



**THE DIFFERENCES OF STUDENT LEARNING MOTIVATION
BETWEEN THE COOPERATIVE LEARNING MODEL OF STUDENTS
TEAM TYPE ACHIEVMENT DIVISIONS (STAD) AND JIGSAW TYPE
IN BASIC ACCOUNTING STUDY IN CLASS X IN SMK NEGERI 3
DEPOK**

Ainiyah Salsabila¹, Ati Sumiati², Sri Zulaihati³

¹ Universitas Negeri Jakarta, Indonesia

² Universitas Negeri Jakarta, Indonesia

³ Universitas Negeri Jakarta, Indonesia

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Abstract

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This study aims to determine the differences in student learning motivation taught by cooperative learning model type Student Team Achievement Divisions (STAD) and Jigsaw type in basic accounting subject for class X at SMK Negeri 3 Depok. This research is an experimental research with a pure research design. The sample of this study was 69 students in class X Accounting at SMK Negeri 3 Depok. Based on the results of the data analysis requirements, it states that the two classes are normally distributed and are homogeneous. The results of the hypothesis test show that there are differences in the average learning motivation of students who use the Student Team Achievement Divisions (STAD) cooperative learning model and the Jigsaw cooperative learning model, where the STAD type of cooperative learning model has a greater effect than the Jigsaw type on student learning motivation. The novelty of the research is the application of a similar learning model but different types, namely the Student Team Achievement Divisions (STAD) cooperative learning model with the Jigsaw type cooperative learning model.

Abstrak

Penelitian ini bertujuan untuk mengetahui perbedaan motivasi belajar siswa yang diajar dengan model pembelajaran kooperatif tipe Student Team Achievement Divisions (STAD) dan tipe Jigsaw pada mata pelajaran akuntansi dasar kelas X di SMK Negeri 3 Depok. Penelitian ini merupakan penelitian eksperimen dengan desain penelitian murni. Sampel penelitian ini adalah 69 siswa kelas X Akuntansi SMK Negeri 3 Depok. Berdasarkan hasil persyaratan analisis data, dinyatakan bahwa kedua kelas berdistribusi normal dan homogen. Hasil uji hipotesis menunjukkan bahwa terdapat perbedaan rata-rata motivasi belajar siswa yang menggunakan model pembelajaran kooperatif Student Team Achievement Divisions (STAD) dan model pembelajaran kooperatif tipe Jigsaw, dimana model pembelajaran kooperatif tipe STAD memiliki pengaruh yang lebih besar

dibandingkan dengan model pembelajaran kooperatif tipe Jigsaw terhadap motivasi belajar siswa. Kebaruan penelitian ini adalah penerapan model pembelajaran yang serupa namun jenisnya berbeda yaitu model pembelajaran kooperatif Student Team Achievement Divisions (STAD) dengan model pembelajaran kooperatif tipe Jigsaw.

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* Corresponding Author.

marsofiyati@unj.ac.id Marsofiyati

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PRELIMINARY

The implementation of this revised edition of the 2013 curriculum also demands an increase in the quality of teachers in implementing a lesson. It can be said that we are currently entering the 21st century. As for this 21st century, it can be seen from the large amount of information that is spread and the development of technology which is very helpful in everyday life. This education focuses more on having the individual's ability to seek information, critical and analytical in thinking and being able to formulate and solve a problem.

The learning process is one of the things that influences learning motivation. If learning is considered rigid by students, it is unable to increase learning motivation. For this reason, increasing student learning motivation by designing the learning process is the demand of a teacher.

News reported by suaramerdeka.com. Nurokhmah as a teacher at MAN 3 Bantul stated that the low motivation to learn PPKn by making students passive and unresponsive to the material provided and the content and vision that were neglected due to the use of the lecture method in the learning process as reported in suaramerdeka.com. He also stated that the learning strategy is something that needs to be designed by adjusting to the millennial generation to increase the enthusiasm for learning (SuaraMerdeka News, 2020).

