

Different Effects Between Cooperative and Sociometric Learning on Lower Passing Learning Outcomes in Volleyball Games of Grade VIII Students at SMP Negeri 14 Medan

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Abstract - This research was conducted at SMP Negeri 14 Medan. This research was carried out in 2019/2020 Academic Year. The stages of this research included collecting data on sociometrics, applying cooperative learning treatment, and collecting data about the results of learning under passing in volleyball games by the implementation of both cooperative learning (cooperative type STAD and cooperative jigsaw type). The time for applying the cooperative learning treatment (cooperative type STAD and cooperative type jigsaw) was carried out for 4 weeks research duration within the 4 meetings. The research sample was taken by cluster random sampling. The results of the study showed: 1) There were differences in the results of learning by which passing in volleyball between the cooperative type STAD and cooperative type jigsaw. 2) There were correlation between cooperative learning with sociometric on the results of learning under passing in volleyball games. 3) The result of learning to pass down in volleyball games of students with high sociometric taught by using cooperative type STAD was higher than that of cooperative type jigsaw. 4) The result of learning to pass down in a volleyball game of students with low Sociometric taught by using cooperative jigsaw type was also higher than cooperative type STAD.

Keywords: *STAD, JIGSAW, SOCIOMETRIC, Send feedback*

I. INTRODUCTION

Physical education is a learning process through physical activities that is designed to improve physical fitness, develop motor skills, knowledge and behaviors of healthy and active living, sportsmanship, and emotional intelligence. The learning environment is carefully regulated to promote the growth and development of all students, physical, psychomotor, cognitive, and affective domains.

Material in physical education is presented to help students understand why humans move and how to do the movements safely, efficiently, and effectively. The implementation needs to be done in a planned, gradual, and sustainable manner, which in turn students are expected to increase a positive

attitude for themselves and appreciate the benefits of physical activities for improving the quality of one's life. Thus, sportsmanship and an active lifestyle will form.

The physical education process basically utilizes physical activities that are planned systematically and aim, to develop and enhance individuals organically, neuromuscularly / psychomotorly, perceptually, cognitively, and affectively, within the framework of the national education system. Physical education taught in schools has an important role, namely to provide opportunities for students to be directly involved in various learning experiences through physical, sports and health activities carried out systematically. Provision of learning experience is directed to foster physical growth and better psychological development, while at the same time forming a healthy and fit lifestyle along the drift.

In the world of education there is a pedagogical goal, so education is felt to be incomplete without physical education, sports and health because motion as a physical activity is the basis for humans to get to know the world and itself which naturally develops in line with the times. Besides physical education is a medium to encourage physical growth, psychological development, psychomotor skills, knowledge and reasoning, appreciation of values (attitude, mental, emotional, sportsmanship, spiritual, social) as well as the habit of healthy lifestyles that lead to stimulate growth and development balanced physical and psychological quality.

In learning physical education, volleyball is a learning that is very popular with students. The popularity of this sport is evident from the existing field facilities in rural and urban areas and various events make this sport included in the curriculum of physical education learning (Ahmadi. 2007: 20).

But the problem that arises is that students only play in volleyball games. They pay less attention to the basic

techniques of playing volleyball such as passing, serve, and other basic techniques. This needs to be improved so that students' abilities can be further improved. Passing is one of the basic techniques in volleyball games which has a major contribution in volleyball games. Then it needs to be taught to students in school. Passing down is the most basic technique. Doing the passing down well is not easy. For beginner students often do not perfect passing underneath, not even close the possibility of the ball running away from mastery.

Based on the results of observations at SMP Negeri 14 Medan in Class VIII students at SMP Negeri 14 Medan, the researchers found several problems such as:

- 1) Students' learning motivation towards physical education is considered lacking, this is shown from students starting to change clothes when entering physical education learning which takes a long time and students complain of fatigue when warming up.
- 2) On the material passing under volleyball where there are several problems including the imposition of the ball and the arm is not right so many balls are bounced high and far (not on target), students feel pain when passing down where this happens a lot to female students, then the ball does not parabolic soar means that there is an error in the implementation of the technique done by students, and the last is the implementation of the material under the passing is usually carried out only in pairs and monotonous so as to make students not really like this material.
- 3) In the implementation of under-passing learning in volleyball games usually carried out in pairs or certain exercises but not through groups, this makes students' imaginations stop and is focused on training alone. Even though there are many ways you can do this by studying groups under this passing material.
- 4) Students who have a gap in adolescent relationships are usually not so good for students' social lives and this has an effect on learning. In the observations of researchers, where students form many gaps in socializing, this can be solved by teachers through group learning by rotating group members so students can always get along with other friends.
- 5) Learning outcomes in mid semester T.A. 2018/2019 the even semester is a reference in this study, where the physical education learning outcomes of the teacher show that there are students who are incomplete in sub KD passing below determined by the teacher. Where passing down is the most incomplete KD sub sub compared to volleyball, basketball and running.

In the implementation of learning under passing in volleyball games it is necessary to apply appropriate teaching methods in order to obtain good passing skills. Learning model according to Istarani (2011: 1) is a whole series of

presentation of teaching material which covers all aspects before, being and after learning by the teacher and all related facilities that are used directly or indirectly in the teaching and learning process. In this study, researchers applied cooperative learning as a treatment in accordance with the background of the problem outlined above.

