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Improving Student Learning Motivation Through the Application of the Games for Understanding Teaching Model in Football Learning

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Abstract

This study aimed to determine the effect of the *Teaching Games for Understanding* (TGFU) learning model in soccer instruction on the learning motivation of seventh-grade students at SMP Negeri 8 Purwokerto. Physical education learning in junior high schools is often dominated by conventional, teacher-centered approaches, which tend to limit student participation and result in low learning motivation. The TGFU model is a game-based learning approach that emphasizes tactical understanding before mastering technical skills, thereby encouraging active student involvement and enhancing learning motivation. This study employed an experimental method with a *one-group pretest–posttest design*. The research sample consisted of 32 students from class VII H selected using a cluster random sampling technique. The research instrument was a learning motivation questionnaire that had been tested for validity and reliability. Data analysis was conducted using normality and homogeneity tests, followed by hypothesis testing using a *paired sample t-test* with the assistance of the SPSS program. The results showed an increase in students' learning motivation after the implementation of the TGFU model, as indicated by the difference between pretest and posttest scores. The hypothesis test produced a significance value of 0.000 ($p < 0.05$), indicating that the implementation of the TGFU learning model had a significant effect on students' learning motivation. Therefore, the TGFU learning model can be considered an effective alternative strategy in physical education learning to improve students' learning motivation in soccer instruction at the junior high school level.

Keywords: Teaching Games for Understanding, Learning Motivation, Physical Education, Football, Student

INTRODUCTION

Physical education is an integral component of the education system, playing a role in developing students overall potential through structured and planned physical activity. The physical education learning process is not only oriented towards improving motor skills but also encompasses the development of students' cognitive, affective, and social aspects (Budi, Hidayat, & febriani, 2019). Systematically implemented physical activity can foster positive character traits such as sportsmanship, cooperation, discipline,

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and responsibility. Similarly, (Batul, 2021) states that physical education is an integrated learning process aimed at developing students into well-rounded individuals through meaningful movement experiences. Thus, physical education plays a strategic role in supporting the achievement of national education goals.

Despite its important role, physical education teaching practices at the junior high school level are often dominated by conventional, teacher-centered approaches. Learning models that emphasize technique demonstrations and repetitive practice tend to limit active student participation (Artha, Syam T, & Priambodo, 2020; Nur et al., 2020). This results in low student engagement and motivation in learning. Learning motivation itself is a psychological factor that functions as an internal and external driver that directs individuals to engage in learning activities (Abnisa, 2020). Students with high motivation generally demonstrate enthusiasm, perseverance, and active participation in the learning process, while low motivation can lead to a lack of engagement and decreased learning outcomes (Bunda, Nevriyarni, & Nirwana, 2024).

In the context of implementing the 2013 Curriculum, the learning process is guided by a scientific approach that involves observing, asking questions, experimenting, reasoning, and communicating. This approach aims to develop critical thinking skills and encourage active student participation (Rianto, Hanafi, & Gusmaneli, 2025). Therefore, a learning model that aligns with these principles is needed, particularly in physical education, which demands simultaneous physical and cognitive engagement.

One learning model deemed relevant to the scientific approach is Teaching Games for Understanding (TGFU). The TGFU model emphasizes understanding game tactics before mastering specific techniques (Shahreza, Parvinpour, & Namazizadeh, 2022). This approach is based on constructivist theory, which encourages students to build understanding through direct experience in a game context. Through TGFU, students are involved in modified game situations, enabling them to analyze problems, make decisions, and implement appropriate strategies (Syamsuar, Zen, & Reflianto, 2020). Furthermore, this model develops not only psychomotor skills but also cognitive and affective skills, including cooperation and learning motivation (Rinaldo, Tarigan, & Juliantine, 2021).

In junior high school soccer instruction, basic techniques such as passing, dribbling, and shooting are often taught separately through repetitive drills without a game context (Nurcahyo et al., 2025). This approach has the potential to cause boredom and

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reduce student interest, especially considering the characteristics of students aged 12–15, who tend to prefer competitive and collaborative game activities (Landis, 2020). Therefore, a learning approach is needed that integrates techniques and tactics into authentic game situations to make learning more engaging and meaningful.

Initial observations at SMP Negeri 8 Purwokerto indicate that soccer learning is still dominated by a conventional approach that focuses on repetitive basic technique drills. Students tend to be passive, waiting their turn, and are less involved in game decision-making. This situation indicates the need for innovative learning models that can optimally increase student engagement and motivation.

