

The Influence Of Traditional Sports Games On Learning Motivation In Physical Education Among Grade V Elementary School Students

Tri Sutrisno^{1*}, Anjas Asmara Subekti²

^{1,2}Universitas Veteran Bangun Nusantara, Indonesia

E-mail: 1triynwasutrisno@gmail.com, 2anjasubketi@gmail.com

* Corresponding Author

ARTICLE INFO

History

Received : 2025-05-11

Revised : 2025-06-26

Accepted : 2025-06-28

Published : 2025-06-30

Keywords

Gobak Sodor, Jump Rope, Learning Motivation, Physical Education, Traditional Sports Games



© 2025 The Author(s)

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

ABSTRACT

This study investigates the influence of traditional sports games on students' learning motivation in physical education. Traditional sports games, such as *Gobak Sodor* and Jump Rope (*Lompat Tali*), were implemented as interventions to enrich the learning process. The research employed an experimental method with a one-group pretest-posttest design. The participants were 25 Grade V students of SDN 1 Dukuh, selected through purposive sampling. The intervention was conducted over a period of six weeks, and data on learning motivation were collected using a standardized motivation questionnaire. Hypothesis testing was performed using a paired-sample t-test.

The results showed a significant difference in students' motivation levels before and after the intervention, with a t-count value greater than the t-table ($-3.441 > 2.262$). These findings suggest that the integration of traditional sports games can enhance students' motivation to learn physical education. However, given the study design, the conclusion should be interpreted as evidence of an association rather than definitive causal proof.

1. INTRODUCTION

Education plays a crucial role in social life as a structured and logical effort to nurture individuals into maturity, enabling them to make wise decisions and contribute to society ([Mashud, 2017](#)). In this context, Physical Education, Sports, and Health (PJOK) in elementary schools serves as a subject that develops students' physical, psychomotor, cognitive, and affective aspects. Through PJOK learning, students are guided not only to improve physical fitness but also to cultivate social attitudes, discipline, cooperation, and sportsmanship, which align with national education goals (Anda, 2021). PJOK strives to achieve these goals through physical activity that positively impacts health, growth, and development ([Nurhasanah & Sobandi, 2016](#)).

From the perspective of physical education objectives, PJOK is expected to enhance fundamental movement skills. Teachers are tasked with improving these skills in every sport as outlined in the Learning Program Plan (RPP) ([Taufik, 2019](#)). However, in practice, students often show reluctance to learn motor skills and prefer sports involving games or competitions. Many teachers accommodate these preferences, which risks students failing to master basic movements. Moreover, repetitive lessons often lead to boredom, while students show greater interest in game-based learning ([Nugraha & Manggalastawa, 2021](#)).

The rapid development of modern sports games has made them popular and widespread, while traditional games are increasingly marginalized and unfamiliar to

students. Yet, traditional games hold significant educational value. They foster cooperation, tolerance, enjoyment, self-confidence, and motivation to learn. Traditional games, such as *Gobak Sodor* and Jump Rope (*Lompat Tali*), are rooted in local culture with rules and concepts passed down from ancient times. According to [Al Asror \(n.d.\)](#), traditional games are not merely recreational activities but also tools to maintain relationships and social comfort, carrying values essential for children's everyday development.

Based on these considerations, it is important to examine the influence of traditional sports games on learning motivation in elementary school PJOK. This research is expected to contribute to the development of innovative, enjoyable, and culturally grounded PJOK learning models, thereby improving the quality of physical education in elementary schools.

2. METHODS

2.1 Research Design

This study employed a quantitative experimental approach using a One-Group Pretest-Posttest design (Pra-experimental design). The design allowed the researcher to measure the effect of traditional sports games on students' learning motivation by comparing scores before and after the intervention (Zhang et al., 2019).

Equation and formula

This Design can be described as follows:

$O1 \times O2$

Information:

$O1$ = Pretest scores (before treatment)

X = Treatment (traditional sports games intervention)

$O2$ = Posttest scores (after treatment)

2.2 Participants/ Sample

The population of this study consisted of Grade V students at SDN 1 Dukuh. The sample was determined using a total sampling technique, involving 25 students. All participants were included to ensure representativeness of the population.

Ethical procedures were followed:

1. Research permission was obtained from the school administration.
2. Parental consent and participant assent were secured prior to data collection.

2.3 Data Collection

Data were collected using a learning motivation questionnaire designed to measure students' motivation levels in physical education.

1. Instrument: Structured questionnaire with closed-ended items.
2. Procedure:
 - 1) Pretest ($O1$): Administered before the treatment.
 - 2) Treatment (X): Implementation of *Gobak Sodor* and Jump Rope (*Lompat Tali*) as traditional sports games.
 - a) Selection of games: Chosen based on cultural relevance, accessibility, and suitability for elementary school students.
 - b) Integration into curriculum: Conducted within PE lessons over a period of six weeks, aligned with the Learning Program Plan (RPP).
 - c) Implementation: Each session included structured rules, teacher facilitation, and reflection activities to connect the games with motivational aspects of learning.
 - 3) Posttest ($O2$): Administered after the treatment to measure changes in motivation.

