Kinestetik : Jurnal Ilmiah Pendidikan Jasmani 7 (3) (2023)
Kinestetik : Jurnal Ilmiah Pendidikan Jasmani
https://ejournal.unib.ac.id/index.php/kinestetik/index
DOI : 10.33369/jk.v7i3.29749

The Effect of Cooperative Learning Approach, Competitive and Physical Fitness on Basketball Dribble Skills

I Ketut Hendry Wijaya Kusuma[1]
[1]STKIP Agama Hindu Singaraja, Bali, Indonesia

Article Info

Article History :

Received : August 2023
Revised : September 2023
Accepted : September 2023

Keywords:

Basketball Dribble,
Model Cooperative Learning Model,
Physical Fitness,

Abstract

The condition of learning basketball games in physical education in junior high schools (SMP) is still not optimally carried out in the implementation of the teaching and learning process, especially in the context of developing learning outcomes of basketball skills. The method used in this research is an experimental method with Anava 2 x 2 design. The population in this study were seventh grade students of SMP Negeri 2 Sawan as many as 78 students. The sampling technique uses the Verducci technique, to be as many as 78 people according to what is needed in the study.The instrument chosen by the author is the physical fitness test from AAHPERD for the junior high level and for basketball dribbling skills with a validity level of 0.89, namely the dribble test from Horrison. The author's hypothesis in this study is (1) The learning outcomes of students' basketball skills taught through the Cooperative learning approach are better than the Competitive learning approach as a whole. (2) There is an interaction between learning approaches and physical fitness on learning outcomes of basketball skills. (3) The learning outcomes of basketball skills of student groups taught through the Competitive learning approach are better than those of student groups taught through the Cooperative learning approach in groups of students who have high fitness. (4) The learning outcomes of basketball skills of student groups taught through the Cooperative learning approach are better than those of student groups taught through the Competitive learning approach in groups of students who have low fitness.

*Corresponding email: hendriwijaya@stkipahsingaraja.ac.id
ISSN 2685-6514 (Online)
ISSN 2477-331X (Print)

INTRODUCTION

Physical Education is an important part of the education system, aiming to develop various aspects of physical fitness, health, critical thinking skills, socialization skills, and developing reasoning skills. Indonesia places physical education as an integral part of its education system. Likewise, other countries such as China, Malaysia, England, America and several other countries have implemented physical education although in different ways and procedures. The learning process of physical education according to the author's observations so far is still teaching using a learning approach that emphasizes mastery of skills as the main goal of learning without paying attention to the characteristics of students and the type of sport. So that without realizing it, the teacher is too focused on the psychomotor aspects (movement skills in particular), forgetting the equally important things, namely cognitive and affective aspects. Basketball is one of the sports in the physical education program carried out in schools. The physical education curriculum explains that through the basketball teaching and learning process, it is hoped that in addition to improving physical fitness, it is also to instill discipline, educate character, train cognition in understanding the material and to improve basketball sports achievements through the process of teaching and learning basketball games, both through intra curricular and extracurricular activities. Selection for the ideal learning approach model so that the practical learning process can run more optimally in terms of learning basketball dribbling skills can be mastered more optimally and this is one of the ways that educators must do. According to Widiastuti, physical fitness is a physical condition that describes the potential and physical ability to perform certain tasks with optimal results without showing significant fatigue (Widiastuti, 2015). Based on the experiences and observations that have been made to date, both in intra curricular and extracurricular activities, many physical education teachers and trainers in schools are suspected of not optimally carrying out the teaching and learning process as expected in an effort to improve the learning outcomes of basketball skills, including due to the different characteristics of students, such as physical condition, the complexity of the game's movements and the lack of teacher understanding in the application of learning approaches. The variety of current learning methods and models makes it a challenge for PE educators to apply effective models in the implementation of learning in accordance with the expected learning. From the many existing learning models, the author wants to apply or test two learning models, namely, cooperative and competitive learning models. According to Johnson argues that: Cooperative learning is a teaching and learning process that involves the use of small groups that allow students to work together in order to maximize their own learning and the learning of each other (David, 2012). Meanwhile, according to Lie, cooperative learning or mutual cooperation learning is structured in such a way that each member in a group carries out their personal responsibilities (Lie, 2008). Competitive learning is the adjective of competition which is synonymous with competition which is usually realized by individuals who are competing and always strive to be the best among other individuals (Saputra, 2007). Competitive learning has advantages including providing opportunities to develop social aspects such as hard work,

