

## EFFECT OF TEACHING STYLES AND MOTOR ABILITY ON RESULTS LEARNING SEPAK TAKRAW BASIC TECHNIQUES

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### Abstract

*The purpose of this study to find the effectiveness of teaching styles to the basic learning techniques sepak takraw seen from motor ability. The method used is experiment with 2x3 factorial treatment design. The population used as the target population is the students of Physical Education Health and Recreation Universitas Islam Riau Force 2015/2016 totaling 129 consisting of 115 sons and 14 daughters. Sampling was done by purposive sampling technique. Hypothesis test 1) The difference between the reciprocal teaching style group (A1) and the teaching style group Exercise (A2) worth =  $0.035 < 0.05$ , mean  $H_0$  is rejected. 2) The difference between the reciprocal teaching style group (A1) and the inclusion teaching style group (A3) =  $0.0005 < 0.05$ ,  $H_0$  is rejected. 3) The difference between the teaching exercise style group (A2) and the inclusion teaching group (A3) =  $0.045 < 0.05$ ,  $H_0$  is rejected. 4) Influence Interaction (Interaction Effect)  $F_0$  (AB) worth =  $0.000 < 0.05$  or  $H_0$  is rejected. 5) Differences in learning outcomes of basic techniques sepak takraw between reciprocal teaching style that has a high ability motor with practice teaching style that has a low ability motor (A1B1 x A2B1) worth =  $0.00 < 0.05$  or  $H_0$  rejected. 6) The difference in learning outcomes of basic techniques sepak takraw between reciprocal forces that have high ability motor with inclusion force that has high ability motor (A1B1 x A3B1) worth =  $0.000 < 0.05$  or  $H_0$  is rejected. 7) Differences in learning outcomes of basic techniques sepak takraw between training styles that have high ability motor with an inclusion force that has a high ability motor (A2B1 x A3B1) worth =  $0.000 < 0.05$  or  $H_0$  rejected. 8) Differences in learning outcomes of basic techniques sepak takraw between reciprocal teaching styles that have low ability motor with exercise style with low ability motor (A1B2 x A2B2) worth =  $0.485 > 0.05$  or  $H_0$  accepted. 9) Differences in learning outcomes of basic techniques sepak takraw between reciprocal teaching styles that have low ability motor with inclusive teaching style that has low ability motor (A1B2 x A3B2) worth =  $0.025 > 0.05$  or  $H_0$  rejected. 10) Differences in learning outcomes of basic techniques sepak takraw between teaching style exercises that have low ability motor with inclusive teaching style that has low ability motor (A2B2 x A3B2) worth =  $0.029 > 0.05$  or  $H_0$  is rejected.*

**Keywords:** *Learning result of basic technique sepak takraw, teaching style and motor ability*

As we know sepak takraw merupakan traditional game that comes from tengggara Asia that has been acknowledged by the world, "Sepak takraw sport is a modern traditional sport that has been modified and recognized all around the world. This sport has been dominated by Asian country specifically in South East Asia ". To play sepak takraw proficiently a player must master and possess basic skills first before a complex skill, because in any sport without mastering the basic techniques can certainly not master the sport well, "previous researchers stated that mastering in basic skill before learning the other complex skill is essential. Likewise with sepak takraw, without mastering the basic techniques first certainly can not master the more advanced advanced techniques.

From the result of the study of the students of the Riau Islamic University observer during the learning process and after graduating this course has not shown the ability and skills expected, this may be caused by limited study time, relatively small semester credit units (2 credits), inadequate, the teaching style used by the lecturer is less effective, the different ability of motion (motor ability) in the student, lack of motivation and talent possessed by every student.

Various possibilities above, it is deemed necessary to find the cause, one of them to improve the mastery of basic techniques sepak takraw through teaching styles conducted by lecturers pengont course, style of teaching in question is the style of teaching mosston, Steven Tones, Luke Jones and Vesa Keskitalo say. "The concept of teaching styles is a well-established aspect of pedagogy within the subject area of physical education. Mosston and Ashworth 'Spectrum of Teaching Styles' has been refined since its inception in the mid-1960s and is now well integrated into physical education programs as a means of understanding approaches to teaching. "

What this means is that the concept of teaching style is an established aspect of pedagogy in physical education. The "spectrum of Teaching styles" of mosston and ashwort have been refined since the 1960s and are now well integrated into the physical education program as a means of understanding teaching.

