

## LITERATURE REVIEW OF TEAMS GAMES TOURNAMENT LEARNING MODEL TIMEFRAME 2019-2025

Dian Laksana <sup>\*1</sup>, Tri Suminar <sup>2</sup>, Bambang Subali <sup>3</sup>, Nuni Widiarti <sup>4</sup>

- <sup>1</sup>) Elementary Education, Faculty of Education and Psychology, Universitas Negeri Semarang  
<sup>2</sup>) Out of School Education, Faculty of Education and Psychological Sciences, Universitas Negeri Semarang  
<sup>3</sup>) Science Education, Faculty of Mathematics and Science, Universitas Negeri Semarang  
<sup>4</sup>) Chemistry Education, Faculty of Mathematics and Sciences, Universitas Negeri Semarang

*\*Corresponding author*

e-mail: [dianlaksana27@student.unnes.ac.id](mailto:dianlaksana27@student.unnes.ac.id) <sup>\*1</sup>, [tri.suminar@mail.unnes.ac.id](mailto:tri.suminar@mail.unnes.ac.id) <sup>2</sup>,  
[bambangfisika@mail.unnes.ac.id](mailto:bambangfisika@mail.unnes.ac.id) <sup>3</sup>, [nuni\\_kimia@mail.unnes.ac.id](mailto:nuni_kimia@mail.unnes.ac.id) <sup>4</sup>

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### ABSTRACT

Teams Games Tournament (TGT) has been known to be effective as a learning model that improves the quality of teaching and learning, but in practice there is still a gap between its theoretical potential and its application in the classroom. This research aims to review in depth various studies on the implementation of TGT in education throughout 2019-2025. The review was conducted using the Systematic Literature Review (SLR) method using PRISMA, selecting 70 articles from national and international reputable journals based on relevance, year of publication, and methodological quality. The analysis was directed at the impact of TGT on motivation, learning outcomes, and student engagement, compared to other learning models. The results showed that TGT consistently made a positive contribution to improving motivation and learning outcomes, as well as establishing an interactive learning environment through teamwork and game elements. However, limited digital facilities and large class management difficulties are barriers to its implementation. This study concludes that TGT has great potential if supported by technology-based innovation. Therefore, the integration of TGT with digital media needs to be developed to answer the challenges of learning in the modern era.

**Keywords:** TGT; learning outcomes; literature review

### INTRODUCTION

The TGT model is a recommended learning approach to overcome obstacles in learning activities because it can encourage student motivation and involvement (Arisetiyana *et al.*, 2020). The TGT model is part of a model that involves group cooperation through educational game activities packaged in a tournament format to create a fun and competitive atmosphere (Sariati & Mahyuny, 2024). This approach is believed to be able to create a fun and healthy competitive atmosphere and encourage students to be actively involved so that they are motivated in learning activities (Aprilia, 2024). TGT also provides space for students to increase

self-confidence, cooperation, and socialization skills (Liantri *et al.*, 2024).

Various studies have revealed the effectiveness of the TGT model in increasing learning motivation at various levels of education. Research by Sobandi (2019) explains that the application of TGT in grade V elementary school has a positive impact on increasing student learning motivation. Another study by Faulina *et al.* (2024) also stated that this model is very effective in learning Islamic Religious Education, because it encourages collaboration and emotional involvement. Not only that, Liantri, *et al.*, (2024) argued that the integration of media such as Quizizz in the application of TGT in Civics lessons succeeded in increasing students' enthusiasm and interest in the subject matter.

This study aims to explore and summarize scientific findings regarding the application of the TGT model in the context of increasing student learning motivation. By reviewing various relevant research results, this study is expected to provide a comprehensive understanding of the extent to which the TGT model is able to answer the challenge of low learning motivation in the basic education environment.

## METHOD

The Systematic Literature Review (SLR) method using PRISMA Flow is a systematic and structured approach to identify, evaluate, and synthesize relevant research related to a particular topic (Wahyudin & Rahayu, 2020). This method ensures that the literature selection process is transparent and objective. The use of PRISMA Flow is used to explore trends that discuss the stages in conducting a systematic review using PRISMA.

