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The Effect of Cooperative Learning Models Ice Breaking Based Tournament Games Teams Type To Motivation and Results Study in Mathematics Subject for 3rd Grade Elementary School in Sapanang Ward, Bungoro District, Pangkep Regency

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Abstract

Quasi experimental design quantitative research was carried out and aims to determine the effect of the Teams Games Tournament (TGT) type cooperative learning model assisted by Ice Breaking on the motivation and learning outcomes of students in class III Elementary School Sapanang Ward , Bungoro District , Pangkep Regency, collecting technical data using tests and questionnaires. A pretest as the initial result before being given treatment and at the end of the meeting given a post-test as a result of giving the treatment. Furthermore, the data obtained was analyzed using the SPSS v.26 application by looking for the results of the normality test, homogeneity test and Independent Sample t-Test to test the hypothesis. The average score obtained by students in the pretest control class was 68.12 and the posttest was 67.92. While the average score obtained by students in the pretest experimental class was 63.14 and the posttest was 80.68. The results of inferential data analysis obtained sig. 0.000. It turns out that the value of sign. 0.000 is smaller than the probability value of 0.05 or in other words the value of 0.05 > 0.000. Then H0 is rejected and H1 is accepted, meaning that the coefficient of data analysis is significant. So it can be interpreted that, there is an influence of the Teams Games Tournament (TGT) type of cooperative learning model assisted by Ice Breaking on the motivation to learn mathematics in class III elementary school students.

Keywords: *Cooperative Type of Teams Games Tournament (TGT); Ice Breaking; Learning Motivation; and Mathematics Learning Outcomes*

INTRODUCTION

In (Law, 2003) the main objective of National education is to develop the potential of students to become human beings who believe in and fear God Almighty, and have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic citizens. and be responsible (Hermanto, 2020) .

According to Miswanto et al (2018) ; Education knows no age, all humans can get it either through formal education (elementary, junior high, high school and university) or informal education. In the process, each individual learns various lessons as a form of acquiring new knowledge and has an impact on changing everyone's behavior. In addition, Fazlurrahman, (2018) ; in "change management in Islamic perspective" explains the privileges of quality and useful humans through education in QS. Al-Mujadila/58:11

The verse above explains that knowledgeable people will get a higher position compared to people who do not have knowledge, knowledgeable people can realize the progress of a nation. The importance of education is so important that it must be made a priority in nation-building, and that means a good quality education is needed so as to create an intelligent and quality educational process.

In the elementary school education curriculum there are several main subjects that must be mastered by students, one of the subjects that has an important role in the field of education is mathematics, Armin & Astuti

(2021) , besides that Mathematics is one of the basic knowledge that plays a role in improving the ability of the nation's next generation through the development of mindset and reasoning power, Anwar, (2018) . In simple terms mathematics is a subject that trains children to think rationally, logically, carefully, honestly, systematically, critically, creatively and the ability to work together.

The curriculum applied in Indonesia today also requires the use of a learner-centered learning model. However, in the elementary school in Sapanang Village, Bungoro District, Pangkep Regency, there are still teachers at the school who apply the direct learning model. Where this direct learning model tends to be teacher-centered, so that in the learning process in class results in most students tending to be passive, have no motivation to learn, and will have an impact on low student learning outcomes .

Based on the results of observations and research observations conducted by researchers in the 2021/2022 academic year at the elementary school in Sapanang Village, Bungoro District, Pangkep Regency, where in this Sapanang Village there are two elementary schools, namely UPT SDN 18 Leppangeng and UPT SDN 12/22 Salebbo. Based on the observations and narratives of class III teachers, both class III teachers at UPT SDN 18 Leppangeng and class III teachers at UPT SDN 12/22 Salebbo. They said that most teachers apply the direct learning model on the grounds that the application of the direct learning model is expected to direct students who are less active in the learning process to continue to excel. The direct learning model emphasizes listening activities (through lectures) so as to help suitable students learn in this way. They also said that lectures can be useful for conveying information to students who do not like to read or who do not have skills in compiling and interpreting information.

