

The Effect of the Teaching Games for Understanding Learning Model on the Learning Motivation of Grade VIII Students in Athletics at SMPN 1 Ambalawi

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Abstract

Introduction: In the implementation of physical education, sports, and health, a pleasant learning atmosphere is needed with the aim of increasing students' interest and motivation in learning.

Material and Methods: This study uses a pre-experimental method with a one-group pretest-posttest design. The sample consisted of 20 grade VIII students selected based on the results of initial observations, of which 60% showed low learning motivation. Data collection was carried out through the provision of learning motivation questionnaires before (pretest) and after (posttest) the application of the TGFU model. The data from the pretest and posttest results were then analyzed using a paired sample t-test statistical test to determine the significance of differences in learning motivation before and after the intervention.

Research Results: The results of the study showed a significant increase in student learning motivation. The average pretest score of 68.45 (with 46% completeness) increased to 126 (84% completeness) in the posttest. This improvement shows that TGFU can create a more fun, interactive, and developmental learning environment for educators.

Conclusion: The TGFU learning model is effective in increasing students' motivation to learn athletic materials. This approach can be presented as an innovative learning alternative in physical education that is , as it encourages active student engagement and provides a meaningful learning experience.

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1. INTRODUCTION

Physical education is an integral part of the education system, which aims to develop physical fitness (Angga & Sari, 2025), shape character (Fitrianto, 2023), and instill discipline (Azhari, 2020). Physical education plays an important role in the education system because it not only focuses on improving physical health, but also on character building and skill development in students (Arifya Hany, et al. 2025).

In implementing physical education and health learning, a pleasant learning atmosphere is needed with the aim of increasing students' interest and motivation in learning. Learning motivation is also a key element that determines the success of the PJOK learning process (Hismullutfi, Muhsan & Salabi Muhammad 2025). Intrinsic motivation is a psychological condition that arises when students feel interested in an activity or object (Sukma Ramadhan Aditya, et al. 2025). Intrinsic motivation is a psychological condition that arises when students feel interested in an activity or object

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The Teaching Games for Understanding (TGfU) approach is a method in physical education learning that aims to help children understand sports through the concept of playing through important ideas from games (Ihza Alkindi Muhammad, et al. 2021) and improve students' self-discipline (Ginanjar Shela & Julianti Eva, 2024). This approach does not focus solely on mastering techniques, but rather provides a more active learning experience that is appropriate for the developmental stage of the students. TGfU is considered an approach that can meet children's needs in play activities and is a form of innovation to improve the quality of physical education in schools (Zultaniah Anna, 2019). TGfU is a learning method that applies real games (Yudha I Dewa Made Krisna et al., 2017).

Based on observations in class VIII of SMPN 1 Ambalawi, there are several problems in the learning process of athletics material, namely students' motivation towards athletics learning is still lacking. In terms of student interest and motivation, learning is still monotonous, using learning models that are not very interesting, so students quickly become bored. There is also a lack of creativity on the part of teachers in designing or creating more interesting learning activities that can increase student interest and motivation.

The tactical game-based learning model utilizes students' interest in a structured form of play to encourage the development of the skills and tactical understanding needed for game performance. In line with this approach, teachers in this model are required to be able to encourage students to think critically in solving various tactical problems that arise during the playing process.

Athletics is the parent sport in realizing other sports because athletics includes running, jumping, and throwing techniques (Usman Khairul et al., 2019). Athletics is a competitive sport that includes walking, running, jumping, and throwing events (Sinta Anggraeni Cika, et al. 2021), which can be performed on a track or field. In addition, athletics is the basis for optimal development/improvement of performance in other sports, because through programmed athletic movements, it is very effective in improving a person's physical condition (Riyoko Endie et al., 2019).

In a previous study conducted by Mujriah & Susilawati Indri in 2024 entitled "The effectiveness of using the teaching games for understanding learning model in increasing motivation to learn long jump," the research aimed to determine the effectiveness of motivation to learn long

jump using the teaching games for understanding learning model. The results of the study concluded that the Teaching Games for Understanding learning model significantly influenced the learning motivation of long jump students at SDN Petak Praya Barat. (N.L. Marettini, I.N. Kanca & I.G.L.A. Parwata) The TGFU learning model has a significant effect on student learning outcomes and is better than the demonstration learning model. The TGFU model was designed in a learning scenario that includes the initial game phase, exploration of tactical understanding, technical training, and the final game. This is because each activity designed aims not only to fulfill basic competencies but also to shape character and increase student motivation.

This study aims to determine the effect of the Teaching Games for Understanding learning model on the learning motivation of eighth-grade students in basketball at SMPN 1 Ambalawi.

2. MATERIALS AND METHODS

This study used a pre-experimental design with a one-group pretest-posttest approach. In this design, the sample was not separated, meaning that there was only one group of subjects. This group was measured twice: the first measurement was taken before the treatment was given (called the pretest), then the treatment was given, followed by a second measurement (called the posttest).

To measure student learning motivation, an instrument in the form of a questionnaire containing statements related to student learning motivation in PJOK subjects was used. This questionnaire was given to the research subjects before (pretest) and after (posttest) the treatment to measure the changes that occurred.

This study used statistical analysis with a Paired Sample T-Test. This test was chosen based on the research design, which used the same sample group, namely eighth-grade students at SMP Negeri 1 Ambalawi, who were given tests before the treatment (pretest) and after the treatment (posttest). The Paired Sample T-Test is very appropriate because it aims to determine whether there is a significant difference between two paired means, namely the pretest and posttest results of the same group.

In addition, the Paired Sample T-Test was used because the research data was in the form of intervals/ratios and came from the same sample but was measured under two different conditions. In other words, this test helped answer the main research question, namely whether the application of the Teaching Games for Understanding (TGFU) learning model really had an effect on increasing student learning motivation.

