Experimental Study of Command and Reciprocal Teaching Styles on Improving Upper Service Learning Outcomes in Volleyball Games for Physical Education, Health and Recreation Students, Cenderawasih University

Marsuki
Cenderawasih University, Jayapura, Papua
Corresponding Author: Marsuki marsukidkd@gmail.com

A R T I C L E I N F O	A B S T R A C T
  	This study was conducted to determine the effect of reciprocal teaching style and command teaching style on upper serve ability in volleyball. The method used is an experimental method using the Pretest Posttest Control Group Design; in this design, a sample is obtained based on the size of the population, then an initial test or pre-test is held. The population in this study was students of the Teaching and Education Faculty of Penjaskesrek, Cenderawasih University. Based on the results of the calculations, it is stated that the command teaching method is more influential than the reciprocal teaching method on the upper serve ability in volleyball. This is based on the value of $t_{count} = 7.42 > t_{table} = 2.101$, with a level of $\alpha = 0.05$. As a recommendation for coaches and coaches, in improving the ability to serve in volleyball games, they can apply the command teaching method.

INTRODUCTION

The purpose of education generally refers to the formation of the whole person. This is as stated by Junaidi and Yudiana (2016) that Education is one of the most basic needs for improve the quality of human life as a whole. So to determine the nation's progress, education is such an important indicator (Aziizu, 2015).This is indicated by the existence of various levels of education starting from Elementary Schools, Junior High Schools, Public High Schools to Higher Education.According to Law No. 20 of 2003 explained: Education is a conscious effort and planning to create an atmosphere learning and the learning process so that students are active develop self-potential to have religious spiritual power, self-control, personality, intelligence, noble character as well skills needed by himself, the community, the nation and the State.

In the education curriculum in Indonesia there are physical subjects. Physical education has an important role in forming a complete human being, because no education is complete without physical education. Physical education does not only have an impact on physical growth, but also the psychological development of students, Lutan (2000: 2) explains that: the ideal goal of a physical education program is comprehensive, because it includes not only physical aspects but also other aspects which include intellectual, emotional, social and moral with the intention that one day young people will become someone who is confident, disciplined, healthy, fit and lives happily. Achievement development in sports is continuously carried out both by the government and by sports organizations. Therefore, the development of each sport branch must be directed at increasing achievements which are later expected to make the nation proud and especially in the land of Papua.

One of them is volleyball. In learning the game of volleyball, the majority The teacher fully provides instructions and explanations in the learning process, so that students are more Many follow what is ordered by the teacher cause students to be active and creative limited (Pamungkas & Wibowo, 2020). In relation to the practical learning process for sports, it is still carried out with a learning model that emphasizes more on competitive aspects that lead to the formation of movement skills, while the development of cognitive and affective aspects is still neglected, the selection and use of appropriate learning models in the practical learning process with the aim that the learning outcomes of movement skills can be well mastered, is an effort that must be made by every teacher, for this reason it is necessary, to develop learning models that are more effective and efficient, according to the demands and characteristics of students who study, because this relates to the characteristics of students who study , because it relates to the characteristics of the level of complexity of motion contained in the game of volleyball itself.

The use of appropriate teaching methods for students who are studying will facilitate the implementation of the process in order to achieve the goals set. Meanwhile, one of the methods that can be used to train the ability to play volleyball is the command and reciprocal teaching style. Each of these two approaches has different characteristics and it is not yet known which approach is better and more effective for improving volleyball playing skills in Physical

Education students at the Teaching and Education Faculty, Cenderawasih University.

One of the factors in the teaching and learning process environment is the teacher's teaching style applied in schools. Teaching style is seen as a means of interaction between teachers and students, including the way teachers treat students. The teaching style applied by the teacher must be efficient and effective. In this regard Lutan (2000: 30) explains that the application of an efficient and effective teaching style can increase student activity in learning, so that in the end the goals of learning can be achieved. In fact, the variety of teaching styles for teachers is very varied, one of which is the command teaching style and reciprocal teaching style.

The purpose of this research is; to knowhow much the command teaching style can have a significant effect on the learning outcomes of the upper serve in volleyball games, to find out how much the reciprocal teaching style can have a significant effect on the learning outcomes of the upper serve in volleyball games, and to find out how much the command teaching style has a significant influence more significant when compared to the reciprocal teaching style on the learning outcomes of the upper serve in volleyball.