Based on further observations and information obtained from students and third grade teachers, it is suspected that the low mathematics learning outcomes of these students are caused by many influencing factors. According to Suwardi (2012) ; there are six factors that affect student learning outcomes, namely (1) psychological factors of students (27.54%) consisting of difficulty doing assignments, lesson grades, student talents, interest, readiness, and motivation, (2) community environmental factors (10.18%) consisting of social friends, the media, and the activeness of students in organizations, (3) school environmental factors (8.70%) consisting of school discipline and teaching tools, (4) family environmental factors (6 .50%) consisting of family background and understanding of parents, (6) school time factor (6.23%).

Based on the low learning outcomes of class III elementary school students in Sapanang Village, Bungoro District, Pangkep Regency and observations made by researchers, during the learning process many students did not pay attention, such as daydreaming, falling asleep, and chatting with their friends. This has an impact on when the teacher gives practice questions students are unable to work on because they do not understand the material that has been explained by the teacher. The researcher saw that when the material was explained the students said they understood and understood, but when given questions it seemed that students were not able to do it on the grounds that they forgot how, it was complicated, and they were confused.

Factors causing the occurrence of the problems above apart from the fact that students are less interested in mathematics, the learning model used by teachers tends to be monotonous and less innovative. This is due to the teacher's inaccuracy in choosing the learning model and the lack of motivation involving students to be active during the learning process. Difficulties in understanding mathematics must be overcome as early as possible, because almost all fields of study require mathematics. Thus the teacher must be able to apply a learning model that can motivate and improve student learning outcomes in the learning process in class. Therefore it is necessary to apply the cooperative learning model of *the Teams Games Tournament* (TGT) type.

the Teams Games Tournament (TGT) type is a learning model that can involve the active role of students, gives freedom to students to interact and use their opinions, increases students' self-confidence and learning motivation, broadens students' insights, develops attitudes and respectful behavior of others, and active involvement of students in the teaching and learning process, as well as increasing students' perceptions that the learning outcomes they obtain depend on hard work not luck.

This was also proven in the research of Rusmawati et al (2013) ; stated that there was an effect of learning motivation and mathematics learning outcomes on students using the *Teams Games Tournament* (TGT) learning model. Furthermore Mustika, (2020) ; that there is an effect of using *the Teams Games Tournament (TGT)* learning model on learning outcomes at SMP Negeri 1 Mawasangka. In a number of subsequent studies, it is increasingly emphasized, such as Damayanti, S & Apriyanto, (2017) ; provide mathematics learning outcomes in cognitive aspects in class IV SD Negeri Danaraja, (Cakrawala et al 2017) ; towards students of SDI Al-Falah 1 Evening, and Solihah, (2016) ; on class XI students of Bina Taqwa Depok Vocational School, *the Teams Games Tournament* (TGT) type cooperative learning model was chosen because it is an innovative and fun learning model and is in accordance with the character of a busy class and is also in accordance with the problems found in class III elementary school in Sapanang Village District Bungoro, Pangkep Regency.

Based on the description of the background above, the researcher is interested in conducting research entitled "The Influence of the *Ice Breaking Assisted Teams Games Tournament* (TGT) Type Cooperative Learning Model on Motivation and Mathematics Learning Outcomes of Class III Elementary School Students in Sapanang Village, Bungoro District, Pangkep Regency". The reason researchers are interested in conducting this research is because the application of an effective learning model will greatly assist in the learning process so that learning objectives are more easily achieved, learning models can provide useful information for students in the learning process, variations in learning models can provide enthusiasm for student learning , avoid boredom and will have implications for motivation and be able to improve student learning outcomes in participating in the learning process. Another reason the researcher is interested in doing this research is so that problems in the learning process at the Sapanang Subdistrict elementary school can be resolved and make the learning process at the school better, as well as being able to upload teachers to work professionally and in a spirit of renewal in improving the learning process in elementary schools so that the goals education can be achieved.

RESEARCH METHODS

This research based on its approach is a quantitative research. This type of research uses experimental research methods. The research design used is *a Quasi Experimental Design* with the Nonequivalent Control Group Design design .

