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# **Research Article**

# DEVELOPING OF PHYSICAL EDUCATION LEARNING MODEL OF BASKETBALL GAME MATERIAL FOR JUNIOR HIGH SCHOOL

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#### **ABSTRACT**

This study aims to develop a learning model of Physical Education Basketball game material on students of junior high school grade 7. This research method uses research and development procedures from Borg, Gall, & Gall, the first step to drafting a model and expert test on the draft model. The second step is the test of developing the model. The third step is the effectiveness test model developed. The subjects in this research are 4 junior high school in Yogyakarta which uses 2013 curriculum and randomly selected. Data collection techniques used observation and questionnaires. Technique of data analysis result of expert test using Content Validity Ratio (CVR) formula, Data analysis techniques test the implementation of the model developed using qualitative techniques, while the data analysis of the effectiveness test of the model developed using the non-parametric different test technique. The result of the research has been found the learning model of physical education basketball game material 3x3 (MPBGM3x3) students of junior high school grade 7 with the result of expert test found CVR = 1, it can be said that the developed learning model has high content validation. The results of the field test of MPMB3x3 model implementation is quite easy, safe and fun. The results of the MPMB3x3 model of the effectiveness test can improve the cooperation, skill, and decision making of seventh grade students of Junior High School.

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# **INTRODUCTION**

Curriculum 2013 is a curriculum used for junior high school today. Basketball game is one of the important physical education subjects in the curriculum at the State Junior High School of Yogyakarta. Based on the tactical, basketball game is one part of the game invasion / invasion game. Based on game competence tactical, basketball include the ability of execution skill, decision making, and support (Lund and Tannehill, 2005; Oslin, 2003; Grehaigne, 2005). In learning physical education of basketball game material in junior high school, the students must master at least three basic competencies namely execution skills, decision making, and support (cooperation). To achieve this competence, an effective physical education learning model is needed for the mastery of these competencies.

The implementing basketball game learning, Physical education teacher in Yogyakarta is using direct teaching model that is learning starting from heating, technique (skill) - drill - play and closing. This model is emphasizing on drill skill execution only, but it is less emphasize on decision making, and support (cooperation), so that students master their skill alone and not develop their mastery in decision making, and

support (Tomoliyus *et al*, 2016). Based on the things above, it is necessary to develop a learning model of basketball game materials that emphasizes the competence of execution skills, decision making, and support (cooperation) are balanced

Physical education learning model to develop decision-making, and support through the skill is to teaching games for understanding models (Metzler, 2005; Griffin and Placek, 2001; Holt *et al*, 2002; Kirk and Mac Phail, 2002) and teaching cooperative models (Dyson and Strachan, 2000). This learning model starts from heating, game-skill-game, closing. Based on learning model teaching games for understanding and teachingcooperative models, the writer are willing to develop a physical education model modification material of basketball game for seventh graders of Junior High School of Yogyakarta.

# RESEARCH METHODS

This research is a Research and Development. According to Borg & Gall (2007, p 569). In the development stage there are three steps: (1) developing initial product and expert validation, (2) field test (small and large scale test) and (3) effectiveness test. Field test design and effectiveness test of learning model using quasi experimental design. The subjects of the study were

seventh grade students of four Junior High Schools in Yogyakarta that taken randomly. Instruments used to collect data in this study is using observation guidelines, questionnaires, and student performance appraisal instruments. Data analysis technique used in this research is qualitative and quantitative data analysis techniques. To search for content validation with expert validation then analyzed using Content Validty Ratio formula (Brinkman, 2009, p.47). The effectiveness test using non parametric statistic Wilcoxon with SPSS 21 was done to test the difference between paired data.

# RESEARCH RESULT

Expert test result of basketball physical education model of seventh grade junior high school students is found content validity (CVR = 1). In other words learning model of physical education basketball material of seventh grade junior high school students have high content validity, so it can be continued for field test.

Field test results are conducted on a small scale and large scale. The results of the assessment of one teacher on a small-scale test of physical education model basketball material of seventh grade junior high school students can be seen in table 1. While the results of the assessment of 32 small-scale test students can be seen in table 2.

Table 1 Teacher Assesment Result

Implementation	Assesment
Language	Easy to understand
picture	Easy to understand
Safety	safe
Time	enough

Table 2 Student Assesment Result

implementation	Very happy	happy	Less happy
Learning Model	75%	25%	-

Based on table 1, it can be concluded that the implementation of learning model of physical education basketball material 3x3 (MPBGM3x3) seventh grade junior high school students in terms of language and images are easy to understand, and in terms of safety and timing of the implementation of this model is safe and enough time. Based on table 2 the implementation of this learning model is fun for students who take part in the lesson. Results of large-scale trial of MPBGM3x3 seventh grade junior high school students can be seen in table 3. While the results of student assessment of small-scale test can be seen in table 4.

Tabel 3 Results of Implementing Teacher Assessment

Learning model	Teacher assesment			
implementatition	1	2	3	
Language	Easy to understand	Easy to understand	Easy to understand	
picture	Easy to understand	Easy to understand	Easy to understand	
Safety	Safe	Safe	safe	
Time	Enough	enough	enough	

Tabel 4 Result of Student Assessment

Implementation	Very happy	happy	Less happy
Learning Model	69%	31%	-

Based on table 3 it can be concluded that the implementation of MPBGM3x3 on seventh grade junior high school students in terms of language and images are easy to understand, and in terms of security and implementation time of this model are safe and enough time. Based on table 4 the implementation of this learning model is fun for students who take part in the lesson

The results of the product model MPMB3x3 on seventh grade Junior High School after input from experts and field trials such as table 5.

