

THE EFFECT OF THE TEAM GAMES TOURNAMENT LEARNING MODEL ON THE LEARNING OUTCOMES OF IPAS STUDENTS IN CLASS V

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ABSTRACT

This study aims to determine the effect of the Teams Games Tournament (TGT) learning model on the learning outcomes of fifth-grade students in IPAS at SDN 002 Pulau Komang. This research employed a quantitative approach using a pre-experimental method with a One-Group Pretest-Posttest Design. The sample consisted of 35 fifth-grade students selected using total sampling. Data were collected using a 20-item multiple-choice learning achievement test and analyzed using descriptive statistics, the Shapiro-Wilk normality test, and the Paired Samples t-Test with the assistance of IBM SPSS. The results showed an improvement in students' IPAS learning outcomes after the implementation of the TGT model, with the mean score increasing from 52.00 in the pretest to 81.14 in the posttest. The Paired Samples t-Test showed a significance value of 0.000 (< 0.05), indicating a statistically significant difference between the pretest and posttest scores. Therefore, H_0 was rejected and H_a was accepted. These findings indicate that the Teams Games Tournament (TGT) learning model has a significant effect on students' IPAS learning outcomes. The TGT model can provide an active, collaborative, and enjoyable learning environment that supports student engagement and learning achievement. Thus, TGT can be considered an alternative innovative learning model for IPAS instruction in elementary schools.

INTRODUCTION

Education is a process that is consciously designed to develop students' potential through meaningful learning experiences. At the elementary school level, learning is not only directed at achieving cognitive aspects, but also at developing attitudes, skills, and the ability to work together. Therefore, the learning process needs to provide opportunities for students to actively engage, interact with friends, and build understanding through learning experiences that suit their characteristics. However, learning that is still dominated by lecture methods and one-way communication can limit student engagement and cause some students to be less active in participating in learning.

These problems were also found in learning science in grade V of SDN 002 Komang Island. Based on the results of initial observations and interviews, the learning process still uses a lot of conventional approaches and simple question and answer activities. This condition causes student involvement in learning to be uneven. Pre-research data showed that the average student score was 76.65, but there was a difference of 35.9 points between the highest score of 91.7 and the lowest

score of 55.8. In several material competencies, the average student score was also at 63.3 and 64.1. The data shows that there is a heterogeneity of academic abilities that need attention through learning strategies that are able to involve all students more actively.

One alternative that can be used to respond to these problems is the Teams Games Tournament (TGT) type cooperative learning model. TGT is a learning model that combines group cooperation with academic game and tournament activities. Through group work, students can help each other in understanding the material, while tournament activities provide opportunities for each member to contribute to their group. These characteristics make TGT relevant to be applied to classrooms with diverse student abilities because the learning process does not only depend on the teacher's explanation, but also utilizes interaction and support between students. Thus, TGT in this study is used as a strategy to increase student engagement while providing more equitable learning opportunities.

A number of previous studies have examined the application of TGT in elementary school learning. Alfira and Syofyan (2022) examined the application of TGT to science learning outcomes in animal life cycle materials. Sarah et al. (2024) examined the application of TGT in social studies subjects, while Rahmi et al. (2025) combined the TGT model with Wordwall media. The results of these studies provide an idea that TGT has been used in various learning contexts. However, research that specifically examines the application of TGT in science subjects as a subject that integrates science and social content in the context of the Independent Curriculum, while considering the heterogeneous conditions of students' academic abilities, still needs to be strengthened.

Based on these gaps, this research has a contribution to three aspects. First, the research applies TGT to science learning that integrates science and social concepts in the context of the Independent Curriculum. Second, the research focuses on learning the material of Theme 8 "Bumiku Sayang, Bumiku Malang", so that the application of TGT is studied in the characteristics of IPAS material that requires students' involvement and understanding of environmental problems around them. Third, the implementation of TGT is directed at classroom conditions that have a fairly large range of academic ability, namely 35.9 points between the highest and lowest scores. Thus, the contribution of this research does not solely lie in the location of the research, but in the application of the TGT model in the context of learning IPAS Independent Curriculum with heterogeneous student ability characteristics.