Table 1
Design Study *Non-equivalent Control Group Design*

Group	Pretest	Treatment	Posttest
Experiment	O_1	X	O_2
Control	O_3		O_4

Source : Sugiyono , in Mihendra et al (2020)

Information :

X : Treatment in the experimental class using the *Ice Breaking Assisted Teams Games Tournament* (TGT) learning model

O_1 : Pre-test *(pretest)* in the experimental class

O_2 : Giving the final test *(posttest)* to the experimental class

O_3 : Pre-test *(pretest)* in the control class

O_4 : Giving the final test *(posttest)* to the control class

RESULTS AND DISCUSSION

The general description of the research being carried out is located at the Sapanang Village Elementary School, Bungoro District, Pangkep Regency, namely at UPT SDN 18 Leppangeng and UPT SDN 12/22 Salebbo, which are about ± 2 km away. This research was conducted in December with the Mathematics subject in semester I of the 2022/2023 academic year. Research with the title "The Effect of *Ice Breaking Assisted Teams Games Tournament* (TGT) Cooperative Learning Model on Learning Motivation and Mathematics Learning Outcomes of Class III Elementary School Sapanang Village, Bungoro District, Pangkep Regency". There are three problem formulations and research objectives in this study.

This research is a quantitative research with the type of research *Quasi Experimental Design* with the form of *Nonequivalent Control Group Design* with research variables of *the Teams Games Tournament* (TGT) assisted *Ice Breaking* cooperative learning model on learning motivation and learning outcomes. Analysis research data using descriptive statistical techniques *pretest* and *posttest and* inferential statistical analysis . The research was divided into two groups, namely the experimental group and the control group. The sample in this study was determined based on *random sampling*, so that the samples in this study were class III A UPT SDN 18 Leppangeng as many as 22 people as the experimental group and class III B UPT SDN 12/22 Salebbo as many as 25 people as the control group. Before this research was carried out, the subject matter was determined and a Learning Implementation Plan (RPP) was prepared. The material chosen is the addition and subtraction of integers. The research instruments used in this study were tests and questionnaires. The learning used in the experimental group was a cooperative learning model of *the Teams Games Tournament* (TGT) type and for the control group it was using a direct learning model.

1. Results Analysis Descriptive

a. Descriptive Mathematics Learning Motivation of Students Using Cooperative Learning Model *Teams Games Tournament* Assisted *Ice Breaking* Type in Experimental Class

In the following, the results of the descriptive statistical analysis obtained based on the *pretest* and *posttest* scores of class III students' learning motivation in Sapanang Village, Bungoro District, Pangkep Regency by applying the *Teams Games Tournament* (TGT) type cooperative learning model assisted by *ice breaking* .

Table 2.
***Pre-test* and *post-test* descriptive statistics on students' motivation to learn mathematics Experiment Class**

Statistik Deskriptif	*Pretest*	*Posttest*
Jumlah Peserta Didik	22	22
Nilai Maksimal	70	86
Nilai Minimal	56	76
Nilai rata-rata	63,14	80,68
Varian	15,171	7,275
Standar deviasi	3,895	2,697
Skewness	-0,070	0,308
Kurtosis	-0,786	-0,586

pretest and *posttest* scores of students' learning motivation in class III Sapanang Village on the SPSS output display for the experimental class by applying the *Teams Games Tournament* (TGT) type cooperative learning model assisted by *ice breaking* and the number of research samples was 22 people, indicating that the average score -the average learning motivation of students between *the pretest* and *posttest* has increased, namely the *posttest learning motivation value* is greater than the *pretest learning motivation value* . The standard deviation values obtained by *the pretest* and *posttest* are respectively smaller than the average values *of the pretest* and *posttest* , this indicates that the resulting values are able to describe the condition of the data or the data are not diverse. The skewness and kurtosis

values obtained in *the pretest* and *posttest* respectively are in the range of -2 to 2, this indicates that the skewness and kurtosis ratio values are normally distributed.