Based on this description, the implementation of the Teaching Games for Understanding (TGFU) model is seen as an alternative solution to increase student learning motivation in soccer learning. This model is expected to create a more active, enjoyable, and meaningful learning environment, thereby encouraging students to participate optimally. Therefore, this study aims to analyze the effect of implementing the TGFU model in soccer learning on the learning motivation of seventh-grade students at SMP Negeri 8 Purwokerto.

METHOD

This research used a quantitative approach with an experimental method through a one-group pretest-posttest design (Sugiyono, 2023). This design involved one group being measured before and after treatment to determine the effect of the learning model implementation on student learning motivation.

The research was conducted in the odd semester of the 2025/2026 academic year at SMP Negeri 8 Purwokerto. The study population was all 259 seventh-grade students. The sample was determined using cluster random sampling, with one class consisting of 32 students.

The treatment, which involved implementing the Teaching Games for Understanding (TGFU) model in soccer learning, was conducted over four sessions. A pretest was administered before the treatment to measure initial learning motivation, and a posttest was administered after the treatment to determine changes in student learning motivation. The research instrument was a learning motivation questionnaire consisting of 26 items with a four-level Likert scale, covering aspects of intrinsic and extrinsic motivation.

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The instrument was tested for validity and reliability, with a validity value of 0.525 and a reliability value of 0.891.

Table 1. Learning motivation questionnaire grid

Construction	Factor	Indicator	Item No	Amount
Motivation To Learn	Intrinsic	a. Physique	1,2*,	2
		b. Knowledge	3,4*,	2
		c. Skills	5,6*,	2
		d. Feeling of Joy	7,8*,	2
		e. Ideals	9,10*,	2
		f. Talent	11,12*,	2
		Intrinsic Amount		12
	Extrinsic	a. Award	13, 14*,	2
		b. Teaching Methods	15, 16*,	2
		c. Facilities and Infrastructure	17, 18*,	2
		d. Games / matches		
		e. Parent	19, 20*,	2
		f. Environment	21, 22*,	2
		g. Location	23, 24*,	2
			25, 26*	2
		Extrinsic Amount		14
		Total Number		26

Note: * is a negative statement item

Data analysis was performed using IBM SPSS Statistics 27 through normality tests (Shapiro–Wilk), homogeneity tests, and hypothesis testing using paired sample t-tests at a significance level of 0.05. The study has obtained ethical approval and was conducted with due regard to the principles of confidentiality and voluntary consent of respondents.

RESULT

The measurement results in this study, which were used to identify the increase in students' learning motivation through the application of the teaching games for understanding model on football material, are explained in the following table.

Table 2. Descriptive Statistics of Pretest and Posttest of Learning Motivation

Variable	*N*	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Pretest Learning Motivation	32	66	95	81	9
Posttest Learning Motivation	32	76	102	89	7

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The table above presents descriptive results of student learning motivation measurements before and after treatment. The analysis shows an increase in student learning motivation scores after implementing the Teaching Games for Understanding (TGFU) model, with the average posttest score higher than the pretest score. Furthermore, this data was analyzed using a Pearson paired-sample t-test to determine the magnitude of the relationship between variables. The results of the Pearson test are detailed in the following table.

Table 3. Test of Normality

Tests of Normality						
	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest Learning Motivation	0,120	32	.200*	0,949	32	0,136
Posttest Learning Motivation	0,082	32	.200*	0,969	32	0,464

Table 4. Test of Homogeneity of Variance

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Learning Motivation Results	*Based on Mean*	2.384	1	62	.128

Table 5. Paired Samples Test

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
PRETEST – POSTTEST	-8.125	8.079	1.428	-11.038	-5.212	-5.689	31	.000

The Shapiro–Wilk normality test and homogeneity test indicated that the data were normally distributed, as both tests had significance values above 0.05. Therefore, the analysis continued with a paired sample t-test. Based on the paired sample t-test analysis results shown in the table, the calculated t-value (Δt) was -5.689 with 31 degrees of freedom (df) and a 2-tailed significance value (Sig.) of 0.000. This calculated t-value illustrates the magnitude of the difference between the pretest and posttest scores compared to the standard error of the difference. The negative sign in Δt indicates the

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direction of the difference in the averages, namely an increase in the posttest score compared to the pretest, as the difference was calculated by subtracting the pretest score from the posttest.

