

Halim Abdul, Tangkudung James, Dlis Firmansyah. The Smash Ability in Volleyball Games: The experimental study of teaching style and motor ability. *Journal of Education, Health and Sport*. 2019;9(12):87-100. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2019.09.12.010>
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2019.09.12.010>
<https://zenodo.org/record/3586152>

The journal has had 5 points in Ministry of Science and Higher Education parametric evaluation. § 8. 2) and § 12. 1. 2) 22.02.2019.

© The Authors 2019;

This article is published with open access at Licensee Open Journal Systems of Nicolaus Copernicus University in Torun, Poland

Open Access. This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author (s) and source are credited. This is an open access article licensed under the terms of the Creative Commons Attribution Non commercial license Share alike. (<http://creativecommons.org/licenses/by-nc-sa/4.0/>) which permits unrestricted, non commercial use, distribution and reproduction in any medium, provided the work is properly cited.

The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 01.12.2019. Revised: 05.12.2019. Accepted: 20.12.2019.

The Smash Ability in Volleyball Games: The experimental study of teaching style and motor ability

Abdul Halim^{a*}, James Tangkudung^b, Firmansyah Dlis^c
Universitas Esa Unggul^a, Universitas Negeri Jakarta^{bc}

*Corresponding Author. Email: abdul.halim@esaunggul.ac.id

Abstract: Smash Ability in low volleyball games can affect to the student achievement. This study as a whole aims to determine the impact of differences and interactions from teaching styles and motor skills on the achievement of smash ability in volleyball games. This research method uses an experiment of *treatment by level* 2x2 design. This research was conducted in National High School of 4 Sinjai Timur, the study sample was 54 students in grade 8. The results of this study indicate that: (1) there is a significant difference in influence between self-check teaching styles and reciprocal to the outcomes of volleyball smash ability learning, (2) there is a significant interaction influence between teaching styles and motor ability to the outcomes of volleyball smash ability learning, (3) there is a significant differences of the smash ability in volleyball games using a self-check teaching styles and reciprocal in groups of students with high motor skills, and (4) there is a significant differences of the smash ability in volleyball games using a self-check teaching styles and reciprocal in groups of students with low motor ability.

Keywords: self-check teaching styles, reciprocal, motor ability, smash, volleyball games,

INTRODUCTION

Education for the life of mankind is an absolute necessity that must be fulfilled throughout life. Without education, it is absolutely impossible for a group of people to live in line with their aspirations to progress, prosper and be happy according to their concept of life. Teacher is a professional educator with the main task of educating, teaching, guiding, directing,

training, assessing, and evaluating students in their early childhood education through formal education, basic education and secondary education. Physical education is a key component of a quality education and can be used to promote school activities among young people. According to Firmansyah physical education is a core component of a quality education, and is an integral part of lifelong learning (Dlis, 2015). So that physical education is the only lesson in the curriculum that specifically focused on the body. Ignoring physical education means reducing the quality of education with a negative impact on public health and the health budget in the future. In the world of education, the role of educators, especially teachers, is crucial in the success of the learning process. This is inseparable from how the teacher's efforts in conveying material to students, so that students can learn and master the subject to achieve the objectives (cognitive aspects, affective aspects, and psychomotor aspects) of a students. Physical education teachers have their own way of teaching students' recognition techniques unnoticed by collaborating between the materials needed and the activities that are being targeted to achieve. This explanation is supported by a quote, volleyball skill training should be viewed as a sport activity with an educational purpose that is, fostering collaboration and teamwork, and teaching the importance of developing a strong body and a healthy mind. (Krishna, 2014).

Teaching style has an important role in improving all aspects of the students, one of them is their learning interest (Attems, Rebhan, & Strickland, 2013), and also the better teaching style, the more influenced the student's learning interest. The explanation is complemented by Kirk and Macphail (2012) in his research that, the better the teacher's teaching style, the more influence the student's learning interest will have. According to Muhibbinsyah, interest means a high tendency and excitement or a great desire for something. Interest affects the quality of student achievement in learning (Munawaroh, Pantiwati, & Rofieq, 2015). Within the scope of physical education, one of which is the formation of motion, which includes the desire to move, to live in time and form including the feeling of rhythm (Tangkudung, 2018). Motor development is very closely related to physical activity. Motoric is the development of controlling body movements through a coordinated activities between the nervous system, brain, and spinal cord. Motoric development is dived into two, namely gross motor and fine motor skills (Saurina, 2016). Gross motor skills is an aspect related to the movement and posture. While fine motor skills are aspects related to the child's ability to observe things, make movements that involve certain parts of the body and do small muscles, but require careful coordination (Soetjningsih, 1995). Furthermore according to Sujiono et al, motor is all movements obtained by the whole body, while motor development can be called as the development of the elements of maturity and control of body movements (Sujiono, Dkk, 2010). Sports and health physical education learning in schools is greatly supported by students' motor skills (Andika Tama, Puji Purwono, 2017). This is like doing throwing, running and all physical activities in learning as well as playing volleyball games.