Based on the news above, decreased motivation is caused by the use of inappropriate learning models. Motivation to learn is also influenced by the environmental conditions of the learners, the psychological and physical conditions of the learners, and the teacher also plays a role in it. Motivation to learn is an important thing that makes it a wheel to drive all activities in school. The intensity of learning efforts from students will always be determined by motivation. Motivation to learn is also closely related to learning objectives.

In class X Financial Accounting, the Institute of SMKN 3 Depok, there is also low student motivation in learning. The conventional learning model used in the teaching and learning process is a factor in the low learning motivation of these students as stated by the basic accounting teacher based on the results of the researcher interviews. The selection of learning models must also be adapted to the conditions of students and the school environment, including the supporting facilities and infrastructure.

Based on the results of several previous studies, it illustrates that previous research has not shown consistent results, and researchers will also apply the cooperative learning model in basic accounting subjects, so further research is needed to strengthen and update the results of previous studies.

RESEARCH THEORITICAL

Motivation to learn

Motivation to learn is the power contained within that causes the learning process to take place and also leads to direction in the learning process in order to achieve a goal (Husamah, Pantiwati, Restian, & Sumarsono, 2018, p. 22). Motivation to learn is a non-intellectual psychological factor. Motivational goals according to (Purwanto, 2004) is to move or inspire someone so that the desire and willingness to do something so that they can get results or achieve certain goals arises.

Learning Motivation Factors

According to Ali Imron (1996) in (Siregar & Nara, 2010) suggests that six elements influence motivation in the learning process, namely: the ideals / aspirations of learners;

Learner ability; Learner conditions; Learning environmental conditions; Learning / learning dynamic elements; The teacher's efforts in teaching learners.

According to (Iskandar, 2009) learning motivation can arise from within humans (Intrinsic) and from outside humans (Extrinsic). Intrinsic motivation can be:

- a. encouragement or desire for learning needs;
- b. Hope;
- c. Ambition.

While extrinsic motivation can be:

- a. Appreciation;
- b. Fun learning environment;
- c. Interesting learning activities.

(Hamzah, 2007) suggests that motivation to learn can arise due to the presence of instrumental and extractive factors. Instrumental factors are the desire and desire to succeed and the encouragement of learning needs, the existence of hopes, and ideals. While the extractive factors are the existence of appreciation, a conducive learning environment, and interesting learning activities. According to (Nursalam & Efendi, 2008) it is stated that motivation can be interpreted as internal and external encouragement within a person which is indicated by an internal drive in the form of desire, encouragement and needs, hopes, and ideals. Meanwhile, external encouragement is in the form of rewards, a good learning environment, and interesting learning activities.

STAD Type Cooperative Learning Model

This type of STAD cooperative learning is one type of cooperative learning model using small groups with a heterogeneous number of members per group of 4-5 students (Al-Tabany, 2014). This is also supported by Slavin's (2007) statement in (Rusman, 2014) stating that the STAD model is the most studied variation of cooperative learning, this model is also very easy to adapt, has been used in mathematics, science, social studies, English, engineering and many other subjects, and at the elementary through college level.

This is also reinforced by a statement (Trianto, 2009) which explains that this type of STAD cooperative learning is one type of cooperative learning model using small groups with a heterogeneous number of members of each group of 4-5 students. Starting with the delivery of learning objectives, delivery of material, group activities, quizzes, and group awards.

The Steps of the STAD Type Cooperative Learning Model

Slavin (2013) in (Priansa, 2017) states it consists of the following six stages.

- a. Delivery of goals and motivation, namely conveying learning objectives to be achieved in this learning and motivating students to learn.
- b. Group division, namely students are divided into groups, consisting of four or six students who prioritize class heterogeneity (diversity) in academic achievement, gender, race and ethnicity.
- c. Class presentation. The teacher delivers the subject matter by first explaining the learning objectives to be achieved at the meeting and the importance of the subject being studied. The teacher motivates students to learn actively and creatively. The learning process is assisted by media, demonstrations, questions or real problems that occur in everyday life. In addition, the teacher also explains the skills and abilities that are expected to be mastered by students, the tasks and work that must be done, and how to do them.
- d. Learning activities in groups. Students learn in groups that have been formed. The teacher submits the worksheet as a guide for group work so that all members

master and each contribute. While the group is working, the teacher makes observations, provides guidance, encouragement, and assistance when needed. This group work is an important feature of STAD.