respect for opponents and others. Meanwhile, according to Slavin, if a competition is well organized, competition among suitable competitors can be an effective and harmless means of motivating people to do their best (Slavin, 2010). In connection with this previous research, the researcher intends to develop more research in line with that, in order to complement previous research. It will look at the aspects of high and low physical fitness associated with the learning model on the learning outcomes of basketball dribbling skills. According to the author's assumption that motor ability alone will not optimally support the learning outcomes of basketball dribbling skills. This means that students who have high motor skills cannot be sure that their physical fitness is also high. The author assumes that if students have high motor skills and their physical fitness is also high, the results will be maximized in the basketball dribbling learning process. Based on the above study, the authors are interested in comparing cooperative and competitive learning models on the learning outcomes of basketball dribbling skills associated with aspects of high and low physical fitness levels possessed by students. Furthermore, the researchers made the research title "The Effect of Cooperative Learning Approaches, Competitive and Physical Fitness on Basketball Dribble Skills." The author considers this research to have important value in relation to efforts to improve the quality of learning both in intra curricular and extracurricular various sports which in turn can help improve the learning outcomes of basketball skills in particular and can generally contribute to other learning with this research, because if this problem continues and is not researched from the perspective described above and studied, it is suspected that it will affect the achievement of non-optimal skill learning outcomes.

METHODS

The method used in this research is the experimental method. For basketball skills, the test that will be used in this study consists of a dribble test with a validity level of 0.89 obtained and the results of calculating multiple correlations with the Horrison method, in Atmojo, namely the dribbling test (Mulyono Biyakto, 2010). To determine the level of physical fitness, researchers used the physical fitness test from AAHPERD with a validity r of 0.89 for the junior high level, in Atmojo The test items, consisting of: 1) body composition measurement (BMI). 2) muscle strength (body lift 60 seconds) full up 3) muscle endurance (60-second push ups) 4) flexibility (sit and reach) 5) long run test (800 meters for girls 1000 meters for boys).

RESULT

This study consists of three variables, namely the dependent variable is the learning outcome of basketball dribbling, the independent variable is the learning method (cooperative and competitive), and the moderator variable is physical fitness (high and low). After following a series of learning processes that have been programmed by dividing students into two groups, namely groups of students taught by the cooperative learning method and groups of students taught by the competitive learning method, data on basketball dribbling learning outcomes in the form of scores are obtained which are used to analyze the average assessment results from the three evaluators. Each group consists of students who have high physical fitness and students who have low physical fitness. The high and low physical fitness

of students is measured by the results of students' physical fitness tests. Furthermore, the data on students' basketball dribbling learning outcomes were analyzed by collecting data from each group after receiving treatment. Data on learning outcomes of dribbling basketball can be seen in the following

Table 1. Summary of Data Calculation Results of Basketball Dribbling Learning Outcomes table:

Physical Fitness	Learning Approach			
	(Cooperative) A_1		(Competitive) A_2	
(High) B_1	n_1 =	10	n_2 =	10
	X_1 =	280	X_2 =	215
	X_1^2 =	7900	X_2^2 =	4681
	x_1 =	28,00	x_2 =	21,50
	$(X_1)^2$ =	78400	$(X_1)^2$ =	46225
(Low) B_2	n_3 =	10	n_4 =	10
	X_3 =	216	X_4 =	235
	X_3^2 =	4734	X_4^2 =	5597
	x_3 =	21,60	x_4 =	23,50
	$(X_3)^2$ =	46656	$(X_4)^2$ =	55225
Total	n_{k1} =	20	n_{k2} =	20
	X_{k1} =	496	X_{k2} =	450
	X_{k1}^2 =	12634	X_{k2}^2=	10278
	x_{k1} =	24,80	x_{k2} =	22,50
	$(X_{k1})^2$ =	246016	$(X_{k2})^2$=	202500