Volleyball game is one of the material contained in the curriculum of physical education and sports subjects the game of volleyball has now experienced quite a rapid development (Mulyani, Gita Dewi & Sumarno, 2017). This is marked by the many championships that have been held, both national and international levels. In all elements of society, ranging from children to adults, both men and women are familiar with the game of volleyball. Beside that, this volleyball includes as a unique sports that is different from other sports capabilities with its own interests, this is as stated by Rohit (2017) that, each volley ball player is unique,

differing in many ways from others in backgrounds and capabilities. As a popular game, volleyball has rules and basic techniques that should be mastered both for beginners and professionals, one of which is the smash technique. Smash is one technique that is often used by volleyball players to attack the opponents and get points for winning a match. To optimize this technique must be supported with maximum strength, endurance and flexibility. This statement is supported by Mala (2016) there were positive correlation between smashing skill test and speed at power test, smashing skill test and endurance test, smashing skill test and flexibility test. In learning at school there are still many students who have not been able to master the smash technique because it is caused by a lack of understanding and limited face-to-face intensity with the teacher. Often, students in smashing the ball are not able to cross from the net, and the ball is not right on target at the volleyball playing area or out of the volleyball playing field.

In the volleyball game, students experience problems when doing the smash technique. The problems that arise during volleyball learning activities in National High School of 4 Sinjai Timur is during smash practice, there are still many students who have poor smash ability while some other have good smash ability. Most of the students in smashing the ball are unable to cross the net, and the ball is not right on target in the volleyball area or out of the volleyball field. That is because the imposition of the ball by hand is still not right yet, in result the ball reached not right on target. The success of conducting techniques in volleyball cannot be separated from the role of coaches and educators who understand the techniques, taught by providing systematic guidance by always evaluating the failure of the techniques that have been done by students. Coaches and physical educators should understand each volley ball players need in order to give adequate guidance and to adapt programs to meet those needs successful measurements and evaluating the truly important outcomes of abilities, needs and capacities of volley ball player (Apriantono T, Nunome H and Ikegami Y, 2014).

Volleyball is basically a fun game and is usually used as a recreation in saturated time after doing activities. The development of volleyball is very fast along with the development of sports so that volleyball is not only for recreation and to fill leisure time but develops as a profession and demands high achievements. Aytio (2016) explains that volleyball is a complex sport that requires a good technique, tactics and skills. Volleyball game is a game that is done by crossing the ball over the net to the opponent playing field in accordance with the rules of the game. The game starts when the team can bounce the ball and must be passed to the opponent. In the other side, volleyball game is a game of bouncing the ball (to volley) by the hands or arms of two teams who play on a field that has a certain size (Subroto & Yudiana, 2010). This game has changes in regulations that are adapted to the needs and attractiveness, in brief the explanation is based on Dincer (2015) the purpose of changing the game rules in volleyball, service, improve defense and block the combination of location, and to extend the service to meet the ball in play situation by reducing the effects of attack. Existing changes have both positive and negative impacts, each of which has its own arguments to explain further an also the structural changes in the volleyball is thought to cause the positive and negative impact in the volleyball (Ulugoz, 2013). In volleyball games, there are several forms of mastery of basic techniques that must be mastered. Techniques in volleyball can be interpreted as a way to play the game efficiently and effectively in accordance with the applicable game rules to achieve an optimal result. The purpose of volleyball is to demonstrate the technique and tactics of playing the ball on the field to win

every game. The mastery of the basic techniques in volleyball games consists of service, passing, block, and smash. All the basic techniques in volleyball must be mastered by both players of the attacking type and players of the defensive type because it is very decisive in a match. The explanation is as stated by Lopez (2013) that, the contribution of the service, smash, block and passing skill to the production of the transition phase is clearly related to the achievement of a positive outcome.

Smash is one of the basic techniques in volleyball games which is very important in a match, because in winning a volleyball match, sometimes is determined by the smash. It is a technique that has a greater chance of getting numbers than other techniques. In addition, smash is a technique that is preferred by athletes or spectators when watching a volleyball match. smash ability is the ability of a tester that begins with standing In a bent knee position and the position of both arms directed back to be ready to help refuse then jumps to reach the maximum height followed by swinging the arm forward and one arm bent to be ready to hit the ball, and when the ball is in front of the hand then a hard, sharp and swooping shot is directed towards the opponent's field. Smash can be done from all positions. The position four, three and two, is the position that often used to attack. Of the three positions a teacher must pay attention to the level of difficulty and the most effective position to achieve a score so that they can arrange teams based on the types of players correctly. The types of players in volleyball play include in attacking player types, defender types, feeder types, and versatile types. A study explains that each student is optimized to have a good smash technique, this technique is supported by the reaction speed and timing with a good ball in the air because in other studies the explosive power of students when hitting does not indicate the success of this technique. The statement is as quoted by Milic dan Ncjic (2013) explosive power parameters have not shown remarkable reliable improvement but speed force parameters have shown reliable improvement during research.