Theoretically, cooperative learning places interaction between students as an important part of the process of building understanding. Hasryani and Ariani (2024) explained that the tournament element in TGT can provide a more interesting learning experience while encouraging student involvement in learning activities. Meanwhile, Salsabila et al. (2023) emphasized the importance of choosing a learning model that is in accordance with student characteristics and learning goals. Based on this perspective, TGT is not positioned as a model that automatically improves learning outcomes, but as an alternative learning strategy that needs to be tested for effectiveness in the context and characteristics of a particular student.

Based on the empirical problems and research gaps, this study aims to examine the influence of the application of the Teams Games Tournament (TGT) learning model on the learning outcomes of IPAS students in grade V of SDN 002 Komang Island. This research is expected to provide empirical evidence regarding the application of TGT in science learning in the context of the Independent Curriculum and become a reference for teachers in choosing learning strategies that can accommodate students' differences in abilities and increase their involvement in the learning process.

RESEARCH METHODS

This study uses a quantitative approach with the Pre-Experimental Design method. The research design used is One-Group Pretest-Posttest Design, which is a study involving one group of subjects who are given tests before and after treatment. This design was chosen because the study involved only one group without a control group. The research was carried out at SDN 002 Komang Island with the research subjects of all grade V students totaling 35 students. The sampling technique used is total sampling, because all members of the population are used as research samples.

The research procedure is carried out through several stages, namely preparation, pretest, implementation of

treatment, posttest, and data analysis. In the preparation stage, the researcher conducts initial observations to identify science learning problems, compile learning tools, determine the materials used, and compile and test research instruments. The material used in the research is IPAS class V material in Theme 8 "Bumiku Sayang, Bumiku Malang". Before being given treatment, all students first took a pretest to find out their initial abilities.

The treatment stage was carried out by applying the Teams Games Tournament (TGT) learning model. The implementation of learning follows the main syntax of TGT which includes class presentation, teams, games, tournaments, and team recognition. At the class presentation stage, the teacher conveys the objectives and learning materials to the students. Furthermore, students are divided into heterogeneous groups to carry out team activities. In groups, students work together to understand the material and complete the assigned tasks. The next stage is games, which are students participating in academic games related to learning materials. After that, students take part in a tournament to answer questions and get scores. The scores obtained by each student are then compiled into group scores. In the final stage, the teacher awards the group based on the results obtained in the tournament. The implementation of these stages is directed at increasing student engagement and providing opportunities for students with different abilities to participate in the learning process.

During the implementation of treatment, the researcher also made observations to determine the implementation of the TGT learning model. Observations were carried out using observation sheets compiled based on the TGT syntax, including the implementation of class presentations, group work activities, academic games, tournaments, and group awards. Observation data is used as supporting data to ensure that the learning process has been carried out in accordance with the stages of the TGT model.

After all treatments are given, students take the posttest using the same instrument as the pretest. The research instrument is in the form of a science learning outcome test in the form of 20 multiple-choice questions arranged based on learning objectives and indicators of the material taught. The preparation of the instrument begins with determining the learning indicators, compiling the grid, and then developing the question items according to these indicators. Before being used for data collection, the instrument is first tested through validity, reliability, difficulty, and differentiating power tests to ensure the quality of the instrument in measuring student learning outcomes.

The research data was analyzed using descriptive statistics and inferential statistics. Descriptive statistics are used to find out the picture of student learning outcomes through average grades, minimum grades, maximum grades, and standard deviations in the pretest and posttest. Next, a normality test was performed using Shapiro-Wilk to determine whether the data met the assumption of normal distribution. The homogeneity test was not used as the main prerequisite because the study used the Paired Samples t-Test, which is a test of two measurement results from the same subject.