In theory many mosston teaching styles can be selected and teachers should be active in using existing teaching styles, since the use of varied teaching styles will benefit. The results from the Chatoupis study say "Using alternative teaching styles in a deliberate sequence can produce expanded learning experiences that provide opportunity learning on multiple domains". which means using alternative teaching styles in an intentional order can result in an expanded learning experience that provides learning opportunities across multiple domains.

In Indonesia alone the use and application of the teaching style of moston in physical education has not been optimally used, the research results R. Aditya Budi Setiawan & Soni Nopembri said "That a high school physical education teacher in Yogyakarta city has applied a teaching style that has characteristics that exist in mosston teaching style even though it has not been fully implemented based on the concept already made by mosston".

And plus the survey results from eco yoga research Prasetyo said that the physical education teacher in the district of Tulung not know about the various styles of teaching accordingly. from the results of other studies on sepaktaraw and the use of teaching styles, there has been no complex research that examines the basic techniques sepaktaraw as a whole, most research to examine a single basic techniques, such as soccer and others, such as Sabbahyah Mohammad's research entitled "the influence of teaching style and motor educability of soccer learning outcomes in the game sepaktaraw "and also research Mawarno with a similar title that examines about one basic technique of soccer.

The novelty of this study examines the basic learning outcomes and basic techniques of sepak takraw (football, head heading, martial arts / service and smes) using the concept of most actual teaching style. The results of this study are not only able to address problems in the learning outcomes of students of Physical Education Health and Recreation Islamic University of Riau, but also can be a reference and description of the concept of moston teaching style actually to be applied to teaching basic techniques sepaktaraw and developed for other basic sports techniques.

For that researchers focused on the use of teaching styles that support the achievement of the process of learning basic techniques sepaktaraw. The teaching style is the reciprocal teaching style, the practice teaching style and the inclusive teaching style that fall into the category of reproductive style (Style A to E), Chung LI and Wai Keung Kam said: "The reproduction styles (Style A to E) signify the teacher's dominance over the decisions across all three phases of the lesson. The styles assume that students learn by replicating known information or imitating a motor skills that are more akin to didactic, teacher-centred and direct instruction.

The point is that the reproductive style (Style A to E) signifies the teacher's dominance over the three-phase decision of the lesson. Style assumes that students learn by replicating known information or imitating motor skills that are more akin to didactic, teacher-centered and direct instruction.

Reciprocal teaching style by improving students' movement ability by transferring some decisions to learning activities from lecturers to students. Students are divided into two groups, there are students who as perpetrators and there are as observers by referring to the observation sheet that has been prepared by the teacher, in the implementation between actors and observers interchangeably. Expected students master the correct concept of motion, because each change their role will continue to try and be responsible in the mastery of the concept of motion of the material to be learned.

Style teaching practice, students are given time to perform tasks individually, with this style lecturers will have the opportunity to teach students in large numbers at once at the same time. Teaching with style of training is designed to improve a person's skill by assigning him / her to do many exercises repeatedly. By repeating this kind of activity, it is expected that there will be physical enhancement and also skill of student involved. It is no less important is giving the right feedback about the appearance that has been done.

The teaching style of inclusion has special features especially in the design of tasks that show the single standard decided by the lecturer. While the task of students is to show the type of task in accordance with the level of the task. The role of a lecturer in this style is to make decisions before the meeting, the student making decisions during the meeting including the decision on the entry point to achieve the goal by selecting the stages of its implementation. At post-student meetings assess the decisions about further placement in the existing levels.

Apart from the use of teaching styles other things that are not less important that also greatly affect the level of success in learning or sports in general and basic techniques sepak takraw is a student factor itself. Each student has different basic motion abilities called motor ability. Motor ability is basically the underlying capability of the motion that is brought to life that is general or fundamental that plays a role to perform motion, both motion sports and non sports. previous research results say that motor ability has a significant correlation with football skills, and futsal. and also the difference in the influence of service skills between students who have high ability motor and low. Motor ability factor owned by mahasiswa will be a supporting factor in learning the basic technique mastery sepak takraw.

