

## Implementation of Team Games Tournament (TGT) Assisted by Puzzle to Increase Learning Activity of Islamic Religious Education and Character

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### ABSTRACT

This research is motivated by the low student activity in Islamic Religious Education and Character learning at SMPN 1 Salimpaung, which is still dominated by conventional methods, so that students are less enthusiastic, passive, and have difficulty understanding the material. This study aims to determine the effect of implementing the Team Games Tournament (TGT) method assisted by Puzzle media on increasing student activity. This type of research is a quasi-experimental study with a posttest-only nonequivalent groups design. The study population was all 32 seventh-grade students of SMPN 1 Salimpaung who were sampled using a total sampling technique. Class VII.1 was designated as the control class and VII.2 as the experimental class. Data were collected through questionnaires and observation sheets, then analyzed using normality tests, homogeneity, and t-tests. The results showed that the average student activity in the experimental class was higher than in the control class, both from the questionnaire results (79 compared to 67) and observations (78 compared to 55). The t-test at a significance level of 0.05 yielded a significance value of 0.000 with  $t \text{ count} = -7.627 < t \text{ table} = -2.042$ , so H1 was accepted. Thus, it can be concluded that the application of the TGT method assisted by Puzzle media is effective in increasing student activity in Islamic Religious Education and Character learning, especially in the oral, writing, motor, mental, and emotional aspects.

**Keywords:** Team Games Tournaments, Puzzles, Islamic Religious Education, Character

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### INTRODUCTION

Education is a conscious and systematic effort to develop the spiritual, intellectual, emotional, and social potential of students. (Alpian et al., 2019) In the Indonesian context, the Independent Curriculum emphasizes independence, creativity, and active student involvement in learning. (Syarosy et al., 2024) However, the success of this curriculum is largely determined by the effectiveness of the learning methods and media used by teachers.

One of the problems that frequently arises in Islamic Religious Education and Character is low student engagement. This is even though engagement, which encompasses verbal, motor, writing, mental, and emotional skills, is a crucial indicator of learning success. (Puspita Sari et al., 2022) In practice, many students are still not enthusiastic, just listening to the teacher's

explanation without daring to ask questions or express opinions. (Chairini et al., 2013) Observations at SMPN 1 Salimpaung show that students tend to be less enthusiastic, reluctant to participate in discussions, and lack the confidence to interact with teachers and peers.

Learning innovation is needed to make students more active and engaged. One approach that has proven effective is the Team Games Tournament (TGT), a cooperative learning model based on games and competition that can increase student participation and motivation. (Samuel & Santosa, nd; Santosa, 2018). Previous research shows that TGT can significantly increase students' learning activities, interests, and engagement. (Mahastuti & Mulyono, 2025; Monica Pontoh & Kami Sani, 2025; Pahargyan & Ella Harendita Petra Christian High School, 2022).

Apart from methods, learning media also play an important role in encouraging student activity. (Junaedi, 2019). Puzzle media has been proven to be able to increase concentration, motivation, and student learning outcomes in various fields. (Sukirman et al., 2023) Puzzle-making activities train coordination, problem-solving, cooperation, and make the learning process more enjoyable. (Sari et al., 2023).

However, studies that integrate the TGT method with puzzle media in Islamic Religious Education and Character learning, especially on Rukhsah material (lightness in worship), are still limited. Likewise, there has not been much research that assesses its effect on five indicators of student activity (oral, writing, motoric, mental, and emotional).

Based on these conditions, this study aims to examine the application of the Team Games Tournament method assisted by puzzle media in increasing student activeness in Islamic Religious Education and Social Studies subjects at SMPN 1 Salimpaung. The novelty of this study lies in the integration of a competitive cooperative model with interactive media adapted to the characteristics of digital generation students, as well as a comprehensive analysis of various dimensions of learning activeness.

## **METHOD**

This study used a quasi-experimental approach with a posttest-only nonequivalent groups design. The subjects were all 32 seventh-grade students of SMPN 1 Salimpaung in the 2024/2025 academic year. The sampling technique used was total sampling, so the entire population was sampled. Based on the recommendations of the Islamic Religious Education and Guidance teachers, class VII.1 was designated as the control class and VII.2 as the experimental class.

