



## **The Difference of the Effect of Reciprocal and Teaching Style on the Learning Outcomes of Service Basic Techniques**

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### **Abstract**

This study aims to see the differences in the effect of reciprocal and inclusion teaching styles on learning outcomes of basic service techniques. The type of this research is a quasi-experimental. The sample in this study were students of the Department of Sports Education, Faculty of Sports Science, Padang State University (UNP) 2018, as many as 44 people. The data were collected by conducting a placement test. Data analysis and hypothesis testing used comparative analysis techniques using the mean difference test formula (t test) with a significant level  $\alpha = 0.05$ . From the data analysis, it can be concluded that there is a difference in the effect of reciprocal and inclusion teaching style on the learning outcomes of student basic service techniques, with the result of the "t" test coefficient, namely tcount (3.38) which is greater than ttable (1.680).

### **How to Cite**

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## INTRODUCTION

The Faculty of Sport Science, Padang State University (FIK UNP) is a sports education institution which provides knowledge, attitudes and skills to students. Padang State University graduates are expected to be able to develop knowledge in the field of sports education and to become competent and professional teaching staff in accordance with the UUD No.14 of 2005 in the field of sports, one of which is being a sports educator, trainer, and sports coach. Faculty of Sport Science, Padang State University has three departments, one of which is the Department of Sports Education (POR). This POR department is one of the departments which is most demanded to prepare physical education educators in schools (physical education and sports teachers). (Menteri Hukum dan HAM RI, 2005)

In the curriculum of the Department of Sports Education (POR), tennis is one of the compulsory practical courses and is part of the face of the Sports Education Department. Tennis game is a small ball game which is played singly or in multiple. The game is played by hitting the ball using a racket to the opponent's field which is limited by the net. According to (Education et al., 2020) strokes in tennis are divided into four types, namely service, forehand drive, backhand drive and volley. Meanwhile there are six basic types of strokes in tennis, namely forehand, backhand, service, volley, lob and smash.(Widya et al., 2011)

One of the techniques taught in tennis courses is service. According to (Widya et al., 2011) service is a type of strokes in the tennis game which begins with bouncing the ball first before hitting it. Tennis service is a complex interceptive motor skill requiring a high degree of inter-extremity and intra-extreme coordination among different body segments (Hughes & Bartlett, 2012). Service is described as the most important stroke of an elite tennis player (Johnson & McHugh, 2016; O'Donoghue & Brown, 2018). Service is a hard knock, which involves a large range of motion, high segmental velocity, and excessive joint load on the upper limbs to hit the ball powerfully (Abrams, Harris, Andriacchi, & Safran, 2014; Fleisig, Nicholls, Elliott, & Escamilla, 2013).

The service expected in a tennis game is a service which is quite effective in an effort to score a point by falling the ball far from the reach of the opponent, so that it can score more points. The service is of course with a stroke which is quite hard, fast and leads to the target area which

is difficult to reach by the opponent. In serving, the stroke movement and the direction of the ball toss should be able to be combined in such a way to become a good and harmonious unit, in order to produce good results as well.

The importance of the role of service should be taught to students in order to understand and master it, so that they can serve properly and correctly, and can place the ball into the service box. Service is one of the basic technique strokes in the tennis game which is often used, but not all students master this basic technique, including POR FIK UNP students because FIK UNP students come from various different backgrounds.(Bowo, 2016)

In the lecturing activities, facts were found which showed that the average ability and accuracy of tennis service for students before the year 2018 was considered unsatisfactory or low. The low technical skills of student service are caused by 2 factors, namely internal factors and external factors. Internal factors include the lack of talent possessed by the students themselves, such as low motor ability, and negative attitudes towards the learning programs offered. Meanwhile, external factors include the low quality of the teaching staff / lecturers, the lack of learning facilities, the lack of parental support, and the monotonous teaching style selection, and so on.

The achievement of learning objectives cannot be separated from the students themselves, the lecturers, the facilities and infrastructure, and the environment as well, including the teaching style of a lecturer in delivering the subject matter. The teaching style which is often applied to tennis courses, especially the provision of service materials, is command style since it is considered effective in the learning process, as the results can be seen more quickly, are more uniform and simultaneous, more orderly, and safer from the risk of injury as all learning activities are strictly controlled by the lecturer. Besides, the lecturer knows exactly how to look after and help students.

