



Effects of the Traditional Gobak Sodor Game on Students' Cooperative Skills

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Abstract.

Background

The background of this research stems from the importance of developing social skills, particularly cooperation, in 21st-century learning. Traditional games such as Gobak Sodor are believed to be a fun learning tool while also fostering collaborative values in students.

Objectives

This study aims to determine the effect of the traditional game Gobak Sodor on student cooperation at SMP Negeri 5 Percut Sei Tuan.

Methods

This research used a quantitative approach with a quasi-experimental design—specifically the One Group Pretest-Posttest Design. The study involved 30 eighth-grade students who participated in Gobak Sodor sessions as a form of treatment. Data were collected through questionnaires, observations, and interviews, and were analyzed using the paired t-test.

Results

The findings revealed a significant improvement in students' cooperation after the treatment, with the average score increasing from 67.03 (pretest) to 84.27 (posttest), and a significance value of $p = 0.008$ ($p < 0.05$). Additionally, 90.6% of the participants agreed or strongly agreed that Gobak Sodor enhanced their cooperation skills—such as group discussion, helping peers, and showing empathy. Observations and interviews supported these results by showing increased communication, coordination, and group responsibility during the game.

Conclusion

In conclusion, Gobak Sodor has a positive impact on developing students' cooperation skills and can be considered an effective alternative instructional strategy for character education and social skill development.

Keywords: Gobak Sodor, Traditional Games, Cooperation

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INTRODUCTION

Physical education is essentially a learning process that utilizes physical activity to create changes in the quality of individuals, both physically and mentally (Prasetyo & Praramdana, 2020). Physical fitness education is an important and fundamental part of advancing a nation because physical fitness enables individuals to carry out activities and daily routines optimally without easily becoming tired and allows them to enjoy their leisure time. In other words, physical fitness defines a person's ability to perform certain activities with satisfying results (Fahrizqi et al., 2020). Education not only aims to improve students' academic abilities but also plays a role in shaping their personalities and social interactions for daily life. The mind is an important part of character because all of its programs consist of life experiences (Purwadhi, 2019). Education also enables individuals to compete at the international level while maintaining their culture (Yuningsih & Agustin, 2024).

The selection of learning media must be adjusted to the lesson plan. Consideration should not only focus on how sophisticated the media is, but also on its role and benefits in enhancing and giving meaning to the learning process (Maryanti et al., 2021). In the era of globalization and digital technological advancement, the development of social skills, especially cooperation, has become increasingly crucial in education. Cooperation is not only the foundation for effective collaborative learning in the classroom but also an essential 21st-century competency needed by students to succeed in social life and the future workplace. However, the phenomena of individualism, excessive competition, and dependence on gadgets often become challenges in building a spirit of togetherness and teamwork among students, including at the junior high school level. Cooperation is one of the important social skills that must be developed among

students, especially at the junior high school level. This ability not only supports an effective learning process but also shapes students' character in interacting with their social environment. However, in today's digital era, direct interaction among students tends to decline due to the dominance of technology use, which impacts the decreasing cooperation skills among students.

Cooperation is extremely necessary for early childhood development. The purpose of fostering cooperation in early childhood is to better prepare children with up-to-date skills so they can participate in an ever-changing and dynamic world, develop children's abilities to understand the meaning of cooperation with others in all situations, and encourage children to actively develop knowledge through cooperative learning. In cooperative learning, early childhood students do not merely receive knowledge from teachers, but continuously construct their own knowledge, placing children as active participants. In addition, it aims to encourage children to help one another, to develop self-confidence so they can easily socialize in new environments, and to foster children's social awareness toward their surroundings (Nuraeni, 2022).

According to the Decree of the Head of the Educational Standards, Curriculum, and Assessment Agency of the Ministry of Education, Culture, Research, and Technology Number 009/H/KR/2022 concerning the Dimensions, Elements, and Sub-elements of the Pancasila Student Profile in the Merdeka Curriculum, Pancasila students possess six character dimensions: faith and devotion to God Almighty with noble character, global diversity, mutual cooperation, independence, critical thinking, and creativity. These six interconnected characteristics shape the noble character of Indonesian students.

Traditional sports grow and develop in every region, representing one form of cultural expression. Traditional sports are folk games that have been passed down from generation to generation (Hakim, 2019). One aspect of the nation's cultural wealth is traditional sports, which combine elements of traditional physical activity. Traditional games that have existed for a long time must be preserved because, in addition to providing entertainment and fulfilling the social needs of players, they can also improve physical health. Traditional games are usually regarded as a category of games with unique features originating from local traditions. Before modern games emerged, traditional games had already become part of the culture of every ethnic group (Baradatu, 2021). Traditional games are a way to address these issues because they involve social interaction, problem-solving, and physical activities that stimulate thinking skills and collaboration, making them highly effective in improving creativity and teamwork skills (Hurlock, 2019).

