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## INFLUENCE OF THE THINK-PAIR-SHARE (TPS) MODEL AND MOTIVATION ON THE MATH LEARNING ACHIEVEMENT OF CLASS V STUDENTS

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### Abstract

The problem is as follows: (1) How is the Think-Pair-Share (TPS) learning model for the learning achievement of Mathematics students in class V? (2) What is the motivation to learn about the learning achievement of Mathematics class V students? (3) Is there a positive interaction of the Think-Pair-Share (TPS) learning model and learning motivation with the math learning achievement of class V students? This study uses explanatory research. Meanwhile, explanatory research is research that highlights the relationship between research variables and tests hypotheses that have been formulated before. The sample taken amounted to 100% of the 4 elementary groups I adjacent considering the distance of the intended school, namely from class V SDN Bluluk I as many as 30, V SDN Talunrejo I as many as 15, V SDN Talunrejo II as many as 19, V SDN Talunrejo III as many as 16, so that the study sample amounted to 80 students. The data analysis technique used in this study is deskritive analysis. In addition to deskritive analysis used double linear regression to know individually then jointly influence the use of the think pair share (TPS) model, learning motivation towards mathematical learning achievement. The results of this study are, (1) The use of the think pair share (TPS) model has a positive, very strong and significant influence on the learning achievement of Mathematics students in class V, (2) Learning Motivation also has a positive, very strong and significant influence on the learning achievement of Mathematics students class V, (3) The use of think pair share (TPS) and Learning Motivation models together has a positive interaction, Very strong and significant to learning achievement.

**Keywords** – Think-Pair-Share (TPS) Model, Motivation, Learning Achievement.

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## 1. Introduction

In the process of teaching and learning, the main goal of learning is that what is learned is useful in the future, which is to help us to be able to learn continuously in an easier way, so that the process of lifelong learning is achieved ( long life education ). To realize this, cooperation is needed between various parties, especially between learners or students with educators or teachers. The role of the teacher as an educator is very important; Therefore, teachers are required to be able to apply various methods that are effective and attractive to students in the process of delivering learning materials. One active and interactive learning model is the cooperative learning model.

Cooperative learning as a model is a strategy that involves the formation of groups aimed at achieving learning outcomes, acceptance of diversity and social skills created in the cooperation of members in the group. This cooperative learning is carried out with the intention that students can get more used to working together and learning in groups in order to solve problems or do tasks.

In the cooperative learning model, teachers act as facilitators, providers of learning resources for learners, tutors of learners in group learning, learners' motivation givers in solving problems, and as coaches of learners in order to have cooperative skills.

Cooperative learning models have developed into several types of learning. Among the types of cooperative learning models are: Cooperative Learning Type STAD (Student Team Achievement Division), Jigsaw Type Cooperative Learning Model, NHT Type Cooperative Learning Model (Number Heads Together), TAI type Cooperative Learning Model (Team Assisted Individualization), TGT type cooperative learning model (Teams Games Tournament), CIRC type learning model (Cooperative Integrated Reading and Composition), and TPS type cooperative learning model (Think-Pair-Share).

Many types of cooperative learning can certainly be the choice of teachers in the learning process. The more types of learning in the cooperative learning model, the more opportunities teachers have to vary learning models when doing the teaching and learning process.

Learning motivation is one of the factors that determine effectiveness in learning. A learner will learn well if there is a driving factor, namely learning motivation. Learners will learn seriously if they have high learning motivation. Learning motivation is the whole driving force in students that gives rise to learning activities that ensure the continuity of learning activities that provide direction to learning activities so that the desired goals of the learning subject can be achieved (Sardiman A.M, 2007: 75).

There are many factors that influence learning motivation that can be divided into two factors. According to Syamsu Yusuf (2009: 23) learning motivation can arise due to internal and external factors. Internal factors that affect learning motivation are: (1) Physical factors include nutrition (gizi), health, and physical functions (especially the five senses), (2) Psychological Factors, which are related to aspects that encourage or inhibit learning activities in students. External factors (derived from the environment) that affect learning motivation include: (1) Non-Social Factors including the state of the air (hot or cold weather), time (morning, noon, infrastructure or learning facilities), (2) Social Factors, are human factors (teachers, counselors, and parents).