THEORETICAL REVIEWS
Service for Volleyball

Service is the opening stroke to start a game. OnInitially, serving is just giving the ball to the opponent and after the ball is received by the opponent, the real game begins (Utami, 2007). One type of serve in volleyball is known as the top serve. Service is the first attack in volleyball. Referring to Faulan (2022), serving for volleyball is a hitting technique that is carried out by throwing the ball up and then hitting it over the head and over the net and falling in the opponent's area. In practice, the top serve technique only requires throwing the ball up and hitting it hard with your palms. Meanwhile, quoting Arifin (2014) it is said thatThe over serve is the basic technique of the initial serve by tossing the ball up as necessary. Then servers hitting the ball with a swing of the hand from top to back opponent's target square over the net from above.
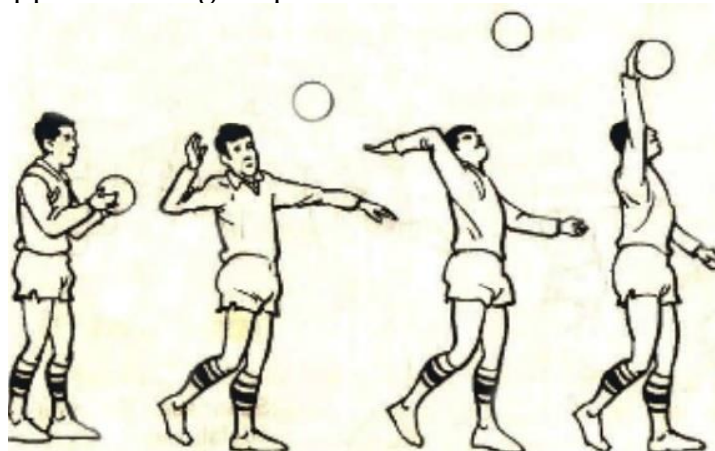

Figure 1. Top Service in Volleyball Game
(*photobucket.com*, in Arifin 2014)

Faulan (2022) says that there are advantages and disadvantages in serving over, the advantagesthe resulting punches are more easily directed to the opponent's area and it will be difficult for the opponent to catch them, while the drawback in this method is that the ball often gets caught in the net or can even get out of the field. Common mistakes in serving according to Barbara L. Viera and Bonnie Jill Ferguson (2000: 35) in Arifin (2014) by saying that there are common mistakes in serving up. These common mistakes are; The ball hits the net, the ball goes to the right, the serve cannot go over the net, the ball falls over the line, and you have to take 2 or 3 steps to serve.

Command Teaching Style

Teaching style is defined as an effort that done by a teacher to organize and guide in the teaching and learning process (Pamungkas & Wibowo, 2020). One of the existing teaching styles is the command teaching style.The command style can be interpreted as a teaching approach that is most dependent on the teacher with the goal of careful performance. The teacher prepares all aspects of teaching and he is fully responsible and takes the initiative in teaching and monitors the great progress of the development of his students (Noviardila, 2020).The main feature of the command style is the direct and immediate relationship between the teacher's stimulus and the student's response. The teacher's stimulus precedes every movement of students who carry out their movement tasks according to orders or examples of models given by the teacher. Decisions about location (where the task is performed), posture, start time, pace and rhythm, stop time, length of task, and intervals are all made by the teacher. The stimulus is planned and given fully by the teacher and students respond repeatedly.

The commando style of teaching has its advantages and disadvantages. Broadly speaking Mosston cited by Mahendra (2000: 108) suggests the advantages of this style include, Response immediately after the stimulus, Uniformity of motion, conformity, Simultaneous appearance, Adherence to the established model, Imitation of a model, Accuracy and thoroughness of response, maintenance, aesthetic standards, group cohesiveness, and efficiency in the use of time and opportunities.

Losses arising from the command style according to Supandi et al. (1986:34) namely; insensitive to individual needs and differences, inhibits creativity and individuality and does not inspire enthusiasm to practice or learn outside of school hours.

Reciprocal Teaching Style

Reciprocal teaching style is one of the teaching styles emphasizes students are more active in learning and the teacher only plays a role as a facilitator who monitors every activity carried out by students in learning (Junaidi & Yudiana, 2016). Furthermore, Juanaidi & Yudiana (2016) said that in the reciprocal teaching style, classes are organized and conditioned in certain roles (divided into two groups), there students who act as actors and there are students who act as observers (observer) of the activities carried out by the group of actors, meanwhile the teacher acts as a facilitator.