Based on the above urain and the important role of the teaching style and motor ability to the learning outcomes basic technique sepak takraw then it is important to do research on the influence of teaching style and motor ability to lecture sepak takraw oriented to students with the title of research "Influence Teaching Style and Motor Ability Against the Learning Results of Basic Techniques Sepak takraw In Sepak takraw Game ".

## **METHOD**

The research was done by using experimental method. The experimental method is a research method used to find the effect of a particular treatment (treatment) on another in controlled condition. This research uses quasi experimental approach, quasi experimental research can be interpreted as research approaching experiment or quasi experiment, because giving treatment or treatment to sample with free variable that is reciprocal teaching style, teaching style of inclusive teaching style training, and moderator variable that is motor ability against dependent variable that is learning result of basic technique sepak takraw.

### Research Design

The research design used is Factorial Design 2 x 3, can be explained as the following table:

**Tabel 8. Desain faktorial 2 x 3.**

Teaching Style (A) (A)	Reciprocal (A1)	Exercise (A2)	Inclusion (A <sub>3</sub> )
Motor Ability (B)			
High ability motor (B <sub>1</sub> )	A <sub>1</sub> B <sub>1</sub>	A <sub>2</sub> B <sub>1</sub>	A <sub>3</sub> B <sub>1</sub>
Motor Ability low (B <sub>2</sub> )	A <sub>1</sub> B <sub>2</sub>	A <sub>2</sub> B <sub>2</sub>	A <sub>3</sub> B <sub>2</sub>

Source: Thesis Writing and Dissertation Manual UNJ 2012

Information:

A1 : Reciprocal Teaching Style

A : Teaching Style Exercises

A3 : Teaching Style of Inclusion

B1 : Motor Ability Height

B2 : Motor Ability Low

A1B1 : reciprocal teaching style group given to high Ability motor students

A2B1 : group teaching style exercises given to high Motor Ability students

A3B1 : inclusive teaching style group given to high Motor Ability students

A1B2 : reciprocal teaching style group given to low Motor Ability students

A2B2 : group teaching style exercises given to low Motor Ability students

A3B2 : inclusive teaching style group given to low Motor Ability students

The population used as the target population is the students of Physical Education Health and Recreation Universitas Islam Riau Force 2015/2016 totaling 129 consisting of 115 sons and 14 daughters. Sampling was done by purposive sampling technique. in the research then to get the data processed in this research, then the instrument used is (1) Instrument result of basic technique sepak takraw (Y) made by researcher, (2) Motor Ability instrument is by using Barrow Ability test. Hypothesis testing is done by using two-lane analysis of variance (ANOVA). However, before the analysis is done then first will be done some testing. Furthermore the frequency distribution is visualized through tables and histograms. Furthermore, the test requirements analysis is tested normality and homogeneity test. Test Normality data using Lilliefors test technique. By the criterion if the test results show that  $L_{hitung} < L_{tabel}$ , then the data comes from normally distributed population. Hypothesis testing using significance level  $\alpha = 0,05$ . Test homogeneity of each group using Hertley Fmax test where E.T. Ruseffendi in Kadir says that this homogeneous test is the same as the bartlett test. By criterion, if the test results show F count  $< F_{table}$ , then the data has the same or homogeneous variance. Hypothesis testing using significance level  $\alpha = 0,05$ . Normality test and homogeneity test have been done then just done testing of research hypothesis by using analysis of variance (ANOVA) one lane and two lane. If the result of variance analysis shows the main effect between the independent variable to the dependent variable and the existence of the interaction (simple effect) of the independent variable to the dependent variable then proceed with Dunnet test as further test to determine which group has better learning result conducted at the level of significance  $\alpha = 0.05$ .

## **RESULTS**

The difference of learning result of basic technique of sepak takraw between students taught with reciprocal teaching style (A1), practice teaching style (A2) and teaching style of inclusion (A3) in accordance with the hypothesis proposed by the researcher. The summary hypothesis will be explained in the following interpretation:

### **First Hypothesis: Differences Between Reciprocal Teaching Style Groups (A1) With the Teaching Style Training Group (A2).**

In table contrast tests can be analyzed the price  $t_0$  ( $A1 \times A2$ ) = 1.846,  $p\text{-value} = 0.070 / 2 = 0.035 < 0.05$ , means  $H_0$  rejected. Thus, the group taught with a reciprocal teaching style is higher than in the group given the teaching-style exercise.

