

The Influence of Application of the Sport Education Learning Model in Improving Volleyball Playing Skills

Ervan Kastrena and Edi Setiawan

Physical Health and Recreation Study Program, Suryakencana University, Cianjur, Indonesia

ervankastrena@unsur.ac.id

Keywords: Learning Model, the Sport Education, Volleyball Playing Skills.

Abstract: This study aims to determine the effectiveness of sports education model influence on the skills of playing volleyball. This research uses experimental method with design that is randomized pretest-posttest control group design (Frankeal and Wallen, 2012). The population in this study were students of volleyball extracurricular in SMP PGRI Ciranjang, totaling 30 students. Sampling technique in this research is total sampling. The sample in this study were 30 people. The instrument used is GPAI. Data analysis using SPSS version 17 at significance level = 0,05. The results show that the learning model of the sport education has a significant influence on the improvement of volleyball playing skills. The results of this study suggest to the teacher apply the model of learning the sports education in the process of physical education.

1 INTRODUCTION

The sport aducation learning model is a curriculum and learning model designed to offer a rich professional educational sports experience for students in the context of physical education in school environments or authentically (Deenihan & Macphail, 2013; Sun, 2016 ; Bailey, 2016). The sport adapter development model was developed by Siedentop in 1994, Siedentop developed the sport education learning model with the ultimate goal is providing students with sport-based education experience that helps in understanding and applying holistic games in playing skills (Perlman 2015, Landi, 2016). From the beginning of the creation of the sport educationn learning model to the present, this model has become world-renowned and contributes to the renewal and enhancement of knowledge in the teaching of physical education, and many researchers are studying this model, even the sport adapting model has been widely applied in some countries such as the UK, New Zealand, Australia, the United States, the United Kingdom, and Ireland aimed at improving the quality of learning and improving student achievement outcomes (Sun, 2016). Characteristics of the sport adapter's learning model have 6 main features:

- (1) season,
- (2) team affiliation,

- (3) formal competition,

- (4) recording,

- (5) peak event, and

- (6) celebration of the competition's results.

In one season, students are grouped into one team for the entire teaching unit, then students compete in a formal championship that includes all stages of team training, early season, season and end season and celebration of the competition, which includes awards that celebrate the performance and development of learning they have achieved (Hastie, 2017). To ensure that all of these features are organized, students are given different organizational and instructional roles in their teams (eg having trainers, managers, fitness trainers) and empowering students with responsibilities that go beyond playing activities provide many benefits and a holistic understanding and appreciation of sports, thus enhancing the student's learning experience. While the role of the teacher in the sport adapter model, acts as a facilitator to provide students with knowledge and learning skills through various student-centered learning strategies (Version, 2004 ; Yudiana , 2016).

In this study, the authors will be more focused on the model of learning that is able to develop the skills of students' volleyball playing, which is by applying the model of learning the sport education. In recent years, many scientists in the sports pedagogy discipline have begun to study programs

and models that can influence student learning outcomes and make this experience more positive. Researchers have shown that the sport education is considered a more inclusive and appropriate approach, can be used by physical education teachers to provide effective teaching to all students, because students not only learn to play, but students also learn to coordinate and manage experiences their own sport. The sport education learning model features some of the key instructional features that distinguish it from traditional physical education models. More recently this model has been implemented in Korea and Russia. The findings show that the sport adapter's learning model provides advantages over traditional approaches to physical education. The findings from this international study have shown positive results that during the sports education season, students enjoy taking an administrative role, showing different preferences to stay on the same team throughout the season and they enjoy their experience in more sports education units than education lessons regular body. even the sport education model has given students a more authentic (real) learning experience, allows students to have more time to play and practice improving skills, and that the sports education model has the potential to produce an educational, educational sport concept (Sun, 2016).

Limitations in the research that is the reality of the field in general in general physical education teachers rarely apply all kinds of learning models that exist in physical education. Learning models applied by teachers in the learning process tend to be traditional, where students perform physical exercises based on the instructions specified by the teacher. This traditional learning model has been widely used but remains a problem for teachers and students in its implementation. Traditional learning models in teaching a skill, not even improving students' playing skills (Griffin, Oslin and Mitchell 2005; Savery and Duffy, 1995).

