



The Development of Mini Football Games for Higher Grade of Elementary School Students

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<http://dx.doi.org/10.47814/ijssrr.v5i12.818>

Abstract

This research aims to develop a mini football game for the senior students of elementary school. The game developed is expected to be used by physical education teachers as a variation in learning and to increase students' interest in mini football games. This study approach used the development research. The product from this research was a modified mini football game for the senior students of elementary school, packaged in the form of a CD and a guide book. This research was divided in two stages: the validation stage of the suitability and quality of the model by the football material experts and physical education practitioners at schools used a questionnaire instrument, the small-scale trial stage with 32 students as subjects from SD Negeri 022 Samarinda Utara (North Samarinda 022 Elementary School), and the large-scale trial stage. with the subject of 128 students from 4 elementary schools: SD Negeri 018 Samarinda Utara (North Samarinda 018 Elementary School), SD Negeri 019 Samarinda Utara (North Samarinda 019 Elementary School), SD Negeri 016 Samarinda Utara (North Samarinda 016 Elementary School), and SD Negeri 005 Samarinda Utara (North Samarinda 005 Elementary School). The data obtained was used as a guide for experts and practitioners to observe the quality of the game in the field trials. The data analysis technique used the descriptive quantitative analysis and descriptive qualitative analysis. The results show that the experts and teachers assess the resulting product in the feasible category to be applied for the senior students of elementary schools. This result can be seen from the observer's answers with 14 question items, all of them are answered accordingly. Students' assessment of the developed mini football game can be seen from the results of filling out the questionnaire. According to students, 100% can be done, 96% of the games taught are easy to do, 90% of the students can understand the rules of the game, 90% of the students obey the game rules, 91% of the students have no difficulty in playing the game, 99% of the students like the tools, 100% of the games are fun and can stimulate the students feeling happy to move, 100% can cooperate, and only 19% of the students are afraid to do the games.

Keywords: *Development; Mini Football; Senior Students of Elementary School*

Introduction

Physical education is an education that uses physical activity. Bucher (1983) states that "physical education is an integral part of the entire educational process, which has the goal of developing physical, mental, emotional, and social goals". According to Arifin (2013), physical education in schools has a target in learning both in teaching and encouraging students to do activities that make individuals fit. Physical activity physical education is closely related to movement. Physical education is one of the media to encourage physical growth, psychological development, motor skills, knowledge and reasoning, appreciation of values (attitude, mental, sportsmanship, spiritual, social) as well as healthy lifestyle habits that leads to stimulating growth and development of physical quality. and psychological balance.

The achievement of the objectives of Physical Education in elementary schools (SD) is expected to consider the learning objectives, student abilities, methods, materials, facilities and infrastructure, learning activities and the balance of students in order to make the learning process runs well. In curent development, there has been a tendency to give the meaning of quality education which is only associated with cognitive aspect. This view leads to the neglect of affective and psychomotor aspects.

The decline in the quality of education is caused by the lack of maximum quality of learning. For this reason, in order to support the achievement of physical education programs in schools, an interesting and fun learning model or method is highly needed. One of the common things to change the conditions of the game to be interesting is by changing the rules of the game, and determining the game requirements of Arias (2011). This method is a way to direct, guide, and provide learning for students who were previously less skilled to become more skilled. Learning modification can be carried out by means of various learning activities provided by the teacher from the beginning of the meeting to the end of the lesson so that some efficient learning activities are reflected.

Modifications in physical education are conducted in order to 1) make the students get satisfaction in following lessons, 2) increase the likelihood of success in participating, 3) guide the students to do movement patterns correctly. This modified approach is intended so that the material in the curriculum can be presented in accordance with the stages of cognitive, affective and psychomotor development of students. Based on the results of research observations in the field, the researcher found the fact that in Physical Education, especially in football material, the teacher only teaches football games with standard football rules without any game development.

Based on the results of the problem analysis above, the researchers took steps in developing the learning process to achieve the expected student learning outcomes, namely by modifying a conventional football game into a four-goals mini football game. Mini football game will use a smaller field size, fewer players, smaller balls (or modified balls) and simpler game rules. Through this modification of the mini soccer game, it is hoped that the learning activities carried out can become more interesting and motivate students to be actively involved in learning activities which in the end the learning outcomes achieved by students can be optimal.

Reaseach Methods

This type of research is Research and Development (Research and Development) to produce a product. According to Borg & Gall (2007) development research is research that produces a product that is designed with new procedures then tested, evaluated, and refined so that it becomes an effective and quality product. Sugiyono (2019) stated that the implementation of the development procedure includes identification of potentials and problems, data collection, product design, design validation, design revision, small-scale product trials, field test product revisions (large-scale), product revisions, and final

aspects which include locomotor, non-locomotor and manipulative movements of students (100%), games encourage development of students' affective aspects (100%), games encourage students' competitive abilities (100%), game models can be played by students and students (100%), game models can stimulate students to be active (100%), safe game models for students (100%) .

Meanwhile, the products provided according to the students' responses are 100% can be implemented, 96% of the games taught are easy to do, 90% of students can understand the rules of the games being taught, 90% of students obey the rules of the game, 91% of students have no difficulty in playing games, 99% of students like the tools used to play, 100% of games are fun and can make students happy to move, 100% can cooperate, and 19% of students are afraid to do the games that are taught.