Referring to Pamungkas & Wibowo (2020) it is said that the teaching style is reciprocal This gives freedom to students to make decisions when observing activity his friends as actors and provide evaluation any movement activity that has been ordered by Teacher.Reciprocal Teaching Style, wherestudents are possible to set the number of repetitions and the speed of carrying out exercises or movements. The reciprocal style is implemented to increase the socialization relationship with friends and to take advantage of the presence of immediate feedback. Students are given the freedom to make broader decisions. In addition, students are required to assess learning outcomes in a limited way. The assessment is limited to formative and corrective assessments by students against other students. In this regard, Mosston (1993:65) explains that the reciprocal style involves the presence of friends to provide feedback on the implementation of their duties and then alternate roles when the task is considered sufficient. Thus, in one learning episode, there are always two children in pairs with different tasks, one acting as the actor and the other being the observer.

In the reciprocal style besides the feedback principle, the principles of cognitive learning theory also influence this style. This was explained by Supandi et al. (1986:319) that the learning principles of cognitive theory are more or less applied in a reciprocal style. This principle is an understanding of learning activities and actions. Efforts to increase understanding is to give freedom in the implementation and assessment of the teaching and learning process to students.

The reciprocal style has advantages and disadvantages. According to Mosston, as quoted by Mahendra (2000: 110), the advantage of this style clearly comes from the presence of immediate feedback after the task is carried out, so there is no need to wait for the teacher to be able to see his performance. The reason is, the sooner a perpetrator knows how he looks, the greater the chance for him to improve his appearance. In this way, it is as if the ideal ratio applies in learning, namely one child per teacher.

METHODOLOGY

The existence of the method used is a necessity in carrying out a research activity (Sapioper et.al, 2022). Therefore, the method used in this study is an experimental method. Design This study uses a pre-test and post-test group design, in this design the sample is obtained by the total population, then a pre-test or pre-test is held. The initial test was carried out to determine the initial ability of the sample, in this case, namely the ability to play volleyball. Preliminary test results data are arranged based on ranking, the aim is to determine the ability of the sample volleyball skills to play from the largest to the lowest. Then divided by two then two objects that have equal scores are matched using the matching method so that there are two groups that have almost the same volleyball playing skills. The population in this study were students of Penjaskesrek [Department of Physical Education, Health and Recreation] FKIP UNCEN [Teacher Training and Education Faculty of Cenderawasih University]. Based on the explanation above, by using the

random sampling technique, a sample of 40 people was obtained. The characteristics of the sample are 2nd semester students who are taking volleyball courses. The sampling technique used is random sampling. The ordinal pairing design was used to divide into two groups, the test results were ranked from the most to the least, then divided and entered into group A and group B then paired with the A-B-A-B formula. Group A was given a tactical approach training treatment,

RESULTS

Presentation of the results of data analysis is a summary of the results of the analysis using the SPSS program. To get an overview of the data of a study, descriptive data analysis was used on the data obtained.

Table 1. Descriptive Results of Service Ability Data

	Descriptive	Initial test	Final test
Teaching Command (Group 1)	N	20	20
	sum	2620	2665
	Means	128	131
	std. Deviation	10.60	11.45
	Variances	33.39	130.3
	Range	24	46
	Min	122	111
	Max	146	157
Reciprocal Teaching (Group 2)	N	20	20
	sum	2489	2596
	Means	124	129
	std. Deviation	1.17	10.61
	Variances	136.89	112.00
	Range	40	36
	Min	109	116
	Max	149	152

The conclusions for the table above for more details will be described as follows:

a. For the posttest data for the commando teaching group, a total value (sum) of 2620 was obtained, an average value (mean) of 128, with a standard deviation of 10.60 and a variance value of 33.39 from a data range of 24 between a minimum value of 122 and 146 for the maximum value.

b. For the posttest data for the commando teaching group, a total value (sum) of 2665 was obtained, an average value (mean) of 133, with a standard deviation of 11.45 and a variance value of 13 from the data range of 46 between a minimum value of 111 and 157 for the maximum value.

c. For data from the pretest results of the reciprocal teaching group, a total value (sum) of 2489 was obtained, an average value (mean) was 124, with a standard deviation of 1.17 and a variance value of 136.89 from a data range of 40 between a minimum value of 109 and 149 for the maximum value.

d. For data from the posttest results of the reciprocal teaching group, a total value (sum) of 2596 was obtained, an average value (mean) was 129, with a standard deviation of 10.61 and a variance value of 112.58 from a data range of 36 between a minimum value of 116 and 152 for the maximum value.