In the following, the frequency distribution data is presented in *the Pre Test* and *Post Test* of the learning motivation of class III students the following:

Table 3 .
Frequency Distribution of *Pre Test* and *Post Test* Students' Motivation to Learn Mathematics Experiment Class

Pre-Test		
		Frequency
Valid	56	1
	58	3
	59	1
	60	1
	61	2
	63	2
	64	5
	65	1
	66	2
	68	2
	69	1
	70	1
	Total	22

Post-Test		
		Frequency
Valid	76	1
	77	1
	78	3
	79	4
	80	2
	81	2
	82	4
	83	2
	85	2
	86	1
	Total	22

b. Descriptive Mathematics Learning Outcomes of Students Using the Cooperative Learning Model Type *Teams Games Tournament* Aided by *Ice Breaking* in Experimental Classes

In the following, the results of the descriptive statistical analysis obtained based on the *pretest* and *posttest scores* of class III student learning outcomes in Sapanang Village, Bungoro District, Pangkep Regency by applying the *Teams Games Tournament* (TGT) type cooperative learning model assisted by *ice breaking* .

Table 4 .
Descriptive Statistics of *Pre Test* and *Post Test* Students' Mathematics Learning Outcomes Experiment Class on

Statistik Deskriptif	*Pretest*	*Posttest*
Jumlah Peserta Didik	22	22
Nilai Maksimal	80	100
Nilai Minimal	40	75
Nilai rata-rata	58,64	83.41
Varian	15,443	43,777
Standar deviasi	12,265	6,616
Skewness	0,262	0,787
Kurtosis	-0,820	0,504

pretest and *posttest* scores of class III students in Sapanang Village on the SPSS output display for the experimental class by applying the *Teams Games Tournament* (TGT) cooperative learning model assisted by *ice breaking* and the number of research samples was 22 people, indicating that the average score -the average learning outcomes of students between *the pretest* and *posttest have increased, namely the posttest* learning outcomes are greater than the *pretest* learning outcomes . The standard deviation values obtained by *the pretest* and *posttest* are respectively smaller than the average values *of the pretest* and *posttest* , this indicates that the resulting values are able to describe the condition of the data or the data are not diverse. The skewness and kurtosis values obtained in *the pretest* and *posttest* respectively are in the range of -2 to 2, this indicates that the skewness and kurtosis ratio values are normally distributed.

In the following, the frequency distribution data is presented in *the pre-test* and *post-test* of class III student learning outcomes the following:

Table 5.
***Pre Test* and *Post Test* student learning outcomes**

Pre-Test			Post-Test		
		Frequency			Frequency
Valid	40	2	Valid	75	4
	45	3		80	7
	50	2		85	6
	55	3		90	3
	60	6		95	1
	70	2		100	1
	75	2		Total	22
	80	2			
	Total	22			

c. Descriptive Students' Motivation to Learn Mathematics Using the Direct Learning Model in the Control Class

In the following, the results of the descriptive statistical analysis were obtained based on the *pretest* and *posttest scores* of class III students' learning motivation in Sapanang Village, Bungoro District, Pangkep Regency by applying a direct learning model.

Table 6 .
***Pre-test* and *post-test* descriptive statistics on students' motivation to learn mathematics Control Class**

Statistik Deskriptif	*Pretest*	*Posttest*
Jumlah Peserta Didik	25	25
Nilai Maksimal	75	78
Nilai Minimal	61	59
Nilai rata-rata	68,12	67.92
Varian	12,443	26,577
Standar deviasi	3,528	5,155
Skewness	-0,318	0,238
Kurtosis	-0,067	-0,146

pretest and *posttest* scores of students' learning motivation in class III Sapanang Village on the SPSS output display of the control class by applying the direct learning model and the number of research samples was 25 people, indicating that the average value of students' learning motivation between the *pretest* and *posttest* decreased, namely the *posttest learning motivation value* was smaller than *the pretest learning motivation value* . The standard deviation values obtained by *the pretest* and *posttest* are respectively smaller than the average values *of the pretest* and *posttest* , this indicates that the resulting values are able to describe the condition of the data or the data are not diverse. The skewness and kurtosis values obtained in *the pretest* and *posttest* respectively are in the range of -2 to 2, this indicates that the skewness and kurtosis ratio values are normally distributed.