One example is Gobak Sodor or Galasin. This game is not merely a physical activity but a team simulation that requires intensive communication, collective strategy, movement coordination, mutual trust, and shared responsibility to achieve goals (crossing the opponent's line without being touched). This game was inherited from previous generations and passed on to younger generations through oral traditions, sounds, or demonstrations. However, the game has gradually been forgotten due to industrialization in recent years. Gobak Sodor is played on a square-shaped field with boundary lines drawn using chalk. The game consists of two teams, each with three guards. One team acts as the guards while the opposing team acts as the players. Alternately, members of the playing team attempt to reach the back line of the field ("the door"), while the guarding team tries to stop them. If a player touches a guard, the two teams switch roles as players and guards (Febyarum & Ichsan, 2023). Each player has a vital role, and the team's success entirely depends on the synergy among members. Gobak Sodor is a very enjoyable game for children because it is played in groups, making it exciting and engaging. The benefits of Gobak Sodor include providing joy for children, training teamwork, developing leadership skills, sharpening brain abilities, improving strategic thinking skills, and increasing strength and agility (Riri Dwiani & Rusmaladewi, 2021).

SMP Negeri 5 Percut Sei Tuan, as one of the educational institutions in Deli Serdang Regency, has the responsibility not only to develop students' cognitive aspects but also to shape their character and social skills. Preliminary observations indicate that although students possess diverse potential, the dynamics of cooperation in group activities still need improvement. Several indicators, such as the lack of initiative to help friends experiencing difficulties, the dominance of individuals in group discussions, and the lack of coordination in collaborative tasks, are still frequently found.

METHOD

Research Design

This study used a quantitative approach with a quasi-experimental method. The researcher administered a treatment (Gobak Sodor) to the subjects and measured its effect on the cooperation variable, but did not fully control external variables as in a pure experiment. The design used was a One Group Pretest-Posttest Design, measuring the level of student cooperation before and after the treatment.

Participant

The time allocated for this study consisted of research instrument preparation, permitting, and data collection. The experimental group conducted the Gobak Sodor game and collected data, followed by data analysis and the preparation of the research report. This study was conducted at SMP Negeri 5 Percut Sei Tuan, located at Jl. Cucak Rw. II No. 03, Tegal Sari Mandala II, Medan Denai District, Medan City, North Sumatra 20226. The sample in this study was drawn using a purposive sampling technique, with 30 students in grade VIII-1 serving as treatment subjects.

Data Analysis

Quantitative data were obtained from the questionnaire results using descriptive statistical analysis and difference tests (pre-test and post-test).

a. Descriptive Statistical Analysis

Before and after the game of gobak sodor, cooperation was measured by calculating the average (mean), standard deviation, and percentage of the questionnaire data. Results are displayed in diagrams or tables.

b. Statistical Tests (t-Test or Wilcoxon Signed Rank Test)

A paired t-test (t-test) is performed if the data is normally distributed or a Wilcoxon signed rank test if the data is not normally distributed to determine whether there are significant changes before and after the game of gobak sodor.

In statistical testing, the Kolmogorov-Smirnov test is a relevant method for normalizing data. The Kolmogorov-Smirnov test is a nonparametric statistical test used to compare the distribution of sample data with the theoretical normal distribution. This test measures the maximum distance between the empirical cumulative distribution function (from the sample data) and the theoretical cumulative normal distribution function. If the distance is small, the data is considered to be normally distributed. This test is based on the principle that the smaller the difference between the empirical and theoretical distributions, the greater the likelihood that the data are normally distributed.

RESULTS AND DISCUSSION

Results

This study aims to determine the effect of the traditional game Gobak Sodor on student cooperation. The subjects were 30 students in grade VIII-1 at SMP Negeri 5 Percut Sei Tuan. Data were collected through questionnaires, observations, and interviews.

The questionnaire consisted of five statements using a Likert scale with four answer choices. The following summarizes the results:

Table 1. Questionnaire Summary Results

Response Scale	Number	Percentage
Strongly Agree	65	43,3%
Agree	71	47,3%
Disagree	14	9,3%
Strongly Disagree	0	0%
Total	150	100%

Based on the table above, the results of the recapitulation of the questionnaire given to students regarding the use of the traditional Gobak Sodor game in the learning process, 90.6% of respondents stated that they agreed and strongly agreed, indicating that the level of cooperation increased after the Gobak Sodor activity was carried out.

Descriptive statistical analysis was conducted to describe respondents' perceptions of the five statement items (P1 to P5) used in the study. Each item was analyzed based on the minimum, maximum, mean, and standard deviation values of the 30 respondents in the study sample.