### **Second Hypothesis: Differences Between Reciprocal Teaching Style Groups (A1) With Teaching Style Teaching Inclusion (A3).**

In table contrast tests  $t_0$  ( $A1 \times A3$ ) = 3.562  $p\text{-value} = 0.001 / 2 = 0.0005 < 0.05$ ,  $H_0$  is rejected. Thus, the learning outcomes of basic techniques of group lesson taught with reciprocal teaching styles are higher than those in inclusive teaching styles.

### **Third Hypothesis: Differences Between Teaching Style Training Groups (A2) With Inclusive Teaching Groups (A3).**

In contrast tests table  $t_0$  ( $A2 \times A3$ ) = 1,717,  $p\text{-value} = 0,091 / 2 = 0,045 < 0,05$ ,  $H_0$  is rejected. Thus, the learning outcomes of basic techniques such as group teachings taught with teaching-style exercises are higher than those in the style of inclusive teaching.

### **Fourth Hypothesis: Interaction Effect**

$F_0$  (AB) = 32.042 with  $p\text{-value} = 0,000 < 0.05$  or  $H_0$  is rejected. This means that there is a very significant interaction effect between factor A (teaching style) and factor B (motor ability) to the result of learning basic technique sepak takraw on the student. It can be seen from the result of analysis that the influence of the influence variable of force mengajr and motor ability to the learning result of basic technique sepak takraw equal to  $RSquared = 0,612 \times 100 = 61,2\%$ .

### **Fifth Hypothesis: Differences in learning outcomes of basic techniques sepak takraw between reciprocal teaching style that has a high ability motor with teaching practice style that has a low ability motor (A1B1 x A2B1).**

The difference between the groups  $t_0$  ( $A1B1 \times A2B1$ ) = 3.764,  $p\text{-value} = 0.00 / 2 = 0.00 < 0.05$  or  $H_0$  is rejected. Thus, the average group of students taught with reciprocal style is higher than in the group of students who are taught in an exercise style for students who have high ability motor.

### **Sixth Hypothesis: Differences in learning outcomes of basic techniques sepak takraw between reciprocal forces that have high ability motor with inclusion force that has high ability motor (A1B1 x A3B1).**

The difference between the groups  $t_0$  ( $A1B1 \times A3B1$ ) = 9.166,  $p\text{-value} = 0,000 / 2 = 0,000 < 0,05$  or  $H_0$  is rejected. Thus, the average group of students taught with reciprocal teaching styles is higher than in the student group taught in inclusion styles for groups of students with high motor ability.

**The Seventh Hypothesis: The difference in learning outcomes of basic techniques sepak takraw between exercise styles that have high ability motor with inclusion force that has high ability motor (A2B1 x A3B1).**

The difference between the groups  $t_0$  (A2B1 x A3B1) = 5.402, p-value =  $0,000 / 2 = 0,000 < 0.05$  or  $H_0$  is rejected. Thus, the average group of students taught with a practice teaching style is higher than that of students who are taught in inclusive teaching styles for groups of students with high ability motor.

**Eighth Hypothesis: The difference in learning outcomes of basic techniques sepak takraw between reciprocal teaching style that has low ability motor with exercise style with low ability motor (A1B2 x A2B2).**

The difference between the groups  $t_0$  (A1B2 x A2B2) = -, 036 p-value =  $0.971 / 2 = 0.485 > 0.05$  or  $H_0$  is accepted. Thus, there is no difference in the average learning outcomes of basic techniques sepak takraw between reciprocal teaching style and teaching style of practice for groups of students who have low ability motor.

**The Ninth Hypothesis: The difference in learning outcomes of basic techniques sepak takraw between reciprocal teaching styles that have low ability motor with inclusive teaching style that has low ability motor (A1B2 x A3B2).**

The difference between the groups  $t_0$  (A1B2 x A3B2) = -1.970, p-value =  $0.053 / 2 = 0.025 > 0.05$  or  $H_0$  is rejected. Thus, the average group of students taught with reciprocal teaching styles is lower than that of students who are taught in inclusive teaching styles for groups of students with low-ability motor skills.