Description:
N : sample size
∑X: the sum of the learning outcome scores
X : average score of learning outcomes (mean)
S : standard deviation

1.Frequency distribution of learning outcomes of basketball dribbling in the group of students taught with the cooperative learning method (a1)

From the data on the learning outcomes of dribbling bola basket of the group of students taught with the cooperative learning method (A1) by not distinguishing the level of physical fitness of students, as a whole has a value range of 17 to 34 with an average score of 24.80 and a standard deviation of 4.18 while the median = 24.90 and mode = 35.50. The frequency distribution can be seen in the following table:

Table 2. Frequency distribution of learning outcomes of basketball dribbling in the group of students taught with the cooperative learning method (a1)

No	Skor			*f*	Lower limit	Upper limit	*fk*	*fr*
1	17	-	19	2	16,5	19,5	2	10,0 %
2	20	-	22	4	19,5	22,5	6	20,0 %
3	23	-	25	5	22,5	25,5	11	25,0 %
4	26	-	28	5	25,5	28,5	16	25,0 %
5	29	-	31	3	28,5	31,5	19	15,0 %
6	32	-	34	1	31,5	34,5	20	5,0%
	Total			20				100%

Based on table 2, it can be seen that 55% (11 students) obtained a score of basketball dribbling learning outcomes above average, 5% (1 student) on average and 45% (8 students) obtained a score of basketball dribbling learning outcomes below average.

2. Frequency Distribution of Learning Outcomes of Basketball Dribbling in Student Groups Taught with Competitive Learning Method (A2)

From the data on the learning outcomes of basketball dribbling, the group of students taught with the competitive learning method (A2) by not distinguishing the students' physical fitness level, as a whole has a range of values (scores) of 17 to 28 with an average score of 22.50 and a standard deviation of 2.83 while the median = 22.8 and mode = 23.5. The frequency distribution can be seen in the following table:

Table 3. Frequency distribution of learning outcomes of basketball dribbling in student groups taught with competitive learning method (a2)

No	Skor			*f*	Lower limit	Upper limit	*f*k	*f*r
1	17	-	18	2	16,5	18,5	2	10,0 %
2	19	-	20	3	18,5	20,5	5	15,0 %
3	21	-	22	4	20,5	22,5	9	20,0 %
4	23	-	24	6	22,5	24,5	15	30,0 %
5	25	-	26	4	24,5	26,5	19	20,0 %
6	27	-	28	1	26,5	28,5	20	5,0%
Total				20				100 %

Based on table 3, it can be seen that 50% (10 students) obtained a score of basketball dribbling results below average, while 50% (10 students) obtained a score of basketball dribbling learning outcomes above average.

3. Frequency Distribution of Learning Outcomes of Learning Basketball Dribbling in the Group of Students with High Physical Fitness Taught with Cooperative Learning Method (A1B1)

From the data on the learning outcomes of basketball dribbling in the group of students who have high physical fitness taught with the cooperative learning method (A1B1), as a whole has a range of values (scores) 22 to 27 with an average score of 28 and a standard deviation of 2.58 while the median = 28.17 and mode = 28.17. The frequency distribution can be seen in the following table.

Table 4. Frequency Distribution of Learning Outcomes of Learning Basketball Dribbling in the group of students with high physical fitness taught with cooperative learning method (A1B1)

No	Skor			*f*	Lower limit	Upper limit	*f*k	*f*r
1	24	-	25	2	23,5	25,5	2	20,0 %
2	26	-	27	2	25,5	27,5	4	20,0 %
3	28	-	29	3	27,5	29,5	7	30,0 %
4	30	-	31	2	29,5	31,5	9	20,0 %
5	32	-	33	1	31,5	33,5	10	10,0 %
Total				10				100 %

Based on table 4, it can be seen that 40% (4 students) obtained a score of basketball dribbling learning outcomes below average, 10% (1 student) on average and 50% (5 students) obtained a score of basketball dribbling learning outcomes above average.