The success of a learning and training are greatly influenced by the methods, teachers, students and infrastructure available. In this regard, teachers are expected to be able to find and create methods that are appropriate to the situation and conditions of both students and available equipment, so that the learning process can take place as expected. The teacher's ability to convey learning must be able to arouse motivation, evaluate and analyse the results of the exercise and the teacher's ability to master the material is very influential on successfulness. The next suspected factor for the cause of students' smash ability in volleyball games is teaching style. Less optimal teaching results can also affect the lack of interest of students, because the delivery and teaching styles of teachers are less varied this happened to the students of National High School of 4 Sinjai Timur in participating in learning. If the physical education teacher can vary a variety of teaching styles, then there is a possibility that students will be interested and motivated to move actively and at the same time provide opportunities for students to get new things from the learning. The use of the term teaching style often replaced with the term teaching strategy whose understanding was seen to be the same, namely a strategy to encourage student participation to manage the environment and teaching atmosphere for the purpose of optimizing the amount of active time practicing from students which is seen as a reliable indicator for assessing teaching effectiveness. (Lutan, 2000). Griffin and Placek (2013) complete other arguments that, style teaching or teaching strategies are intended so that students are more active in following the teaching assignments of the teacher. This is related to the efforts of teachers in optimizing the ability

of students to achieve effective and efficient learning goals. In brief, it explains the teaching style or teaching strategy intended so that students are more active in following the teaching assignments of the teacher. This is related to the efforts of teachers in optimizing the ability of students to achieve effective and efficient learning goals.

Another opinion added, the difference in instructional style of teaching has the value of more effectiveness in the delivery of overall content in the delivery of information in the scope of sports games. The explanation is based on a quote, although the traditional instructional model might be effective in improving technical skills, it has been criticized for the loss of the contextual nature of the skills in sport games (Broek, Boen, and Claessens, 2015). Teaching style is a form of teacher's performance during the teaching and learning process both curricular and psychological. Curricular teaching style is a teacher teaching is adjusted to the purpose and nature of certain subjects. Whereas psychological teaching styles are teachers teaching are adjusted to the motivation of students, classroom, management, and evaluation of teaching and learning outcomes. The teacher always places himself as a student protector and does not differentiate from other students so that the teaching style of the teacher is more acceptable and more likely to create a pleasant atmosphere in learning. That is according to the closure, a teacher should always try to meet individual needs and personal differences of each student, the best methods to achieve these goals are found within the indirect (Chatoupis, 2013). In physical education, strategies such as self-talk, presence of images, and goal setting have been used as efforts to encourage independent learning. One of the teaching styles in which students are required to check their own work is namely the self-check teaching style. Self-check teaching style is one way of teaching style, where students assess their own performance so that students have confidence and accept their limitations. Self-check teaching style is where each student performs their respective tasks and at the end of the meeting session, they make decisions for themselves. In this case the teacher has the role to make the lesson material before the lesson begins. In self-check styles, students learn an exercise and are involved in self-evaluation according to criteria set by the teacher, while being responsible for assessing correct or incorrect movements on their own (Pitsi, Digelidis, & Athanasios, 2015). This means that the use of a self-check teaching style, where students learn exercises and engage in self-evaluation according to criteria set by the teacher, while being responsible for assessing the right or wrong movements on their own.

Byra in (Pitsi, Digelidis, & Athanasios, 2015) also said that thus, their personal responsibility for the evaluation of their performance is critical for this method to bear fruits, but it also poses a challenge to them since it represents a different way of learning from what they are accustomed to. Thus, the responsibilities held by students are very important to evaluate their work, but this can pose challenges for students, because this is a way of learning that is different from what they generally do. Sometimes teachers want students to be more free to choose and hone their abilities that they have, either individually or with their partners. So a new teaching style is needed as a self-check style and requires student to choose task and check them off as the complete them (mastery learning) during part of lesson (Shimon, 2011). The self-check teaching style allows students to practice their skills in every environment full of freedom and choice; As such, this style often increases their motivation to participate and learn. To check themselves, students must analyse (compare and differentiate) their performance with the criteria of the task and draw conclusions about what is right and

wrong. Therefore, self-check these teaching style the learner performs a task and checks his/her work against a criteria sheet (Kirk, Macdonald, & O'Sullivan, 2006). Thus, when using the self-check teaching style there has been a cognitive process where students are involved when doing self-checking including understanding, application, analysis, and evaluation, in the dimension of conceptual knowledge. Furthermore, reciprocal teaching style is almost similar to the concept of peer assisted learning, peer tutoring (Ward & Lee, 2015). This style is more capable for problem solving, especially in large classes, limited equipment, limited class time, and limited feedback for students. This style has a better impact with indicators of students feeling comfortable and avoiding boredom in the process of knowledge transfer. This explanation is based on Theodosiou, et al. (2016), "while the 'reciprocal' and 'guided-discovery' teaching styles resulted more adaptive behaviours such as enjoyment, less boredom, and more focus on learning and improvement.

