

The Influence of Direct Instruction (Di), Teaching Games for Understanding (TGfU) and Motivation on Learning Outcomes of Volleyball Underpass



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ABSTRACT: This research aims to determine the interaction between the Direct Instruction (DI) and Teaching Games for Understanding (TGfU) learning models with learning motivation (high and low) on the learning outcomes of volleyball underpass. Experimental method with a quantitative approach in class VII. The data collection technique uses a measurement test on the learning outcomes of volleyball underpassing and uses a questionnaire to measure student motivation. Two-way ANOVA (multiple variance analysis) Tukey test analysis technique if there is an interaction. The results of data analysis show that there is a significant difference, namely the TGfU model has a higher value, namely 15.85, compared to the DI model with a value of 10.55 in learning outcomes for volleyball bottom passing. The research conclusion is that there is an interaction and difference in influence between the DI and TGfU models with learning motivation on the learning outcomes of volleyball underpassing, and there is a difference in influence between students who have high and low learning motivation on learning outcomes for volleyball underpassing.

KEYWORDS: Influence of DI & TGfU, Volleyball Underpass

INTRODUCTION

Student learning outcomes will improve if a teacher is able to apply a learning model that is suitable for student characters. A teacher must be able to create and develop the right learning model for their students. In addition, given the development of the teaching system and the variety of learning models, teachers must be able to apply and vary learning models when teaching at school so that students are motivated to follow the lessons taught and the objectives of the learning model can be achieved. However, the facts in the field are not the case, there are still teachers who have not been able to motivate students in learning, one of which is seen at the State Junior High School 3 Rupert, Bengkalis Regency.

Learning is a way that can improve a person's life, through learning a person can gain as much knowledge as possible which can be used to do something for a better life. Whether or not a person is active in learning is influenced by various factors. One of the factors is motivation. Someone who has motivation to learn, indirectly has a goal or ideal that is realized (Palittin, Wolo & Purwenty, 2019, p.102). Student learning motivation is closely related with the teaching and learning process and the teacher's teaching strategy. Effective teaching strategies must be tailored to the needs of the class and the conditions of the students where the teaching and learning process takes place. The achievement of learning objectives or learning outcomes depends on how the teaching and learning process has been designed and implemented. Based on initial observations, the effectiveness and quality of teaching at State Junior High School 3 of Rupert, Bengkalis Regency is still the main obstacle faced in the physical education learning process.

There are still many students who are less motivated in participating in physical education lessons, many students are lazy in following the physical education subject matter provided, students easily feel tired in participating in lessons, and students feel bored because the learning model used by the teacher is just that without any changes every time the learning meeting. Learning models that are considered appropriate for junior high school students are Direct Instruction (DI) and Teaching Games for Understanding (TGfU). Physical education learning with DI and TGfU approaches can be used as an effort to make students enthusiastic and actively participate in physical education learning. The TGfU learning model is also very appropriate to be applied in physical education learning on volleyball learning materials at school.

The TGfU model has several advantages, including: (1) to facilitate the development of technical skills and (2) empower children to learn on their own and take responsibility; (3) to assess tactical transfer throughout the game; and (4) increase fun and

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enjoyment in playing games (Wang & Ha, 2013). Furthermore, in the research results of Yudha et.al (2017) that the TGfU type learning model has a significant effect on improving the learning outcomes of basic soccer control passing techniques in students.

In addition to the TGfU model, there are learning models that can be used to facilitate physical education learning, namely DI learning (Direct Instruction) is teacher-centered learning that emphasizes clear communication. In this approach, 'the effectiveness of education for all learners depends largely on the provision of quality teaching by competent teachers, equipped with effective strategies', (Rowe as cited in Ewing, 2011). Therefore, these two models are suitable to be tried in school learning, given that some schools have not yet implemented the DI and TGfU models.

RESEARCH METHODS

This type of research is an experiment with a quantitative approach which was carried out in September - October 2023 at the State Junior High School 3 Rupert, Bengkalis Regency. A total of 208 students were selected as the population, then using random sampling techniques to select a sample in the form of class VII in the 2023/2024 school year as many as 72 students. Data collection techniques used performance tests to measure the learning outcomes of volleyball lower passes, then questionnaires to measure student motivation.