D. Feasibility Test

Products that have gone through the large-scale trial stage are then revised according to the input given by both experts and test subjects, namely students. Products that have been declared eligible, are then tested for feasibility. The goal is to obtain the results of the analysis in accordance with the data obtained. The product feasibility test is divided into several, namely content validity test, reliability test, normality test, homogeneity test, paired sample T test, and effectiveness test.

1. Content Validity Test

Table 1. Content Validity Results

No	Analisis	Rcount	Rtable	Result
1	<i>Product Moment</i>	0,4518	0,1552	Valid

Based on the table above, it shows that the value of r_{count} on all items is greater than r_{table} . These results have met the criteria to say that the test on the questionnaire is declared as valid.

2. Reliability Test

The reliability test on the questionnaire in this study was carried out with the help of analysis on SPSS 25 and used the calculated value *cronbach alpha*, with the criteria if the arithmetic value > 0.6, then the test is said to be reliable. The results of reliability testing on the questionnaire can be seen in the following table:

Table 2. Realibility Test

No	Analisis	Reliability Value	Result
1	<i>Cronbach Alpha</i>	0,642	Reliable

The table above shows the results of the reliability test which obtains a result of 0.642. These results can indicate the product as reliable.

3. Normality Test

The normality test of the data was carried out using *kolmogorof-smirnov* with the condition that the data was said to be normal if the sig value > 0.05. The following are the results of the data normality test:

Table 3. Large-Scale Normality Test

	Mean	Asymp. Sig. (2-tailed)
Pre_SD018	5,10	0,074
Pre_SD019	5,24	0,123
Pre_SD016	5,33	0,204
Pre_SD005	5,58	0,074
Post_SD018	9,03	0,076
Post _SD019	8,94	0,093
Post _SD016	8,88	0,053
Post _SD005	8,94	0,078

Based on the normality test, it can be seen that the sig value of the pretest and posttest data for SD018, SD019, SD016 and SD005 obtained a Sig value. (2-tailed) > 0.05 so it can be concluded that the data is normally distributed.

4. Homogeneity Test

Table 4. Large-Scale Homogeneity Test

	Levene Statistic	Sig.
Pretest	.287	.834
Posttest	.977	.406

Homogeneity test used Levene and it was obtained with significant results for large-scale trials for pretest data of 0.834 > 0.05 and posttest data of 0.406 > 0.05. So, it can be concluded that large-scale data came from a homogeneous population.

5. Paired T Test

After all the test conditions were obtained (normality test and homogeneity test), the next test was the paired sample t test with the aim of seeing the difference in the average of each group.

Table 5. Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean	
Pair 1	Posttest	8.95	128	1.082	.096
	Pretest	5.31	128	1.085	.096

The *paired sample statistics* table describes the results of statistical processing of the average scores or pretest and posttest students' scores for a large scale carried out by the four elementary schools, namely SD018, SD019, SD016 and SD005. In the table there is an average pretest value of 5.31 and an

average posttest value of 8.95. Based on the results of the *paired sample statistical* analysis, it was known that the average scores of students got higher after getting a modified model of the mini soccer game.

Tabel 6. 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	Posttest Pretest	-3.633	1.170	.103	3.428	3.837	35.140	127	.000

Based on the *paired sample test table*, it is known that the t-count value was 35.140 with a significant (*2-tailed*) value of 0.000. So it can be concluded that H0 is rejected because the significance value is $0.00 < 0.05$. Therefore, it can be said that the average students before (pretest) is not the same as after (posttest) when they were using the modified model of the mini football game.

6. Effectiveness Test

Descriptive analysis is used to read the data from the tests that have been carried out. This descriptive analysis test provides the minimum value, maximum value, average and std deviation. The following are the results of the descriptive analysis of the pretest and posttest data for a large scale.

Table 7. Analysis of Descriptive Statistics Pre-test

	N	Minimum	Maximum	Mean	Std. Deviation
Pre_SD018	30	3	8	5.10	1.155
Pre_SD019	34	3	7	5.24	1.017
Pre_SD016	33	3	7	5.33	1.080
Pre_SD005	31	4	7	5.58	1.089

Based on the table above, it can be seen that from the pretest data, all elementary schools have an average that is almost the same as the number of respondents > 30 students. The following is a descriptive analysis of large-scale posttest data.

Tabel 8. Analisis Descriptive Statistics Post-test

	N	Minimum	Maximum	Mean	Std. Deviation
Post_SD018	30	7	10	9.03	.999
Post_SD019	34	7	10	8.94	.983
Post_SD016	33	5	10	8.88	1.293
Post_SD005	31	7	10	8.94	1.063

Based on the table above, it can be seen that from the posttest data, SD 016 has a lower average than other elementary schools, which was 8.88 and std. Deviation of 1,293 with the number of respondents as many as 33 students.

Conclusion

Based on the results of the study, it was found that the mini football game was proven to be effective played by upper grade elementary school students. This criterion is based on the achievement of learning outcomes which show a significant increase between the average pretest (5.31) and the average posttest (8.95) and based on the results of the *paired sample t test* with a significance value of 0.000.

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