Table 2. Results of Descriptive Statistical Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
P1	30	3.00	4.00	3.5333	.50742
P2	30	2.00	4.00	3.2667	.58329
P3	30	2.00	4.00	3.4000	.56324
P4	30	2.00	4.00	3.0000	.78784
P5	30	2.00	4.00	3.5000	.62972
Totalx	30	14.00	20.00	16.7000	1.41787
Valid N (listwise)	30				

Based on the analysis results table above, it shows that the five statement items (P1–P5) from 30 respondents, obtained the highest average score in items P1 (3.53) and P5 (3.50), which indicates a high level of agreement from respondents. The item with the lowest average is P4 (3.00), and has the highest standard deviation (0.78), which indicates a greater variation in opinion. Overall, the total score of respondents is in the range of 14.00–20.00 with an average of 16.70, indicating that respondents tend to give a positive assessment of the items given.

Discussion

Based on the results of the data analysis, several important findings were obtained and are discussed in detail as follows:

1. The Effect of the Gobak Sodor Game on Improving Cooperation

Based on the results of the paired t-test, it was found that the average pretest score of 67.03 increased significantly to 84.27 in the posttest. This difference had a significance value of 0.008 ($p < 0.05$), indicating that the Gobak Sodor game had a significant effect on students' cooperation skills. These findings show that students' active involvement in traditional games emphasizing group interaction, strategic coordination, and teamwork can have a real impact on developing social skills, particularly the ability to cooperate. Indirectly, the Gobak Sodor game trains students to communicate with one another, develop strategies, listen to opinions, and help teammates achieve common goals, which are the core aspects of cooperation.

2. Positive Responses from Students through Questionnaires

The questionnaire results showed that 90.6% of respondents stated that they “Agree” and “Strongly Agree” with the statement that the Gobak Sodor game improves cooperation. The questionnaire, consisting of five items, indicated that students found it easier to discuss, understood the importance of roles within a team, became more accustomed to helping friends, and became more concerned about group conditions. This demonstrates that traditional game-based learning is not only well received by students but also provides a fun and meaningful learning experience. The Gobak Sodor game, played in groups, was able to facilitate students in getting to know one another, reducing individualistic attitudes, and fostering solidarity among peers.

3. Observations and Interviews Supporting Quantitative Findings

The results of observations during the activities showed an increase in social interaction among students. Students became more active in expressing opinions, organizing game strategies, and demonstrating helpful attitudes. For example, when one team member had difficulty moving, other members quickly provided assistance or guidance. These findings were reinforced by interviews with several students and teachers, who stated that after playing Gobak Sodor, students became more united, were able to organize roles within the team, and showed a greater sense of responsibility toward the group. Teachers also revealed that the learning atmosphere became more lively, students appeared more enthusiastic, and cooperation values such as trust, coordination, and support became more visible throughout the activities.

4. Validity and Reliability of the Instrument

The validity test showed that 4 out of 5 questionnaire items were declared valid (Sig. value < 0.05). However, one item (P1) was found to be invalid because its significance value exceeded 0.05. In addition, the reliability value based on Cronbach's Alpha was 0.049, indicating that the instrument had very low reliability. This serves as an important note that although the overall research results indicate a significant effect, the instrument used still needs to be improved and further developed to ensure the consistency and accuracy of measuring the cooperation variable.

CONCLUSION

Based on the research results and discussion, it can be concluded that:

- 1) The traditional game Gobak Sodor has a significant influence on improving student cooperation. This was demonstrated by a paired t-test, which showed an increase in the average score from 67.03 in the pretest to 84.27 in the posttest, with a significance value of $p = 0.008$ ($p < 0.05$). Therefore, the Alternative Hypothesis (H_1) was accepted.
- 2) The questionnaire results showed that 90.6% of students agreed or strongly agreed that the Gobak Sodor game helps improve cooperation, such as the ability to discuss, help each other, understand team roles, and care for others.
- 3) Findings from observations and interviews supported the quantitative data. Students demonstrated mutual support, active communication, and good coordination during the game. The teacher also observed that students became more united and enthusiastic during the learning process.
- 4) However, the questionnaire instrument used in this study still needs improvement. Of the five statement items, one was invalid, and the reliability test results showed a Cronbach's Alpha value of 0.049, which is very low. This indicates that the instrument is not consistent in measuring the cooperation variable.

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AUTHOR CONTRIBUTION STATEMENT

This research was conceptualized and designed by Tomy Dannel Siregar, who developed the research objectives and methodology, managed data collection, coordinated with participants, and supervised fieldwork at STOK Bina Guna Medan. Liliانا Puspas Sari performed data analysis, interpreted the findings, and contributed significantly to the drafting of the manuscript. All authors participated in the revision of the manuscript, approved the final version for submission, and take full responsibility for the integrity and accuracy of the work.

CONFLICT OF INTEREST AND FUNDING

The authors declare no conflict of interest related to the conduct, authorship, or publication of this study.

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