

Effect of Teaching Style , Eye Coordination Hand and Feet on the Results of Learning Groundstrokes in Students Faculty of Sport Science

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Abstract: *The purpose of this study is to obtain an overview of the differences in independent variables on the dependent variable. There are two independent variables in this study, namely the teaching style and coordination of eyes, hands and feet. As the dependent variable is the learning outcomes of groundstrokes. Students of Physical Health and Recreation Education Study Program at the Faculty of Sport Sciences, Medan State University. The method used in this study is the experimental method with Factorial 2 x 2 design. Determination of research samples and preliminary tests to collect data on hand eye foot coordination from the sample used . The target population in this study were all students of the Recreational Physical Health Education study program at the Faculty of Sport Sciences, Medan, while the reachable population was set for the 4th (fourth) semester 2015 students consisting of six classes. The population was 160 students. The population was given eye, hand and foot coordination tests with tests and measurements. The results of the coordination tests were ranked from 1 to 160. From the test of the average learning outcomes of groundstroke in field tennis the group of students taught using reciprocal teaching styles scored 32, 50 is lower than the teaching style of exercise with an average score of 33.60. Based on the group of students who have high eye, hand and foot coordination, the average learning outcomes of groundstroke taught 33.30 reciprocal teaching styles are better than with students who are taught with practice teaching styles 35.60. Based on the results of the study, it can be concluded that: (1) There are significant differences in the groundstroke punch process in field tennis, between groups of students treated with reciprocal teaching styles with groups of students treated with teaching style exercises (2) There are significant differences in the process of groundstroke in tennis , between groups of students treated with reciprocal teaching styles with groups of students treated with teaching style exercises (3) There were differences in groundstrokes learning outcomes using reciprocal teaching styles with training teaching styles that had high eye, hand and foot coordination of students (4) There are differences in groundstrokes learning outcomes using reciprocal teaching styles with training teaching styles that have low eye, hand and foot coordination.*

Keywords: Teaching Style, Groundstrokes, Eye Coordination, Hands and Feet

1. Preliminary

The development of educational sports is carried out through a learning process carried out by qualified sports teachers / lecturers who have competency certificates and supported by adequate sports facilities and infrastructure (Kemendikbud of the Republic of Indonesia, 14: 2005). Medan State University as one of the universities that will produce superior, professional, skilled graduates in their fields and produce, develop, disseminate science, art technology, innovative and productive works in answering all challenges and changes that occur in the middle society. Medan State University Manages seven Faculties and thirty-two Study Programs, one of which is at the Faculty of Sports Sciences.

The 2004 National Curriculum field tennis courses are divided into two semesters, namely: (1) odd semester basic tennis, (2) advanced field tennis in the second semester with each weighting 2 credits and the number of meetings once a week face to face, so the total number of meetings one semester maximum of sixteen face-to-face sessions on basic tennis and tennis in advanced health and recreation physical education majors. The 2004 National curriculum changes to the 2008 Block System competency-based curriculum and the Indonesian National Qualifications Framework curriculum field tennis courses turn into one semester until students complete the study, which is only sixteen meetings so that the course name turns into a tennis tennis course. With the number of face-to-face meetings described above, students are expected to be able to change their behavior,

one of which is having tennis skills, understanding of tennis history, and tennis skills that students have expected to lead to changes in movement skills. can play tennis to be able to play tennis.

Field tennis games belong to the type of skill game that is open (open skill). That is to say the condition of the environment playing tennis blows the ball that comes from the opponent is difficult to control or difficult to predict beforehand by the tennis player. Specific kinematics of real tennis maneuvers performed on a variety of court surfaces must first be identified (Dunn, Goodwill, Wheat, & Haake, 861: 2011). Another difficulty is playing tennis, because the equipment used is a ball, racket, and a complete playing field limited by lines and net. Tennis balls are relatively small and springy, so that when hit you will be able to go fast and bounce in the field.

The basic techniques of punching tennis games include forehand groundstrokes, backhand groundstrokes, serve, volleyball, and smash. Based on the grouping of basic punch techniques in the tennis game, when viewed from the basic types of motion, the basic techniques include: (1) groundstrokes technique, swinging motion, (2) volleyball, basic motion is blocking (3) service and smash, the basic motion is throwing (4) while for lob techniques, the basic motion is from bottom to top. In the game of tennis the game is a way to play in the game (serving, receiving, playing, and playing at the back of their own court, approaching or net,

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playing at the back of the court with opponent approaching or at the net) (Unierzyski & Crespo, 4: 2007).