The steps in conducting a Systematic Literature Review (SLR) with the PRISMA Flow approach include several important stages that are systematic and structured. First, researchers need to set objectives and formulate clear research questions as the basis for literature searches. Next, the inclusion and exclusion criteria are determined to filter out articles that are relevant to the study topic. After that, a literature search was conducted on various scientific sources such as Google Scholar, Scopus, and ResearchGate using appropriate keywords. The articles found were then filtered through a screening process based on the title, abstract, and full content of the article. This selection process was visualized in a PRISMA flowchart depicting the number of articles at each stage, from initial identification to the final articles analyzed. Once the relevant articles were collected, the researchers synthesized and analyzed the data to uncover key findings from each article. The findings were then

categorized based on certain aspects such as type of learning or level of education. Finally, recommendations for future research were made based on the gaps or shortcomings found in previous studies (Fitrianto *et al.*, 2023).

The first step in SLR research is to define the purpose of the study as well as the research questions to be answered through the literature review. This involves determining the topic or research area to be investigated and ensuring that the entire literature review process focuses on it (Norlita *et al.*, 2023). If the research objective is to evaluate the effect of a particular learning method on student motivation, then the entire literature search will be directed towards exploring this. Setting clear research objectives and questions is a crucial first step in their SLR process.

Determination of inclusion and exclusion criteria is very important in Systematic Literature Review (SLR) to decide which articles to include or exclude from the review (Andriani, 2022). Inclusion criteria include articles that are relevant to the topic, published within a certain time span, for example within the last five years. On the other hand, exclusion criteria were used to eliminate irrelevant articles, such as articles that only contained literature reviews or that did not contain primary data.

Once the inclusion and exclusion criteria were established, the next step was to conduct a literature search in various scientific sources, such as Google Scholar, Researchgate, and Scopus and (Rusdiana *et al.*, 2022). This search was conducted using important and appropriate words related to the research topic, for example, "Team Games Tournament," or "learning motivation,". Once the literature was found, a screening process was conducted to eliminate irrelevant articles.

The PRISMA Flow diagram is used to visualize the article selection process from

start to finish. This diagram provides a clear picture of the number of articles found at each stage, including articles identified through the initial literature search, articles filtered by

title and abstract, and articles finally included in the analysis (Wahyudin & Rahayu, 2020). The following is an overview of PRISMA Flow:

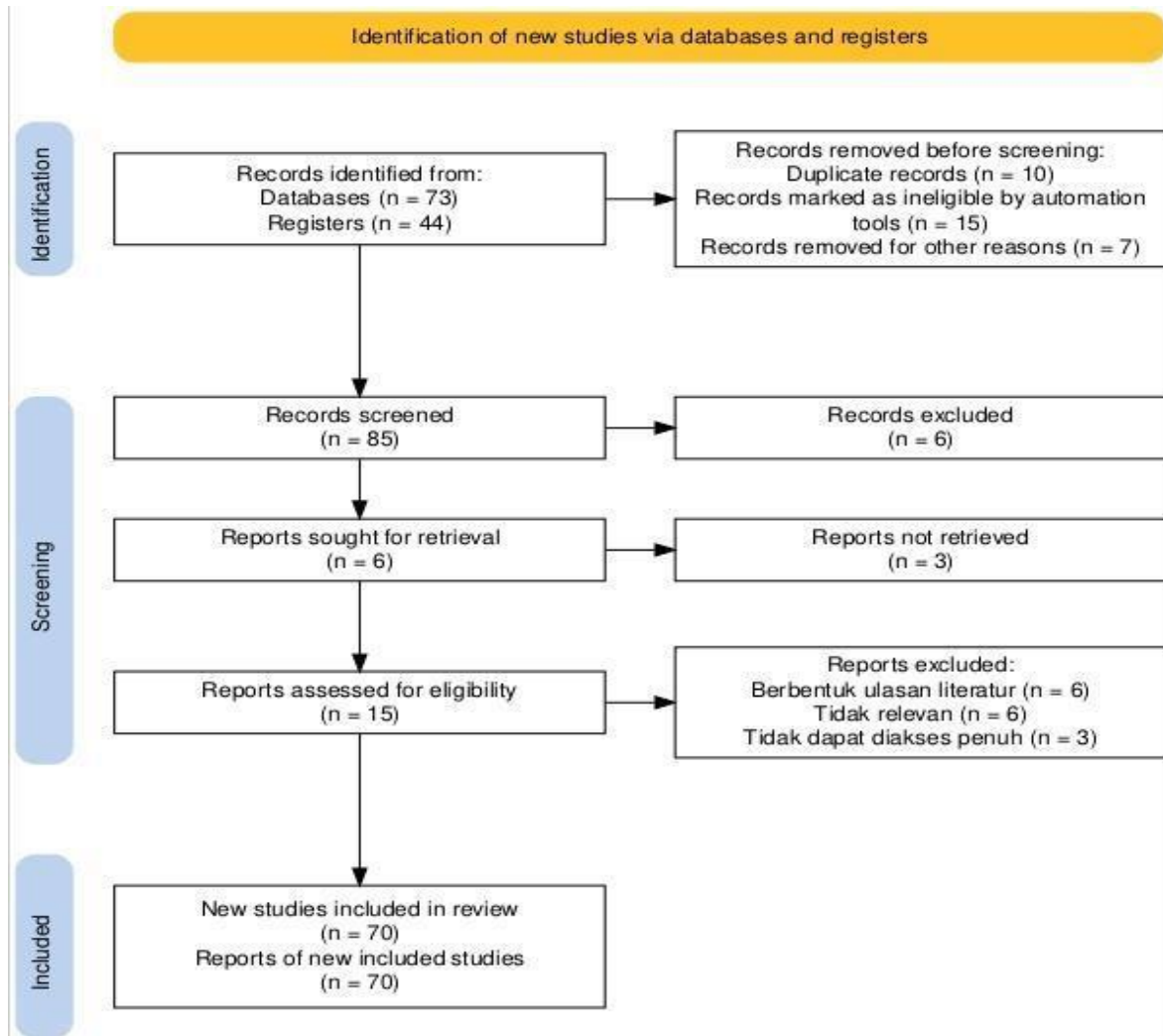


Figure 1. PRISMA Flow Diagram of the Article Screening Process

Once the relevant articles have been selected and screened, the next step is data synthesis and analysis. At this stage, the main findings from each article will be summarized and analyzed. The analysis includes a description of the main findings presenting the research results found in the selected articles, including the methods used, research results, and research context. This synthesis and analysis stage is important to integrate findings from various studies, identify patterns, and provide deeper insights into the topics studied (Wahyudin & Rahayu, 2020).

Next is categorization by grouping the findings based on relevant categories, for example, learning type, education level, or motivation measurement method. At the end of the process, recommendations for future research are provided, specifically to address the gaps found in the existing research, as well as to expand the application of the *TGT* model with technology integration and more innovative learning approaches.

## RESULT AND ANALYSIS

TGT can increase students' motivation and willingness to learn in mathematics lessons

in elementary school (Octariani *et al.*, 2022). In addition, TGT can increase student motivation in elementary school, especially in IPAS lessons (Sinaga *et al.*, 2023). This learning model increases students' active participation and makes students feel more involved in learning. The results of the study on the effectiveness of TGT on motivation are shown in Figure 2 below:

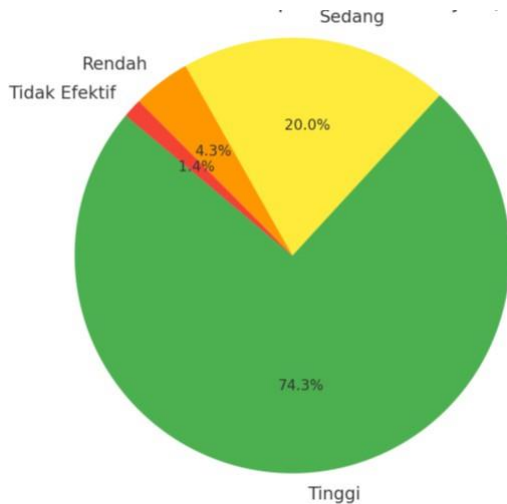


Figure 2. Level of effectiveness of TGT model on motivation.