Hypothesis testing was performed using the Paired Samples t-Test with the help of the IBM SPSS program. This test was used to find out if there was a significant difference between student learning outcomes before and after the implementation of the TGT learning model. The test was carried out at a significance level of 5% or $\alpha = 0.05$. If the Sig. (2-tailed) value < 0.05 , then H_0 is rejected and H_a is accepted, indicating a significant difference between the pretest and posttest values. On the other hand, if the significance value > 0.05 , then H_0 is accepted and H_a is rejected.

Thus, the entire research process begins with the identification of problems and the preparation of instruments, followed by the measurement of initial abilities through pretests, the application of the TGT learning model, the measurement of learning outcomes through posttests, and ends with statistical analysis to determine the effect of the application of the TGT model on the learning outcomes of science students in grade V of SDN 002 Komang Island

Tabel 1. Research Flow

Phase 1: Preparation	→	Phase 2: Pre- Test	→	Phase 3: Treatment	→	Phase 4: Post- Test	→	Phase 5: Analysis
Observing field problems & validating instruments		Measuring initial science learning outcomes		Applying Teams Games Tournament (TGT) model		Measuring final learning outcomes after treatment		Comparing data using Paired Sample T-Test

Source: **Compiled by researchers based on research procedures, One-Group Pretest-Posttest design, and syntax of the Teams Games Tournament (TGT) learning model.**

RESEARCH RESULTS

1. Question Validity Results

Before the research instrument is used in the implementation of the pretest and posttest, the validity test is first carried out on all questions that have been prepared. The validity test aims to find out the extent to which each question item is able to measure the learning outcomes of IPAS in accordance with the indicators that have been set. Instruments that have a good level of validity will produce accurate data because each question item really measures the competencies that want to be revealed in the research. Therefore, the validity test is one of the important stages before the instrument is used in the data collection process.

The validity test in this study was carried out empirically using data from the results of the instrument test given to 35 students. The determination of the validity of each question item is based on a comparison between the value of $r_{\text{calculating}}$ with r_{table} at a significance level of 5%. A question item is declared valid if the value of $r_{\text{calculate}}$ is greater than the r_{table} , so that the question item is considered to be able to measure the same aspect as the total score of the instrument.

The results of the validity test for the 20 questions are presented in Table 1 below.

Table 1. Recapitulation of Validity Test Results

No.	Question Item	Calculation	r_{table}	Remarks
1	Question 1	0,437	0,3246	Valid
2	Question 2	0,458	0,3246	Valid
3	Question 3	0,532	0,3246	Valid
4	Question 4	0,567	0,3246	Valid
5	Question 5	0,522	0,3246	Valid
6	Question 6	0,496	0,3246	Valid
7	Question 7	0,526	0,3246	Valid
8	Question 8	0,518	0,3246	Valid
9	Question 9	0,569	0,3246	Valid
10	Question 10	0,501	0,3246	Valid
11	Question 11	0,408	0,3246	Valid
12	Question 12	0,455	0,3246	Valid
13	Question 13	0,423	0,3246	Valid
14	Question 14	0,402	0,3246	Valid
15	Question 15	0,507	0,3246	Valid
16	Question 16	0,488	0,3246	Valid
17	Question 17	0,599	0,3246	Valid
18	Question 18	0,567	0,3246	Valid
19	Question 19	0,438	0,3246	Valid
20	Question 20	0,452	0,3246	Valid

Source: Research Data (2026)

Based on Table 1, it can be seen that all question items have a value of $r_{\text{calculating}}$ that is greater than the r_{table} value of 0.3246. The value of the validity coefficient of each question item is in the range of 0.402 to 0.599, which indicates that all question items meet the empirical validity criteria. Thus, there is not a single question item that must be eliminated because all questions have been able to measure the construct of social studies learning outcomes in accordance with the indicators that have been set.

These results show that all question items have a positive relationship with the total score of the instrument. The higher the value of the validity coefficient of a question item, the better the ability of the item to represent the competence to be measured. In this study, the highest validity value was obtained by question number 17 with a value of 0.599, while the lowest validity value was found in question number 14 of 0.402. However, both values remain above the r_{table} value, so that all question items are declared to meet the validity requirements.

