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Application of The Teams Games Tournament Model Through Basketball Games on Cooperation and Responsibility of Elementary School Students

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ABSTRACT

This study was motivated by the low level of cooperation and responsibility among elementary school students in physical education learning. This condition calls for a learning model that can effectively improve both aspects. The purpose of this research was to determine the effect of applying the Teams Games Tournament (TGT) model through basketball games on the cooperation and responsibility of elementary school students. The research was conducted at SDN 139 Sukarasa with a population consisting of all 5th-grade students, totaling 42 students. The sample was divided into two groups: class VA (22 students) as the control group and class VB (20 students) as the experimental group, which received the TGT model treatment. The research method used was a quasi-experiment with a Nonequivalent Control Group Design. The research instruments consisted of a cooperation questionnaire and a responsibility questionnaire, developed based on cooperation and responsibility indicators in physical education learning. Data were collected through pretests and posttests, then analyzed using normality tests, homogeneity tests, t-tests, and Mann-Whitney tests. The results showed significant differences between the control and experimental groups in cooperation and responsibility, with the experimental group showing greater improvement. In conclusion, applying the TGT model through basketball games is effective in enhancing cooperation and responsibility among elementary school students. The study recommends that physical education teachers consider using the TGT model as an interactive, competitive, and enjoyable learning strategy to improve students' social skills and sense of responsibility.

Keywords: Teams Games Tournament; basketball game; cooperation; responsibility; elementary school students

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INTRODUCTION

Education plays a strategic role in shaping a generation that excels not only academically but also possesses strong social character (Fitriani, 2023). In the era of globalization, elementary school students face increasingly complex social challenges, such as increasing individualism, low empathy, and a lack of responsibility for the school environment (Sutisna & Ramdhani, 2021). Physical education, sports, and health (PJOK) is believed to be an effective means of developing character through learning that integrates physical activity and social values (Hidayat, 2022; Wahyudi et al., 2018).

Physical education in elementary schools serves not only as a physical development tool but also as a medium for developing the values of discipline, cooperation, responsibility, creativity, and innovation (Kurniawan & Firmansyah, 2020; Rosmi, 2016).

Physical education activities designed around group work can help students develop social skills from an early age through direct interaction and structured collaboration (Ningrum, 2022). One potential activity for developing these skills is team games such as basketball, which require coordination, communication, and a sense of team responsibility.

Basketball is a team sport played by two teams and requires each player to work together to achieve a common goal (Fadhilah & Darmawan, 2020). In elementary school, basketball not only teaches technical skills such as dribbling, passing, and shooting, but also instills the values of sportsmanship, respect for opponents, and teamwork (Cahyadi et al., 2022; Nugraha & Mahardika, 2023). This activity facilitates students' communication skills, respect for opinions, and consistent adherence to game rules.

Cooperation in education is defined as the ability to actively participate in a group, share responsibilities, and support each other in achieving common goals (Kisworo et al., 2019; Sari & Prasetyo, 2021). In basketball, cooperation is seen in coordinating offensive and defensive strategies, assisting each other on the court, and maintaining team cohesion under pressure (Wicaksono & Hidayah, 2024). This makes basketball an effective social learning medium in elementary schools.

In addition to cooperation, responsibility is an important social skill that includes accepting and carrying out assigned obligations (Ardila et al., 2017; Handayani, 2022). In the context of basketball, responsibility is seen when students obey rules, take care of equipment, and diligently carry out their roles for the team's success (Putra & Zainuddin, 2023). Learning that emphasizes this value helps shape sustainable positive character.

One effective approach to fostering cooperation and responsibility is the Teams Games Tournament (TGT) cooperative learning model. This model combines group-based learning, educational games, and healthy competition to encourage positive interactions among students (Mulyani, 2021; Slavin, 2015). Through TGT, students from diverse backgrounds can help each other achieve shared learning goals.

TGT has been shown to increase students' learning motivation, active engagement, and social skills (Rahman et al., 2020). Previous research has shown this model to be effective in enhancing classroom collaboration, particularly in team sports (Fauziyah et al., 2019; Sholihah, 2023). The game and competitive elements contained in TGT create a fun learning environment while also demanding responsibility from each team member.

Several studies have also highlighted the effectiveness of TGT in learning large ball games. By Wahyudi et al. (2018) found a significant improvement in students' cooperation skills through the implementation of TGT. Nisa et al. (2024) reported that basketball can specifically develop cooperation, discipline, and responsibility in elementary school students. However, studies integrating TGT with basketball to simultaneously improve cooperation and responsibility are still limited, making this research relevant.

The novelty of this research lies in the application of TGT in elementary school basketball instruction, with the simultaneous goal of developing two key social skills: cooperation and responsibility. This approach addresses the limitations of previous research, which generally focused on only one aspect of social skills or failed to specifically combine cooperative learning models with team games.