The following is the frequency distribution data presented in *the Pre Test* and *Post Test* of students' learning motivation in class III the following:

Table 7.
Frequency Distribution of *Pre-Test* and *Post-Test* Control Class Students' Motivation to Learn Mathematics :

Pre-Test		
		Frequency
Valid	61	2
	64	2
	65	2
	66	3
	68	2
	69	3
	70	6
	71	3
	74	1
	75	1
	Total	25

Post-Test		
		Frequency
Valid	59	2
	61	1
	63	2
	64	2
	65	1
	66	2
	68	3
	69	3
	70	4
	71	1
	74	1
	76	1
	78	2
	Total	25

d. Descriptive Mathematics Learning Outcomes of Students Using the Direct Learning Model in the Control Class

In the following, the results of the descriptive statistical analysis were obtained based on the *pretest* and *posttest scores* of class III student learning outcomes in Sapanang Village, Bungoro District, Pangkep Regency by applying a direct learning model.

Table 8.
Descriptive Statistics of *Pre Test* and *Post Test* Students' Mathematics Learning Outcomes Control Class

Statistik Deskriptif	*Pretest*	*Posttest*
Jumlah Peserta Didik	25	25
Nilai Maksimal	80	80
Nilai Minimal	35	50
Nilai rata-rata	64,20	59,40
Varian	20,667	66,000
Standar deviasi	14,116	8,124
Skewness	-0,286	0,343
Kurtosis	-1,083	-0,903

Based on the results of the analysis on the *pretest* and *posttest* scores of class III students in Sapanang Village on the control class SPSS output display by applying the direct learning model and the number of research samples as many as 25 people, indicating that the average value of student learning outcomes between the *pretest* and *posttest has decreased, namely*

the posttest learning outcomes are smaller than the *pretest* learning outcomes . The standard deviation values obtained by *the pretest* and *posttest* are respectively smaller than the average values *of the pretest* and *posttest* , this indicates that the resulting values are able to describe the condition of the data or the data are not diverse. The skewness and kurtosis values obtained in *the pretest* and *posttest* respectively are in the range of -2 to 2, this indicates that the skewness and kurtosis ratio values are normally distributed.

The following is the frequency distribution data presented in *the Pre Test* and *Post Test* the learning outcomes of class III students the following:

Table 9.
***Pre Test* frequency distribution and *Post Test* learning outcomes**

Pre-Test		
		Frequency
Valid	35	2
	40	2
	45	3
	50	1
	55	1
	60	5
	65	3
	70	2
	75	4
	80	2
	Total	25

Post-Test		
		Frequency
Valid	50	1
	55	4
	60	8
	65	4
	70	2
	75	5
	80	1
	Total	25

2. Results Analysis Inferential

a. Test Normality

Before testing hypothesis done especially formerly done test purposeful normality _ For know whether the data obtained originate from population normal distribution or no . The basis for decision making in the normality test is as follows:

a) If the significance value (Sig.) < 0.05, then the variable is not normally distributed
b) If the significance value (Sig.) > 0.05, then the variable is normally distributed

The normality test was carried out with the help of the SPSS program. The normality test results are as follows:

Table 10.
normality test

Tests of Normality							
Variabel		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Belajar Kelas Kontrol	Pre-Test	0.157	25	0.114	0.933	25	0.104
	Post-Test	0.217	25	0.064	0.920	25	0.052
Hasil Belajar Kelas eksperimen	Pre-Test	0.183	22	0.053	0.939	22	0.186
	Post-Test	0.197	22	0.062	0.908	22	0.043
Motivasi Belajar Kelas Kontrol	Pre-Test	0.159	25	0.106	0.950	25	0.253
	Post-Test	0.143	25	0.198	0.959	25	0.403
Motivasi Belajar Kelas eksperimen	Pre-Test	0.133	22	0.200*	0.963	22	0.551
	Post-Test	0.143	22	0.200*	0.964	22	0.574
a. Lilliefors Significance Correction							