However, the problem is, this kind of treatment often leads to behavior which is not beneficial to students' personal development holistically, including students are becoming less active (passive), always waiting for lecturers' orders, are not critical, not independent, and simply obey the instructions of the lecturer or teacher. Meanwhile, student initiative and creativity do not develop. This condition results in less optimal learning function as an educational medium in order to develop the whole human personality.

The choice of teaching style needs to be considered because students who study in col-

lege have different habits and backgrounds. According to (Teaching, R. 2012) in the learning process, students learn in different ways, coming from different cultural backgrounds and different levels and experiences of movement. The attainment of learning objectives covering the psychomotor, cognitive and affective domains can be achieved in physical education and differences in teaching styles can help facilitate the achievement of the third goal. Therefore, to improve learning outcomes for novice students, appropriate teaching methods are needed. A lecturer is required to have creativity in teaching service, so that learning objectives can be achieved. A lecturer should be able to apply the right teaching style.

According to (Fan & Ye, 2007) teaching style is defined as the teacher's preferred way of solving problems, carrying out assignments, and making decisions in the teaching process. Teaching style is teacher behavior which is sustainable and consistent in their interactions with students during the teaching and learning process (Ghanizadeh & Jahedizadeh, 2016). The achievement of learning objectives covering the psychomotor, cognitive and affective domains can be achieved in physical education and differences in teaching styles can help facilitate the achievement of the goals of the three domains (Chen & Kong, 2017).

According to (Santana et al., 2015) there are several styles of teaching which are commonly practiced, including the following: 1) command style, 2) training style, 3) reciprocal style, 4) self-examination style, 5) coverage or inclusion style, 6) guided discovery style, 7) divergent style, 8) individual program style, 9) student-initiated style, and 10) self-teaching style. Some forms of this teaching style are those which are often used by teachers, lecturers or other educators. In the learning process at campus, lecturers can choose the appropriate method. This selection is certainly in accordance with the character of students and the goals to be achieved.

Seeing the phenomena in the field, it is necessary to explore teaching styles to be applied to students. However, not all teaching styles can be studied and researched collectively. The first teaching style discussed is the reciprocal teaching style. Reciprocal teaching style. Reciprocal teaching style is a way of delivering learning by transferring part of the decision or task from the lecturer to the student. In this teaching style, some decisions regarding teaching activities shifted from lecturers to students. Students in this case are given more responsibility, namely making several decisions regarding the implementation of tasks and providing feedback to their friends

(Ashegh Navaie, 2018). The reciprocal method is a teaching style which provides opportunities for students to provide feedback to their own friends which allows students to learn to increase social interaction among students (Ashegh Navaie, 2018).

Then the inclusion teaching style. Inclusion teaching styles are teaching guidelines used by lecturers in presenting learning material as a whole in detail, describing the level of difficulty (Mulyono et al., 2018). Furthermore explained that the characteristics of the inclusion teaching style are that students with different skill levels participate in the same task by choosing which difficulty level they can do. Inclusion teaching styles introduce different levels of assignments. In this style, students are encouraged to determine their level of performance, meaning that students are allowed to choose where they will start their task. On that basis, they are given different tasks according to their level of ability. respectively (Pilten, 2016).

The two teaching styles outlined above have their respective advantages. The reciprocal style helps create good cooperation between students, develops patience and tolerance, enables reciprocity in the learner and the recipient of feedback, and develops appreciation for the honesty of the observer. Meanwhile, the inclusion teaching style provides opportunities for individuals to advance both who have good abilities and those who have less abilities. Students develop their own concepts related to learning with the appearance of movement, students can choose to enter from a level that suits their abilities (M. Okkingaa, R. van Steenselb, A.J.S. van Gelderenc, n.d.).

Based on the background stated above, the researcher is interested in participating in solving the above problems, and trying to see the difference between reciprocal teaching styles and inclusion on learning outcomes of service basic techniques, and based on by research before, (and research, the effect of motor ability level on taekwondo kick learning outcome through reciprocal teaching style. The sample used the state University students PJKR Siliwangi (Junior, 2019).