The significance value of 0.000 is below the 0.05 significance limit ($p < 0.05$), so the difference can be categorized as statistically significant. Based on the t-test results and the significance level, it can be concluded that there is a significant difference between the pretest and posttest scores. This finding indicates that the implementation of the Teaching Games for Understanding (TGFU) model in soccer learning has a positive impact on the learning motivation of seventh-grade students at SMP Negeri 8 Purwokerto..

DISCUSSION

Research results obtained from four treatments indicate that the implementation of the Teaching Games for Understanding (TGFU) model in soccer learning has a positive impact on student motivation at SMP Negeri 8 Purwokerto. This is demonstrated by the increase in learning motivation scores between the pretest and posttest results. Although the percentage increase in each motivation category did not show a significant difference, the trend of increasing scores for each student indicates a positive change after participating in soccer learning using the TGFU model.

The implementation of the Teaching Games for Understanding (TGFU) learning model has been shown to be effective in increasing student participation and maximizing student motivation during physical education learning (Batez, Petrušič, Bogataj, & Trajković, 2021; Qohhar & Pazriansyah, 2019). This is because, in learning using the TGFU approach, students are actively engaged in practicing basic techniques directly integrated with game tactics. Furthermore, during the game, students are given specific rules set by the teacher, so that learning activities are not simply focused on playing but also encourage them to think tactically about scoring goals in accordance with the applicable game rules. This situation allows students to be more focused, actively participate, and motivated throughout the learning process.

Based on the results of the hypothesis analysis using a paired sample t-test, a significant difference was found in students' learning motivation levels before and after the implementation of the Teaching Games for Understanding (TGFU) model. Therefore,

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it can be concluded that the TGFU model has a significant positive impact on increasing student learning motivation in physical education lessons. This influence arises because TGFU implements a game-based approach that emphasizes tactical understanding, decision-making skills, and active student involvement. This approach allows for a more meaningful learning experience and positively contributes to increasing student learning motivation.

The results of this study are consistent with the findings of several previous studies with similar relationships and relevance. Research by Prasetyo (2023) found that students' learning motivation levels in soccer lessons using the Teaching Games for Understanding (TGFU) model ranged from moderate to very high. Although that study used a descriptive approach, its findings are consistent with this study, proving that TGFU positively contributes to student learning motivation. The main difference lies in the research approach: this study assesses the influence quantitatively through the application of an experimental design.

The results of this study also align with the findings of Riyadi (2024), who demonstrated that the TGFU model is effectively implemented on students with high learning motivation. This further strengthens the current research findings that TGFU is a learning model capable of encouraging active student participation while fostering learning motivation, particularly in the context of physical education learning.

Based on research by Rahman (2023), it was found that students involved in soccer learning using the TGFU approach had a relatively positive perception of the model's implementation. This positive perception is closely related to learning motivation, as students who have a positive view of the learning process tend to show greater enthusiasm and engagement. This finding further confirms that TGFU not only influences the cognitive and psychomotor domains but also significantly impacts students' affective aspects.

Based on the analysis, it can be concluded that the implementation of the Teaching Games for Understanding (TGFU) model in soccer learning has a positive and significant impact on increasing student learning motivation at SMP Negeri 8 Purwokerto. This improvement is evident from the significant difference between pretest and posttest scores, which is also supported by a trend towards increasing motivation scores for each student. The TGFU model can create more meaningful learning by actively involving

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students, integrating basic techniques with an understanding of game tactics, and implementing game rules that encourage students to think strategically. Furthermore, the alignment of this study's findings with those of previous studies further confirms that the Teaching Games for Understanding (TGFU) learning model is an effective approach in increasing student learning motivation, particularly in the context of physical education learning that encompasses cognitive psychomotor, and affective aspects.

CONCLUSION

Based on the data analysis, research description, and discussion described above, it can be concluded that the implementation of the Teaching Games for Understanding (TGFU) model in soccer learning has an impact on the learning motivation of seventh-grade students at SMP Negeri 8 Purwokerto. This study shows an increase in learning motivation in each individual student after being treated using the TGFU model.

Statistically, the hypothesis testing using a paired sample t-test showed a significance value of 0.000, which is lower than the 0.05 level of significance (sig. <0.05). Therefore, the alternative hypothesis (H_1) is accepted and the null hypothesis (H_0) is rejected. This indicates a significant difference in student learning motivation before and after the implementation of the Teaching Games for Understanding (TGFU) learning model. Therefore, the TGFU model has been proven effective in increasing student learning motivation in soccer learning. This model is able to create a more active, enjoyable, and meaningful learning atmosphere, thereby encouraging student participation physically, cognitively, and affectively during the physical education learning process.

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