There are three choices of learning models, namely competition, individual, and cooperative learning (Lie, 2008: 23). Cooperative learning is one of the learning models that uses different task structures and rewards to enhance student learning. The structure of the task makes students have to work together in small groups. In completing their group assignments, each student in a group member must work together and help one another to understand the subject matter. In cooperative learning, learning is said to be incomplete if one of the friends in the group has not mastered the lesson material. According to Suprijono (2010: 58), the benefits of the cooperative learning model: 1) make it easier for students to learn; 2) growing students' awareness to learn to think independently; 3) students can solve problems given by the teacher.

There are several types of cooperative learning. In this study, it has been established that is applying the Student Teams Achievement Division (STAD) type of cooperative learning model and the type of jigsaw cooperative learning model which will be implemented in the classroom.

STAD learning according to Istarani (2011: 19) is one type of cooperative learning model using small groups of 4-5 people heterogeneously. Beginning with the delivery of learning objectives, delivery of material, quiz group activities, and group awards.

In this STAD model students are placed in learning teams consisting of 4-5 heterogeneous people. The teacher presents learning, then students work in their team ensuring that all team members have mastered the material. Then students are given a test about the material, at the time of this test they are not allowed to help each other. By understanding and knowing the STAD cooperative learning model, the teacher will be able to change the teaching paradigm from conventional to learning models that can motivate students to be active, creative, innovative and fun.

The jigsaw method is one type of active learning consisting of heterogeneous learning teams consisting of 4-5 people (material presented by students in the form of text) and each student is responsible for mastering the learning material section and being able to teach the part to other members. Slavin (2005: 235) jigsaw method was developed and tested by Elliot Aronson and friends at the University of Texas, and friends at John Hopkins University in 1978. Jigsaw is a cooperative learning model, with students learning in small groups consisting of 4-6 people are heterogeneous. Learning material provided to students is in the form of text and each

member is responsible for completing the part of the subject matter that must be learned.

Members from different origin groups met with the same topic in the group to discuss and discuss the material assigned to each group member and help each other to learn their topic. After the discussion is over, the group members then return to the original group and try to teach their group friends what they got during the meeting in the expert group. Jigsaw was designed not only to increase students' sense of responsibility independently, but also to demand positive interdependence of their peers and then to end learning. Students are given a quiz individually which includes material for each student to team members who provide the information needed with the aim of being able to do the quiz properly. The jigsaw method as with other group learning processes is an effective way to vary the atmosphere of class discussion patterns. Assuming that all recitation or discussion requires arrangements to control the class as a whole.

In learning many things that affect one of them is sociometry. In the world of education we as prospective teachers are required to have knowledge creativity and broad insight to understand students which includes psychology, abilities, weaknesses, and strengths possessed by students. To know the ability and development of students can be done through tests and non-tests.

Sociometry is an appropriate technique for collecting data on students' social relations and social behavior. According to Nelson (1979: 392) sociometry is to measure the status of students with an accepted group. With this technique data can be obtained about the atmosphere of the relationship between individuals, the structure and direction of social relations. The picture of the atmosphere of social relations obtained with sociometry is called a sociogram. From individual sociometry data it can be seen the breadth and depth of association, the status of the choice or rejection of peers, and popularity in relationships.

By considering the problems and circumstances of students in SMP Negeri 14 Medan, it can be determined the title in this study is "Differences in the Effects of Cooperative Learning and Sociometric Against Learning Outcomes in Volleyball Games in Class VIII Students of SMP Negeri 14 Medan T.A. 2019/2020".

II. METHOD

The study was conducted using the experimental method. The experimental method is a research method used to look for the effect of certain treatments (Sugiyono, 2010: 12). In this research is to compare two different cooperative learning, namely STAD cooperative type and jigsaw cooperative type with sociometric attribute variable of students consisting of high sociometric and low sociometric.

The research design used was by level 2 x 2 with three research variables, namely one dependent variable and two

independent variables. As the dependent variable was the result of learning to pass underneath in volleyball games and the two independent variables are cooperative learning and student sociometric.

Learning treatment variables were divided into two, namely cooperative type STAD (A1) and cooperative type jigsaw (A2). The influencing variables are high sociometric (B1) and low sociometric (B2).

III. RESULTS AND DISCUSSION

The treatment in this study was to use cooperative learning as independent variables, namely STAD cooperative type and jigsaw cooperative type, and sociometric as moderator independent variables. Before the teacher / team teaches material passing down on volleyball learning in each treatment class the researcher first gives signs to the teacher / team regarding the steps taken in the implementation of teaching and learning.

The conditions created for the two treatment groups were attempted the same, except using cooperative learning. The same treatment includes competency standards, material, time (number of face-to-face) and semesters. One difference between the STAD type cooperative learning model and the jigsaw cooperative type lies in the syntax or the steps of the learning.

The results of this study were:

- a. There is a difference in the results of learning to pass down in a volleyball game between cooperative type STAD and cooperative type jigsaw.
- b. There is a significant effect of cooperative learning with sociometric towards the results of learning under passing in volleyball games.
- c. The results of under passing learning in volleyball games of students with high sociometric which are taught by using cooperative type STAD are higher than cooperative type jigsaw.
- d. The results of under passing learning in volleyball games of students with low Sociometric taught using cooperative jigsaw type are higher than cooperative type STAD.

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