**Tenth Hypothesis: Differences in learning outcomes of basic techniques sepak takraw between teaching style exercises that have low ability motor with inclusive teaching style that has low ability motor (A2B2 x A3B2).**

The difference between the groups  $t_0$  (A2B2 x A3B2) = -1.934, p-value =  $0.058 / 2 = 0.029 > 0.05$  or  $H_0$  is rejected. Thus, the average group of students taught with teaching-style exercises is lower than that of students who are taught in inclusive teaching styles for students with low-ability motor skills.

Thus it can be concluded that there is a significant influence between the teaching style and motor ability to the learning outcomes of basic techniques sepak takraw on the students jasmani health and recreation Islamic University of Riau, summary of the results of hypothesis testing can be seen in the table below.

**Table Summary of Decomposition of All Hypothesis Test Results**

No	Hypothesis	$t_0$	Fo	p-value	Description	
1	A1 x A2	1.846		$0,035 < 0,05$	$H_0$ Rejected	Significant
2	A1 x A3	3.562	-	$0,005 < 0,05$	$H_0$ Rejected	Significant
3	A2 x A3	1.717	-	$0,045 < 0,05$	$H_0$ Rejected	Significant
4	Interaksi AXB	-	32,042	$0,000 < 0,05$	$H_0$ Rejected	Significant
5	A <sub>1</sub> B <sub>1</sub> x A <sub>2</sub> B <sub>1</sub>	3.764	-	$0,000 < 0,05$	$H_0$ Rejected	Significant
6	A <sub>1</sub> B <sub>1</sub> x A <sub>3</sub> B <sub>1</sub>	9.166	-	$0,000 < 0,05$	$H_0$ Rejected	Significant
7	A <sub>2</sub> B <sub>1</sub> x A <sub>3</sub> B <sub>1</sub>	5.402	-	$0,000 < 0,05$	$H_0$ Rejected	Significant
8	A <sub>1</sub> B <sub>2</sub> x A <sub>2</sub> B <sub>2</sub>	-,036	-	$0,355 > 0,05$	$H_0$ Be accepted	Non-Significant
9	A <sub>1</sub> B <sub>2</sub> x A <sub>3</sub> B <sub>2</sub>	-1.970	-	$0,026 < 0,05$	$H_0$ Rejected	Significant

No	Hypothesis	t <sub>0</sub>	F <sub>0</sub>	p-value	Description	
10	A <sub>2</sub> B <sub>2</sub> x A <sub>3</sub> B <sub>2</sub>	-1.934	-	0,029 < 0,05	H <sub>0</sub> Rejected	Significant

So 1) The difference between the reciprocal teaching style group (A1) and the teaching style group Exercise (A2) worth = 0.035 < 0.05, means H<sub>0</sub> is rejected. 2) The difference between the reciprocal teaching style group (A1) and the inclusion teaching style group (A3) = 0.0005 < 0.05, H<sub>0</sub> is rejected. 3) The difference between the teaching exercise style group (A2) and the inclusion teaching group (A3) = 0,045 < 0.05, H<sub>0</sub> is rejected. 4) Influence Interaction (Interaction Effect) F<sub>0</sub> (AB) worth = 0,000 < 0,05 or H<sub>0</sub> is rejected. 5) Differences in learning outcomes of basic techniques sepak takraw between reciprocal teaching style that has a high ability motor with practice teaching style that has a low ability motor (A1B1 x A2B1) worth = 0.00 < 0.05 or H<sub>0</sub> rejected. 6) The difference in learning outcomes of basic techniques sepak takraw between reciprocal forces that have high ability motor with inclusion force that has high ability motor (A1B1 x A3B1) worth = 0,000 < 0,05 or H<sub>0</sub> is rejected. 7) Differences in learning outcomes of basic techniques sepak takraw between training styles that have high ability motor with an inclusion force that has a high ability motor (A2B1 x A3B1) worth = 0.000 < 0.05 or H<sub>0</sub> rejected. 8) Differences in learning outcomes of basic techniques sepak takraw between reciprocal teaching styles that have low ability motor with exercise style with low ability motor (A1B2 x A2B2) worth = = 0.485 > 0.05 or H<sub>0</sub> accepted. 9) Differences in learning outcomes of basic techniques sepak takraw between reciprocal teaching styles that have low ability motor with inclusive teaching style that has low ability motor (A1B2 x A3B2) worth = = 0.025 > 0.05 or H<sub>0</sub> rejected. 10) Differences in learning outcomes of basic techniques sepak takraw between teaching style exercises that have low ability motor with inclusive teaching style that has low ability motor (A2B2 x A3B2) worth = = 0.029 > 0.05 or H<sub>0</sub> is rejected