Based on the table above *Tests of Normality* and Normal Histogram P-Plot, the *Kolmogorov Smirnov value is obtained.* The *output of the pretest* and *posttest* control class learning outcomes variants of 0.144 and 0.064, *pretest* and *posttest* experimental class of 0.053 and 0.062. At *the output of the pretest* and *posttest* control class learning motivation variants of 0.106 and 0.198, *pretest* and *posttest* experimental class of 0.200 and 0.200. Then *the* results show that the data for the control class and the experimental class (*pretest* and *posttest*) are significant (Sig.) > 0.05. *The value of the entire data variable* has a greater significance (> 0.05) meaning that the overall value of the variable data is normally distributed , thus testing the hypothesis can be done.

b. Test Homogeneity

Homogeneity test was conducted to find out whether the data in variables X and Y are homogeneous or not. Test homogeneity done with use *One-way Anova* with help test *Homogeneity of Variance test.* Base taking decision :

a) If the probability value is <0.05, then it is said that the data is not homogeneous.
b) If the probability value is > 0.05, it is said that the data is homogeneous.

Homogeneity test was carried out with the help of the SPSS program. The homogeneity test results in this study can be seen as follows:

Table 11 .
Homogeneity test

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Hasil Data Based on Mean	2.518	1	42	0.120
	1.764	1	42	0.191

In the table above the results show that the variances of the two groups are homogeneous (same). It can be concluded that the *Teams Games Tournament* (TGT) type cooperative learning model assisted by *Ice Breaking* has a significant effect on learning motivation and mathematics learning outcomes of class III elementary school Sapanang Village, Bungoro District, Pangkep Regency. Output data is 0.120 > 0.05 with meaning that data _ stated homogeneous .

c. Test hypothesis

Test hypothesis done For know Effect of learning models cooperative type Assisted *Teams Games Tournament* (TGT). *Ice Breaking* against motivation Study And results Study mathematics participant educate class III school Base Ward Sapanang Subdistrict Bungoro Regency Pangkep . Following appearance *SPSS output 26* results data analysis :

Table 12.
results SPSS data analysis

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Dev	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1 Pre-Test Motivasi Belajar - Post-Test Motivasi Belajar	-17.545	4.847	1.033	-19.695	-15.396	-16.977	21	.000
Pair 2 Pre-Test Hasil Belajar - Post-Test Hasil Belajar	-24.773	9.938	2.119	-29.179	-20.367	-11.692	21	.000

Table 13.
Results Class Test Test Control

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Dev	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1 Pre-Test Hasil Belajar Post-Test Hasil Belajar	-4.800	8.098	1.620	-8.143	-1.457	-2.964	24	.007
Pair 2 Pre-Test Motivasi Belajar - Post-Test Motivasi Belajar	.200	3.969	.794	-1.438	1.838	.252	24	.803

Table 14.
Results Test Manova Multivariate test

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.999	5726.705[b]	4.000	18.000	.000
	Wilks' Lambda	.001	5726.705[b]	4.000	18.000	.000
	Hotelling's Trace	1272.601	5726.705[b]	4.000	18.000	.000
	Roy's Largest Root	1272.601	5726.705[b]	4.000	18.000	.000
KelasKontrol	Pillai's Trace	1.576	77.580[b]	4.000	19.500	.000
	Wilks' Lambda	.054	83.002[b]	4.000	19.500	.000
	Hotelling's Trace	.048	88.039[b]	4.000	17.000	.000
	Roy's Largest Root	.048	88.039[b]	4.000	17.000	.000
KelasEksperimen	Pillai's Trace	.390	80.002[b]	4.000	19.500	.000
	Wilks' Lambda	1.000	57.580[b]	4.000	19.500	.000
	Hotelling's Trace	.038	88.039[b]	4.000	17.000	.000
	Roy's Largest Root	4.630	104.100[b]	4.000	17.000	.000

a. Design: Intercept + KelasKontrol + KelasEksperimen + KelasKontrol * KelasEksperimen
b. Exact statistic

Based on results *SPSS output* data analysis 26 on the influence of learning models cooperative type Assisted *Teams Games Tournament* (TGT). *Ice Breaking* against motivation Study And results Study mathematics participant educate class III school Base Ward Sapanang Subdistrict Bungoro Regency Pangkep with the research hypothesis:

Hypothesis 1

H_0 : None _ the influence of learning models cooperative type Assisted *Teams Games Tournament* (TGT). *Ice Breaking* against motivation Study mathematics participant educate class III school Base Ward Sapanang .