## METHODS

The method used in this study was a quasi-experimental method. This research was conducted at the tennis court at Padang State University from September to October 2019. The samples in this study were 44 students of the Sports Education Department of the Sports Science Department of Padang State University who took tennis

courses. Service data collection was done using a placement test. Data analysis and hypothesis testing used comparative analysis techniques using the mean difference test formula (t test) with a significant level  $\alpha = 0.05$ .

**RESULTS AND DISCUSSION**

The research process was carried out for 16 meetings, in which the sample was given a reciprocal teaching style and an inclusion teaching style. The results of the research are described in accordance with the objectives of the previously proposed hypothesis. From the service basic technique tests carried out to the two sample groups, namely the reciprocal group and the inclusion group, the results are as follows **Table 1**:

**Table 1.** Test Results of Reciprocal and Inclusion Group

Group	Max	Min	Mean	SD
Reciprocal	28	12	18.95	3.76
Inclusion	22	10	15.55	2.92

The data **Table 1** above illustrate that the reciprocal group has a better average score than the inclusion group. Before testing the research hypothesis, the analysis requirements test is carried out, namely the normality test of each data from the variable. The data normality test of the variables was carried out using the Liliefors test. For more details, see the following **Table 2**.

**Table 2.** Summary of Data Distribution Normality Test

Variable	N	Lo	Ltab	Distribution
Reciprocal	22	0.1181	0.1900	Normal
Inclusion	22	0.0188	0.1900	Normal

The **Table 2** above shows that the two groups meet the  $Lo < Ltable$  criteria, so it can be concluded that the data come from a normally distributed population. Based on the results of the data normality test, the hypothesis testing of the two sample groups was then carried out. The hypothesis proposed is that there are differences in the effect of reciprocal teaching style and inclusion teaching style on learning outcomes of service basic techniques. Based on the comparative analysis with the mean difference test formula (t test), the results are as follows **Table 3**:

**Table 3.** Summary of Test Result (t test) of Reciprocal and Inclusion Group

Group	Mean	SD	Tcount	A	ttable	Test Result
Reciprocal	18.95	3.76	3.38	0.05	1.680	Significant
Inclusion	15.55	2.92				

Based on the **Table 3** above, it can be seen that  $tcount (3.38) > ttable (1.680)$ . Therefore,  $H_0$  is rejected while  $H_a$  is accepted. In conclusion, there are differences in the effect of the use of reciprocal teaching style compared to inclusion teaching style on student learning outcomes of service basic techniques.

From the analysis of the mean (t) difference test that has been carried out, it can be proven that there are differences in the effect of reciprocal teaching style and inclusion teaching style on learning outcomes of the service basic techniques. This difference in results is due to different teaching styles. The treatment method between reciprocal and inclusion teaching styles is very different. The reciprocal teaching style emphasizes student activeness, in which the lecturer provides material and then gets feedback from the students. Meanwhile, the inclusion teaching style emphasizes the role of the lecturer in providing more detailed material to students.

In the learning process of service basic techniques, it is necessary to provide an appropriate teaching method or style. Moreover, students being taught have different backgrounds or habits. The right teaching style will provide opportunities for students to more quickly understand each material being taught. When students understand each material given, there is a possibility that it will be easier to apply it. If this is done continuously, the service basic techniques provided will be easier for students to do.

The successful use of teaching styles by lecturers will always depend on the student's learning style. Teaching and learning styles are two things which are necessary in carrying out the teaching and learning process. Learning style is a student's personality or ability to be involved in the learning process. While the teaching style is a lecturer strategy to convey teaching tasks to students so that they can actively participate in the teaching tasks given.

Teaching style is basically a set of decisions made in the implementation of the teaching process. Both lecturers and students have the possibility to make decisions in the learning process. The difference between one style and another is

determined by the magnitude of the transfer of decisions from lecturers to students. On the other hand, it can be seen that the teaching style in which all decisions are made by the lecturer, but there is also a teaching style in which students can also make decisions.