Thus, this research is expected to provide theoretical contributions to the development of studies on the integration of cooperative models in physical education, as well as practical contributions for PJOK teachers in designing learning that hones technical sports skills while shaping students' social character from an early age (Mukarromah et al., 2021).

METHOD

This study used a quantitative method with a quasi-experimental design of the Non-equivalent Control Group Design type, which began with a pretest and ended with a posttest to compare the results before and after treatment (Privitera & Delzell, 2019; Sugiyono, 2016). The location of the study was SDN 139 Sukarasa, Bandung City, in the even semester of the 2024/2025 academic year. The sample was obtained through purposive sampling, consisting of class VA as the control group (22 students) and class VB as the experimental group (20 students).

Data collection was conducted through pretest and posttest using 41 questions (38 multiple choice, 3 essay) to measure student cooperation and responsibility, observation during the learning process using observation sheets for cooperation based on Teamwork Skill Inventory (Strom & Strom, 2011) and responsibility based on Teaching Personal and Social Responsibility (Hellison, 2011), as well as documentation of school data and photos of activities. The instrument has been validated by experts, tested for empirical validity, and demonstrated high reliability (Cronbach's Alpha 0.79–0.89).

The research procedures included preparation (initial observation, preparation of TGT-based basketball learning tools, instrument validation, research permit), implementation (TGT learning in the experimental group and conventional learning in the control group for 10 meetings, accompanied by observation), and evaluation (data collection, normality and homogeneity tests, hypothesis testing). Data analysis was conducted using SPSS version 21 through descriptive analysis, Kolmogorov–Smirnov test, Levene's Test, and independent sample t-test with a significance level of 5% (Fadluloh et al., 2024).

RESULTS AND DISCUSSION

Findings

The control class experienced a slight decrease in cooperation scores from the pretest (69.05) to the posttest (67.59). The experimental class experienced a significant increase, namely an average pretest score of 66.05 to 79.90 in the posttest. The increase that occurred in the experimental class shows that the use of the Teams Games Tournament (TGT) learning model contributes positively to improving the cooperation skills of elementary school students. In addition to cooperation skills, this researcher also examined aspects of student responsibility before and after learning with the Teams Games Tournament (TGT) model. Data were obtained from the student responsibility instrument and measurements were carried out for both the control and experimental classes.

Table 1. Average Score of Pretest and Posttest of Cooperation

Sample	Average Pretest Score	Posttest Mean Score
Control Class	69.05	67.59
Experimental Class	66.05	79.90

In the control class, there was an increase in the responsibility score from an average pretest of 30.05 to 32.73 in the posttest. The experimental class showed a significantly higher increase, from 30.09 to 39.90. The greater increase in the experimental class indicates that the implementation of the Teams Games Tournament (TGT) learning model

is more effective in improving students' responsibility attitudes compared to learning with other models given to the control class.

Table 2. Average Responsibility Score

Sample	Average Pretest Score	Posttest Mean Score
Control Class	30.05	32.73
Experimental Class	30.09	39.90

The cooperation pretest and responsibility posttest data showed a normal distribution, while the cooperation posttest and responsibility pretest data for the experimental class showed a non-normal distribution (Sig. < 0.05). Therefore, the statistical tests used were adjusted. If the data were normal and homogeneous, the t-test was used; otherwise, the non-parametric Mann-Whitney test was used.

Table 3. Pretest and Posttest Normality Test Cooperation and Responsibility

Sample	Data Types	Kolmogorov-Smirnov Sig.	Shapiro-Wilk Sig.	Conclusion
Control Class	Collaboration Pretest	0.200	0.416	Normal
	Collaboration Posttest	0.200	0.106	Normal
	Responsibility Pretest	0.53	0.191	Normal
	Responsibility Posttest	0.200	0.188	Normal
Experimental Class	Collaboration Pretest	0.200	0.181	Normal
	Collaboration Posttest	0.169	0.025	Abnormal
	Responsibility Pretest	0.033	0.001	Abnormal
	Responsibility Posttest	0.200	0.188	Normal

Table 1. Results of the Homogeneity of Variance Test of Pretest and Posttest Cooperation and Responsibility.

Measured Aspects	Test Types	F	Sig.	Information
Collaboration Pretest	Levene's	2,975	0.092	Homogeneous
Collaboration Posttest	Levene's	5,872	0.034	Not Homogeneous
Responsibility Pretest	Levene's	1,295	0.262	Homogeneous
Responsibility Posttest	Levene's	4,663	0.000	Not Homogeneous

From the results of the table above, it is known that the cooperation pretest and responsibility pretest data are declared homogeneous, because the sig. value is >0.05. However, in the cooperation pretest and responsibility posttest, the data are declared non-homogeneous (sig. ,0.05), meaning that the variance between groups is significantly different.