Reciprocal teaching styles are given responsibility in terms of providing feedback. And also, reciprocal style are social interactions, reciprocation, receiving and giving immediate feedback (Mosston & Ashworth, 2008). This means there is a shift in the role from the teacher to peer. This shift allows for increased social interaction between peers and direct feedback. Furthermore, the anatomy of reciprocal teaching styles according to Mosston is that the role of the teacher is to make all subject matter, criteria, and logistical decisions and to provide feedback to the observer (Mosston & Ashworth, 2008). In this case the implementation of learning is done in pairs, each student has a role as an actor and observer, who then gives feedback based on criteria set by the teacher. Reciprocal teaching style is paying attention to the greater changes in making decisions from the teacher to students, students are responsible for observing the performance of their friends or partners and provide immediate feedback at each time a movements made (Mahendra, 2000). Theodosiou, et al. (2016) explained it has been found that the 'reciprocal teaching style, a style which allows students to have more choices, positive affected their intrinsic motivation, while the 'reciprocal' and 'guided-discovery' teaching styles resulted more adaptive behaviours such as enjoyment. The quote explains that reciprocal teaching style is a style that allows students to have more choices. In the process, positive encouragement influences their intrinsic motivation.

This reciprocal style is a style where students can act as observers and actors, do feedback, and provide encouragement to fellow students. Demirhan in (Munusturlar, Mirzeoglu, & Mirzeoglu, 2014) defines reciprocal teaching style is that, reciprocal style can be referred as a style, in which the students are matched as observer and doer, and the observer student gives the implementer student feedback, correction and reinforcement based on the paper the teacher writes the skill or exercise criteria. Thus, this style is one of the leading teaching styles because it can make students active, easy to work with, and honest. Another thing that can be a factor so that the smash ability of the students of SMP Negeri 4 Sinjai Timur Kab. Sinjai is the low motor ability of students so that they are not optimal in doing good smash movements. Schmidt emphasize that learning motion is a series of training associations or experiences that can change the ability of motion towards the performance of certain motion skills. In connection with this, the change in motion skills in learning motion is an indication of the process of motion learning that someone carried out. Thus, the movement skills obtained are not only influenced by the factors of motion maturity but also by the factors of the motion learning process. On the other hand, the effect of learning motion appears on the real difference from the level of motion skills of a child who gets treated with intensive

motion learning and who that is not. In the group of children who received intensive movement learning treatment, showed a progressive and permanent ascending curves.

Motion is very important in human daily life because humans must move, one of which is to meet their needs or desires such as eating. Motor learning then is that aspect of learning in which movement plays a major part. Motor learning is a relatively permanent change in motor behavior resulting from practice or past experience (Gallahue & Ozmun, 2006). Motor skill is learned, goal oriented, voluntary movement task or action of one or more of the body parts (Gallahue & Ozmun, 2006). The difference in ability is mainly due to physical quality. Physical ability is related to basic motor abilities that will greatly affect one's performance in learning movement in a sport. One difference from each individual in developing a movement skill lies in motor skills or basic motor skills, commonly called as motor ability. It is A capacity of a person relating to the exercise of physical abilities to carry out a movement (Widiastuti, 2015). Motor ability is a general capacity related to achievement with a variety of skills as a general capacity of the individual that relates to the performance of skill or task (Morrow & dkk, 2006). In line with what motor ability is the capacity of a person related to the implementation and demonstration of a skill that is relatively inherent (Nurhasan, 2000). Thus, this motor ability is the capacity of a person to perform movement skills. Motion plays a very vital role in human life. From infancy, childhood, to adulthood, the development of motion greatly influences overall development both physically, intellectually, socially and emotionally. Motor ability is a quality of one's ability that can make it easier to do movement skills, therefore the ability to move can be seen as a foundation for future success in doing movement skills. As revealed motor skills are the quality of the results of individual movements in motion, both non-sports movements and in sports movement or the maturity motor skill performance (Sukintaka, 2004). Furthermore, the development of motor ability is largely determined by growth and development (Sukintaka, 2004).

Both of these factors must still be supported by exercises that are appropriate to the level of maturity of the child and also a good nutrition. As for the possibility that good growth and development will affect a person's motor skills. The explanation is that, if learn movements means optimizing the process of solving tasks engines, resulting didactic implications different from those prescriptive learning own cognitive approach (Tafuri, 2014). Based on the background and some theoretical studies, the following problems can be formulated: 1) is there a difference in influence between self-check and reciprocal teaching style on the learning outcomes of Volleyball game smash ability?, 2) is there an interaction effect between teaching style and motor ability on the learning outcomes of volleyball smash?, (3) is there a difference in the learning outcomes of the smash ability in volleyball game between the self-check and reciprocal teaching styles in the high motor ability group? (4) is there a difference in the learning outcomes of smash ability in volleyball game between the command teaching style and the self-check teaching style in the low motor ability group?