## CONCLUSION

The conclusion in this study in accordance with the submission of the hypothesis, from the results of hypothesis testing can be drawn the conclusion that: 1) There is a difference between the reciprocal teaching style and the practice teaching style to the basic techniques of sepak takraw. 2) There is a difference between the teaching style of reciprocity and the teaching style of inclusion to the learning outcomes of basic techniques sepak takraw. 3) There is a difference between the teaching style of the practice and the teaching style of inclusion to the basic technique learning outcomes sepak takraw. 4) There is interaction effect between teaching style and motor ability To learning result of basic technique sepak takraw. 5) There is a difference between the teaching style of reciprocal and the teaching style of the exercise on the learning outcomes of basic techniques sepak takraw on students who have high ability motor. 6) There is a difference between the reciprocal teaching style and the inclusive teaching style on the learning outcomes of basic techniques sepak takraw in students who have high ability motor. 7) There is a difference between the teaching style of the exercise and the teaching style of inclusion to the learning outcomes of basic techniques sepak takraw on students who have high ability motor. 8) There is no difference between the teaching style of reciprocal and the teaching style of the exercise on the learning outcomes of basic techniques sepak takraw on students have low motor ability. 9) There is a difference between the reciprocal teaching style and the teaching style of inclusion to the learning outcomes of basic techniques sepak takraw on students who have low ability motor. 10) There is a difference between the teaching style of the exercise and the teaching style of inclusion to the learning outcomes of basic techniques sepak takraw in students who have low ability motor.



## REFERENCE

- Agung, Sunarno and Syafullah D. Sihombing. (2011). *Research Methods of Sports*. Surakarta: Yuma Pusaka.
- Deputy Assistant for the development of personnel and Sports coaches. (2008). *Basic Training Guidelines and Materials*. Jakarta: Ministry of State and Sports,
- A.Coker, Cheryl. (2004). *Motor Learning and Control For Practitioners*. Mexico: Mcgraw Hill.
- Asrori, Muhammad. (2011). *Learning Psychology*. Bandung: CV Wacana Prima.
- Arikunto, Suharsimi. (2013). *Research Procedures A Practice Approach*. Jakarta: PT. Rineka Cipta.
- Abdurrahman, Mulyono. (2012). *Learning Difficulties Children*. Jakarta: Creativity.
- Benny A. Private. (2009). *Model Desai Learning System*. Jakarta: Dian Rakyat.
- Byra, M. (2006). *The reciprocal style of teaching: A positive motivational climate Paper presented at the AIESEP World Congress, The Role of Physical Education and Sport in Promoting Physical Activity and Health*, Jyväskylä, Finland.
- Battineli, Thomas. (2007). *Physique, Fitness, and Performance*. Unites States America: CRS Press.
- Chatoupis, C. (2005). *Effects Of Practice and Inclusion Styles On Perceived Athletic Competence Of Greek Primary School Children*. Department of Physical Education and Sport Science, University of Athens, Greece: Studies in Physical Culture and Tourism, vol. 12, No. 1.
- Coh M, Jovanovic-Golubovic D, Bratic M. (2004). *Motor Learning In Sport*. Facta Universitatis-Series: Physical Education and Sport, vol 2 no 1.
- Chatoupis C. (2009). *Contributions of The Spectrum of Teaching Styles to Research On Teaching*. Studies in Physical Culture and Tourism, vol. 16 no.2.
- Chung LI and Wai Keung KAM. (2011). *Mosston's Reciprocal Style of Teaching: A Pilot Study in Hong Kong*. Journal New Horizons in Education, vol, 59, no 2.
- Djamil, Syaiful Bahri and Aswan Zain. (2006). *Learning Strategy Teaching*. Jakarta: PT Rineka Cipta.
- Engkos, Riduan Acmad Kuncoro. (2008). *How To Use and Interpret Path Analysis (Path Analysis)*. Bandung: Alfabeta.
- Bro, Rick. (2010). *Sepak Takraw Basics*. Bandung: Great Experts.
- Gallahue, David L & Jhon C. Ozmun. (2006). *Understanding Motor Development: Infant, Children, Adolescent, Adults*. New York: McGraw Hill.
- Hanif, Sofyan Hanif. (2016). *Management Of The Sepak Takraw Competition*. Jakarta: PT Rajagarafindo persada.
- Hanif, Achmad Sofyan. (2011). *Sepak takraw Basic Training*. Jakarta: PT Bumi Timur Jaya.
- Hanif, Achmad Sofyan. (2015). *Sepak takraw For Students*. Jakarta: King Garafindo Persada.
- Judge, Abdul Aziz. Sudarsono, Arif Bulqini. (2007) *Sepak takraw*. Surabaya: Unesa University Press,
- Hasbullah, Bahmid. (2008). *"The Influence of Teaching Style (A) and Motor Ability to Learning Outcomes Forehand Skill Drive Tennis Mini" Dissertation*. Jakarta: PPs Jakarta State University.
- Hattie, J, and Timperley, H. (2007). *Review of Educational Research*. University of Auckland, Vol. 77, No. 1.
- Harsono. (2015). *Sports Coaching*. Bandung: PT Remaja Grafindo.
- Harvey F. Silver, Richard W. Strong, Matthew J. Perini. (2012). *Learning Strategies*. Jakarta: PT Index.
- Husdarta H.JS. and. Saputra Yudha M. (2013). *Physical Education Learning and Learning*. Bandung: Alfabeta.
- Kadir. (2010). *Statistics For Social Science Research is equipped with SPSS Program Output*. Jakarta: Rosemata Sampurna.
- Komarudin. (2016). *Physical Education Learning Outcomes Assessment*. Bandung: PT Remaja Rosdakarya.
- Kosni. N. A and Dkk. (2017). *Determination Association Of Anthropometric And Performance Ability In Sepak takraw Youth Athlete Using Unsupervised Multivariate*. Journal of Fundamental and Applied Sciences, vol 9, no. 2S.
- Lumintuarso, Ria. (2013). *Sports coaching theory*. Jakarta: Lankor.