The research instruments consisted of a questionnaire to measure students' perceptions of activeness and an observation sheet to assess direct involvement during learning. The instruments were tested for validity and reliability before use.

The research procedures include: (1) preparation, namely the preparation of TGT learning devices assisted by puzzles; (2) implementation, namely providing learning in the experimental

class using TGT with puzzle media and in the control class using conventional methods; (3) data collection through observation and questionnaire distribution; and (4) data analysis. Then, the data analysis techniques include normality tests, homogeneity tests, and t-tests to determine differences in student activity between the experimental and control classes at a significance level of 0.05.

## **RESULTS AND DISCUSSION**

The results of this study aim to determine the effect of the Team Games Tournament (TGT) method assisted by Puzzle media on student activity in Islamic Religious Education and Character Education (PAI & BP). The study was conducted in three meetings with the application of the Team Games Tournament (TGT) method, assisted by Puzzle Media. At the last meeting, a post-test was given in the form of a questionnaire to measure student responses after being treated with different methods and media. Activity was measured through questionnaires and observations that included five main indicators: (1) oral activity, (2) writing activity, (3) motor activity, (4) mental activity, and (5) emotional activity.

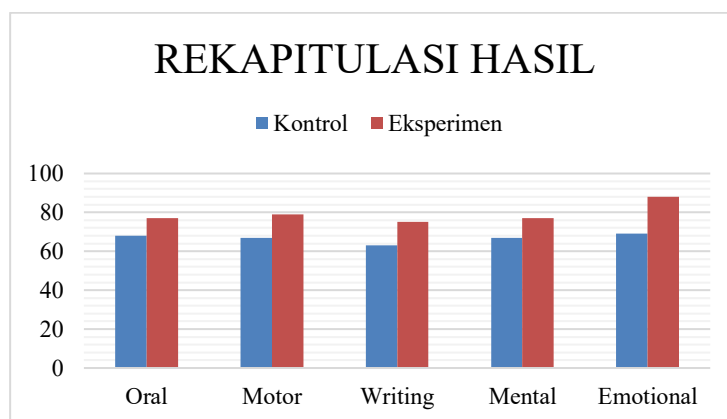
### **1. Student Activity Questionnaire Results**

Based on the results of filling out the questionnaire, the average student activity was obtained as follows:

Table1. Summary Results of the Student Activity Questionnaire for the Control and Experimental Classes

Activity Indicator	Experimental Class	Control Class
Oral Activities	77	68
Motor Activities	79	67
Writing Activities	75	63
Mental Activities	77	67
Emotional Activities	88	70
<b>Average</b>	<b>79</b>	<b>67</b>

These results indicate that students in the experimental class were more active across all indicators than those in the control class. The following is a comparison diagram of the two classes:



Picture1. Experimental and Control Class Recapitulation Results Diagram

## 2. Observation Sheet for the Implementation of the Team Games Tournament (TGT) Method

In addition to the questionnaire, observations were conducted to directly assess student engagement during the learning process, using observation sheets. The results are shown in the following table:

Table2. Observation Sheet Recapitulation Results

Activity Indicator	Experiment			Control		
	1	2	3	1	2	3
Oral Activities	58	71	75	36	49	59
Motor Activities	78	82	88	45	47	42
Writing Activities	71	79	82	67	73	80
Mental Activities	82	86	86	80	76	67
Emotional Activities	62	82	88	50	47	47
<b>Average</b>	<b>70</b>	<b>80</b>	<b>84</b>	<b>52</b>	<b>56</b>	<b>57</b>

The observation results corroborate the questionnaire data, which show that learning using a puzzle-assisted Team Games Tournament is more effective at increasing student engagement than conventional methods. The data shows that the experimental class showed significant improvement at each meeting, in contrast to the control class, which did not show significant improvement at each meeting.

## 3. Statistical Test Results

### a. Prerequisite Analysis Test

#### 1) Normality Test

This normality test is used to determine whether the sample data is normally distributed. The normality test uses the Shapiro-Wilk test. The results

obtained are that the post-test data for the experimental and control classes are 0.077 and 0.174, respectively. It can be stated that  $0.077 > 0.05$  and  $0.174 > 0.05$ . Therefore, the post-test results for both classes are normally distributed.

