# Development of Basketball Game Modifications for Elementary Schools 

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#### Abstract

This study aims to develop a basketball game model for elementary schools. The model that was made beforehand was validated by 3 experts, 1 sports academic expert, 1 expert trainer and 1 referee expert. The small group test involved 6 elementary school children and the trial group involved 25 elementary school children. The basketball game model for elementary schools has been validated and results from expert validation that each model is valid and can be used as a basket play model for children, with a validity percentage of $76 \%-100 \%$. The results of a small group test of 6 elementary school children showed that the basketball game model at the elementary school has met the reader properly or is valid. The percentage of validity of the questionnaire that was distributed to the sample showed that $91 \%-100 \%$ of them agreed with the ball game for schoolchildren. The percentage of validity from the questionnaire that was distributed to the sample shows that $87 \%-97 \%$ of those who approve the game meet the criteria.


Keywords: Development, Modification and BasketBall

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## INTRODUCTION

Today sport has become a primary need for society. From students to adults and even the elderly, they carry out sports activities according to their needs. This is because, the many benefits derived from exercise. In its development, sports are currently divided into achievement sports, recreational sports and educational sports. Sport is a physical activity carried out by a person or group of people, which is carried out systematically and periodically according to their needs (Dewi \& Verawati, 2021). The increasingly widespread development of sports has made many fields of study in sports where it has become a profession for the sport itself (Mirdayani Pauweni, Suriyadi Datau, 218). Achievement sports are sports that are carried out and managed professionally with the aim of obtaining and achieving certain achievements. The purpose of achievement sports is to achieve achievements in the fields that are competed at both the regional, national and international levels. One of the sports that is currently developing and in great demand by the public is basketball (Hadi Wijaya et al., 2021). This can be seen through the many basketball matches held in the city of Medan for students, students and the general public, for example clubs.

In the game of basketball there are several basic techniques that must be known and trained, including: dribbling or dribbling, passing or passing the ball, and shooting or shooting the ball (Achmad Syaifi'ul Anam, 2014). After understanding the basic techniques, a basketball player also must understand the rules of the game. The obstacle faced in the field is that basketball players who are relatively young or are said to be still elementary school students have difficulties in playing this basketball (Kurniawan et al., 2018).Especially when doing the basic techniques of existing basketball .Students have difficulty in carrying out these movements. Then an initial test is carried out to find out how much the students need to modify the game rules. The initial test is in the form of a questionnaire distributed to 20 elementary school students as respondents. Based on the questionnaire which has been distributed to 20 elementary school students can be taken conclusion $100 \%$ of students are happy with basketball, $85 \%$ of students are happy with basketball I play basketball is difficult, $50 \%$ of students find playing basketball tiring, $15 \%$ of students are able to pass three opposing players, $5 \%$ of students do zone defense, $10 \%$ of students like it when their opponent does press defense, $30 \%$ of students are able to shoot three points, $65 \%$ of students often step on the line when shooting free throws, $45 \%$ of students are able to play basketball with a duration of $4 \times 10$ minutes without being replaced, and $90 \%$ of students like it if they get modified basketball game rules.

From the results of observations and interviews with basketball coaches and questionnaires that have been distributed, the researcher concludes that students still have difficulty following the current modifications to the basketball game, providing more interesting game modifications is necessary for students to motivate students to play basketball so that they are more serious and from the analysis of student needs based on the questionnaires that have been distributed, students still rarely get interesting basketball game modifications, and students will of course be interested in new basketball game modifications. Based on this, researchers are interested in making modifications to a new basketball game, so that students can more easily and seriously play basketball. To achieve a more meaningful game modification where elementary school students can enjoy every game modification made, it is fun and the game objectives that have been set can be achieved, good game modifications are needed. To create modifications to the game, it is necessary to study through research, so the authors are very interested in conducting research with the title: Development of modifications to basketball games for elementary school children.

Based on several descriptions regarding the meaning of the game of basketball, it can be concluded that the game of basketball is a game played by two teams, with the aim of putting the ball in the basket and getting as many points or points as possible and preventing the opponent from getting these numbers or points. In the game of basketball there are several basic techniques that need to be mastered. Games carried out by children, which cannot create a sense of fun and joy and cause children to be inactive not to move, it is necessary to evaluate these games. Game modification is an alternative way that can be used to improve the form of the game so that children are more interested and happy with the game.

Furthermore, according to (Yoyo Bahagia, 2012) states that in a lesson, it can be done using modifications. Modification is one of the efforts that can be made by teachers or trainers so that learning reflects a delevantly appropriate practice, meaning that the teaching assignments given must pay attention to changes in children's abilities and can help encourage these changes. Therefore, these teaching assignments must be in accordance with the level of development of students who are learning. This appropriate teaching assignment must be able to accommodate any changes and differences in the characteristics of each individual and encourage change for the better. Based on the explanation and benefits of the modifications above, it can be concluded that modification is one way that can be used to reduce or eliminate problems related to learning games and sports. The modification of the basketball game using a modified ring can be seen in Figure 1 as follows:


Gambar 1. Desain Produk

Several studies related to the modification of basketball games include research conducted by (Brilian et al., 2022) (Setiawan, 2022) explaining that the product developed is in the va;id category and is suitable for use. so based on this the researcher is interested in developing game modifications for elementary school students.