Through this analysis, it was found that there was a significant difference between the pretest and posttest scores. This shows that the application of the TGFU model has a real effect on increasing students' learning motivation in athletics. Thus, the use of the Paired Sample T-Test in this study is considered appropriate because it provides a valid picture of the effectiveness of the treatment given.

3. RESULTS

Pretest scores for Grade VIII students at SMP Negeri 1 Ambalawi.

Table of pretest scores for eighth-grade students

No.	Name of eighth-grade student	Pretest score	Remarks
1	AG	74	Low
2	AFG	68	Low
3	NAF	73	Low
4	HF	82	Low
5	KPM	101	Medium
6	SZ	55	Very Low
7	RW	78	Low
8	NT	66	Low
9	AP	87	Low
10	NF	49	Very Low
11	NCH	45	Very Low
12	NEP	88	Low
13	NS	57	Very Low
14	TH	57	Very Low
15	FF	47	Very Low
16	MR	68	Low
17	AL	98	Moderate
18	LP	57	Very Low
19	EA	66	Low
20	AI	53	Very Low

Total 1369

Average 68.45

Classical Completion Rate 46%

The initial data on student learning outcomes was obtained from the pretest scores of eighth-grade students at SMP Negeri 1 Ambalawi before the implementation of the cycle (pre-cycle) on the subject of athletics. The results showed that the classical mastery level of students only reached 46% of the total 20 students. Thus, more than half of the students did not demonstrate optimal mastery of the subject of athletics.

Cycle

The observation activities carried out in the cycle consisted of 1) observing student activities in athletics lessons, including long jump, short-distance running, and shot put, 2) assessing students in athletics learning, and 3) processing the results of student athletics learning.

Table 2. Post-test data of eighth-grade students at SMP Negeri 1 Ambalawi

No.	Student Name Grade VIII	Post-test Score	Remarks
1	AG	114	Moderate
2	AFG	130	High
3	NAF	141	High
4	HF	117	Moderate
5	KPM	119	Moderate
6	SZ	140	High
7	RW	140	High
8	NT	113	Medium
9	AP	113	Moderate
10	NF	118	Moderate
11	NCH	123	High
12	NEP	123	High
13	NS	125	High
14	TH	119	Medium
15	FF	137	High
16	MR	137	High
17	AL	137	High
18	LP	123	High
19	EA	136	High
20	AI	118	Medium

Total 2523

Average 126.15

Classical Completion Rate 84%

The data above shows a significant improvement in learning completeness, from 46% to 84%. This occurred because the students were very enthusiastic about participating in the learning process. Supporting factors included motivation from the teacher and improved understanding among the students. Through the methods used, the students successfully completed the Athletics material.

To determine whether there was a significant difference between the pretest and posttest scores, a paired t-test was conducted with a significance level of 5% (0.05).

Table 2. Paired Sample T-test

Test	Statistics	Value	Conclusion
Paired Sample T-test	t	-12.105	p-value < α = 0.05. The alternative hypothesis (H_1) is accepted.
	df	19	
	p-value	0.001	
	CI (95%)	[-42.81112, -30.18888]	

The t-test results indicate that $t = -12.105$ with degrees of freedom (df) = 19 and $p\text{-value} = 0.001$. Since the $p\text{-value}$ is much smaller than 0.05, it can be concluded that there is a significant difference between the pretest and posttest results. In addition, the 95% confidence interval for the difference in mean values is in the range $(-42.81112 \text{ to } -30.18888)$, which indicates that the statistical difference between the pretest and posttest values is significant and negative. The average difference between the pretest and posttest results is -36.50000 , which indicates an increase in scores after the treatment.

Based on the results of the analysis, it can be concluded that there was a significant increase in posttest scores compared to pretest scores. These findings indicate that the intervention or treatment provided during the study had a positive effect on student motivation.

These results indicate that the learning methods or interventions applied can increase student motivation in the material being taught. Factors that may contribute to this motivation include the effectiveness of learning strategies and the active involvement of students. This study has implications that the approach used can be considered in motivating student learning in the future.

4. CONCLUSION

The results of the study confirm that the application of the Teaching Games for Understanding (TGFU) learning model has a positive effect on the learning motivation of eighth-grade students at SMP Negeri 1 Ambalawi in athletics. This model has been proven to create a fun and interactive learning atmosphere and encourage students to actively participate in the learning process. Before the treatment was given, the students' learning motivation was relatively low, as reflected in the pretest results, which showed an average score of only 68 or 45%. After the treatment using the TGFU model was given, the students' learning motivation increased significantly, with an average score of 126 or 84%. This nearly twofold increase shows that the TGFU method is effective in fostering enthusiasm, participation, and confidence in students in learning athletics material. From these findings, it can be concluded that the TGFU learning model is very relevant as an alternative teaching strategy in physical education, especially in athletics material. In addition to increasing motivation, this method is also able to provide a meaningful learning experience for students. Therefore, teachers are advised to integrate the TGFU model more often into learning activities. It should be noted that this study was only conducted in one treatment cycle and was limited to athletic material at SMP Negeri 1 Ambalawi. For this reason, further research with a broader scope is needed to provide a more comprehensive picture of the effectiveness of the TGFU model in the context of physical education learning in various schools. Therefore, teachers are advised to integrate the TGFU model more often into daily learning activities. Teachers can adapt this model in several ways, such as designing simple games that focus on understanding tactics before practicing techniques, using game variations to keep students motivated and prevent boredom, and dividing students into small groups so that each student has the opportunity to actively participate and interact. By applying this approach, learning is not only oriented towards academic achievement, but also towards character development, social skills, and student motivation to learn.

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