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# The Influence of the Use of Cooperative Learning Models, Individual and Learning Motivation in Improving Student Learning Outcomes

## Sumarwoto

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#### Abstract

The purpose of this research to determine the effect of learning outcomes between cooperative and individual learning models applied to Class VII students in Civics subjects at SMP Negeri 1 Trenggalek, knowing the difference in learning outcomes between students who have high motivation, high learning and students who have low motivation in Class VII students in Civics subjects at SMP Negeri 1 Trenggalek and know the interaction between cooperative learning models, individual and learning motivation on the learning outcomes of Class VII students in Civics subjects at SMP Negeri 1 Trenggalek. The analysis used using data analysis used in this study is to use two-way analysis of variance techniques. The results of the study explain that there are differences in the learning outcomes of class VII students who are taught using the cooperative method compared to students who are taught using individual learning at SMP Negeri 1 Trenggalek. There are differences in the learning outcomes of class VII students who have high learning motivation compared to class VII students who have low motivation at SMP Negeri 1 Trenggalek. There is an interaction between the application of cooperative learning methods and class students' learning motivation on the learning outcomes of class VII students at SMP Negeri 1 Trenggalek, where classes that apply cooperative learning methods to students who have high motivation have better learning outcomes.

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## 1. Introduction

Problems that are often a concern in the world of education are problems related to how to improve and achieve learning objectives to be achieved effectively and efficiently. Learning objectives can be achieved with an appropriate, fun learning process, so that the goals are automatically achieved. The learning paradigm must change from being teacher-oriented to student-oriented, so that students become subjects and not objects of education. Furthermore, the teacher needs to provide the material with the appropriate type of presentation. For example, by applying learning models and sociological activities that are in accordance with the way students think and teaching materials, so that material that is difficult to understand individually can be solved by fellow friends. All efforts, through the selection of methods and media, appropriate forms of social activities as well as through appropriate gradual models, are considered necessary to improve the quality of lessons, in this case Civics lessons. Civics subjects for the majority of Class VII students are considered less attractive subjects. This causes students to tend to ignore, not pay attention because it is caused by a lot of material that must be memorized, where students sometimes do not understand the purpose of giving Civics material.

Keywords: Cooperative learning model Individual model Learning motivation Learning outcomes.

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Received: 2 September 2021 Revised: 6 October 2021 Accepted: 25 October 2021 Published: 4 November 2021 The cooperative learning model with various types is suitable as a learning model in the current KTSP curriculum and is in accordance with the constructivism learning theory approach. Constructivism is the foundation of thinking (philosophical) concept approach in learning. According to Nurhidayati (2017) regarding the philosophy of constructivism is "knowledge is built by humans little by little whose results are obtained from a limited (narrow) context and do not come suddenly. Knowledge is not a set of facts, concepts or rules that are ready to be taken and remembered, but humans must construct that knowledge and give meaning through real knowledge.

Aspikal, Hujemiati, and Bone (2019) says that there are not many CL learning models in Indonesia for the following reasons: fears of chaos in the classroom, students do not study in groups, have a negative impression of cooperation, only students who are diligent in working harder and students who are less able to feel inferior and just follow the results and worry about the loss of personal character because they have to adjust to the group. However, it needs to be developed to be able to practice, and activate students in teaching and learning activities. Models like this will be very important for students, where students are expected to be able to work together to help each other and help each other. The process of interaction between students in a group will lead to emotional bonds, accelerated knowledge for students who are active in each other's group activities and so on.

However, in these activities it is very possible that there are some students who need to get focus or attention. This will be closely related to individual monitoring that can be done by the teacher in a lesson. The aim is to improve skills and abilities in the group so that it does not interfere or hinder the teaching and learning process and interaction in the group. The individual learning model in principle consists of steps arranged in a sequence that takes students and what they already know to what they need to know, namely learning objectives.

The learning method developed is expected to be able to foster motivation in students, so that students experience a process to study the material provided more, further, so that in turn students will become more creative in learning. In addition to the emergence of motivation for students, motivation from within students is expected to get students motivation or encouragement from outside students, both from teachers, community/parents, and friends, so that improving the quality of education is just a matter of time, slowly this development will reach a point where expected. In addition to improving the quality of education, which previously would have started with an increase in student learning outcomes. The teaching process will be more lively and establish cooperation among students.