From the test results of the service basic techniques performed to students, there are differences in the results of the two teaching styles given. Although there are differences in the effect between reciprocal and inclusion teaching styles, there is certainly something better between the two. From the test results, it can be seen that the average (mean) value of reciprocal teaching style, which is 18.95, is better than the inclusion teaching style, which is 15.55. This indicates that the reciprocal teaching style is better than the inclusion teaching style.

Reciprocal teaching style is a teaching style with an approach that gives students responsibility for making broader decisions. According to, in a reciprocal teaching style, some decisions regarding teaching activities shift from lecturers to students. Students in this case are given more responsibility, namely making several decisions regarding the implementation of tasks and providing feedback to their friends. (Teaching, R. 2012)

The reciprocal method is a teaching style which provides opportunities for students to provide feedback to their own friends which allows students to learn and to increase social interaction among students. The theoretical basis of reciprocal teaching style is basically applying the feedback theory. This theory assumes that information about learning outcomes will strengthen or improve learning outcomes in the future. Information which causes improvement is called negative feedback, while information which strengthens learning outcomes is called positive feedback. (Digital et al., 2018).

Reciprocal teaching style has advantages over other teaching styles, including: 1) Can develop small teams so that the social aspects develop, 2) Improve the teaching and learning process by systematically observing the movements or subject matter of friends, 3) Can develop responsibility. The strengths of this reciprocal teaching style make it better than the inclusion teaching style. (Chen & Kong, 2017)

Although the reciprocal teaching style is better than the inclusion teaching style, lecturers also need to see and understand other forms of teaching styles. Understanding various kinds of teaching styles is one of the needs of a lecturer or teacher to deal with: 1) different numbers of students, 2) learning objectives which cover the three domains (psychomotor, cognitive and social), and 3) the subject matter and context in giving

tasks to a specific approach (Pitsi et al., 2015).

Teaching style is strongly influenced by decisions made by both lecturers and students at certain times. The types of decisions taken by both lecturers and students will determine the process and consequences of each teaching episode. In the end, this teaching spectrum will provide enormous assistance to the achievement of learning objectives and teaching and learning activities in general (Pitsi et al., 2015). The spectrum of the chosen teaching style is a bridge between students and learning materials. Spectrum here has the intention of being a theoretical construction and implementation design of the teaching style to be selected.

The anatomy of all teaching styles consists of imaginable categories of decisions made during the learning process. These categories are grouped into three stages: the pre-impact stage, the impact stage, and the post-impact stage. Pre-impact, stipulates that all decisions should be made prior to teaching and learning interactions; impact, determine decisions related to real teaching-learning interactions; and post-impact determines the identification of decisions regarding the evaluation of student and lecturer interactions (Santana et al., 2015)

The theories described above have illustrated that the teaching style is an indicator which can succeed in the goals of learning. Therefore, in teaching service basic techniques to students, it is necessary to select a teaching style which is more appropriate. However, the service basic technique is very important in tennis. Service is the most important stroke in a tennis match and is the only stroke which should be mastered and is not affected by or dependent on the opponent's ball hit. The results of testing requirements analysis that the data berdistribusi normal and of the population a homogenous group .Based on the results of statistical tests produce that style teaching resiprok have an influence study results a significant dolyo chagi to university students that have motor ability high ( $t_{count} = 12,77$  &  $gt; t_{table} = 3,63$ ) .This is proven by revenue value rerata 38,19 and a byway raw 4,55 . There are 31 % is still below rerata , 19 % are in rerata group and 50 % have above group rerata. (Juniar, 2019).

Tennis servicing is a complex interceptive motor skill requiring a high degree of inter-extremity and intra-extreme coordination between different body segments. More specifically, it has been shown that tennis players require the ability to organize complex segmental sequences of rackets and stimuli during ground strokes using efficient coupling of the upper limbs (Hughes & Bartlett, 2012).

## CONCLUSION

Based on the results of data analysis and discussion, it can be concluded that there are differences in the effect of reciprocal teaching style and inclusion teaching style on learning outcomes of student service basic techniques. In addition, the reciprocal teaching style is better than the inclusion teaching style in improving learning outcomes for service basic techniques.

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