The level of mastery of field tennis skills in Recreational Physical Education study program students can be seen from the last year of field tennis courses, the results of the practice scores of student tennis courses they obtained as in table 2 the value recapitulation showed unsatisfactory results because there were still many students C and there are still students who get an E score. The assessment includes assessment of the three cognitive, affective and psychomotor domains.

In this research study, we want to reveal about how to use a good and appropriate teaching style for the success of learning the basic techniques of backhand groundstrokes, which of course require concrete data about the level of success of the teaching style. In addition, information about how the level of coordination of the eyes, hands and feet of students in moving because it is very necessary, to find out how much the students have a desire, the urge to do business in achieving the objectives of tennis learning.

2. Theoretic Study

In learning life is a necessity for every person because by learning someone can understand and master something so that their abilities can be improved. Learning is not only a matter of schooling, but is a problem for every human who wants to succeed in life. Through learning knowledge, skills, values and human attitude.

Reciprocal teaching style in learning basic forehand techniques of groundstrokes uses an approach by giving students the freedom to make broader decisions. Students are also given the obligation to assess learning outcomes on a limited basis. This assessment is only limited to formative or corrective values by a student towards students or by a group of students on the learning outcomes of a student. Organizing systems like this are called reciprocal teaching styles. This teaching style is often applied in physical education learning activities in the form of paired formations.

In this case the reciprocal style is one of the styles that gives rise to socialization between students and other students as stated by Sandra A. Stroot is a social learning theory, how about the function of the approach and emphasizes the importance of observing and socializing approaches to one another (Strott, 2002: 129). Reciprocal teaching styles on basic groundstrokes also have advantages and disadvantages. If reciprocal teaching styles in groundstrokes can be optimized, while the weaknesses of reciprocal teaching styles can be minimized, it is expected that the use of reciprocal teaching styles can be used to improve the learning outcomes of groundstrokes.

The style of teaching practice (practice stlye) is one of the most suitable teaching models applied in the motion lecture, because it has superiority as follows: (1) lecturers will have the opportunity to teach in a large number of students at once, (2) Students learn to be able working independently, (3) Students learn about decisions that are in accordance

with existing provisions, (4) Students learn about time constraints, (5) Students can learn about goals that must be achieved by carrying out certain tasks, (6) Students have to increase individual interaction with each student. The process found in training teaching styles can shape leadership as a transformational leadership contributing to significant improvement to subordinates and organizational performance (Tarsik, Kassim, & Nasharudin, 9: 2014).

In training style teaching, the role of the lecturer is to provide feedback to all students, whether they have succeeded in carrying out the task as well as possible, or not. namely the lack and progress of students in learning the material of field tennis groundstrokes by using a teaching style of training. Eye, hand and foot coordination is a person's ability to coordinate eyes, hands and feet into a single movement and is able to move easily, smoothly in a series and controlled rhythms of movement.

Basically, coordination is divided into two types, namely general coordination and special coordination (Imran, 2013: 121). General coordination is the ability of the entire body to adjust and adjust movements simultaneously while performing a motion (Imran, 2013: 122). That is, that every movement carried out involves all or most of the muscles, nervous system and joints. For this general coordination, there is a need for regularity of movement from several other limbs, so that the movements carried out can be harmonious and effective so they can master motion skills learned. General coordination is an important element in motor performance and shows the level of ability a person has. Therefore general coordination is also the basis for developing special coordination.

Special coordination is coordination between several members of the body, namely the ability to coordinate the movements of a number of limbs simultaneously. each punch technique in tennis is the result of a combination of eyes, hands (hand eye coordination), working feet (footwork), and setting the distance of the standing position where the ball is hit (adjustment). Therefore the game of tennis is also called eye, hand and foot sports, where the eye must be coordinated with hand movements when hitting the ball and the foot must move in the right standing position where the ball falls.

Therefore special coordination is the development of coordination of general coordination combined with other biomotor abilities according to the characteristics of the game of tennis. The characteristics of tennis players who have good special coordination in displaying punch technique skills can be harmonious, fast, easy, perfect, precise, and flexible. For this reason, in order to be able to play tennis well, both general and special coordination are both very necessary in tennis because they influence each other's movement skills.

3. Research Methodology

3.1 Place and time of research

This research was conducted at the tennis court of the Faculty of Sport Sciences, Medan State University.