**Tabel 5** Product model of physical education basketball material MPBGM3x3 on seventh grade Junior High School

	C	•		
Purpose	Cooperation, decision n	nakers and passing skills.		
Method tools Class management	Problem solving 2 Ball, simpai, field area 14 x 15 meter 10 groups(3 students each)			
Warming up (10 minute)	Dynamic and static Stretching The teacher explains the rules of the game			
Core (100 minute)	Basketball Game modification; Number of players 3 vs 3. The rules of the game are allowed only passing and shotting, Score is obtained: when the ball goes into the hoop (goal)  Teaching evective cooperation	Teacher role: asses students performance Teacher's role improves the right techniques and cooperation		
	Playing again the same game before	Teacher role: asses students performance		
Colling down (10	Feeback	•		
minute)	Stretching statis			

Test Results of the effectiveness of the seventh grade model of Junior High School 3 is in table 6, table 7, and table 8.

**Table 6** Test Results Effectiveness of Cognitive Aspects (Decision Making)

Meeting	N	Mean	Z	Sig.
Day 1&2	32	60.8438	-4.295 <sup>b</sup>	.000
	32	68.1875		
Day 2&3	32	68.1875	-4.628 <sup>b</sup>	.000
	32	74.4688		
Day 1&3	32	60.8438	-4.785 <sup>b</sup>	.000
	32	74.4688		

Based on the above table, it shows that average learning outcomes of cognitive aspects (decision-making) increases. Sig. of 0.000. Since the sig value is 0.000 <0.05 then H0 is rejected. This shows that there are significant differences on days 1, 2, and 3. So it can be concluded that the MPBGM3x3 model is effective for improving learning outcomes of cognitive aspects (decision-making) students in learning Basketball.

**Table 7** Test Results Effectiveness of Psychomotor Aspects (Skills)

Meeting	N	Mean	Z	Sig.
D 1 8-2	32	61.0000	-4.377 <sup>b</sup>	000
Day 1&2	32	68.7500	-4.3//	.000
D 2 8-2	32	68.7500	-4.865 <sup>b</sup>	000
Day 2&3	32	75.2500	-4.803	.000
D. 102	32	61.0000	-4.862 <sup>b</sup>	000
Day 1&3	32	75.2500	-4.862	.000

Based on the above table, it shows that the average learning outcomes psychomotor aspects (skills) increased. Sig. of 0.000. Since the sig value is 0.000 <0.05 then H0 is rejected. This shows that there are significant differences on days 1, 2, and 3. So it can be concluded that this MPBGM3x3 model is effective to improve students' learning result of psychomotor aspect (skill) in learning basketball.

**Table 8** Result of Effectiveness Value Test of Affective Aspect (Cooperation)

Meeting	N	Mean	Z	Sig.
Day 1&2	32	61.5938	-4.132 <sup>b</sup>	.000
Day 1&2	32	69.5313	-4.132	.000
D 2 6-2	32	69.5313	-4 792 <sup>b</sup>	.000
Day 2&3	32	76.7500	-4./92	.000
D. 102	32	61.5938	-4.863 <sup>b</sup>	000
Day 1&3	32	76.7500	-4.863	.000

Based on the above table, it shows that the average learning outcomes affective aspects (cooperation) increased. Sig. of 0.000. Since the sig value is 0.000 <0.05 then H0 is rejected. This shows that there are significant differences on days 1, 2, and 3. So it can be concluded that the MPBGM3x3 model is effective for improving learning outcomes affective aspects (cooperation) students in learning Basketball.

# **DISCUSSION**

Learning model is a learning design to achieve certain goals, in phisical education, learning model is not a new thing. In physical education, there are several learning models such as direct teaching modelis more pressing on skills development, teaching game for understanding model is more pressing on the development of understanding of play (Metzler, 2005;Griffin and Placek, 2001; Holt *et al*, 2002; Kirk and Mac Phail, 2002) and cooperative teaching model is more pressing on the development of cooperation (Dyson and Strachan, 2000).

From the several models above, most physical education teachers are more familiar with the direct teaching model. This is because direct taching has cultivated and is easier, teachers have control over the teaching and learning process. Is this wrong? Certainly not. Each model is created with each background and purpose therefore every model has its own advantages and disadvantages.

The development of 3x3 bolabasket material (3M3x3) learning material for the seventh grade students of junior high school has been found. The design of MPBGM3x3 teaching model starts from the game - teaching - game (game - teach - game). This model can improve the three aspects of cognitive aspects (decision making), skills and affective (cooperation). But this model dominantly improves the aspect of cooperation.

If the learning model development outcomes are compared with the direct teaching model, TGFU and coopertive models

reviewed by learning objectives, the MPBGM3x3 model in seventh grade students of SMP is effective for developing skills and cooperation. The direct teaching model develops more in mastery of sports skills or techniques than cooperation and cognition. The TGFU model is more effective for developing students' understanding than skills and cooperative. The cooperative model is more effective to develop self-reliance.

The Differentiation between MPBGM3x3 model procedure with direct teaching model is in the learning phase. The learning phase uses the basketball game learning model starting from game-teach-game, while the direct teaching learning phase begins with the learning of technique (skill) - drill-play. Thus, the MPBGM3x3 model can be used by the physical education teacher for learning with the purpose of improving the affective aspect of cooperation.

#### CONCLUSION

Based on the results of research and discussion of the final product review that has been explained, it can be concluded that:

- 1. MPBGM3x3 model has been developed to develop cooperation by not leaving the aspect of skilled and cognitive, Content Validity = 1.00
- 2. Implementation of MPBGM3x3 model is effective (easy, safe and fun) for teacher and students.
- 3. The MPBGM3x3 model is effective for improving student learning outcomes, especially on cooperation aspects, as well as improving skills and cognitive aspects (decision making).

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