## 2. Literature Review

## 2.1. Cooperative Learning

Syaharani (2018) cooperative learning method is a learning model using a grouping system / small team, between four to six people who have a different background of academic ability, gender, race, or ethnicity, the assessment system is carried out on the group. Each group will get an award, if the group shows Required achievement. Rewards are group oriented rather than individual. In cooperative learning, special skills are taught in order to work well in groups, such as being good listeners, students are given activity sheets containing questions or assignments that are planned to be taught. During group work, the task of group members is to achieve completeness (Slavin, 2001).

## 2.2. Individual Learning Strategy

Individual learning programs are oriented towards providing assistance to each student so that he or she can study independently. The independence of learning is a demand for individual development. In creating individual learning, the teacher's plan is different from classical teaching. In the implementation the teacher acts as a facilitator, mentor, diagnosing learning difficulties, and discussion partners. The teacher acts as a teacher educator, not an instructor (Ningrum, 2008).

#### 2.3. Motivation

Emda (2017) the motivational learning process is one of the most important dynamic aspects. It often happens that students who do not excel are not caused by their lack of ability, but because there is no motivation to learn so that they do not try to direct all their abilities. Djamarah (2000) which is classified as a form of extrinsic learning motivation, among others: (1) learning to fulfill obligations, (2) learning to avoid threatened punishment, (3) learning to get promised material rewards, (4) learning to improve social prestige, (5) study for the demands of the position to be held or to meet the requirements for promotion, and (6) learn to gain praise from important people.

#### 2.4. Learn

Winkel (1997) in Hamalik (2002) learning is a mental or psychological activity that takes place in active interaction with the environment that produces changes in knowledge, skills and attitude values that are permanent or constant. Learning is a process activity and is a very fundamental element in the implementation of every type and level of education. This means that the success or failure of achieving educational goals is

very dependent on the learning process experienced by students both when they are at school and in their own home or family environment (Syah, 2003).

## 3. Research Methods

This study uses a causal-comparative research design method, which according to Santoso (2012) aims to determine the possibility of a causal relationship based on observations of the existing effects, then suspect factors as causes through the collection of certain data. Noting that in this study the research population was all students of Class VII totaling, then all students of Class VII became the research sample, which amounted to 50 students.

Data collection methods that are often used in social research, including education are: (1) Questionnaire or questionnaire method; (2) interview method; (3) observation method; (4) documentary method; and (5) the test method (Sudikin & Mundir, 2005). The analytical technique used using data analysis used in this study is to use two-way analysis of variance techniques.

## 4. Result

## 4.1. Research Result

The descriptive results of this experimental class are as follows

| Table-1. Descriptive statistics of learning methods |        |           |                         |             |  |  |  |  |
|---|--------|-----------|-------------------------|-------------|--|--|--|--|
| Factor A (Learning Method)                          |        |           | 95% Confidence Interval |             |  |  |  |  |
|   | Mean   | Std.Error | Lower Bound             | Upper Bound |  |  |  |  |
| Cooperative Learning                                | 82.617 | 1.015     | 80.573                  | 84.661      |  |  |  |  |
| Individual Learning                                 | 79.646 | 1.050     | 77.532                  | 81.759      |  |  |  |  |

Based on the Table 1 above, it can be explained that there are differences in the average learning outcomes of the Cooperative learning method and the average learning outcomes of the Individual learning method, where based on the table above it can be explained that the class taught by Cooperatives has higher learning outcomes compared to students or classes taught using Individual. This gives an understanding that there are differences in learning outcomes for students who are taught using Cooperatives and Individuals. However, to find out whether the difference is significant or not, statistical tests are needed. By using the comparison of the smallest average difference can be seen as follows.

| (I) Faktor A         | (J) Factor A        |                 |           |                   | 95% Co   | nfidence |
|----------------------|---------------------|-----------------|-----------|-------------------|----------|----------|
| (Learning Method)    | (Learning Method)   |                 |           |                   | Interval |          |
|                      |                     | Mean            |           |                   |          |          |
|                      |                     | Difference      | Std.Error |                   | Lower    | Upper    |
|                      |                     | (I-J)           |           | Sig. <sup>a</sup> | Bound    | Bound    |
| Cooperative Learning | Individual Learning | $2.971^{*}$     | 1.461     | .048              | 0.031    | 5.911    |
| Individual Learning  | Cooperative         | <b>-</b> 2.971* | 1.461     | .048              | -5.911   | 031      |
| Learning             |                     |                 |           |                   |          |          |

#### Table-2. The average difference test of cooperative learning method.

Based on estimated marginal means

The mean difference is significant at the .05 level
Adjusment for multiple comparisons : Least Significant Difference (equivalent to no adjusments).

