail Exercises on Improving Dribbling Ability at Age 12-14 in SSB OP. Ladon 89 Griya Martubung. 2017; 1(2):1-6.
 24. Stone Keeron J, Jonathan L Over. International Journal of Sports Physiology and Performance: The Effect Of 45 Minutes Of Soccer Specific Exercise On The Performance Of Soccer Skills. 2009; 4:163-175.
 25. Sudjana, Nana. Research on Teaching and Learning Results. Bandung: Youth Rosda Karya Sugiyono (2015). Educational Research Methods (Quantitative, Qualitative and R&D Approaches). Publisher of CV. Alfabeta: Bandung, 2012.
 26. Suharsaputra Uhar. Research Methods: Quantitative, Qualitative and Action. Bandung: PT. Refika Aditama, 2012.
 27. Sukardi. Educational Research Methodology. Yogyakarta: Earth Literacy, 2007.
 28. Sukmadinata Nana. Educational Research Methods. Bandung: Youth Rosda Karya, 2005.
 29. Tangkudung James, Ahmad Atiq, Mulyana. Journal of Indonesian Physical Education and Sport: Development of Basic Procurement Techniques of a Ball Soccer Athletes Model Based on Play For Beginners Ages 8-12 Years. 2017; 3(2):110-121.
 30. Tangkudung James Emral. Journal of Indonesian Physical Education and Sport: Development Of Dribbling Basic Technique Skills Of Students Of Psts Tabing Padang Football School. 2015; 1(1):12-20.
 31. Taskin Halil. Journal of Strength and Conditioning Research: Evaluating S printing Ability, Density of Acceleration and Speed Dribbling Ability of Professional Soccer Players With Respect To Their Positions. 2008; 22(5):1481-1486.
 32. Tegeh Made. Development Research Model. Yokyakarta: Graha Science, 2014.
 33. Utama Andhi Zakariya, Eko Hariyanto I Nengah Sudjana. Journal of Physical Education: The Effect of Agility and Flexibility Training on Football Dribbling Skills of SSB PAS-ITN Malang Regency. 2015; 25(1):31-38.
 34. Walid Abdul. E-JTPEH: Improving Dribbling Skills Through Playing Methods in Small Groups in Mini Soccer Game for Guntarano Elementary School Students. 2015; 1(3):2337-4535.