2.4 Data Analysis

The collected data were analyzed using quantitative statistical methods.

1. Hypothesis Testing: A paired two-sample t-test for means was applied to compare pretest and posttest scores.
2. Software: Statistical analysis was conducted using standard statistical software (e.g., SPSS or equivalent).
3. Purpose: To determine whether traditional games significantly increased student motivation in learning physical education.

3. RESULTS AND DISCUSSION

3.1 Results

Table 1. Data Description (Paired Samples Statistics)

	Mean	N	Standard	Standard Error Mean
Pre Test	24.04	25	2.557	0.511
Post Test	27.48	25	3.454	0.691

The descriptive statistics show that the average motivation score increased from 24.04 before the intervention to 27.48 after the intervention. The higher standard deviation in the posttest (3.454) indicates greater variability in student responses after participating in traditional games.

The mean difference between pretest and posttest scores was 3.44 points, suggesting a notable improvement in student motivation following the intervention

Table 2. Paired Sample Correlation

	N	Correlation	Significant
Pre Test & Post Test	25	-.394	0.051

The correlation between pretest and posttest scores was -0.394 with a significance value of 0.051. This indicates a moderate negative relationship, meaning that students with lower pretest scores tended to show greater improvement after the intervention.

Table 3. Paired Samples Test

Mean Difference	T-value	Df	P-value	95% CI (Lower-Upper)	Cohen's d
-3.44	-3.441	24	0.002	(-5.36, -1.52)	0.69

The paired-samples t-test revealed a statistically significant difference between pretest and posttest scores ($t = -3.441$, $p < 0.05$). The confidence interval $[-5.36, -1.52]$ confirms that the improvement was consistent across the sample. The effect size (Cohen's $d = 0.69$) indicates a medium practical impact, meaning the intervention had a meaningful influence on student motivation.

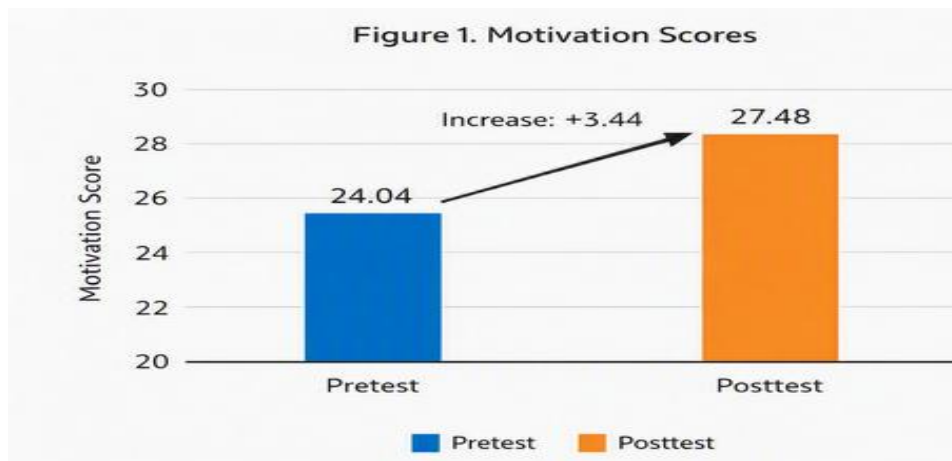


Figure 1. Difference Between Pretest and Posttest Scores

The results confirm that the implementation of traditional sports games in PE lessons significantly improved student motivation. The statistical evidence ($p = 0.002$, Cohen's $d = 0.69$) shows that the intervention was both effective and practically meaningful. Importantly, the variability in posttest scores suggests that different students may have experienced different motivational benefits depending on the type of game played, which opens opportunities for further research into game-specific effects.

3.2 Discussion

The results of this study indicate that the implementation of traditional sports games in Physical Education (PE) lessons significantly increased student motivation. This improvement was evidenced by higher mean scores in the posttest compared to the pretest, with statistical analysis confirming a meaningful difference ($t = -3.441$, $p = 0.002$, Cohen's $d = 0.69$). The upward trend demonstrates that traditional games such as *Gobak Sodor* and *Jump Rope (Lompat Tali)* contributed to higher levels of student motivation, making the learning environment more contextual and engaging.

The motivational effect of traditional games can be explained through Self-Determination Theory (Deci & Ryan, 2000; Ryan & Deci, 2017). These games satisfy students' psychological needs for competence, relatedness, and autonomy. Competence is fostered through clear rules and achievable challenges, relatedness emerges from teamwork and peer interaction, and autonomy is experienced when students make decisions during gameplay. Together, these elements strengthen intrinsic motivation and provide a theoretical mechanism for the observed improvement.