- e. Quiz (evaluation), namely the teacher evaluates learning outcomes through giving quizzes about the material being studied and evaluating the work results of each group. Students are given seats individually and not allowed to work together.
- f. Performance awards. After implementing the quiz, the teacher checks the students' work and gives a score ranging from 0-100. Furthermore, giving individual scores and group successes can be done by the teacher in three ways, namely calculating individual scores, calculating group scores, and giving gifts.

According to Slavin in (Rusman, 2014), to calculate the development of individual scores it is calculated as can be seen in the table as follows:

Tabel II. 2 - Perhitungan Perkembangan Skor Individu

No	Nilai Tes	Skor Perkembangan
1.	Lebih dari 10 poin di bawah skor dasar	0 poin
2.	10 sampai 1 poin dibawah skor dasar	10 poin
3.	Skor 0 sampai 10 poin di atas skor dasar	20 poin
4.	Lebih dari 10 poin di atas skor dasar	30 poin
5.	Pekerjaan sempurna (tanpa memerhatikan skor dasar)	30 poin

Sumber : Rusman (2014)

The group score is calculated by making the average progress score of group members, namely by adding up all the individual development scores of group members and dividing the number of group members. In accordance with the average group progress score, the group score was obtained as in the table as follows:

Tabel II. 3 - Perhitungan Perkembangan Skor Kelompok

No	Rata-rata Skor	Kualifikasi
1.	$0 \leq N \leq 5$	-
2.	$6 \leq N \leq 15$	Tim yang Baik (<i>Good Team</i>)
3.	$16 \leq N \leq 20$	Tim yang Baik Sekali (<i>Great Team</i>)
4.	$21 \leq N \leq 30$	Tim yang Istimewa (<i>Super Team</i>)

Sumber :Rusman (2014)

Jigsaw Type Cooperative Learning Model

According to (Lie, Cooperative Learning, 2002) argues that the jigsaw cooperative learning model is a cooperative learning model consisting of 4-5 people in one group who is responsible for mastering the learning material section and is able to teach the material to other members of the group.

The jigsaw type of cooperative learning model is a learning model consisting of 4-6 people by paying attention to heterogeneity, cooperating positively and each member is responsible for studying certain problems from the material provided and teaching the material to other group members (Yamin, 2013).

According to (Rusman, 2014) the Jigsaw cooperative model is group learning in the form of small groups. According to (Isjoni, 2010) the Jigsaw type can activate students and maximize mastery of the material so that they achieve high achievement. The grouping of the team in the Jigsaw type model according to (Trianto, 2009) illustrates, for example, in a class there are 20 students, who we know their mathematical abilities and are already ranked (students don't need to know), we divide into 25% (rank 1 -5) into very good groups , 25% (ranked 6 - 10) were in good groups, the next 25% (ranked 11-15) were medium groups, 25% (ranked 15 - 20) were low groups. " Each group will contain:

Tabel II. 4 - Pembagian Kelompok Jigsaw

Group	Kelompok
A	A1, A2, A3,A4
B	B1,B2,B3,B4
C	C1,C2,C3,C4
D	D1,D2,D3,D4

Then the group is broken down into expert groups that have been previously trained based on their scores.

Tabel II. 5 - Pembagian Kelompok Expert

Group	Kelompok
1	A1, B1, C1, D1, E1
2	A2, B2, C2, D2, E2
3	A3, B3, C3, D3, E3
4	A4, B4, C4, D4, E4

Sumber : Trianto (2019)

The steps of the JIGSAW cooperative learning model

According to (Al-Tabany, 2014) the steps in the Jigsaw learning model are as follows.