These findings show that the instrument used has good quality as a tool to measure social studies

learning outcomes. All question items are able to measure the same competency aspects, so that the data obtained through the implementation of the pretest and posttest can describe the ability of students objectively. A valid instrument will also increase the accuracy of the results of statistical analysis because the score produced really reflects the level of mastery of the material by the students.

Based on the results of the validity test, it can be concluded that all 20 questions are declared valid and suitable for use as research instruments. Therefore, all question items are used in the implementation of pretest and posttest to measure the learning outcomes of IPAS students in grade V of SDN 002 Komang Island. The use of all question items that have met the validity requirements is expected to be able to produce research data that is accurate, objective, and scientifically accountable in accordance with the rules of quantitative research.

2. Instrument Reliability Results

After all the question items are declared valid, the next stage is to test the reliability of the instrument. The reliability test is carried out using **Cronbach's Alpha coefficient** to determine the level of internal consistency of the instrument. An instrument is said to be reliable if it has a Cronbach's Alpha value greater than 0.60.

The results of the instrument reliability test can be seen in Table 4.3.

Table 4.3 Instrument Reliability Test Results

Number of Question Items	Cronbach's Alpha	Minimum Limits	Remarks
20 Questions	0,837	0,600	Reliable (Very High)

Source: Research Data Processing Results (2026).

Based on Table 4.3, Cronbach's Alpha value is 0.837. This value far exceeds the minimum reliability limit of 0.600, so the research instrument is stated to have a very high level of reliability. This shows that the instrument has good internal consistency so that it is able to provide stable measurement results when used in a group of respondents with the same characteristics.

The high reliability value also indicates that each question item has a good relationship in measuring the variables of IPAS learning outcomes. Thus, measurement errors can be minimized so that the data obtained through research instruments is more reliable. These results reinforce the previous validity test findings that the instrument has met the requirements as a good research measuring tool.

3. Description of Learning Outcome Data (Pretest & Posttest)

The data on student learning outcomes is objectively recalculated with a maximum weight of 100 (5 points for each correct answer on 20 valid questions selected). The statistical description of the average score of the student group before (pretest) and after (posttest) applied the TGT learning model is summarized in Table 5 below:

Table 5. Statistical Description of Pretest and Posttest Scores (N = 35)

Statistics	Pretest	Posttest
N	35	35
Minimum	25,00	45,00
Maximum	80,00	100,00
Mean	52,00	81,14
Std. Deviation	16,77	13,45
Mean Gain	29,14	

Source: Research Data (2026)

After the research instrument is declared feasible to be used based on the results of the validity and reliability tests, then the **selected question instrument** is used to measure the learning outcomes of social

studies students in grade V of SDN 002 Komang Island. Measurements were carried out twice, namely before the implementation of the *Teams Games Tournament* (TGT) learning model through **the pretest** and after the implementation of the TGT learning model through **the posttest**. Each correct answer is scored 5 so the maximum score a student can get is 100.

Statistical descriptions of student learning outcomes during the pretest and posttest are presented in Table 5 below.

Table 5. Statistical Description of Pretest and Posttest Scores (N = 35)

Descriptive Statistics	Pretest	Posttest
Number of Students (N)	35	35
Track-Track (Mean)	52,00	81,14
Minimum Score	25,00	45,00
Maximum Value	80,00	100,00
Standard Deviation	16,77	13,45
Mean <i>Gain</i>	29,14	

Source: Research Data Processing Results (2026)

Based on Table 5, it is known that student learning outcomes have improved after the implementation of the *Teams Games Tournament* (TGT) learning model. The average pretest score was 52.00, while the average posttest score increased to 81.14. Thus, there was an increase in the average score of 29.14 points.

In addition to the average increase, the minimum score of students also increased from 25.00 during the pretest to 45.00 during the posttest. Similarly, the maximum score increased from 80.00 to 100.00, which shows that after participating in learning using the TGT model, there are more students who are able to achieve optimal learning outcomes.