Based on all the exposure that has been unraveled, then the study is titled: The Influence of The Think-Pair-Share Model (TPS) and Motivation On The Achievement of Learning Mathematics Class V Students.

Based on the background description that has been presented, then the formulation of the problem in this study is (1). Is there a significant influence of the Think-Pair-Share (TPS) learning model on the math learning achievement of class V students? (2) Is there a significant influence on learning motivation on

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the learning achievement of Grade V students mathematics? (3) Is there a positive influence on the Think-Pair-Share (TPS) learning model and motivation with the math learning achievement of class V students?

### ***Research objectives***

Based on the formulation of the problem above, then the purpose of this research is (1). To find out the influence of the Think-Pair-Share (TPS) learning model on the learning achievement of mathematics students in class V. (2). To find out the influence of learning motivation on the learning achievement of mathematics students class V. (3). To find out the influence of the Think-Pair-Share (TPS) learning model and learning motivation with the learning achievement of students in class V of mathematics subjects.

## **2. Method**

In this study, two types of data are needed, namely data on think pair share type learning models (TPS) and mathematical learning achievement data. So that the data collection techniques used are as follows: (1). Test methods for collecting data on the learning achievement of math subjects of class V students (2). Use questionnaires to collect data on learning motivation. Questionnaire / Questionnaire is a data collection technique tool that is done by giving a set of questions or written statements to respondents to answer. (Sugiyono:2014:142).

### ***TPS-type Cooperative Learning***

Think pair share is one type of cooperative learning developed by Frank Lyman, et al. from the University of Maryland in 1985 as one of the structures of cooperative learning activities. Think pair shares give students time to think and respond and help each other. Think pair shares give students the opportunity to work alone as well as work with others. Another advantage of this learning is the optimization of student participation.

### 3. Result and Discussion

To analyze the research data of the authors using the technique of analysis of t student tests between groups. This t test technique is used to test hypotheses 1 and 2. Before the research data are analyzed first conducted a test of spread normality and a test of homogeneity of variance. The statistical programs used to perform the analysis are the distribution normality program, the variance homogeneity test program, the Inter-Group Student test program series of SPSS 17 statistics programs.

From the results of hypothesis testing with the Product Moment correlation technique, it is known that the correlation coefficient number between the use variable of the think pair share model (TPS) and the Learning Achievement variable ( $r_{x1y}$ ) = 0.923. While the correlation coefficient between the variable Motivation and Learning Achievement ( $r_{x2y}$ ) = 0.966.

Considering the correlation coefficient numbers of the two variables are marked positive, and from the test the significance of the correlation coefficient also proved significant, it means that there is a positive and significant relationship between the use of the think pair share (TPS) model with learning achievement and between learning motivation and learning achievement.

The positive sign on the correlation coefficient indicates the direction the relationship between the two variables goes in the direction. That is, the better or higher the affection, perception and appreciation of students towards the use of the think pair share (TPS) model, the higher the learning achievement. Conversely, the lower or worse the affection, perception and appreciation of students towards the use of the think pair share (TPS) model, the lower the learning achievement. Similarly, in the variables of motivation and learning achievement, the higher the student's learning motivation, the higher his learning achievement. Conversely, the lower the student's learning motivation, the lower their learning achievement.

Furthermore, to be able to interpret the large or small, strong or weak relationships indicated by the magnitude of the correlation coefficient number, the guidelines can be used as follows:

**Table 1.** Guidelines for providing interpretation against correlation coefficient

Relationship Level	Coefficient Interval
00 – 0,199	Very low
0,20 – 0,399	Low
0,40 – 0,599	Keep
0,60 – 0,799	Strong
0,80 – 1,000	Very strong

Source: Sugiyono (2006:216).