- 1) Students are divided into several groups (each group consists of 5-6 people)
- 2) Subject matter is given to students in the form of text which has been divided into several sections.
- 3) Each group member reads the assigned section and is responsible for studying it. For example, if the material presented is about the excretion system. So one student from one group studied kidneys, another student from the other group studied the lungs, another student studied the skin, and another studied the liver.
- 4) Members from other groups who have studied the same section meet in expert groups to discuss them.
- 5) Each member of the expert group after returning to his group is in charge of teaching his friends.
- 6) At home group meetings and discussions, students are billed in the form of individual quizzes and giving awards.

The effect of implementing the STAD cooperative learning model on learning motivation

The main purpose of using the STAD type of cooperative learning model is to motivate students to support each other and help one another in mastering the knowledge taught by the teacher (Priansa, 2017). According to (Al-Tabany, 2014) states that the cooperative learning model causes positive interdependence, helps each other, and creates motivation so that there is positive interaction. This is also reinforced by (Suprijono A., 2016) which states that: the main benefit of cooperative learning is that students increase self-esteem which in turn motivates students to participate in the learning process. According to (Sanjaya,

Hypothesis Formulation

Based on the theoretical framework above, this study proposes a hypothesis, namely: There are differences in student learning motivation between those using the STAD type cooperative learning model and the Jigsaw type.

RESEARCH METHODOLOGY

Researchers used a quantitative research approach, namely pure experimental research (True Experiment). Researchers conducted research at SMKN 3 Depok. This place the researchers made as a place for research because there were problems related to the low learning motivation of students which was based on the results of interviews with basic accounting teachers at the school. The implementation of this experimental research was carried out for 1 month, namely in March 2020.

In experimental research using the experimental design needed to answer questions in research. The experimental design was carried out by comparing two groups which were used as research with one of them being given special treatment and the other group being controlled by a situation whose influence was used as a comparison. In this study, two groups were used, one of which used the Student Team Acquisition Discussion (STAD) cooperative learning model and the other group used the Jigsaw cooperative learning model in order to determine the differences in learning motivation.

No.	Class	Qty	Treatment
1	X AKL 1	36	Experiment Class (STAD Model)
2	X AKL 2	33	Control Class (Jigsaw Model)

Data collection technique

This study uses two variables to be studied, namely the dependent variable and the independent variable, the STAD Cooperative Learning Model (X1) and the Jigsaw Type Cooperative Learning Model (X2) as the independent variable, and Learning Motivation (Y) as the dependent variable. This study uses data collection techniques in the form of questionnaires and documentation. Primary data is data taken without going through intermediaries but obtained directly from the sample.

RESEARCH RESULT

Student Motivation AKL 1 (Experiment Class)

The distribution of learning motivation questionnaires to 36 class X AKL 1 students using the STAD-type cooperative learning model at SMKN 3 Depok totaling 22 statements resulted in descriptive statistics, namely:

Tabel IV.1
Deskriptif Statistik Motivasi Belajar
Kelas Eksperimen

	Descriptive Statistics							
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Varian
Motivasi Belajar Kelas Eksperimen	36	28	80	108	3435	95.42	6.376	40.650
Valid N (listwise)	36							

Student Motivation AKL 2 (Control Class)

The distribution of learning motivation questionnaires to 33 students of class X AKL 2 using the Jigsaw cooperative learning model at SMKN 3 Depok, totaling 22 statements, resulted in descriptive statistics as follows.

Tabel IV.4
Deskriptif Statistik Motivasi Belajar
Kelas Kontrol

	Descriptive Statistics							
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Motivasi Belajar Kelas Kontrol	33	39	63	102	2980	90.30	8.353	69.780
Valid N (listwise)	33							

Sumber: Data diolah oleh peneliti, Tahun 2020

In the descriptive statistics, it can be concluded that the lowest score for the control class students' learning motivation data is 63 while the highest score is 102. The total score obtained from the experimental class learning motivation data is 2980 with an average score of 90.30. The data also showed the standard deviation (S) and variance (S²) of learning motivation in the experimental class of 8.353 and 69.780.