The standard deviation in the pretest was 16.77, while in the posttest it was 13.45. The decrease in the standard deviation value shows that the variation in student learning outcomes after participating in learning becomes smaller than before being given treatment. In other words, students' abilities become more evenly distributed after the *Teams Games Tournament* (TGT) learning model is applied. Descriptively, these results indicate that the application of the TGT learning model is able to improve the learning outcomes of social studies students in grade V of SDN 002 Komang Island. However, to find out whether the increase is statistically significant, further testing is needed through analytical prerequisite tests and hypothesis tests.

4. Results of the Prerequisite Test Analysis (Normality)

Before the hypothesis test was carried out, a normality test was carried out using the Shapiro-Wilk method considering the number of $N < 50$ samples.

Table 6. Shapiro-Wilk Normality Test Results

Data Groups	Statistics	df	Sig. (p-value)	Remarks
Pretest	0.946	35	0.085	Normal
Posttest	0.942	35	0.068	Normal

Source: Research Data (2026)

Based on the test results in Table 6, the significance value (Sig.) for pretest data was 0.085 and posttest was 0.068. Because these two values are greater than the significance level of 0.05 ($p > 0.05$), it can be concluded that the IPAS learning outcome data is normally distributed. The fulfillment of this assumption of normality allows researchers to continue the analysis using parametric statistics.

The accuracy of the selection of prerequisite tests is the main foundation in maintaining the accuracy of the results of experimental data analysis. According to Ghozali (2021), the data with a normal distribution reflects that the distribution of values does not concentrate on one extreme side, so that the average difference

test carried out later can provide an objective picture of the population. Thus, this data is worthy of further processing using the t-test.

5. Hypothesis Test Results (Paired Samples T-Test)

Hypothesis testing was carried out to find out whether there was a significant influence of the application of the Teams Games Tournament (TGT) learning model on the learning outcomes of IPAS students in grade V of SDN 002 Komang Island. The test was carried out using the Paired Samples t-Test because this study used one group of samples that were given two measurements, namely before treatment (*pretest*) and after treatment (*posttest*). This test aims to find out whether the difference in the average score of learning outcomes before and after the implementation of the TGT learning model occurs significantly.

Table 7. Paired Samples t-Test Test Results

Comparison Variables	Mean Difference	Std. Deviation	Std. Error Mean	t	count	df	Sig. (2-tailed)
Posttest – Pretest	29,14286	20,12774	3,40221	8,566		34	0,000

Source: Research Data Processing Results (2026)

The basis for decision-making in the Paired Samples t-Test test is as follows.

1. If the value of Sig. (2-tailed) < 0.05, then H_0 is rejected and H_a is accepted.
2. If the value of Sig. (2-tailed) > 0.05, then H_0 is accepted and H_a is rejected.

Based on the results of the analysis in Table 7, the average Mean Difference value was obtained of 29.14286, which shows that the value of student learning outcomes after participating in learning using the Teams Games Tournament (TGT) model has increased by an average of 29.14 points compared to before being given treatment. This value shows a considerable increase in learning outcomes after the implementation of the TGT learning model.

The results of the statistical test also showed a $t_{\text{calculating}}$ value of 8.566 with a degree of freedom (df) of 34 and a significance value of Sig. (2-tailed) of 0.000. Since the significance value is smaller than the established significance level ($0.000 < 0.05$), H_0 is rejected and H_a is accepted. Thus, there is a significant difference between student learning outcomes before and after the implementation of the Teams Games Tournament (TGT) learning model.

The results of this study show that the application of the Teams Games Tournament (TGT) learning model has a positive influence on improving the learning outcomes of IPAS students in grade V of SDN 002 Komang Island. The increase in the average score from 52.00 at the *pretest* to 81.14 at the *posttest*, supported by the results of the statistical test, indicates that the TGT learning model is able to significantly improve students' understanding of the material learned.