Based on the Table 2 above, it can be seen that the average difference between cooperative learning and individual learning is 2,971 with a significant value of alpha < 0.05 so it can be explained that the difference between the two is significant or significant. In other words, this difference in learning outcomes cannot be ignored. In addition, using the t test can be seen in the following table

| Table-3. | t-test | learning | Method |
|----------|--------|----------|--------|
|----------|--------|----------|--------|

|                            |  | Levene's Test for<br>Equality of<br>Variances |       | t-test for Equality of Means |              |                        |                    |                         |  |
|----------------------------|--|---|-------|------------------------------|--------------|------------------------|--------------------|-------------------------|--|
| PKN<br>Learning<br>Results | Equal<br>variances<br>assumed<br>Equal | F   | Sig.  | t                            | df           | Sig.<br>(2-<br>tailed) | Mean<br>Difference | Std.Error<br>Difference |  |
|                            | variance<br>not<br>assumed             | 13.198  | 0.001 | 1.682<br>1.682               | 48<br>41.285 | 0.099<br>0.100         | 3.08000<br>3.08000 | 1.83077<br>1.83077      |  |

Based on the Table 3 above, it can be seen that the t-count value is smaller than t-table and with a smaller alpha significance value equal to 0.099 which is greater than 0.05 so that it can be explained that the cooperative learning method is not different from individual learning based on the t-test that has been carried out. While the difference test of the two learnings using the smallest difference test can be said to be significantly different. Furthermore, in the second factor, namely student learning motivation, the following results were obtained.

| 1 d010-T.                   | Table-F. Descriptive statistics of learning motivation |           |                         |             |  |  |  |  |
|-----------------------------|--|-----------|-------------------------|-------------|--|--|--|--|
| Factor B (Study Motivation) | Mean   | Std.Errod | 95% Confidence Interval |             |  |  |  |  |
|                             |  |           | Lower Bound             | Upper Bound |  |  |  |  |
| High Motivation Learning    | 84.884   | 0.922     | 83.028                  | 86.740      |  |  |  |  |
| Low Motivation Learning     | 77.379   | 1.133     | 75.099                  | 79.659      |  |  |  |  |

Table-4. Descriptive statistics of learning motivation

Based on the Table 4 above, it can be explained that there are differences in the average learning outcomes of students who have high motivation and students who have low motivation, where based on the table above it can be explained that students who have high motivation have higher learning outcomes compared to students who have motivation. low. However, to find out whether the difference is significant or not, statistical tests are needed. Based on the results of this descriptive calculation, it can be explained that there are differences in learning outcomes between students who are taught with cooperative learning methods and individual learning methods in students who have high motivation and low motivation, although to see the difference is significant or not need to be proven by statistical calculations.

| <b>Table-5.</b> Test the difference in the average student motivation. |                |             |           |                   |                             |                    |  |  |  |  |
|--|----------------|-------------|-----------|-------------------|-----------------------------|--------------------|--|--|--|--|
| (I) Factor B   | (J)Factor B    | Mean        | Std.Errod | Sig. <sup>a</sup> | 95% Confidence Interval for |                    |  |  |  |  |
| (Study   | (Learning      | Difference  |           |                   | Differ                      | rence <sup>a</sup> |  |  |  |  |
| Motivation)  | Motivation)    | (I-J)       |           |                   | Lower Bound                 | Upper Bound        |  |  |  |  |
| High Motivation  | Low Motivation | $7.505^{*}$ | 1461      | 0.000             | 4.565                       | 10.445             |  |  |  |  |
| Learning   | Learning       |             |           |                   |                             |                    |  |  |  |  |
| Low Motivation   | High           | -7.505*     | 1.461     | 0.000             | -10.445                     | -4.565             |  |  |  |  |
| Learning   | Motivation     |             |           |                   |                             |                    |  |  |  |  |
|  | Learning       |             |           |                   |                             |                    |  |  |  |  |

Note:

Based on estimated marginal means.

\*.The mean difference is significant at the .05 level.

a. Adjusment for multiple comparisons: Least Significant Difference.