H_1 : There is an influence of *the Ice Breaking assisted Teams Games Tournament* (TGT) cooperative learning model on the motivation to learn mathematics in class III elementary school Sapanang Village .

The results of testing the data analysis hypothesis testing the influence of the *Teams*

Games Tournament (TGT) type cooperative learning model assisted by *Ice Breaking* on the mathematics learning motivation of third grade elementary school students can be seen in Table 11. The sig. 0.000. It turns out that the value of sig. 0.000 is smaller than the probability value of 0.05 or in other words the value of 0.05 > 0.000. Then H_0 is rejected and H_1 is accepted, meaning that the coefficient of data analysis is significant . So it can be concluded that, there is an influence of *the Teams Games Tournament* (TGT) assisted *cooperative* learning model on the motivation to learn mathematics in class III elementary school Sapanang Village, Bungoro District, Pangkep Regency.

Hypothesis 2

H_0 : There is no effect of the *Teams Games Tournament* (TGT) assisted cooperative learning model on *the* mathematics learning outcomes of class III elementary school students in Sapanang Village .

H_1 : There is an influence of the *Ice Breaking assisted Teams Games Tournament* (TGT) cooperative learning model on the mathematics learning outcomes of class III elementary school students in Sapanang Village .

The results of testing the data analysis hypothesis testing the influence of the *Teams Games Tournament* (TGT) type cooperative learning model assisted by *Ice Breaking* on the mathematics learning outcomes of third grade elementary school students can be seen in Table 11. The sig. 0.000. It turns out that the value of sig. 0.000 is smaller than the probability value of 0.05 or in other words the value of 0.05 > 0.000. Then H_0 is rejected and H_1 is accepted, meaning that the coefficient of data analysis is significant . So it can be concluded that there is an influence of the *Ice Breaking assisted Teams Games Tournament* (TGT) cooperative learning model on the mathematics learning outcomes of class III elementary school students in Sapanang Village, Bungoro District, Pangkep Regency.

Hypothesis 3

H_0 : There is no difference in motivation and mathematics learning outcomes of class III students who are taught using the *Ice Breaking*- assisted *Teams Games Tournament* (TGT) cooperative learning model is higher than those taught using the direct learning model.

H_1 : There are differences in motivation and mathematics learning outcomes for third-grade students who are taught using the *Ice Breaking -assisted Teams Games Tournament* (TGT) cooperative learning model , which is higher than those taught using the direct learning model.

Based on table 13. the test results show the value of Sig. those tested with *the Pillar's test Wilka's Lambda, Hotellings Trace and Roy's Largest Root procedures* all show the number 0.000, based on the rule where if Sig > than 0.05 then H_1 is accepted, meaning that there are differences in motivation and mathematics learning outcomes of class III students who are taught by using *the Ice Breaking Assisted Teams Games Tournament* (TGT) cooperative learning model is higher than those taught using the direct learning model .

A. Discussion

Based on results research that has outlined on part before , then on part This will outlined discussion results study about the influence of learning models cooperative type Assisted *Teams Games Tournament* (TGT). *ice breaking* against motivation And results Study math .

1. Influence of learning models cooperative type Assisted *Teams Games Tournament* (TGT). *Ice Breaking* against motivation Study mathematics participant educate class III school Basic .

Based on results research , value data analysis score *pretest* and *posttest* on *SPSS* output display class control with amount sample study as many as 25 participants educate And *SPSS* output results is known mark class average score control obtained _ participant educate on *pretest* is 68.12 and *posttest* is 67.92. Results value data analysis

score *pretest* and *posttest* on *SPSS* output display class experiment with amount sample study as many as 22 participants educate And results *SPSS* outputs is known mark class average score obtained experiment _ participant educate on *pretest* was 63 ,14 and *posttest* is 80.68. The results of the inferential analysis of the data obtained sig. 0.000. It turns out that the value of sig. 0.000 is smaller than the probability value of 0.05 or in other words the value of 0.05 > 0.000. Then H_0 is rejected and Ha_{is} accepted, meaning that the coefficient of data analysis is significant . So it can be concluded that, there is an influence of *the Teams Games Tournament* (TGT) type cooperative learning model assisted by *Ice Breaking* on the motivation to learn mathematics in class III elementary school students.