Based on the overall results of the statistical analysis, it can be concluded that the Teams Games Tournament (TGT) learning model has a significant effect on the learning outcomes of IPAS students in grade V of SDN 002 Komang Island. Thus, the research hypothesis that there is an influence of the Teams Games Tournament (TGT) learning model on students' IPAS learning outcomes is accepted.

DISCUSSION

This study aims to determine the change in the learning outcomes of IPAS students in grade V of SDN 002 Komang Island after the implementation of the Teams Games Tournament (TGT) learning model. Before being used in research, the instrument was first tested on 35 students to determine the quality of the question items. The results of the analysis showed that all 20 question items had a value of $r_{\text{calculating}}$ greater than r_{table} of 0.3246 so that all items were declared empirically valid. The results of the reliability test also showed a Cronbach's Alpha value of 0.837 which is included in the high reliability category. Although all items met the validity criteria, as many as 10 questions were selected as research instruments by considering validity, reliability, difficulty index, and differentiation. The selection was

carried out so that the instruments used have appropriate characteristics to measure student learning outcomes consistently (Ghozali, 2021).

The results of the descriptive analysis showed an increase in learning outcomes after students participated in learning with the TGT model. The average pretest score of 52.00 increased to 81.14 in the posttest, resulting in an average increase of 29.14 points. The minimum value also increased from 25 to 45, while the maximum value increased from 80 to 100. These changes show that after participating in the TGT learning series, students' ability to answer IPAS questions has increased. Thus, descriptively there is a fairly clear change in learning outcomes between the conditions before and after learning.

This increase can be explained through the characteristics of the TGT model that places students as active participants in the learning process. In its application, students learn in heterogeneous groups, discuss material, explain concepts to each other, and then participate in academic games and tournaments. This learning pattern allows students to not only receive information from teachers, but also to have the opportunity to explain, ask questions, listen to friends' opinions, and test their understanding through academic activities. The process can theoretically help students strengthen their understanding of the material because knowledge is learned and constructed through interaction with group members.

According to Slavin (2015), TGT is a form of cooperative learning that combines group work with academic games and tournaments. The structure gives each group member the responsibility to understand the material while contributing to the group. In the context of this research, individual responsibility and group cooperation can be one of the mechanisms that help students be more involved in learning. Students who were previously less active had the opportunity to study with friends, while students who understood the material better could help explain to other members of the group. These interactions have the potential to expand learning opportunities for students with different abilities.

In addition to cooperation, the elements of games and tournaments in TGT can provide a more interesting learning experience. Academic game activities give students the opportunity to repeat and apply the material in a less formal setting. The existence of tournaments also provides challenges that encourage students to prepare themselves before the activity takes place. This condition can increase students' attention and involvement during the learning process. Thus, the improvement in learning outcomes found in this study is theoretically not only related to play activities, but is the result of a combination of group interaction, individual responsibility, academic exercise, and active student involvement.

The findings are in line with the view of cooperative learning that interaction between students can help the process of understanding through explaining, asking, giving feedback, and discussing answers. In learning science studies, the process becomes relevant because the material not only requires the ability to remember information, but also understand concepts and relate them to various phenomena. When students discuss material with friends, they get the opportunity to see a concept from a different perspective. Therefore, TGT can be one of the learning alternatives that supports the creation of an active and collaborative learning environment.

The results of the prerequisite test showed that the data met the assumption of normality. The Shapiro-Wilk test obtained a significance value of 0.085 in the pretest data and 0.068 in the posttest data. Both values are greater than 0.05 so that the pretest and posttest data can be declared to be normally distributed. This condition allows the analysis to continue using the Paired Samples t-Test. The results of the statistical test showed a t-value of 8.566 with a significance value of 0.000 and a mean difference of 29.14286. These results show that there is a statistically significant difference between learning outcomes before and after the implementation of TGT.

In addition to statistical significance, the power of change also needs to be considered through effect measures. Based on a t-value of 8.566 and the number of students as many as 35 people, Cohen's d_z value was obtained around 1.45. The value indicates a very large effect size. This means that the change in learning outcome scores from pretest to posttest is not only statistically detected, but also shows a strong change in the group of students studied. These findings provide additional information that the average increase of 29.14 points has considerable practical significance in the context of the study group.