Table 2. Results of the Student Cooperation Pretest T-Test

Group	N	Mean	Standard Deviation	Sig. (2-tailed)
Control	22	69.06	7.71	
Experiment	20	66.65	5.42	0.256

Based on the results of the table above, the Sig. (2-tailed) value = 0.256 > 0.05, it can be concluded that there is no significant difference between the pretest scores of student cooperation in the control group and the experimental group. Thus, the initial abilities of students from both groups in terms of cooperation are at a relatively similar level, which indicates that both groups have initial equality before being given treatment.

Table 3. Student Responsibility Pretest t-Test

Group	N	Mean	Standard Deviation	Sig. (2-tailed)
Control	22	30.05	2.77	
Experiment	20	30.09	2.88	0.262

Sig. Value (2-tailed) = 0.262 > 0.05, so it can be concluded that there is no significant difference in the pretest scores of responsibility between the control group and the experimental group. This means that before being given treatment, students from both groups had a relatively equal level of responsibility, thus allowing the research to run fairly and objectively. The t-test conducted on the pretest scores showed that there was no significant difference between the experimental and control groups, either in terms of cooperation or responsibility. This is quite important to prove that both groups are in a balanced condition, so that if there is a difference in the posttest, then the difference can be attributed to the treatment of the Teams Games Tournament (TGT) learning model.

Table 4. Results of the Mann-Whitney Posttest of Cooperation

Group	N	Mean	Standard Deviation
Control	22	67.59	6.15
Experiment	20	79.9	7.35

Sig. value = 0.000 < 0.05, so there is a significant difference between the posttest scores of student cooperation in the control group and the experimental group. Thus, it can be concluded that the implementation of the Teams Games Tournament (TGT) learning model has a significant positive effect on elementary school student cooperation.

Table 5. Results of the Mann-Whitney Posttest of Responsibility.

Group	N	Mean	Standard Deviation
Control	22	32.73	4.75
Experiment	20	39.90	2.97

Sig. value = 0.000 < 0.05, so there is a significant difference between the posttest scores of students' responsibility in the control and experimental classes. This shows that the Teams Games Tournament (TGT) learning model also has a significant influence on increasing students' responsibility, especially in the context of learning basketball.

Discussion

This study shows that the implementation of the Teams Games Tournament (TGT) learning model combined with basketball activities has a positive impact on improving cooperation and responsibility in elementary school students. During the learning process, students in the experimental group appeared more active in working together, engaging in group discussions, and demonstrating mutual support in completing joint tasks. The Teams Games Tournament (TGT) learning model creates a fun, playful, competitive atmosphere while still prioritizing collaborative values. In each game and tournament session, students are required to work together so that their team achieves the best results. This situation naturally trains students' collaboration skills, such as sharing information, expressing opinions well, listening to friends, and making decisions together. The results of this study reinforce the findings of (Widi, 2022), who stated that the

implementation of TGT in learning can improve students' collaboration skills through active involvement in group activities.

Furthermore, students' responsibilities also develop during the implementation of the Teams Games Tournament (TGT) learning model. In a structured basketball game using the TGT model, each student has a specific role and responsibility within the team or group. They must adhere to the rules, manage time, and be accountable for the group's success. These results align with research by (Hidayat, 2022), which states that the Teams Games Tournament (TGT) learning model encourages students to be more responsible because each team member plays a crucial role in the group's success.

Learning through basketball not only trains motor skills but also instills character values. With the TGT model, students not only learn individually but are also encouraged to build healthy social relationships. This aligns with the findings of (Ainun & Jayabama, 2020), who concluded that learning strategies involving games and teamwork can improve students' sense of responsibility and social skills during the learning process.

Overall, learning using the Teams Games Tournament (TGT) learning model through basketball created a fun atmosphere, encouraged student activity, and fostered social character traits such as cooperation and responsibility. The results of this study support and strengthen previous research showing that cooperative learning models, such as TGT, are effective in developing elementary school students' social skills.

CONCLUSION

This study demonstrates that implementing the Teams Games Tournament (TGT) learning model through basketball can improve cooperation and responsibility in elementary school students. Improved cooperation is evident in positive interactions, information sharing, and active participation in groups, while responsibility is reflected in consistent task performance and concern for the team.

These findings confirm that TGT is effective in Physical Education (PJOK) instruction, developing both social and technical skills. Teachers are advised to utilize this model as a fun and character-building learning strategy, with school support in providing facilities and training. Future research can be expanded to other social variables or different subjects to broaden its application.

CONFLICT OF INTEREST

There were no conflicts that occurred in this study.

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