2. *Ice Breaking* assisted *Teams Games Tournament (TGT)* cooperative learning model on the mathematics learning outcomes of third grade elementary school students.

The pretest and *posttest* scores on the control class *SPSS* output display with a total sample of 25 students and *the SPSS output results* it is known that the average score of the control class obtained by students in *the pretest* is 59.40 and *the posttest* is 64, 20. The results of the analysis on *the pretest* and *posttest* scores on the *SPSS* output display of the experimental class with a total sample of 22 students and *the SPSS output results* show that the average score of the experimental class obtained by students in the *pretest* is 58.64 and *the posttest* is 83.41 . The results of the inferential analysis of the data obtained sig. 0.000. It turns out that the value of sig. 0.000 is smaller than the probability value of 0.05 or in other words the value of 0.05 > 0.000. Then H_0 is rejected and Ha_{is} accepted, meaning that the coefficient of data analysis is significant . So it can be concluded that, there is an influence of *the Teams Games Tournament* (TGT) type cooperative learning model assisted by *Ice Breaking* on the mathematics learning outcomes of third grade elementary school students.

3. Differences in motivation and mathematics learning outcomes of class III students who were taught using the *Ice Breaking-assisted Teams Games Tournament* (TGT) cooperative learning model were higher than those taught using the direct learning model.

Based on the results of statistical analysis of descriptive data on the *ice breaking* assisted *Teams Games Tournament* (TGT) cooperative learning model on mathematics learning motivation, the average value of *the pretest* control class was 68.12 with less and *posttest categories.* 67.92 with less category. While the results of the data analysis showed the average value of the experimental class, namely *the pretest* 63.14 with the less category and *the posttest* 80.68 with the enough category. These results indicate that there are differences in the motivation to learn mathematics in class III students who are taught using the *Teams Games Tournament* (TGT) cooperative learning model assisted by *Ice Breaking* which is higher than those taught using the direct learning model .

The results of the statistical analysis of the descriptive data of *the Teams Games Tournament* (TGT) cooperative learning model *ice breaker* assistance on mathematics learning outcomes showed an average in the control class *the pretest* was 59.40 with the less category and *the posttest* was 64.20 with the less category. While the results of the data analysis showed the average value of the experimental class, namely *the pretest* is 58.64 with the less category and *the posttest* is 83.41 with the enough category. These results indicate that there are differences in the mathematics learning outcomes of class III students who are taught using the *Teams Games Tournament* (TGT) cooperative learning model assisted by *Ice Breaking* which is higher than those taught using the direct learning model.

CONCLUSION

Based on results study, the conclusions are:

1. The results of data analysis obtained sig. 0.000. It turns out that the value of sig. 0.000 is smaller than the probability

value of 0.05 > 0.000. Then H_0 is rejected and Ha_{is} accepted, meaning that the coefficient of data analysis is significant . So it can be concluded that, there is an influence of the *Teams Games Tournament* (TGT) cooperative learning model assisted by *Ice Breaking* on the motivation to learn mathematics in class III elementary school students.

2. The results of data analysis obtained sig. 0.000. It turns out that the value of sig. 0.000 is smaller than the probability value of 0.05 > 0.000. Then H_0 is rejected and Ha_{is} accepted, meaning that the coefficient of data analysis is significant . So it can be concluded that, there is an influence of the *Teams Games Tournament* (TGT) cooperative learning model assisted by *Ice Breaking* on the mathematics learning outcomes of third grade elementary school students.
3. The results of the data analysis showed that there were significant differences in learning motivation and mathematics learning outcomes for third grade students who were taught using the *Ice Breaking based Teams Games Tournament* (TGT) cooperative learning model , which was higher than those taught using the direct learning model.

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