4. Frequency Distribution of Learning Outcomes of Learning Basketball Dribbling in the Group of Students with Low Physical Fitness Taught with the Cooperative Learning Method (A1B2)

From the data on the learning outcomes of basketball dribbling in the group of students who have low physical fitness taught with the cooperative learning method (A1B2), as a whole has a range of values (scores) of 15 to 25 with an average score of 21.60 and a standard deviation of 2.75 while the median = 21.17 and mode = 14.50. The frequency distribution can be seen in the following table:

Table 5. Frequency Distribution of Learning Outcomes of Learning Basketball Dribbling in the Group of Students with Low Physical Fitness Taught with the Cooperative Learning Method (A1B2)

No	Skor			*f*	Lower limit	Upper limit	*f*k	*f*r
1	18	-	19	2	17,5	19,5	2	20,0 %
2	20	-	21	1	19,5	21,5	3	10,0 %
3	22	-	23	1	21,5	23,5	4	10,0 %
4	24	-	25	4	23,5	25,5	8	40,0 %
5	26	-	27	2	25,5	27,5	10	20,0 %
Total				10				100 %

Based on table 5, it can be seen that 50% (5 students) obtained a score of learning outcomes of basketball dribbling below average, 10% (1 student) on average and 40% (4 students) obtained a score of learning outcomes of basketball dribbling above average.

5. Frequency Distribution of Learning Outcomes of Learning Basketball Dribbling in Student Groups with High Physical Fitness Taught with Competitive Learning Method (A2B1)

From the data on the learning outcomes of learning dribbling basketball in the group of students with high physical fitness who are taught with the competitive learning method (A2B1), as a whole has a range of values (scores) of 18 to 34 with an average score of 21.50 and a standard deviation of 2.54 while the median = 22.50 and mode = 21.30. The frequency distribution can be seen in the following table.

Table 6. Frequency Distribution of Learning Outcomes of Learning Basketball Dribbling in Student Groups with High Physical Fitness Taught with Competitive Learning Method (A2B1)

No	Skor			*f*	Lower limit	Upper limit	*f*k	*f*r
1	17	-	18	1	16,5	18,5	1	10,0 %
2	19	-	20	3	18,5	20,5	4	30,0 %
3	21	-	22	2	20,5	22,5	6	20,0 %
4	23	-	24	2	22,5	24,5	8	20,0 %
5	25	-	26	2	24,5	26,5	10	20,0 %
Total				10				100 %

Based on table 6, it can be seen that 60% (6 students) obtained a score of learning outcomes of dribbling basketball below average, 40% (4 students) obtained a score of learning outcomes of dribbling basketball above average.

6. Frequency Distribution of Learning Outcomes of Learning Basketball Dribbling in Student Groups with Low Physical Fitness Taught with Competitive Learning Method (A2B2)

From the data on the learning outcomes of learning dribbling basketball in the group of students with low Physical Fitness who are taught with the competitive learning method (A2B2), as a whole has a value range (score) of 13 to 27 with an average score of 23.50 and a standard deviation of 2.87 while the median = 25.50 and mode = 18.83. The frequency distribution can be seen in the following table:

Table 7. Frequency Distribution of Learning Outcomes of Learning Basketball Dribbling in Student Groups with Low Physical Fitness Taught with Competitive Learning Method (A2B2)

No	Skor	*f*	Lower limit	Upper limit	*f*k	*f*r
1	17 - 18	1	16,5	18,5	1	10,0 %
2	19 - 20	2	18,5	20,5	3	20,0 %
3	21 - 22	4	20,5	22,5	7	40,0 %
4	23 - 24	2	22,5	24,5	9	20,0 %
5	25 - 26	1	24,5	26,5	10	10,0 %
Total		10				100 %

Based on table 7, it can be seen that 32.50% (6 students) obtained a score of basketball dribbling learning outcomes below average, 18.75% (3 students) on average and 33.75% (7 students) obtained a score of basketball dribbling learning outcomes above average.