Frequency of meetings 3 times a week with 2 hours of lecture (105 minutes) per meeting. The total number of meetings is 8 times. Meetings are held one day during the lecture hour and two days outside the lecture hours. The schedule for lecture hours is Monday, Wednesday and Friday, 15:00 to 16:40 WIB for reciprocal teaching style groups, exercise teaching styles. The target population in this study were all students of the Health and Recreation Physical Education study program, while the reachable population was assigned to the 4 (four) batch of 2015 Physical Education and Health Study Program students consisting of six classes.

The method used in this study is an experimental method with Factorial 2 x 2 design. Determination of design refers to Sudjana's opinion, that is, experimental units are grouped in cells such that experimental units in cells are relatively homogeneous and many experimental units in cells equal to many treatments that are being studied (Sudjana, 1994: 109-124). Treatment is carried out randomly to experimental units in each cell. The factorial 2x2 design matrix is:

Table of Factorial Design 2x2

	Teaching Style (A)	Reciprocal (A1)	Exercise (A2)
Coordination Hand Eye Feet (B)			
Height (B1)		A ₁ B ₁	A ₂ B ₁
Low (B2)		A ₁ B ₂	A ₂ B ₂
Total		A ₁	A ₂

4. Results and Discussion

The data of the process of punching groundstroke in field tennis by the assessors in students when performing basic groundstroke forehand techniques and basic techniques of backhand groundstroke, so that the results of the treatment are the influence of the teaching style process carried out. The following is a summary calculation of the statistical values for each treatment group.

Statistical Calculation Results Summary Table

Learning style	Coordination	Mean (\bar{x})	Std. Deviation	N
Reciprocal	High	33,30	1,567	10
	Low	31,70	1,252	10
	Total	32,50	1,606	20
Exercise	High	35,60	1,075	10
	Low	31,60	1,506	10
	Total	33,60	2,415	20
Total	Tinggi	32,53	3,181	30
	Rendah	32,10	1,447	30
	Total	32,32	2,460	60

Based on Table 4.1 above, it can be seen that the average learning outcomes of groundstroke in field tennis games in groups of students taught using reciprocal teaching styles score 32.50 lower when compared to teaching style exercises with an average score of 33, 60 and higher. Based on the group of students who have high eye, hand and foot coordination have an average value of learning outcomes of groundstroke taught 33.30 reciprocal teaching style better than students taught with inclusive teaching style 28.70 and less than teaching style exercises 35 , 60. For reciprocal teaching and practice styles.

5. Discussion

The results of this study indicate that the application of exercise teaching styles in the learning of tennis tennis groundstrokes provides a significant and more significant influence on reciprocal teaching styles and training teaching styles. This proves that the use of training teaching styles will be more effective in developing students' abilities about the basic techniques of doing field tennis groundstrokes. Through the style of teaching practice, students are given the freedom to carry out activities and develop their own abilities and have a sense of responsibility to do the tasks given by the teacher repeatedly in the learning process.

The interaction between exercise teaching style and high motor skills proved to have a positive influence on the results of learning passing with field tennis groundstrokes. Thus, in applying the training teaching style the lecturer should be able to pay attention to the coordination of the eyes, hands and feet that students have, so that they can improve the learning outcomes of field tennis groundstrokes obtained by students to be better. Because, the results of research and analysis show that students who have low eye, hand and foot coordination do not make a significant contribution to the learning outcomes of field tennis groundstrokes obtained by students so that in the implementation of the learning process the lecturer must know first hand and foot eye coordination skills owned by students.

As an implication of the application of training teaching styles in field tennis groundstrokes learning students can find out various advantages and disadvantages of each student regarding the field tennis groundstrokes technique through repeated treatment given to students by the lecturer through assignments. By knowing the various shortcomings, students can immediately improve and improve the technique of doing groundstrokes through their own tests and decisions. The freedom of space given by the teacher in learning helps students to better understand and do field tennis groundstrokes properly. In addition, the application of student exercise teaching styles is directly involved in making movements and getting hands-on experience making students more able to find solutions to the problems they have experienced in conducting tennis tennis groundstrokes. That way, the learning objectives that have been previously set at the beginning of the learning process can be achieved well.

Seeing so much positive influence from the application of training teaching styles, then teaching learning styles should be an alternative teaching learning style that can be used by lecturers to improve the basic techniques of groundstrokes on a wider scale and in field tennis learning. Groundstrokes in the field of tennis in playing tennis is one of the basic techniques that must be mastered well. Therefore, the ability of each person (student) in carrying out field tennis groundstrokes must be properly evaluated for their achievements and developments. Thus, the involvement of various parties has a role important to achieve optimal learning goals.

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