## METHOD

The research and development method is a method that will produce a certain product through research conducted by researchers using a needs analysis questionnaire given to physical education teachers. Development methods that include: developing products, testing the effectiveness of products to achieve the desired goals. The end result of this research and development activity is a modification of a new basketball game so that elementary school children are more serious and more active in playing basketball. The sample in this study involved elementary school students in the city of Medan with product testing on small-scale trials and large-scale trials. The procedure for developing a castor game model for elementary school students includes several stages, namely: (1) analyzing the product to be developed, (2) developing the initial product, (3) expert validation and revision, (4) small group trials and revisions, and (5) large group trials and final products. The data analysis technique used in this development research is using descriptive analysis techniques in the form of percentages. While the data in the form of suggestions and reasons for choosing answers were analyzed using qualitative analysis techniques. (Dewi et al., 2020) (Dedy Apri Anto, 2014)

## RESULTS AND DISCUSSION

In general, basketball games for elementary school children are the same as standard basketball games. the way to play is only 3 against 3 , and the height of the ring is also not too high so that children can easily throw and put the ball into the basketball hoop. The first test was carried out after the initial design or development of the $3 \times 3$ basketball game for kids had been observed, corrected and declared fit to be tested by experts. The first test of the game model consisted of 3 experts, namely 1 coach, 1 sports academic, and 1 referee. The results of the evaluation carried out by experts refer to the indicators that have been prepared. before which is a reference to test whether the model is feasible to use or not. To obtain a percentage value which is a reference for whether the model is used or not, it is done by adding up the values given by the validator with a range of 1-4. These values are added up and then divided by the total value of each indicator, then
multiplied by $100 \%$. Each validation instrument variable is calculated by the percentage and then averaged with the other variables. Each validator will have a different value. The three validator values consisting of several variables for one model are averaged and that is the reference for whether the model is used or not. Before testing the product on the sample, an instrument assessment of the model is carried out by the validator. The results of the recapitulation of the instrument model assessment can be seen in the following table:

Table. 2 Results of Recapitulation of Assessment of Model Instruments

| No | Model | \% | Conclusion Results |
| :---: | :---: | :---: | :---: |
| 1 | Field | $80 \%$ | Used |
| 2 | Ring | $91 \%$ | Used |
| 3 | Bola | $87 \%$ | Used |
| 4 | Initial | $75 \%$ | Used |
| 5 | Point | $80 \%$ | Used |
| 6 | Free throw | $83 \%$ | Used |
| 7 | Game Rules | $80 \%$ | Used |
| 8 | Refereeing | $89 \%$ | Used |

From the results of small group trials on players where after carrying out the $3 \times 3$ basketball game model for kids where the players were given a questionnaire to fill in according to their own understanding. From the results of the small group trial of 6 elementary school children it was concluded that the $3 \times 3$ basketball game model for kids met the criteria to be continued in the large group trial because the percentage of each model was between $91 \%-100 \%$. It can be concluded that the kids futsal game model is easy to do and implement so that it can become a new $3 \times 3$ for kids basketball game model for kids. From the results of large group trials on players where after carrying out the $3 \times 3$ basketball game model for kids where the players were given a questionnaire to fill in according to their own understanding.

From the results of the small group trial of 25 elementary school children it was concluded that the $3 \times 3$ basketball game model for kids met the criteria to be continued in the large group trial because the percentage of each model was between $87 \%-97 \% .3 \times 3$ for kids is a basketball game that is played specifically for children, the basketball game model is made easier and simpler so that children can enjoy the game of basketball in the form of a new, attractive and fun model. The basketball model was designed and adjusted/modified so that this game is more fun and appropriate for children. The $3 \times 3$ basketball game for kids is very easy to play, so it is very
interesting for elementary school children who are beginners in playing basketball. This game is played with 3 against 3 players along with 1 reserve, with a field size of 14 meters long and 16 meters wide and a ring height of 3.05 meters. The graphs of the results of small-scale trials and large-scale trials can be seen in the following graphs:

Trial Results


Figure 1. Test Results

## CONCLUSION

Basketball is a game played by two teams, each consisting of five people. The goal is to get the ball into the basket. In addition to the five main players, each team is also allowed to have backup players. Based on the results of the field trials and the results of the researcher's discussion, it can be concluded that: In carrying out the $3 \times 3$ basketball game model for kids, the game should be effective and efficient. $3 \times 3$ basketball for kids is designed and played by elementary school children, so that it can make children will be earnest and motivated. With the development of a $3 \times 3$ basketball game model for kids this can be useful for use in the basic development of basketball games for elementary school children. Based on the results of the field trials and the results of the researcher's discussion, it can be suggested that: In order for this $3 \times 3$ for kids basketball game product to be used by children, this product should be produced and applied in several matches for elementary schools and clubs that do not have players or athletes who pretty much. Before being disseminated, the basketball game model for kids should be rearranged to be better, including packaging, content and materials. For research subjects, it should be carried out on a wider range of subjects, both in terms of the number of subjects and the number of elementary schools or clubs used as the test group. The results of the development of the $3 \times 3$ basketball game
model for kids can be disseminated to various elementary schools and basketball clubs in Indonesia.

## ACKNOWLEDGMENT

The author's thanks go out to all research members who assisted researchers in processing research data and providing input and directions related to the research being conducted.

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