METHOD

The research method used was an experimental method with a treatment by level 2 x 2 design. According to Sugiyono (2017) experimental research methods can be interpreted as research methods used to look for the effects of certain treatments on others under controlled conditions. This research was conducted at National High School of 4 Sinjai Timur during March-June 2017. The population of this research is the students at SMP Negeri 04 Sinjai

Timur, with 54 students the sample in grade 8 are using stratified sampling techniques. For self-check and reciprocal teaching style research instruments was using learning process planning called *RPP*, motor ability using barrow test, and a volleyball smash test. The data analysis technique used in this study is the prerequisite test using the Liliefors test and the Bartlet test, while for the hypothesis testing using ANVA and the Tukey Test.

RESULTS AND DISCUSSION

Results

1. Normality and Homogeneity Test Results

Normality and homogeneity tests are prerequisites before testing hypotheses. For the normality test was using the Liliefors test, while for the homogeneity test was using the Bartlet test.

a. Normality test

From the results of the Liliefors test conducted at the smash ability level, the following results are obtained:

Table 1. Normality Test Results

Group	L_{count}	L_{table}	α	Info
A2B1	0.146	0,271	0,05	Normal
A3B1	0.103	0,271	0,05	Normal
A2B2	0.124	0,271	0,05	Normal
A3B2	0.139	0,271	0,05	Normal

Based on table 1 it can be seen that overall test results are significant with $L_{count} > L_{table}$, so the population is normally distributed.

b. Homogeneity Test

In homogeneity testing with data bartlet test the level of smash ability in the teaching style group of students of National High School of 4 Sinjai Timur obtained the value of Bartlet $\chi^2_{count} = 2,19$ dan $\chi^2_{tab} = 14,07$ and smaller than value $\alpha = 0,05$ or at a significant level of 95%. Thus, from the results it can be seen that the data group includes homogeneous data.

2. Hypothesis Test Results

a. Differences in Self-Check Teaching Style and Reciprocal Teaching Style on Volleyball Smash Ability

Table 2. Analysis A1 – A2

(I) Teaching style (A)	(J) Teaching style (A)	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
A1	A2	5,44	3,541	,002	-3,10	13,99

Based on table 2 it can be seen that $Q_{(OA)} 5,44 > Q_{(tab)} 3,18$ or H_0 is rejected. There is a real difference sig (p) is 0,002 ($0,002 < 0,05$), to be seen in the column table Sig (p) is 0,002 or the probability above $\alpha = 0,05$. So the decision can be taken to reject H_0 and accept H_1 . Therefore, there are differences in the average smash ability of groups who are given a self-check teaching style and reciprocal teaching style in students of SMPN 4 Sinjai Timur Kab. Sinjai.

b. The Interaction Between Teaching Style and Motor Ability Against Smash Ability of Students in Volleyball Games

The results of the two-way analysis of variance found that there was a significant interaction effect between teaching style and motor skills on the learning outcomes of smash ability in volleyball games. The results are meaning, because $F_{count} = 3,767 > F_{table} = 2,96$ with a probability value (Sig.) of 0,030 smaller than a significant level (0,05). This means that there is a significant interaction effect between teaching style and motor ability on the students' volleyball smash ability.

c. Differences in Self-check Teaching Style and Reciprocal Teaching Style on Smash Ability Volleyball Games with High Motor Ability

Table 3 Analysis of $A_1B_1 - A_2B_1$ groups

(I) Group (B1)	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
A_1B_1	$_{32}B_1$	6,222	4,184	,009	-6,19	18,64

Based on table 3 it can be seen that Q_{count} is $6,22 > Q_{table}$ 3,03, this means H_0 is rejected and H_1 is accepted. There is a real difference sig (p) is 0,009 ($0,009 < 0,05$), to be seen in the Sig (p) column table is 0,009 or the probability is well below $\alpha = 0,05$. So the decision can be taken to reject H_0 and accept H_1 . It means that there is a difference in the average results of the smash ability in the self-check teaching style and reciprocal teaching style in high motor ability group.

d. Differences in Self-check Teaching Style and Reciprocal Teaching Style on Volleyball Smash Ability with Low Motor Ability

Table 4. Analysis of $A_1B_2 - A_1B_2$ groups

(I) Group (B2)	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
A_1B_2	A_2B_2	4,667	4,184	,008	4,667	4,184

Based on table 4 it can be seen that obtained Q_{count} is $4,67 > Q_{table}$ 3,03, this means H_0 is rejected and H_1 is accepted. There is a significant difference sig (p) is 0,008 ($0,008 < 0,05$), to be seen in the column table Sig (p) is 0,008 or the probability far below $\alpha = 0,05$. So the decision can be taken to reject H_0 and accept H_1 . It means that there is a difference in the average results of the smash ability in the self-teaching style and reciprocal teaching style in low motor ability group.