DISCUSSION

1. The difference between the cooperative learning approach and the competitive learning approach on the learning outcomes of overall basketball dribbling skills.

Testing the first hypothesis shows that cooperative learning models and competitive learning models have a significant effect on learning outcomes of basketball skills. Based on the researcher's findings, the difference is due to, among others:

- The learning implementation process of both learning approaches.
- The ability to work together and the ability to work alone.
- Characteristics of the development of student movement skills.
- The fact of the test data regarding basketball skills.

Cooperative learning is a group learning method involving four to six students. The cooperative learning model emphasizes aspects of teamwork, namely organized and managed group work where students work cooperatively in small groups to achieve learning objectives (academic, affective and social).

2.Interaction between learning approaches and physical fitness on learning outcomes of basketball skills.

In addition, related to the high and low physical fitness of the students in participating in the learning process through cooperative and competitive approaches, the research results show that there is interaction in it. With the results of students .Testing the second hypothesis shows that there is an interaction between the learning approach and physical fitness on the learning outcomes of basketball skills. Based on the findings of the researchers, this is caused, among others, by the learning implementation process between the cooperative learning model and the competitive learning model, each of which has different characteristics, one of which is such as the finding that through a cooperative learning approach the learning atmosphere is more cooperative, making students interact with each other, communicate to achieve goals. While the competitive learning approach is more competitive, making students compete with each other to outperform other students. Students who have low fitness are more effective in learning through the cooperative approach, while students who have low fitness are more effective in learning through the competitive approach.

3. Differences in cooperative learning approaches and competitive learning models on learning outcomes of basketball skills in students who have high fitness.

Testing the third hypothesis shows that there are differences in cooperative learning models and competitive learning

models on learning outcomes of basketball skills in students who have high fitness. The cooperative learning model is a learning approach that provides a process for students to work together, interact and communicate with their friends to achieve learning goals, positive interdependence that makes each group member dependent on their friends in completing tasks or common goals, individual responsibility, each group member has the responsibility to deliver their work, face-to-face support and help each other, communication between members aims for each individual to learn social skills to support stronger cooperation, group evaluation corrects unwanted behavior discusses special needs or problems in the group.

While the competitive learning approach, which in principle is a format of activities that prioritizes competition, always strives to be the best among other individuals. maximizing the academic performance of each student in order to achieve the highest achievement, the goal is that students are encouraged to compete with the assumption that their classmates are rivals who must be defeated, which may only be achieved by one or a few students. To achieve where when one wins, the others lose. In learning situations, students will be independent and work alone in achieving success, so that one's success and failure will not affect the group.

In other words, what can be used as a fundamental thing by researchers in this hypothesis is why students who have high physical fitness who are taught through a competitive approach do not experience an increase in learning outcomes of their basketball skills well (optimally), unlike students who have high fitness who are taught through a cooperative approach experience an increase in learning outcomes of their basketball skills well (optimally). This is based on the findings felt by researchers, among others, because the situation and conditions of learning a competitive approach tend to be individualistic and lack of evaluation so that it has an impact on the lack of technical improvement during learning because each student feels competitive with each other. So that they do not develop their skills in learning their basketball skills. Based on the findings of researchers regarding students who have low fitness and are taught through both approaches, namely cooperative and competitive learning approaches, the results in the field show that students who have low fitness are more effectively taught through a competitive learning approach.

4. Differences in cooperative learning approaches and competitive learning models on learning outcomes of basketball skills in students who have low fitness.

Testing the fourth hypothesis shows that there are differences in cooperative and competitive learning approaches to the learning outcomes of basketball skills in students who have low fitness. Meanwhile, students who have low fitness who are taught through the learning process through a competitive approach based on the findings of researchers in the field are quite effective.

This is because the desire to win from other students provides its own motivation for students so that students can take part in learning optimally which has an impact on the development of learning outcomes of their basketball skills. In learning situations, students will be independent and work alone in achieving success, so that one's success and failure will not affect the group.