Data Normality Test

One of the assumptions that must be met in order for the parametric test to be used in research is that the data must follow a normal distribution, so a data normality test is performed. Testing the normality of the data can be done to find out whether the data obtained in the research results are in normal distribution.

The criterion for stating whether the data comes from the sample used is normally distributed or not by comparing the Sig coefficients. Or a P value of 0.05 (Significant level). If the P value is greater than 0.05 (significance level), which means it is not significant, it means that the data comes from a normally distributed population or sample. Conversely, if the P-Value is less than 0.05, which means it is significant, it means that the data comes from a population or sample that is not normally distributed.

The results of testing the normality of research variable data can be seen from the following table:

Table 2. Data Normality Test Results

No	Top Serviceability		sig. value	α	Inf.
1	Teaching Command	Pre-test	0911	0.05	Normal
	Reciprocal Teaching		0.541	0.05	Normal
2	Teaching Command	Posttest	0989	0.05	Normal
	Reciprocal Teaching		0.946	0.05	Normal

a. In testing the normality of command teaching at the pretest, a significant level value of 0.911 was obtained, which was greater than the value $\alpha_{0.05}$. Thus, the command teaching group on the pretest obtained follows a normal distribution or normal distribution.

b. In testing the normality of reciprocal teaching at the pretest, a significant level of 0.541 was obtained, which was greater than the score $\alpha_{0.05}$. Thus the reciprocal teaching group on the pretest obtained follows a normal distribution or normal distribution.

c. In testing the normality of command teaching at the posttest, a significant level value of 0.989 was obtained, which was greater than the value $\alpha_{0.05}$. Thus, the command teaching group on the posttest obtained follows a normal distribution or normal distribution

d. In testing the normality of reciprocal teaching on the posttest, a significant level of 0.946 was obtained, which was greater than the score $\alpha_{0.05}$. Thus the reciprocal teaching group on the posttest obtained follows a normal distribution or normal distribution.

Homogeneity Test

Homogeneity test is to test the similarity of variance between data obtained from the pretest d. This homogeneity test serves as a requirement in testing samples from homogeneous populations.

Table 3. Summary of the Variable Data Homogeneity Test

Top Serviceability	Levene Statistics	DF 1	DF 2	Sig
Pretest teaching group	1,736	20	20	0.165

Based on table 3, the pretest data homogeneity test with the Levene test was 1.736 with a significant value of 0.165. Because the probability value is greater than $\alpha_{0.05}$ or a significant level of 95%, therefore the pretests for the commando teaching group and the reciprocal teaching group for both teaching groups are homogeneous or come from the same group.

As a second requirement, the homogeneous test shows that the pretest-posttest of the command and reciprocal teaching groups are homogeneous or consist of the same group. The group data results above show an overview of the data obtained from the actual research results. The data above fulfills the requirements to carry out statistical tests that aim to find out the results of the research. The experimental data will be further analyzed using parametric statistics to find out the hypothesis through the t test with the help of SPSS 20.00 with a significant level of 95%.

Hypothesis Testing

Table 4. Summary of the t test

Data	t_{count}	t_{table}	Inf.
Pretest and posttest teaching command	7,42	2,201	Sig
Pretest and posttest reciprocal teaching	2,32	2.101	Sig

Based on the table above, it can be seen that teaching commando gets a t_{count} of 7.42 and a t_{table} of 2.201 with significant information. Meanwhile, reciprocal teaching obtained a t_{count} of 2.32 and a t_{table} of 2.101. So it can be concluded that the commando teaching group can improve higher than reciprocal teaching on upper serve skills in volleyball games.

DISCUSSION

The results of the data analysis previously stated show that there is an effect resulting from the command teaching method and the reciprocal teaching method on the upper serve ability in volleyball. Based on theoretical studies and statistical calculations with reference to data analysis. A good teaching program certainly has teaching methods that are right on target which are detailed in each developmental period, so as to improve the ability to serve in volleyball games several kinds of teaching methods can be carried out such as command and reciprocal teaching methods and several other methods. To master some basic skills, of course, through structured, systematic training so as to obtain maximum proficiency, and improve performance in general.