Discussion

The purpose of this study is to find differences and interactions of teaching styles and motor ability in achieving smash abilities in volleyball games. The following discussion is as follows:

1. Differences in Self-check Teaching Style and Reciprocal Teaching Style on Volleyball Smash Ability

There is a difference in the score of the ability to smash a volleyball on students using the self-check teaching style and that using the reciprocal teaching style. This in line with the opinion of Yunus (2002) which states that s mash is a technique that has a complex

movements which consist of: a) the initial steps, b) the repulsion to jump, c) hitting the ball when floating in the air, and d) when landing again after hitting the ball. So, in the volleyball game, especially in smash, can train students to have accuracy in hitting the ball that leads to a predetermined target. So it takes skills (coordination, strong or weak and fast or slow movements, mastery of techniques) and feelings (accuracy and sharpness of the senses). To hone or gain skills and feeling in doing volleyball smash, the teacher must be able to teach the material for the ability to smash in volleyball game with fun and the students are interested in learning it. Teachers in teaching also must be able to vary, because teaching styles greatly affect the success of the learning process in improving learning outcomes in the volleyball smash ability. Including in the use of self-check teaching styles and reciprocal teaching styles. Mosston & Ashworth in Pitsi, Digelidis, Athanasios (2015) said that, in self-check styles, students learn an exercise and are involved in self-evaluation according to criteria set by the teacher, while being responsible for assessing correct or incorrect movements on their own. The self-check teaching style is used for the student's relationship with the teacher which is developed by examining the assignment given by the teacher, the decision is then shifted or moved to the student to be more responsible. Students carry out tasks and adjust to the criteria created by the teacher as the feedback. That way, students stop to depend on others, and rely more on feedback from themselves. Then, students can maintain honesty and objectivity regarding their own performance, so they are able to accept the limitations of themselves and continue the process of making decision during learning and after. Thus, it can improve student learning outcomes, especially in volleyball game smash material.

Meanwhile, reciprocal teaching styles are given responsibility in terms of providing feedback. As explained by Mosston (2008) that reciprocal style are social interactions, reciprocation, receiving and giving immediate feedback. Whereas in the reciprocal teaching style is a style that gives students the opportunity to provide feedback to their friends or their own partners. There is a shift in responsibility for providing feedback, which was originally done by the teacher but in this style is done by the students. Making it possible for students to improve learning outcomes and social interaction between their peers. In this teaching style, students are given the opportunity to repeat the practice with their partners individually, students receive direct feedback, but also provide feedback for their friends. Then also this style can foster patience and tolerance towards friendship.

2. The Interaction between Teaching Style and Motor Ability against the Smash Ability of Students in Volleyball Games

Hasibuan and Mujiono (2005) said that, teaching style can be interpreted as the teacher's actions in the context of the teaching and learning process aimed at overcoming student boredom, so that in the learning process students always show perseverance, enthusiasm, and actively participate. So, meaningfully, learning volleyball smash is a way to play the ball effectively and efficiently to get optimal results, but still stick to the rules of the game that have been set. Smash mastery can be taught through a variety of teaching styles, including self-check teaching style and reciprocal teaching style. Delivering different teaching style to students who have low or high motor skills will also produce a different volleyball smash ability. Then, the results of this study are in line with the opinion of Cureton quoted by Toho and Gusril, (2004) regarding the function of motor skills that is the main function of motor skills is to develop the capability and ability of each individual that is useful to enhance work

power. By having a good motor skills, certainly individuals have a foundation for mastering specific motor skills tasks. All the elements of motor ability in high school students can be developed through a training and playing activities that involve muscles. The more students experience in motion activity, surely their elements of motor ability are increasingly trained. This experience is stored in the memory to be used on another occasions that needed the same movements. With so much motor experience done by junior high school students, it will certainly add to his maturity in doing motor activities. The interaction between teaching styles and motor ability among students will interact with each other towards the results of learning the ability to smash in volleyball games.

3. Differences in Self-check Teaching Style and Reciprocal Teaching Style on Smash Ability with High Motor Ability in Volleyball Games.

There is a significant difference in the value of volleyball smash ability between groups of students who use the self-check teaching style and group of students who use reciprocal teaching styles and the value of volleyball smash ability in groups of students who are trained with reciprocal teaching styles are superior than the value of the group that are trained in the self-check teaching style on National High School of 4 Sinjai Timur in grade 8. This is in line with the opinion of Byra in Pitsi, Digelidis, Athanasios (2015) said that thus their personal responsibility for the evaluation of their performance is critical for this method to bear fruits, but it also poses a challenge to them since it represents a different way of learning from what they are accustomed to. The self-check teaching style package includes several aspects, which are students only learning independently, then communication is done by the teacher, communication does not occur between students, because students are active based on criteria given by the teacher. Thus, the responsibility held by students is very important to evaluate their work, but this can also pose challenges for students, because this is a way of learning that is different from what they usually do. While reciprocal teaching style is one of the teaching approaches that is suitable for making students interact socially, especially when applied in volleyball smash learning. In line with Mosston (2008) regarding the anatomy of reciprocal teaching style that, the role of the teacher is to make all subject matter, criteria, and logistical decisions and to provide feedback to the observer. In this case the implementation of learning is done in pairs, each student has a role as an actor and observer, who then gives feedback based on criteria set by the teacher. The teacher will provide opportunities for the student to be able to work independently as well as in pairs, then student also can learn the consequences of the decisions that have been made in accordance with existing agreements, and can learn about time constraints at once and learn to complete the tasks given. For students who have high motor skills, it will be easier to learn through a reciprocal style because it will be easier for them to receive the material delivered by his friend. Therefore, based on the results of the study, it can be concluded that the reciprocal teaching style to the high motor ability group is better than the self-check teaching style to the high motor ability group in an effort to improve their smash ability in volleyball games.