Table3Normality Test Results

		Shapiro-Wilk		
		Statistic		
		s	df	Sig.
Student Activity	Post-Test Control (Conventional)	.894	15	.077
	Experimental Post-Test (Puzzle-Assisted TGT)	.924	17	.174

2) Homogeneity Test

This homogeneity test is used to determine whether the obtained data has a homogeneous variance. The significance value obtained is 0.530, which means that  $0.530 > 0.05$ . Therefore, it can be concluded that the data is considered to have a homogeneous variance.

Table4Homogeneity Test Results

Test of Homogeneity of Variance					
		Levene			
		Statistics	df1	df2	Sig.
Student Activity	Based on Mean	.403	1	30	.530
	Based on Median	.088	1	30	.768
	Based on Median and with adjusted df	.088	1	29,908	.768
	Based on the trimmed mean	.309	1	30	.582

b. Hypothesis Testing

Hypothesis testing with the help of the IBM SPSS 25 application uses the Independent Sample t-test to see whether there is an average difference between the application of the Team Games Tournament (TGT) method assisted by Puzzle in the experimental class, with the application of the conventional 77 method in the control class, to see the increase in Student Activeness. The sig. Value results obtained are (2-tailed) = 0.000 ( $< 0.05$ ) with  $t$  count =  $-7.627 < t$  table =  $-2.042$ . Thus,  $H_1$  is accepted, meaning there is a significant difference between student activeness in the experimental and control classes. In conclusion, the Team Games Tournament method, assisted by Puzzle Media, can increase Student Activeness.

Table 5 Hypothesis Test Results

Group Statistics					
	Class	N	Mean	Standard Deviation	Std. Error Mean
Student Activity	Control Class	15	114.53	7,472	1,929
	Experimental Class	17	134.06	7,004	1,699

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Keaktifan Siswa	Equal variances assumed	.403	.530	-7.627	30	.000	-19.525	2.560	-24.754	-14.297
	Equal variances not assumed			-7.595	28.915	.000	-19.525	2.571	-24.784	-14.267

a)

This Oral Activities Indicator has 5 sub-indicators or supporting activities, namely asking, answering, expressing opinions, debating, and responding. Students in the experimental class asked more questions, answered questions, and expressed their opinions during the discussion. The activity elements that are interrelated with this Oral activity are Team Activities (Group), Games (Games), and Tournaments (Competitions). This is in line with the characteristics of TGT, which requires interaction between teams. These results support the findings of (Samuel & Santosa, nd) That TGT improves students' communication skills through tournament activities.

At the first meeting, the average score of students' Oral Activities was 58. Then at the second meeting, the average score was 71, and at the third meeting, the average score was 75. This showed a significant increase in the experimental class but was not yet seen in the control class.

**b) Increased Motor Activity**

In the motoric indicators, experimental students were more active because they had to put together puzzles as part of the learning process. There are 4 sub-indicators/activities, namely speed in completing activities partially and in helping other individuals, speed in revealing the contents of the Puzzle, and participating in tournaments. This activity requires hand-brain coordination, making learning interactive. (Purnamasari Putri Bahriah & Riana, 2022) Stated that puzzles are effective in training students' motor and cognitive skills.

At the first meeting of the experimental class, the average score was 78. Then, at the second meeting, there was an increase in the average score to 82. It was seen that students were actively moving and enthusiastic in completing games and tournaments. Furthermore, at the third meeting, the average motor activity was 88, which can be stated that most students had shown active motor cooperation movements.

**c) Increased Writing Activities**

The activity of recording answers and writing down discussion results was done more in the experimental class. Has 2 sub-indicators/activities that represent, namely, noting important points and writing accurate answers. Puzzles help students understand the concepts of the material before they are written down. This is in line with research.(Mahastuti & Mulyono, 2025)This Shows that game-based media can strengthen writing skills through active student involvement.