The main task of the training is to explore, compile, and develop the concept of training and training by combining practical and scientific approaches, so that the process can take place on target, effectively and efficiently. Of the several methods or types that can be used, including focused and random training. The main feature of the command style is the direct and immediate relationship between the teacher's stimulus and the student's response. The teacher's stimulus precedes every movement of students who carry out their movement tasks according to orders or examples of models given by the teacher. Decisions about location (where the task is performed), posture, start time, pace and rhythm, stop time, length of task, and intervals are all made by the teacher. The stimulus is planned and given fully by the teacher and students respond repeatedly.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research results from the data calculated through the prerequisite test and t test that the sample is normally distributed and homogeneous. So it can be concluded that the command teaching method and the reciprocal teaching method can affect the ability to serve in volleyball games with a value of $t_{count} = 7.411 > t_{table} = 2.101$, based on dominance it turns out that the commando teaching method has a better effect than the reciprocal teaching method. from the analysis of improvement of both groups. The suggestions are

as follows: For coaches and coaches of the game, that in order to improve the upper serve ability in volleyball games, the command teaching method must be carried out. For those who are interested in doing further research, it is suggested to involve other variables that are relevant to this research as well as the wider population and sample.

ADVANCED RESEARCH

The weakness of this article is that it is only focused on Cenderawasih University. Therefore, in the future it is hoped that there will be similar research that examines this Experimental Study of Command and Reciprocal Teaching Styles on Improving Upper Service Learning Outcomes in Volleyball Games for Junior and Senior High School Level Students in Papua Province.

ACKNOWLEDGMENTS

The author's thanks go to all parties involved in writing the article from the data collection stage until this article could be published.

REFERENCES

Arifin, I. (2014). Kemampuan Servis Bawah Dan Servis Atas Bolavoli Siswa Kelas Viii Smp Negeri 2 Gamping Sleman Tahun Ajaran 2014/2015. *Skripsi, Fakultas Ilmu Keolahragaan Universitas Negeri Yogyakarta*

Aziizu, B.Y.A. (2015). Tujuan Besar Pendidikan Adalah Tindakan. Prosiding Ks: Riset & Pkm, 2(2), 147-300.

Faulan. (2022). Cara Melakukan Servis Atas Dalam Permainan Bola Voli. Accessed from: https://parboaboa.com/cara-melakukan-servis-atas-bola-voli (Accessed April 5, 2022).

Junadi, & Yudiana, Y. (2016). Pengaruh Gaya Mengajar Resiprokal Dalam Pembelajaran Permainan Bola Voli Terhadap Pengembangan Kreativitas Siswa (Studi Eksperimen pada Siswa Kelas VIII SMP Negeri 2 Lembang Kab. Bandung Barat). *Jurnal Pendidikan Jasmani dan Olahraga, 1*(1), 17-26.

Lutan, Rusli. (2000). Strategi Belajar Mengajar Pendidikan Jasmani dan Kesehatan. Jakarta. Departemen Pendidikan Nasional. *Direktorat Jenderal Pendidikan Dasar dan Menengah. Bagian Proyek Penataran Setara D-III.*

Mahendra, A. (2000). *Senam.* Bandung: Depdikbud.

Mosston, M. (1993). *Teaching Physical Education Fourth Edition.*

Noviardila, I. (2020). Uraian gaya mengajar menurut Moska Mostton. Accessed from:https://staff.universitaspahlawan.ac.id/web/upload/materials/256-materials.pdf (Accessed April 5, 2022).

Sapioper, H. C., Ilham, I., Kadir, A., Yumame, J., Sriyono, S., Muttaqin, M. Z., ... & Patmasari, E. (2022). Emas Merah Paniai: Kebijakan Pengembangan Ekonomi Rakyat Berbasis Potensi Lokal. *Publikauma: Jurnal Administrasi Publik Universitas Medan Area, 10*(2), 116-126.

Supandi, dkk. (1986). *Pengelolaan Interaksi Belajar Mengajar Intrakurikuler,. Kokurikuler dan Ekstrakurikuler.* Jakarta : Karunika. Wijaya.

Utami, N.R. (2007). Perbedaan Pengaruh Latihan Servis Atas Tanpa dan Dengan Latihan Fisik Terhadap Kemampuan Floating Service Dalam Permainan Bola Voli Siswa Putera Kelas II Smp Negeri 4 Kroya Tahun Pelajaran 2006/2007. *Skripsi, Fakultas Ilmu Keolahragaan, Universitas Negeri Semarang.*