Based on an analysis of 70 research articles that used the TGT learning model, the data showed that most studies reported an increase in student learning motivation. The pie chart in Figure 1 shows that 52 studies (74%) stated that TGT is very effective in increasing students' learning motivation. These studies mentioned that students became more enthusiastic, active, and motivated in participating in learning activities because of the elements of games, healthy competition, and fun teamwork (Walanty & Agusdianita, 2024).

A total of 14 studies (20%) reported that the application of the TGT model provided a moderate, but not very significant improvement effect. Factors such as lack of teacher preparation, time constraints, or less than optimal supporting media are the cause of moderate results (Prabowo & Wakhudin, 2024). Meanwhile, 3 studies (4%) showed low impact, and only 1 study (1%) stated

that TGT did not have the expected effect on student motivation. This generally occurs in learning conditions that are not in accordance with the characteristics of the TGT method, or due to limited application in certain subjects (Suardi & Muchtar, 2020).

The TGT model is effective in improving student learning outcomes in elementary school math (Armanda & Rahmat, 2024). The study of learning

outcomes is shown in the following figure:

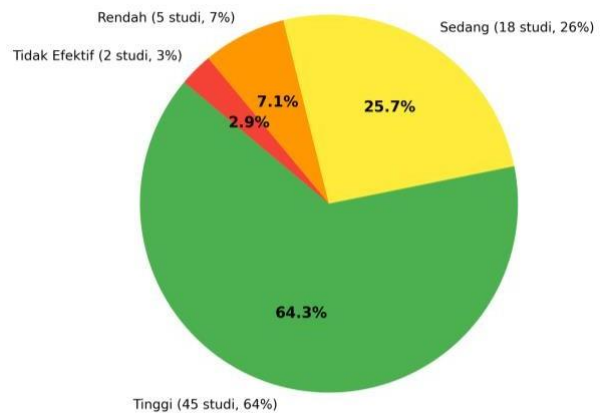


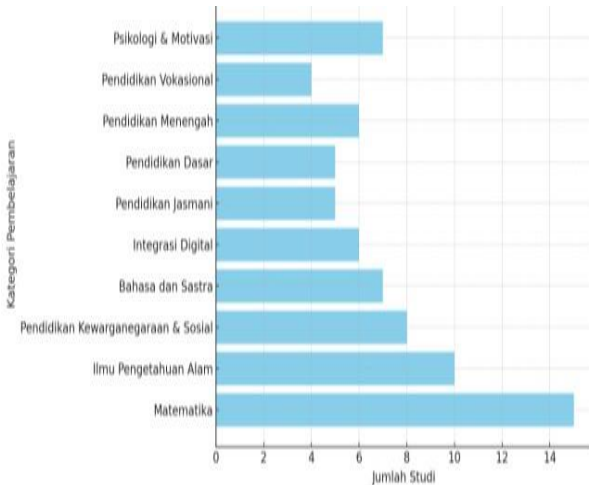
Figure 3. Success rate of TGT learning outcomes on learning outcomes.

Apart from the motivation aspect, this study also evaluated the effect of the TGT model on student learning outcomes. Based on the chart, 45 studies (64%) stated that the TGT model was highly effective in improving student learning outcomes. This improvement is reflected in higher scores, better concept understanding, and improved cognitive skills (Camilla *et al.*, 2024)

A total of 18 studies (26%) mentioned that the improvement in learning outcomes was in the moderate category. Generally, this result is obtained when the TGT model is adapted to heterogeneous classroom conditions or is less supported by optimal learning facilities (Ummah & Mutaqin, 2021). Meanwhile, 5 studies (7%) showed that the increase in learning outcomes was low. Only 2 studies (3%) stated that the use of TGT had no significant impact on student learning

outcomes. This could happen because the suitability of the material with the learning method is not appropriate or there is resistance from students to cooperative methods.

The subjects that most often showed improved learning outcomes were math and science. A subject comparison of the 70 articles reviewed is as follows:



Based on the figure shown, the application of the TGT learning model has been shown to be effective across various learning categories. Most studies focus on math, with 15 studies showing a favorable impact on student motivation and learning outcomes. Natural Science is also a key area with 10 studies showing improved understanding of scientific concepts through TGT. In addition, the application of TGT in civic and social education and language and literature showed favorable results in improving learning motivation.