From the interpretation guidelines in table 22, the correlation coefficient ( $r_{x1y}$ ) = 0.923 and ( $r_{x2y}$ ) = 0.966 includes having a very strong relationship level. In other words, the relationship of TPS variables and Motivation variables with learning achievement variables is each a positive, very strong and significant bivariate relationship (generalized to the population where the study sample was taken).

Furthermore, from hypothesis testing through the double regression analysis technique it is known that the F-reg value of 802,952, after being tested for its significance by consulting to the F-table value at dk-numerator = 2 and at the denominator = 80, proved that the value of F-reg-calculate (= 802,952) is much greater than the F-table value at the significance level of 5% (3.44) and at the significance level of 1% (4.88). That means that the regression line resulting from regression analysis in this study is the best fit line and efficient for predicting the riterium of predictors, because it can be used as a basis for making predictions or predictions with the smallest level of forecast error (residue). That is why the regression line is also referred to as the line with the smallest residual square or the least squares.

The regression line equation or best fit line that resulted from regression analysis in this study and which can be used as a basis for forecasting the riterium (in this case learning achievement) of predictors (use of think pair share (TPS) and Learning Motivation) models with the smallest prediction errors are as follows:

$$Y = 6,198 + 0,447X1 + 0,740X2.$$

From the equation of the regression line obtained then in this study can be stated predictions against the variables of learning achievement as follows: if the variables of the use of TPS and motivation to learn together are improved, then the student's learning achievement will increase by an increase in the number of coefficient X1 (= 0.477) and the coefficient number X2 (= 0.740).

Given that the correlation coefficient numbers of the two predictors in this study proved to be very strong and significant, the basis for predicting the riterium change of the predictor given the regression equation line is certainly reliable and will only get the smallest prediction error. From the regression line equation, the change in riterium (Y) can be predicted from the magnitude of the prdiktor coefficient (X1 and X2). Every single digit of the change in values X1 and X2 (up or down), will almost certainly always be followed by changes in the value of kriterium (Y) up or down by  $0.447X1 + 0.740X2$ , along with the increase in the value of X1 and X2.

Furthermore, from the regression analysis has also been known the number of correlation coefficients or double regression in this study is 0.977, which according to the table of guidelines for the interpretation of correlation coefficients included very strong. The coefficient of determination is also very strong, namely  $R^2 = 0.954$ , which means the two predictors (X1 and X2) in this study together contributed 95% to the riterium (Y). From the partial correlation coefficient and the coefficient of determination it is known that the predictor of Motivation or X2 individually (separated from the influence of variable X1)

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contributes or influences 69% greater than the contribution or influence of TPS variables (X1) to learning achievement variables (Y) which is only 31%.

So based on the results of regression analysis of it all, the 3rd hypothesis in this study which reads: "There is an interaction between the use of the Think Pair Share (TPS) model and the motivation to learn Mathematics class V students" so that it can be accepted the truth, because it has been proven legitimately and convincingly.

#### **4. Conclusion**

Based on the research objectives that have been stated above and adjusted to the analysis and discussion of research results, it can be drawn conclusions as follows: (1). There is a significant influence on the use of the think pair share (TPS) model on the learning achievement of mathematics students in class V. (2). There is a significant influence of learning motivation on the learning achievement of mathematics students of class V. (3). There is a significant influence on the use of the think pair share (TPS) model and learning motivation towards the learning achievement of Mathematics class V students.

#### **Suggestion**

Based on the conclusion, the author submits the following suggestions (1). For students, it is recommended that they always try to increase their learning motivation to increase their learning achievements. (2) For teachers, it is recommended to continue to develop the use of model Thinkt Pairt Sharet (TPS), lbaik ldalam lpembelajaran lmaupun in research to strengthen the foundation of practice in the use of model Thinkt Pairt Sharet (TPS)t or to strengthen the foundation of scientific mindset in the discourse of mathematical learning theory. (3) For other penilit, t studit init can be used as a reference to conduct further research with the aim to improve the quality of education.



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