This finding is consistent with previous studies. For example, [Ardini et al. \(2025\)](#) emphasized that traditional games enhance intrinsic motivation, while Khoirunnisya (2025) reported that they reduce boredom and increase active participation. [Nababan \(2024\)](#) further highlighted their role in strengthening psychomotor aspects. International literature also supports these results, with [Chen & Sun \(2016\)](#) and [Standage et al. \(2019\)](#) showing that game-based learning fosters engagement and motivation in PE. However, unlike prior studies that often treat games as a single intervention, this research underscores the importance of game selection and cultural relevance, suggesting that different games may produce distinct motivational experiences.

Although the study focused on motivation, traditional games may also contribute to social connectedness and character development. Group interactions in *Gobak Sodor* may foster cooperation and sportsmanship, while persistence in *Jump Rope* may encourage resilience. Since these aspects were not directly measured, they should be considered possible implications rather than confirmed findings.

The study has limitations. The scope was restricted to one elementary school, limiting generalizability. Moreover, the focus was primarily on motivational outcomes without examining cognitive learning or motor skill development. Future research should expand the variables studied, include control groups, and investigate the specific effects of different traditional games on broader educational outcomes.

Overall, this study confirms that integrating traditional sports games into PE lessons is not only enjoyable but also theoretically grounded in motivational psychology. By meeting students' psychological needs, these culturally relevant games can serve as an innovative strategy to enhance motivation, enrich learning experiences, and potentially contribute to broader developmental benefits.

4. CONCLUSION

This study concludes that the implementation of traditional sports games in Physical Education (PE) lessons significantly increased students' learning motivation. The improvement was demonstrated by higher posttest scores compared to pretest scores, with statistical analysis confirming a meaningful difference ($t = -3.441$, $p = 0.002$, Cohen's $d = 0.69$). These findings provide empirical evidence that traditional games can serve as an effective and innovative strategy to address low motivation in elementary school PE learning.

The conclusion is limited to the observed motivational outcomes within the specific context of one elementary school and a one-group pretest-posttest design. Broader claims regarding character development or cultural preservation, while potentially valuable, were not directly measured in this study and should be considered possible implications for future research rather than established findings.

5. CONFLICT OF INTEREST

The authors declare that they have **no conflict of interest** related to this study. All stages of the research—including design, data collection, analysis, and reporting—were conducted independently, without any financial, personal, or professional relationships that could influence the objectivity of the findings.

6. ACKNOWLEDGEMENTS

The author expresses his deepest gratitude and appreciation to all parties who have supported the implementation of this research. He also thanks the elementary school where the research took place, along with all the teachers and students who participated enthusiastically. He also thanks his colleagues at the university who provided valuable input on the report, from the planning stage through the completion of the research.

The author would also like to express his appreciation to his family and friends for their continued moral support and motivation. He also thanks the institutions and agencies that provided facilities, permits, and technical assistance, enabling the successful completion of this research. May all assistance received be amply rewarded by God Almighty.

7. REFERENCES

- Al Asror, S. F. (n.d.). The relationship between traditional games and motor development of Grade IV students at SD Negeri Sinduadi 1 Kapanewon Mlati Sleman.
- Ardini, P. P., Tine, N., Sari, M., & Ningsih, S. (2025). *Anthology of Nusantara Traditional Games*. Widina Publisher.
- Chen, W., & Sun, H. (2016). Motivation and physical activity in physical education: A review of literature. *Journal of Teaching in Physical Education*, 35(3), 285–297.

- Deci, E. L., & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://psycnet.apa.org/doi/10.1037/0003-066X.55.1.68>
- Hakim, N. D. (2021). Increasing student learning activity through traditional games in Physical Education at MIN 2 Padangsidempuan. IAIN Padangsidempuan.
- Mashud, M. (2017). Approaches to Physical Education, Sports, and Health learning in the 21st century. *Multilateral: Journal of Physical Education and Sports*, 14(2). <https://doi.org/10.35194/jm.v14i2.4283>
- Nababan, M. B. (2024). Implementation of self-directed learning models to improve rhythmic gymnastics skills in students. *Pembelajaran*, 39.
- Nugraha, Y. A., & Manggalastawa, M. (2021). The influence of traditional games on student learning motivation in elementary social studies learning. *Jurnal Review Pendidikan Dasar*, 7(1), 31–37. <https://doi.org/10.26740/jrpd.v7n1.p31-37>
- Nurhasanah, S., & Sobandi, A. (2016). Learning interest as a determinant of student achievement. *Journal of Office Management Education*, 1(1), 128. <https://doi.org/10.17509/jpm.v1i1.3264>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.
- Sardiman, A. M. (2006). *Interaction and learning motivation in teaching*. Jakarta: Rajawali Pers.
- Standage, M., Gillison, F., & Treasure, D. C. (2019). Self-determination theory and motivation in physical education: Current trends and future directions. In *Advances in Motivation in Sport and Exercise* (2nd ed.). Human Kinetics.
- Taufik, M. S. (2019). Improving basic dribbling techniques in soccer through game modification. *Journal of Physical Education, Health, and Recreation*, 8(1).
- Vallerand, R. J. (2016). *The psychology of passion: A dualistic model*. Oxford University Press.