A pre-test and post-test design was used to assess the impact of TGT on student learning motivation in elementary schools (Cahyani & Mustadi, 2021). There is also a pre-test and post-test method used to assess changes in the motivation of students who learn using TGT in Indonesian (Rizani & Nurlizawati, 2024). A description of the methods used in the application of the TGT model is as follows:

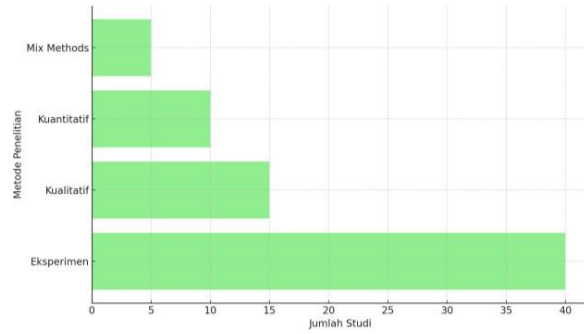


Figure 5. Distribution of Research Design on the Application of the TGT Model

Based on Figure 5, the majority of studies used experimental methods with a total of 40 studies (57%), which focused on testing the effect of TGT on student motivation and learning outcomes. Qualitative methods were used in 15 studies (21%), providing in-depth insights into students' and teachers' experiences during learning. Quantitative methods were noted in 10 studies (14%), numerically measuring the impact of TGT on academic achievement. Meanwhile, 5 studies (7%) used mixed methods, combining quantitative and qualitative approaches for more comprehensive results. Most studies favored experiments to assess the effectiveness of TGT, with qualitative and mixed methods approaches providing additional perspectives.

The application of the TGT model has been implemented at various levels of education, from elementary to higher education. Overall, TGT is widely used at the elementary and secondary school levels to improve students' motivation, participation, and their learning outcomes (Oktaviani *et al.*, 2024). This is shown in the following figure:

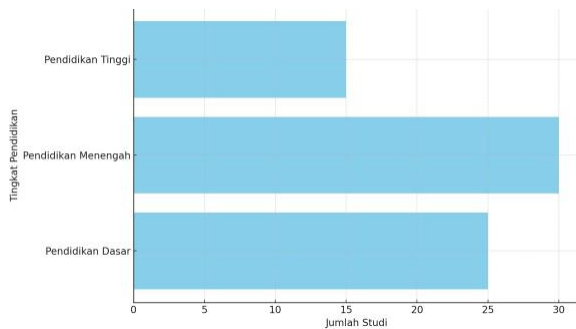


Figure 6. Distribution of education levels using the TGT model.

The figure describes the distribution of education levels in the studies on the application of the TGT learning model. The figure shows that most studies focus on secondary education with 30 studies, followed by primary education which includes 25 studies. Fewer studies focused on higher education, with only 15 studies. This indicates that the TGT model is more widely applied at the secondary and primary school levels.

Several articles show that technology integration such as Quizizz, Blooket, and Android apps can increase motivation and interactivity in learning with the TGT model. TGT research with the use of the PlantNet application in TGT helps students understand biological material more interestingly (Nasution, 2023). Meanwhile, the use of Quizizz to support biology learning through the TGT model, which increases student motivation and learning outcomes (Liantri *et al.*, 2024). The use of technology provides added value in increasing student engagement, especially in the context of a classroom with limited resources. Various integrations of TGT learning are shown in the following figure:

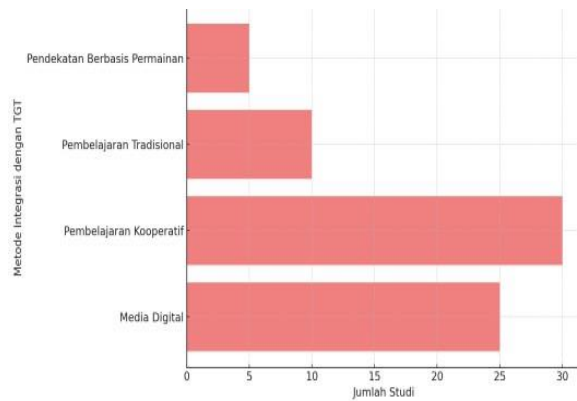


Figure 7. Diagram of integration of TGT model with other variables

The figure shows that cooperative learning is the method most often combined with TGT, recorded in 30 studies. This approach strengthens teamwork and interaction between students, which improves their academic and social skills. Digital media was also frequently used, noted in 25 studies, which utilized tools such as Quizizz and Blooket to make learning more interactive and fun. Traditional learning was noted in 10 studies, although fewer, this integration provided an element of competition that refreshed the conventional classroom atmosphere. Finally, game-based approaches were noted in 5 studies, introducing a more fun way of learning with an element of competition. Overall, TGT was more often combined with cooperative and digital learning, but the integration with traditional and game-based learning still contributed to the diversity of learning methods.

Based on the overall review, the Fishbone diagram illustrates an in-depth analysis of the application of the TGT learning model based on 70 articles that examine various important aspects of this model. The overall picture of the study conducted is as follows:



Figure 8. Fishbone diagram of the TGT model

Each branch in this diagram shows how these factors contribute to the implementation of the TGT model. Student motivation is an important factor in triggering better engagement and learning outcomes, as described in research showing an increase in both intrinsic and extrinsic motivation through TGT (Ambarita, *et al.*, 2024). Positive learning outcomes were noted in various studies, showing that TGT is able to improve students' social, academic and problem-solving skills (Rafida & Nurizka, 2023).

In addition, subjects such as math and science shows significant results with TGT, especially in improving the understanding of difficult basic concepts (Putri *et al.*, 2023). The integration of TGT with other methods, such as digital media and cooperative learning, further enriches the learning process, making learning more interactive and fun (Amni *et al.*, 2021). On the other hand, the application of TGT in primary, secondary, and higher education shows variations in its impact, which is adapted to the context of different educational levels (Nurrohima *et al.*, 2024).

Finally, the methods used in these studies vary between quantitative,

qualitative, experimental, and mixed methods, which allows for a broader measurement of the impact of TGT (Handayani, 2022). Research conducted using these various methods provides a more complete picture of the effectiveness and challenges in implementing TGT.

The findings generated from the literature review on the TGT learning model should be a reference for schools and education agencies to formulate more innovative policies in education. Schools can encourage teachers to adopt collaborative learning models such as TGT by organizing training, seminars, or joint learning forums that focus on developing active learning techniques. Education offices can provide support through policies that facilitate the implementation of interactive learning approaches in the curriculum and provide supporting facilities such as educational technology devices and classrooms that support group activities. To overcome obstacles such as overly large classes or lack of technology, the education office can increase the budget for the procurement of assistive devices and provide guidance for schools that lack facilities, especially in remote areas. In addition, the evaluation system also needs to be changed to not only focus on students' cognitive achievement, but also pay attention to the development of social skills and cooperation

formed through models such as TGT. With this kind of policy, it is expected to create a more adaptive and enjoyable environment, and improve the overall quality of education.

The review shows that the majority of studies on the TGT learning model are still limited to aspects of increasing motivation and academic achievement, especially in subjects such as mathematics and science, and are predominantly conducted in schools with adequate facilities in urban areas. Therefore, future research is recommended to broaden the scope by examining the effectiveness of TGT in other less explored subjects, such as cultural arts and sports. In addition, it is important to evaluate the application of TGT in more diverse contexts, including inclusive education, 3T (frontier, outermost, and disadvantaged) areas, and classes with large numbers of learners. Research that combines TGT with cutting-edge technologies, such as augmented reality or digital learning platforms, also has the potential to contribute to learning innovation. Equally important, longitudinal studies are needed to explore the long-term impact of TGT on character development, social collaboration, and student learning independence.

## CONCLUSION

Based on a review of various articles, the TGT learning model has been shown to play an important role in improving various variables such as motivation, learning outcomes and social skills of students at various levels of education. By combining elements of competition and cooperation, TGT encourages intrinsic and extrinsic motivation and strengthens understanding of the material, especially in subjects such

as math, science and civic education. The application of digital media and cooperative approaches makes learning more interactive and fun. The effectiveness of TGT has been proven through various research methods, both quantitative, qualitative, and mixed, which show that this model is able to optimize the learning process while developing students' critical thinking and social skills.

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