Relating to the existing limitations, the solution that researchers provide is by applying the sport education model, which, according to previous research, positively influences the playing skills in a sport game (Estrada, 2015, Perlman, 2015). In this regard there are several hypotheses to be answered through this research among others:

1. Is there a significant effect of the sports education model on improving volleyball playing skills?
2. Is there a significant effect of traditional learning models on improving volleyball playing skills?

3. Is there any difference in influence between the sports education model and the traditional learning model on improving volleyball playing skills.

The purpose of this research is to find out the influence of learning model of the sport education and traditional learning model to improve students' volleyball playing skills.

2 METHODS

2.1 Participants

The population in this study were all students who followed the extracurricular activity of volleyball in SMP PGRI Ciranjang which amounted to 30 people. Sampling technique for this is the total sampling technique. Samples in the study were 30 people with details of 10 female students and 20 male students.

2.2 Design and procedure

The research method used is true experiment with research design that is randomized pretest-posttest control group design (Frankeal and Wallen, 2012). As an illustration, the authors present the form of research design used can be seen in Figure 1.

Eksperimental Group	R	O	X	O
Control Group	R	O	C	O

Figure 1: Research Design.

Information:

- R : Selection of each group is done randomly
- O : Observation (Pretest-posttest volleyball skill)
- X : Kelompok treatment (Model of Learning the Sport Education).
- C : Control Group (Traditional Learning model).

In this study, we were using two groups, where experimental group was given treatment in the form of learning model of the sports education and control group was given treatments in the form of traditional learning model. Treatment given to the students as many as 19 meetings with the frequency of three times a week. The learning program can be seen in Table 2.

Table 1: Principal contents and activities by sessions of both programs.

Session	Sport Education Model	Traditional Model
1.	Introduction and composition of teams. Election of the captain-coach.	Introduction. Play volleyball 6x6.
2.	Names of the teams and other roles: fitness trainer. Serve and set.	Set 1x1
3.	Role of the referee. Serve and set.	Set 1x1
4.	Presentation of logos and t-shirts. Set and pass. Tactics.	Set 2x2
5.	Committee of discipline and organization. Pass, set and attack. Tactics	Set 2x2
6.	Role of statistician. Draw and schedule of the championship. Attack and block. Tactics.	Pass 1x1.
7.	Training for the championship	Pass 1x1
8.	Competition (league).	Pass and set
9.	Training for the championship	Serve
10.	Competition (league).	Serve
11.	Training for the championship	Attack and block
12.	Competition (league)	Attack and block
13.	Training for the championship	Attack tactics 6x6
14.	Competition (league).	Attack tactics 6x6
15.	Competition (league)	Defense tactics 6x6
16.	Competition (semi-final1)	Defense tactics 6x6
17.	Competition (semi-final2)	Competition 6x6.
18.	Competition (final of the class).	Competition 6x6.
19.	Competition (final between classes) and party. Presentation of diplomas and awards	Competition 6x6.

3 MEASURES

The instruments used are game performance assessment instrument (Griffin, Mitchell, and Oslin, 1997). Where students play bolavoli dive 5 minutes.

4 RESULTS

4.1 Results

After giving the treatment as much as 19 meeting that is in the form of learning using learning model of the sport education obtained raw data and then

analyzed using SPSS version 17. For more details are presented as follows:

Table 2: Descriptive Data and Testing Normality, Homogeneity.

Group	Type of Test	Mean	St d. Deviation	Min	Ma
Sem	Pretest	7.01	1.65	4	9.77
	Posttest	8.12	1.48	5	10
Traditional	Pretest	5.10,	2.15	2	9.77
	Posttest	6.30	2.03	3	10

Table 3: Test-t Initial Test and End Test SEM and Traditional Learning Model.

Group	Type of Test	Normality test		Homogeneity Test	
Sem	Pretest	0.230	0.05	0.165	0.05
	Posttest	0.56	0.05		
Traditional	Pretest	0.117	0.05	0.118	0.05
	Posttest	0.256	0.05		

Table 4: Testing the First Hypothesis.