Based on the Table 5 above, it can be seen that the average difference between high motivation and low motivation is 7.505 with a significant value alpha < 0.05 so that it can be explained = that the difference between the two is significant or significant. In other words, the differences in students' motivation have an impact on the average value of student learning outcomes. Meanwhile, by using the t test, the following results were obtained.

| Table-6. t-test student motivation |                   |                          |                                |                              |        |         |            |            |
|------------------------------------|-------------------|--------------------------|--------------------------------|------------------------------|--------|---------|------------|------------|
|                                    |                   | Levene's<br>Equa<br>Vari | s Test for<br>lity of<br>ances | t-test for Equality of Means |        |         | 5          |            |
| PKN                                | Equal             | F                        | Sig.                           | t                            | df     | Sig.    | Mean       | Std.Error  |
| Learning                           | variances         |                          |                                |                              |        | (2-     | Difference | Difference |
| Results                            | assumed           |                          |                                |                              |        | tailed) |            |            |
|                                    | Equal<br>variance | 0.073                    | 0.788                          | 4.553                        | 48     | 0.000   | 7.3166     | 1.60685    |
|                                    | not               |                          |                                | 4.572                        | 41.441 | 0.000   | 7.3166     | 1.60032    |
|                                    | assumed           |                          |                                |                              |        |         |            |            |

Based on the Table 6 above, it can be seen that the t-count value is greater than the table and with a significance value of alpha = 0.000 which is smaller than 0.05 so that it can be explained that the learning outcomes of PKN are different between students who have high motivation and students who have low motivation. After the prerequisite test was carried out, the 2-factor Anova test was then carried out, to determine the interaction of the learning method and the motivation of the students. With regard to the analysis of variance of the 2 factors carried out, it can be seen in the Table 7.

Based on the Table 7, it can be explained regarding factor A (Cooperative and Individual learning methods) and factor B (high and low motivation) and Factor A and Factor B which are interactions between learning and motivation with the following results.

1. In the table above, the value of FA = 4.138 with a significance value of more ksmaller than < 0.05 i.e. 0.048; with  $df_1 = 1$  and  $df_2 = 50$ , the value of F table = 4.03 can be explained so that it can be explained that F count > F table, meaning that there is a difference in the learning outcomes of class VII students who are taught using the Cooperative method compared to students who are taught using Individual Learning at SMP Negeri 1 Trenggalek.

2. FB Ratio = 26,405, with a significance value smaller than < 0.05, namely 0.000, with df1 = 1 and df2 = 50, the value of F table = 4.03 can be explained so that it can be explained that F count > F table, meaning that there is a difference in the learning outcomes of class VII students who have high learning motivation compared to class VII students who have low motivation in junior high school State 1 Trenggalek.

3. The significance value on the interaction between factor A (Cooperative and Individual learning methods) and factor B (high and low motivation) obtained a calculated F value of 5.897 with a significant level of 0.019, comparison with F table and significant level = 0.05; (5.897 > 4.03), so it can be explained that the cooperative learning method and the individual learning method and factor B (high learning motivation and low learning motivation) have an influence on student learning outcomes at SMP Negeri 1 Trenggalek. This means that there is an interaction between the application of cooperative learning methods and student learning motivation on the learning outcomes of class VII students at SMP Negeri 1 Trenggalek.

| Source              | Type III Sum<br>of Squares | df | Mean Square | F         | Sig.  |
|---------------------|----------------------------|----|-------------|-----------|-------|
| Corrected Model     | 961.347ª                   | 3  | 320.416     | 12.615    | 0.000 |
| Intercept           | 313490.523                 | 1  | 313490.523  | 12342.523 | 0.000 |
| Factor_A            | 105.101                    | 1  | 105.101     | 4.138     | 0.048 |
| Factor_B            | 670.663                    | 1  | 670.663     | 26.405    | 0.000 |
| Faktor_A * Faktor_B | 149.783                    | 1  | 149.783     | 5.897     | 0.019 |
| Error               | 1168.373                   | 46 | 25.3999     |           |       |
| Total               | 336201.000                 | 50 |             |           |       |
| Corrected Total     | 2129.620                   | 49 |             |           |       |

| Ta | ble-7. | The | results | s of | the | two-factor | anal | ysis | of | varianc | :6 |
|----|--------|-----|---------|------|-----|------------|------|------|----|---------|----|
|    |        |     |         |      |     |            |      |      |    |         |    |

Note:

a R Squared =.451 (Adjusted R Squared= 0.416).

Based on the results of research and calculations carried out using the analysis of variance of the two factors, it can be explained that with respect to the hypothesis that has been proposed, it can be explained that in this study there are significant differences in learning outcomes and interactions between student learning outcomes with cooperative learning methods and individual learning in students. who have high learning motivation and students who have low learning motivation.

## 5. Conclusion

The implications of the research results should be to develop other more innovative learning methods so that learning methods are found that are liked by students and are able to improve student learning outcomes. School institutions and teachers do not hesitate to using cooperative learning methods, especially cooperatives which have been proven to contribute to improving student learning outcomes.

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