The activity of taking notes was not optimal in answering and writing accurate and precise answers, so the average obtained was 71. At the second meeting, there was an increase in the average, namely 79. Furthermore, at the third meeting, the average was 82, where students appeared to be more active and had the initiative in noting down important points regarding the material being studied.

**d) Increased Mental Activity**

Puzzles also stimulate thinking power and problem-solving abilities. This indicator has 3 active activities, namely remembering, solving problems, and making decisions. Students are trained to find the correct answer pieces, so that mental activity is more trained. Research(Beaty, 2019)Shows that educational games such as puzzles improve concentration and critical thinking.

At the first meeting of the experimental class, the average score obtained in this Mental Activity was 82. Then, at the second meeting, the average score was 86. This shows a significant increase from the first meeting. Furthermore, at the third meeting, the average score was 86.

**e) Increased Emotional Activity**

In this Emotional Activities indicator, there are several sub-indicators/activities, namely interest and enthusiasm. Students in the experimental class showed higher enthusiasm, joy, and motivation than those in the control class. The competitive element in TGT and the challenge of putting together puzzles encouraged emotional engagement. These results are consistent with research.(Suwirda, 2021)This proves that TGT fosters students' self-confidence and intrinsic motivation.

At the first meeting, students still did not seem enthusiastic and enthusiastic in carrying out the learning; only a few showed interest in learning, so that an average score of 62 was obtained. Then, at the second meeting, an average score of 82 was obtained, which showed a significant increase from the first meeting. Furthermore, at the third meeting, an average score of 88 was obtained, which also increased from the previous meeting.

The conclusion obtained is that with the application of the Team Games Tournament (TGT) method assisted by Puzzle media in the experimental class and the conventional method in the control class, the results obtained are that there is an average difference between the activity of students in the control and experimental classes. Where the average activity of the experimental class is higher than the control class. Then, seen from the observation sheet, when three meetings were conducted, it was found that each indicator of student activity in the experimental class increased significantly from meetings 1 to 3. This means that the Team Games Tournament (TGT) method, assisted by Puzzle media, can be concluded to increase student activity in the Islamic Religious Education and Character Education subjects in the Rukhsah material.

A key finding of this study is that the integration of Team Games Tournaments with Puzzles results in collaborative, competitive, and enjoyable learning. While TGT focuses on social interaction and teamwork, puzzles add a visual-motor dimension that demands concentration. The combination of the two has been shown to comprehensively enhance activity across the verbal, writing, motor, mental, and emotional aspects.

The novelty of this research lies in the application of a Team Games Tournament using puzzles in the context of Islamic Religious Education (PAI) and Islamic Religious Education (BP), specifically in the Rukhsah (School of Religious Education) material. Previous research has focused more on improving learning outcomes or motivation, while this study assesses student engagement multidimensionally.

Based on the research description above, this research provides a positive contribution by proving a significant average difference in the application of the Team Games Tournament (TGT) method assisted by puzzle media in the experimental class with the application of the conventional method in the control class on the activeness of students in the PAI and BP subjects on the Rukhsah material: The ease given by Allah in worshipping Him.

With the significant average difference, it can be stated that there is an increase in student activity. So it is interpreted that the Implementation of the Team Games Tournament (TGT) Method Assisted by Puzzle Media has an influence on student activity. Learning carried out with the TGT method assisted by puzzle media has advantages that lie in its ability to create a fun and competitive learning atmosphere through tournaments, increase responsibility and teamwork, and provide a more interactive learning experience where students are active in discussions, questions,

and answers, and problem-solving through puzzles. This research has succeeded in changing learning from teacher-centered to student-centered.

## **CONCLUSION**

This study shows that the implementation of the Team Games Tournament (TGT) method assisted by Puzzle media can increase student activeness in Islamic Religious Education (PAI) and Social Studies (BP) subjects at SMPN 1 Salimpaung, both in oral, motoric, writing, mental, and emotional aspects. These results confirm that game-based and collaborative learning strategies can create a more interactive, enjoyable learning atmosphere and encourage optimal student participation. In the future, similar research is recommended to be developed in different subjects and educational levels, and to explore its impact on critical thinking skills and long-term learning outcomes.

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