4. Differences in Self-Check Teaching Style and Reciprocal Teaching Style on Volleyball Smash Ability with Low Motor Ability

There is a significant difference in the value of the volleyball smash ability between groups of students who use the self-check teaching style and groups of students who use reciprocal teaching style, the value of the volleyball smash ability of the group of students who are trained in self-check teaching style is higher than the value of groups who are trained in reciprocal teaching style for the students of National High School of 4 Sinjai Timur in grade 8. This is in line with the opinion of Kirk, et al. in Pitsi, Digelidis, Athanasios (2015) who said that, the self-check strategy is formal element styles of teaching. Self-check is a means of preparing for the future. This process has been used effectively by students to improve their academic performance in the class. The self-check teaching style allows students to practice their skills in every environment full of freedom and choice; As such, this style often increases their motivation to participate and learn. To check themselves, students must analyse (compare and differentiate) their performance with the criteria of the task and draw the conclusions about what is correct and what is lacking. Then, according to what Mosston said in Mahendra (2000) said that, reciprocal teaching style is to pay attention to greater changes in making decisions from the teacher to students, students are responsible for observing the performance of their friends or partners and provide immediate feedback at every time they making a move. The teacher prepares an assignment sheet which explains the assignments that must be carried out by their partner in accordance with the reference. This kind of descriptions will help students as observers in analysing their task. Every time the teacher going to give a lesson, they must start by giving a demonstration first and outlining how to implement it to the students. For the students who have low motor ability, it will be easier to learn through a reciprocal style because it will make them easier to receive the material given by his friend. Thus, based on the results of the study, it can be concluded that the self-check teaching style is better than the reciprocal teaching style for groups with low motor ability in an effort to improve their smash ability in volleyball games.

CONCLUSION

Based on the results of research and the results of data analysis that have been conducted, the following conclusions obtained: overall, that there are differences in the influence of self-check teaching styles and reciprocal teaching styles on volleyball smash ability. Then, there is the effect of interaction between teaching style and motor ability to the volleyball smash ability, and there is a difference in influence between the self-check teaching style group and reciprocal teaching style group for the students who have high motor ability on the volleyball smash ability, and finally there is a difference in influence between the self-check teaching style group and reciprocal teaching style group for the students who have low motor ability on the volleyball smash ability. Based on the conclusions obtained from the data analysis results above, suggestions can be made as follows: the self-check teaching style has a better influence in improving the learning outcomes of the smash ability in volleyball games, so in the context of using the style in teaching the teachers are expected to prefer the said teaching style in order to improve the learning outcomes for the students smash ability in volleyball games. Associated with the difference in effect that the high motor ability having a better results, the teacher is advised to pay attention to motor ability factors, in order to improve learning outcomes of the students smash abilities. For further researcher who study the self-check teaching style and reciprocal teaching style on the learning outcomes of smash abilities

in volleyball games is suggested to choose the attribute variable of kinaesthetic perception, eye-hand coordination, physical activity, and others to be included.