- Majid, Abdul. (2014). *Integrated Temantik Learning*. Bandung: PT Remaja Rosdakarya.
- Makruf, Akbar. (2012). *Statistical Material II Ancova: Manova and Anova*.
- Morss, Kate and Rowena Murry. (2005). *Taching at University*. India: Sage Publication India Ltd.
- Morgan. (2005). *Ikathletics running challenges*, english: British Journal of Teaching physical Education.
- Mosston, Muska and Ashworth sara. (2008). *Teaching Physical Education, First Online Edition*. New York: Macmillan College Publishing Company.
- Magil, Richard and David Anderson. (2014). *Motor Learning and Control, Concept and Application*, America: Mc Graw hill.
- Magil, Richard A. (2010). *Motor Learning and Control*. New York: McGraw-Hill.
- Nurhasan, Hasanudin. (2007). *Module Test and Measurement of Sports*. Bandung: FIK UPI Coaching Department.
- Tangkudung, James. (2006). *Coaching Sports Coaching Sports Achievement*. Jakarta: Smart jaya.
- Uno, Hamzah B. (2012). *New orientation in Learning Psychology*. Jakarta: PT Bumi Aksara.
- Verducci, Frank M. (1980). *Concepta Measurement in Physical Education*. St. Louis Missouri: Mosby Company.
- Wahyudin, Dinn et al. (2007). *Introduction to Education*. Jakarta: University open.
- William, C Thomson. (2010). *Styles of teaching: Style B - the practice style*. Vahperd Journal, Vol 31 no 2.
- Widiastuti. (2011). *Test and Sport Measurements*. Jakarta: PT Bumi Timur Jaya.
- Yudiana, Yuyun et al. (2008). *Training basics*. Jakarta: University is open.
- Zalfendi et al. (2009). *Sepak Takraw Game*. Padang: Sukabina Press.
- Zulkifli. (2012). *Effects of Balance, Pelvic Eye Formation And Foot Coordination Against Skills Sepakula Begin Sepaktaraw*, (Multilateral journal) Vol 14 No. 2
- \_\_\_\_\_. (2012). *Thesis Writing and Dissertation Handbook*. Postgraduate of State University of Jakarta.