Type of Test	Average	One-Sample t-Test				
		t-ht	t-tb	Sig		Keterangan
Pretest	7.05	21.65	2.05	0.00	0.05	Significant
Posttest	8.16	27.89	2.05	0.00	0.05	Significant

Table 5 : Testing Second Hypothesis.

Type of Test	Average	Table One-Sample t-Test				
		t-ht	t-tb	Sig		Information
Pretest	4.99	11.77	2.05	0.000	0.05	Significant
Posttest	6.20	3pm	2.05	0.000	0.05	Significant

Table 6: Testing the Third Hypothesis.

Type of Test	Average	Table Independent Sample t-Test				
		t-ht	t-tb	Sig		Information
Pretest	4.99	3.85	2.05	0.000	0.05	Significant
Posttest	6.20	3.95	2.05	0.000	0.05	Signifik an

Table 7: Testing Gain.

Table 4. Paired Samples Test			
		Correlation	Sig.
Pair 1	Pretest-Posttest	.972	.000

Based on the one-sample t test table, the results of the data analysis show the initial test score and the final test of the sport education model and the traditional has a significant influence on the

improvement of volleyball playing skills. Then based on table of independent sample t-test show both model of learning of the sport education and traditional have difference of influence significantly because seen from post value t-count equal to $3.95 > t\text{-table } 2.05$, hence H_a hypothesis there is difference of influence between model learning sport education and traditional learning models on improving volleyball play skills are accepted or significant. Then the gain value is increased the skill of playing volleyball from pretest to posttest with correlation value equal to 0.972 and sig value equal to 0.00. Furthermore, based on the average value of the model group learning the sport education and traditional shows that the model group learning the sport education is better to improve the skills of playing volleyball.

4.2 Discussion

The findings of the study show that the first hypothesis is significant where the learning model of the sports education has an effect on the improvement of bolavoli playing skills. This is in line with research conducted by (Sun, 2016). Improvement occurs because the learning model of the sport education is a learning model that allows students to have more time to play and practice for learning skills (Sun, 2016). With the learning model of the sports education students feel comfortable and not feel bored in the learning process.

5 CONCLUSIONS

The implementation of the sport education learning model in physical education particularly in learning volleyball is proven to be effective. Thus, it can be implied that the model gives positive influences towards the improvement of volleyball skills of the students (Estrada, 2015).

ACKNOWLEDGEMENTS

To the University of Suryakencana Cianjur thank you for helping the author in the provision of research tools so that the research went well.

REFERENCES

- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R., Education, B. P. 2009. The educational benefits claimed for physical education and school sport: an academic review. *Research papers in education*, 24(1), 1-27.
- Deenihan, J. T., Macphail, A. 2013. *A Preservice Teacher's Delivery of Sport Education: Influences, Difficulties and Continued Use*, 166–185.
- Estrada, L. 2015. *The Sport Education Model on a Basketball Elective Course at the College Level*, 1(4), 90–91.
- Hastie, P. 2017. *European Journal of Physical Education and Sport Science Sport Education In A Higher Education*, (2009), 22–35. Landi, D., Fitzpatrick, K. and McGlashan, H., 2016. Models Based Practices in Physical Education: A Sociocritical Reflection. *Journal of Teaching in Physical Education*, 35(4), pp.400-411.
- Perlman, D. 2015. *The influence of the Sport Education Model on developing autonomous instruction*, 8989 (November).
- Savery, J.R. and Duffy, T.M., 1995. Problem based learning: An instructional model and its constructivist framework. *Educational technology*, 35(5), pp.31-38.
- Sun, Z. 2016. *The Advantage of Using Sport Education Instead of Traditional Approach in Physical Education*, 6(2), 13–16.
- Version, D. 2004. *Effects of a Sport Education Intervention on Students's Motivational Responses in Physical Education*.
- Yudiana, Y., 2016. Implementasi Model Pendekatan Taktik dan Teknik dalam Pembelajaran Permainan Bola Voli pada Pendidikan Jasmani Siswa Sekolah Menengah Pertama. *ATIKAN*, 5(1).