CONCLUSION

Based on the results of data processing and analysis that has been carried out, the following conclusions can be drawn:

1. The learning outcomes of basketball skills of students taught through a cooperative learning approach are better than students taught through a competitive learning approach as a whole.
2. There is an interaction between learning approaches and physical fitness on learning outcomes of basketball skills.
3. The learning outcomes of basketball skills of student groups taught through a cooperative learning approach are better than those of student groups taught through a competitive learning approach in groups of students who have high fitness.
4. The learning outcomes of basketball skills of student groups taught through a competitive learning approach are better than those of student groups taught through a competitive learning approach in groups of students who have low fitness.

ACKNOWLEDGEMENT

The author would like to thank STKIP Agama Hindu Singaraja for providing support in this research. The author also thanks the physical education study program which has encouraged to conduct research in realizing the vision and mission.

REFERENCES

Amber, V. (2012). Petunjuk untuk pelatih dan pemain bola basket. Bandung: Pionir Jaya.

Fawaid, A., & Mirza, A. (2009). Terjemahan Buku Models of Teaching. Edisi Kedelapan. Yogyakarta: Pustaka Pelajar.

Ahmadi, N. (2007) *Permainan Bola Basket*. Solo: Era Intermedia,

D .W., Johnson.,& Johnson. R, (1994). *Leading the Co- Operative School,* Edina MN: Interaction Book Co.

David W. J. (2012) *Colaborative Learning Strategi Pembelajaran Untuk Sukses Bersama*, Bandung: Nusa Media,.

Departemen Pendidikan Nasional, (2008) *Kamus Besar Bahasa Indonesia Pusat Bahasa,* Edisi keempat Jakarta: Gramedia Pustaka Utama,

Dimyati & Mujiono, (2006) *Belajar dan Pembelajaran*, Jakarta: Rineka Cipta.

Dwiyogo, W, D. (2010) *Dimensi Teknologi Pembelajaran Pendidikan Jasmani dan Olahraga*. Malang: Wineka Media,

Ega T, R, (2013) *Strategi Pembelajaran Pendidikan Jasmani.,* Bandung: Alfabeta,

Iskandar.*Psikologi Pendidikan sebuah Orientasi Baru*. (2012) .Jakarta: Referensi.

J. B, Grissom. (2005).*Physical and Academic Achievement.Journal* of Exercise Physiology.

Jon Oliver, (2009) dasar-dasar Bola Basket (Bandung: Intan Sejati ,) h 50.

Joyce, Bruce., Marsha Weil and Emily Calhoun, (2008) *Models Of Teaching*, 8th Edition.New Jersey: Allyn & Bacon Publisher.

Kaplan, C. B., & Kaplan, B. (2012). Bball basics for kids: a basketball handbook. Universe.

Lie, Anita. (2008) *Cooperative learning diruang ruang kelas*., Jakarta: Grasindo,

Mukholid, Agus. (2007) *Pendidikan Jasmani Olahraga Dan Kesehatan*. Surakarta: Yudistira.

Mulyono B, A, (2010) tes dan pengukuran Pendidikan Jasmani olahraga., Surakarta: lpp uns.

Purwanto, (2011). *Evaluasi Hasil Belajar*. Yogyakarta: Pustaka Pelajar.

Prasetyo, T., Sir, I., & Amir, A. (2022). The Effects of the Team-Game-Tournaments Learning Model on Primary School: Basic Dribble Moves in Basketball Games. ETDC: Indonesian Journal of Research and Educational Review, 1(2), 225-233.

Slavin. Robert E (2009). *Cooperative Learning Teori, Riset dan Praktek.* Bandung: Nusamedia,

Slavin, Robert E. (2010) *Cooperative Learning Teori*, Riset dan Praktik. Bandung: Nusa Media,

Sugiyono, (2010). *Metode Penelitian Kuantitatif Kualitatif dan R&D.* Bandung:Alfabeta.

Trianto, T. (2007). Model-model pembelajaran inovatif berorientasi teori earthcomm. Jakarta: Prestasi Pustaka.

Widiastuti, (2015). *Tes dan Pengukuran Olahraga.* Jakarta:*Raja Grafindo Persada*.