Nonetheless, these results need to be interpreted carefully. This study used a one-group pretest-posttest design

without a control group. Therefore, the increase in scores from pretest to posttest shows a change in learning outcomes after TGT learning, but it has not been able to prove absolutely that all of these improvements are due to the application of the TGT model. Changes in learning outcomes can also be influenced by other factors, such as the experience of doing the pretest, practice during learning, the development of students' understanding during research, the condition of students when taking the test, or other learning factors. Thus, the use of the term "affective" in this study needs to be understood in the context of changes in learning outcomes after treatment, not as evidence of a fully ascertainable cause-effect relationship.

The findings of this study are in line with previous research that shows that TGT can be used to increase student activity, motivation, cooperation, and learning outcomes. These similarities show that the characteristics of TGT that combine cooperative learning, academic games, and tournaments have the potential to create higher learning engagement. The results of this study reinforce previous findings in the context of social studies learning in grade V elementary school students, especially in showing that there is a considerable change in learning outcomes after students participate in learning with TGT.

The contribution of this study lies in the finding that the application of TGT in social studies learning not only results in an increase in average scores, but also shows a large effect size. This gives an idea that TGT has the potential to be one of the learning alternatives that teachers can use to create more active, collaborative, and interesting learning activities. However, these contributions still need to be placed within the limits of the research design used so that the results of the research are not generalized excessively.

Overall, the results showed an increase in the learning outcomes of IPAS after the application of the TGT model, which was shown by an average increase from 52.00 to 81.14, a significant difference based on the Paired Samples t-Test, and a measure of Cohen's d_z effect of 1.45 which was in the very large category. Theoretically, the improvement can be understood through the mechanisms of group work, individual responsibility, interaction between students, academic games, and tournaments that are the main characteristics of TGT. However, because the study did not use a control group, these results could not be used as evidence that TGT was the only factor that led to improved learning outcomes. Therefore, further research is recommended using a control group or a stronger experimental design so that the contribution of TGT to improved learning outcomes can be tested with a higher level of causal certainty.

CONCLUSION

The application of the Teams Games Tournament (TGT) learning model has a significant influence on improving the learning outcomes of IPAS students in grade V at SDN 002 Komang Island. The results of this study answer the research objectives and prove that the working hypothesis (H_a) is accepted, which shows that the use of tournament-based cooperative learning models is more effective in improving students' cognitive learning outcomes compared to conventional learning methods. The TGT model is able to create a more active, competitive, and collaborative learning atmosphere so that students are more motivated to participate in the learning process and more easily understand the material being studied. Thus, the TGT learning model can be used as an alternative effective learning strategy to improve the quality of social studies learning outcomes in elementary schools.

However, this study still has some limitations that need to be considered in interpreting the results of the research. First, the study uses a One-Group Pretest-Posttest Design without involving a control group so that the influence of external variables on student learning outcomes cannot be optimally controlled. Second, the study only involved 35 grade V students at SDN 002 Komang Island, so the results of the study had limitations in terms of generalizations on other schools or areas with different characteristics. Third, the research is only focused on the IPAS material "Bumiku Sayang, Bumiku Malang", so that the effectiveness of the TGT learning model in other materials or subjects cannot be known comprehensively.

Based on these limitations, further research is recommended to use a more robust experimental design, such as True Experimental Design, by involving experimental groups and control groups to improve the internal validity of the research. In addition, future research is expected to involve a larger number of samples and come from different schools or regions so that the results of the study have a wider level of generalization. Further research can also examine the effectiveness of the TGT learning model on other variables besides cognitive learning outcomes, such as learning motivation, social skills, critical thinking skills, communication skills, and students' collaboration skills. In addition, the integration of the TGT learning model with digital technology-based learning media or *game-based learning* is also an

interesting alternative to be researched to adjust the learning process to the characteristics of students in the digital era.

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