REFERENCES

- Dlis, Firmansyah, *Sosiologi Olahraga*. Malang: Wineka Media, 2015
- Kirk, D., & MacPhail, A. (2012). Teaching games for understanding and situated learning: Rethinking the Bunker-Thorpe model. *Journal of Teaching in Physical Education*, 3(2): 56–64.
- Saurina, N. (2016). Aplikasi Deteksi Dini Tumbuh Kembang Anak Usia Nol Hingga Enam Tahun Berbasis Android. *Jurnal Buana Informatika*. <https://doi.org/10.24002/jbi.v7i1.485>
- Tangkudung, James. *Sport Psychometrics. Dasar-dasar dan Instrumen Psikometri*. Depok: Rajawali Pers, 2018.
- Sujiono, Bambang dkk, *Metode Pengembangan Fisik*. Depdiknas: Universitas Terbuka, 2010.
- Sukintaka. *Teori Pendidikan Jasmani*. Bandung: Yayasan Nuansa Cendekia, 2004.
- Andika Tama, R., Puji Purwono Jurusan Pendidikan Jasmani Kesehatan dan Rekreasi, E., & Ilmu Keolahragaan, F. (2017). Survei Kendala Pelaksanaan Pembelajaran Pjok Materi Pencak Silat Smp Negeri Di Kabupaten Semarang. *Journal of Physical Education, Sport, Health and Recreation Journal of Physical Education*. <https://doi.org/10.1021/jp901300k>
- Mulyani, Gita Dewi & Sumarno, G. (2017). Pengaruh Pengajaran Handball Like Games Terhadap Penguasaan Keterampilan Gerak Dasar Lempar Tangkap Dalam Pembelajaran Penjas Sekolah Dasar. *Jurnal Pendidikan Jasmani Dan Olahraga*. <https://doi.org/10.17509/jpjo.v2i1.6402>
- Rohit, H. (2017). Construction and Standardization of Volleyball Skill Tests for Men Players. *International Journal of Physiology, Nutrition and Physical Education*, 2(2): 560–561.
- Mala, M. (2016). Scoring Ability in Volley ball. *Snipes Journal*, 2(3): 34-42.
- Apriantono T, Nunome H, Ikegami Y, S. S. (2014). The Effect of muscle Fatigue on Instep Hicking Kinetics and Kinematics in association volley ball. *Sports Science*, 3(2): 77–82.
- Dinçer, Ö. (2015). The Changing Rules of the Game , Volleyball Player Systematic Structure and Effects in Applying Değişen Oyun Kurallarının , Voleybol ' un Sistemik Yapısı ve Oyunun. *International Journal of Science Culture and Sport*, 1(4): 10–18. <https://doi.org/10.14486/IJSCS342>
- Subroto dan Yudiana, *Permainan Bolavoli*. Bandung: FPOK Universitas Pendidikan Indonesia. 2010.
- Ulugoz, E. (2013). Six Of The Elite Women's Volleyball Player Of Physical, Anthropometric And Investigation By Somatotype Outskirts Of The Games. *E-Journal Of New World Sciences Academy*, 6(4): 2712–2782.
- Lopez, J. P. (2013). Analysis Of The Service As A Performance Factor In High-Level Volleyball And Beach Volleyball. *Sports Technology Symposium Satellite to the 18th Annual Con114 Gress of the European College of Sport Science 2013*, 3(1): 145–151.
- Milic V, Nejc D, K. R. (2013). The effect of plyometric training on the explosive strength of leg muscles of volleyball players on single foot and two-foot takeoff jumps. *Physical Education and Sport.*, 6(2): 67–72.
- Lutan, Rusli. *Strategi Belajar Mengajar Penjas*. Jakarta: Departemen Pendidikan Nasional, 2000.

- Griffin, L.L., & Placek. (2013). The understanding and development of learners' domain-specific knowledge: Introduction. *Journal of Teaching in Physical Education*, 20(3): 200–209.
- Broek, G. Vande, Boen, F., & Claessens, M. (2015). Comparison of Three Instructional Approaches to Enhance Tactical Knowledge in Volleyball among University Students. *Journal of Teaching in Physical Education*, 7(-): 375–392.
- Chatoupis, C. & V. (2013). An analysis of published process-product research on physical education teaching method. *International Journal of Applied Sports Sciences*, 23(1): 271–281.
- Pitsi, Athina., Nikolaos Digelidis, Athanasios P., The effects of reciprocal and self-check teaching styles in students' intrinsic-extrinsic motivation, enjoyment and autonomy in teaching traditional Greek dances. *Journal of Physical Education and Sport*, June, 2015.
- Shimon, Jane M., *Introduction to Teaching Physical Education: Principles and strategies*. USA: Human Kinetics, 2011.
- Kirk, David., Doune Macdonald, dan Mary O'Sullivan, *The Handbook of Physical Education*. London: Sage Publications, 2006.
- Ward, P. dan M-A Lee, Peer-assisted learning in physical education: A review of theory and research, *Journal of Teaching in Physical Education*, 24, 2015.
- Theodosiou, A., Gerani, C., Barkoukis, V., Gioupsani, A., Papacharisis, V., Drakou, A., & Tsorbatzoudis, H. (2016). Self-check and reciprocal teaching styles in physical education : A qualitative investigation of elementary school students ' experiences. *Las Palmas de Gran Canaria*, 11(3): 249–252.
- Mosston, Muska, dan Sarah Ashworth. *Teaching Physical Education (First Online)*. Ohio: Merrill Publishing Company, 2008.
- Mahendra, Agus. *Bola Tangan* (Jakarta: Departemen Pendidikan Nasional Direktorat Jenderal Pendidikan Dasar dan Menengah Bagian Proyek Penataran Guru SLTP Setara D-III, 2000.
- Munusturla, Süleyman r, Nevzat Mirzeoglu, A. Dilsad Mirzeoglu, The Effect of Different Teaching Styles Used In Physical Education Courses On Academic Learning Time, *Journal of Education and Science*, vol. 39 (173), 2014.
- Gallahue, David L. dan John C. Ozmun, *Understanding Motor Development: Infant, Children, Adolescent, Adults*. New York: McGraw-Hill, 2006.
- Sukintaka. *Teori Pendidikan Jasmani*. Bandung: Yayasan Nuansa Cendekia, 2004.
- Tafari, D. (2014). Teaching method of physical education and sports by prescriptive or heuristic learning. *International Network of Sport and Health Science*, 10 (December), 4–6. <https://doi.org/10.14198/jhse.2015.10.Proc1.28>