Normality test

Based on the normality test in the experimental class, it states that the data is normally distributed. The test results in this experimental class obtained a significance value of $0.200 > 0.05$.

So it can be concluded that the learning motivation data of the experimental class students are normally distributed. While the normality test in the control class also states that the data is normally distributed. The test results in this control class obtained a significance value of $0.061 > 0.05$. So it can be concluded that the data from the two classes are normally distributed and the data can be used in further analysis.

Homogeneity Test

The results of the homogeneity test showed that the significance (Sig) based on the mean was $0.344 > 0.05$, so the variance of the data was homogeneous. The data variance of students' learning motivation in the experimental class and the control class is the same or homogeneous, so that the conditions of the difference test can be fulfilled.

T test

The results of the T test show that the group statistics data shows that the average learning motivation of the experimental class students is 95.42 and the control class students' learning motivation average is 90.30. In the independent sample test table in the Equal variances assumed section, the Sig. (2-tailed) of $0.005 < 0.05$, it can be concluded that H₀ is rejected and H₁ is accepted or there is a difference in the average learning motivation of the experimental class students who use the STAD cooperative learning model with the control class using the Jigsaw cooperative learning model.

This result is strengthened by the comparison between t count and t table. Based on the independent sample test table, it is known that the t value is 2.873 and the t table is at $\alpha = 0.05$ with $df = 67$, then the t table is 1.99601. From these data, $t_{count} > t_{table}$ is $2.873 > 1.99601$, so H₀ is rejected and H₁ is accepted, which means that there is a difference in the average learning motivation of students in the experimental class and the control class.

DISCUSSION

After testing the requirements of the analysis, the student learning motivation data is stated to be normally distributed and homogeneous, so the requirements to do the

difference test are fulfilled. Furthermore, in testing the difference using IBM SPSS V.26 software, it states that the results of the independent sample test in the Equal variances assumed value of Sig. (2-tailed) of $0.005 < 0.05$, it can be concluded that H_0 is rejected and H_1 is accepted or there is a difference in the average learning motivation of the experimental class students who use the STAD cooperative learning model with the control class using the Jigsaw cooperative learning model.

In the implementation of this research it is inseparable from the existence of limitations so that the level of accuracy is not absolute and there are still several shortcomings and limitations, including:

1. The STAD type cooperative model is one of the many learning models that can increase student learning motivation, so further research is needed on other, more innovative learning models.
2. The STAD type cooperative model is less used by teachers during the learning process so that students must adapt to this model and educators must explain first.
3. The learning model is one of the factors that increases student motivation. Many other factors can affect student motivation, including expectations, ideals, appreciation, a good learning environment, and other things.
4. The short research time was due to the covid-19 pandemic, which caused the learning process to be hampered.

CONCLUSION

There is a significant difference in student learning motivation between students using the STAD tie cooperative learning model and students using the Jigsaw cooperative learning model in basic accounting subjects in class X at SMK Negeri 3 Depok so that the data is concluded that using the STAD learning model can increase learning motivation students.

Based on the results of data analysis, it is known that the average student learning motivation with the STAD cooperative learning model is higher than the Jigsaw cooperative learning model.

SUGGESTION

Based on the results of the research and the above conclusions, the researcher provides several suggestions, namely to overcome low extrinsic learning motivation, students can participate in learning activities conducive so that the material presented by educators can be maximally absorbed and can work together to create a good learning environment in the classroom.

Based on the results of this study, it is known that learning activities are less attractive, to overcome this the teacher can innovate more with learning models and this can also be supported by the school as an educational unit by providing facilities in the form of training on innovative and interesting learning models.

In overcoming the triggers for low learning motivation, which is related to the absence of awards, teachers can overcome them by giving an award. The rewards here can be either verbal or physical. With this award, it can trigger the adrenaline of students to learn and be the best in the class. Apart from this, it can also reduce student boredom in learning.

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