Testing the validity of the instrument in this study was carried out by professional judgment, in this study Mr. Prof. Dr. Pamuji Sukoco, M.Pd., and Prof. Dr. Suharjana, M. Kes. The data from the expert validator's assessment results from the assessment instrument validation sheet were analyzed to determine the content validity of the instrument. Based on the results of this analysis, the instruments in this study are said to be valid and suitable for use in this study.

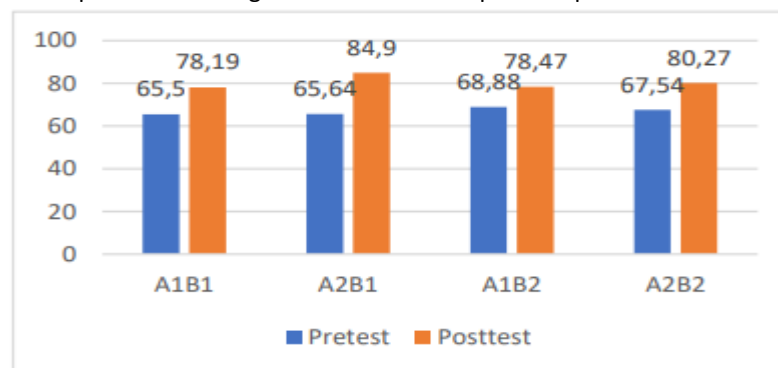
Hypothesis testing was carried out using two-way ANOVA. Multiple variance analysis techniques are often referred to as two-way variant analysis techniques. This multiple variance analysis technique is used to distinguish the mean of several data distributions of research subject groups conducted at once for two types of treatment variables (Budiwanto, 2017). If it is proven that there is an interaction, a further test will be carried out, namely the Tukey test using the SPSS version 23 for windows software program with a significance level of 5% or 0.05.

RESEARCH RESULTS AND DISCUSSION

Results

The research process will be conducted in four stages. (1) conduct a test to obtain initial data regarding the assessment of learning motivation. Stage (2) students use performance tests and knowledge tests to get the learning outcomes of volleyball lower passing. Stage (3) students will get treatment with DI and TGfU learning models conducted 12 times a meeting. At stage (4) students will be given performance tests and knowledge tests to get the final data on learning outcomes of volleyball lower passes which are carried out at the end of the post-test).

Descriptive statistic of the pretest and posttest learning outcomes of underpass are presented in the diagram as follows:



Description:

A1B1: Learners using Direct Instruction (DI) learning model with high motivation.

A2B1: Students using Teaching Games for Understanding (TGfU) learning model with high motivation.

A1B2: Learners using Direct Instruction (DI) learning model with low motivation.

A2B2: Learners using the Teaching Games for Understanding (TGfU) with low motivation.

The results of data analysis in testing this hypothesis are: (1) The hypothesis of the difference in the influence of the Direct Instruction (DI) learning model den Teaching Games for Understanding (TGfU) on the learning outcomes of volleyball underpass.

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Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Learning Model	505.779	1	505.779	22.271	.000

Based on the results of the data analyzed, the Teaching Games for Understanding (TGFU) learning model on learning outcomes of underpass volleyball with a total average value of 15.85 is higher than the Direct Instruction (DI) learning model group on learning outcomes of underpass volleyball with an average total value of 10.55. Then (2) the hypothesis of differences in influence between students who have high motivation and low motivation on the learning outcomes of volleyball underpasses:

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Motivation	344,546	1	344,546	15,172	.000

Based on the results of the data analyzed, students who have high motivation with an average value of 15.39 are better when compared to students who have low motivation with an average value of 11.01. Then (3) the interaction hypothesis between DI and TGFU learning models and motivation (high and low) on the learning outcomes of volleyball lower passes:

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Learning Model* Motivation	106,345	1	106,345	4,683	.034

Based on the previous table, it can be seen in the significance section of 0.034. Decision making if the significance level < 0.05 then there is interaction, meaning that the significance level value of $0.034 < 0.05$, then there is a significant interaction between DI and TGFU learning models and motivation (high and low) on learning outcomes of volleyball underpass. After there is an interaction between the learning model and motivation on the learning outcomes of volleyball underpass, then further tests are carried out with the Tukey test. The Tukey test results are shown in the following table:

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.
A1B1	A2B1	-7.7315*	1.5885	0
	A1B2	1.9444	1.5885	0.614
	A2B2	-0.9257	1.5885	0.937
A1B2	A1B1	7.7315*	1.5885	0
	A1B2	9.6759*	1.5885	0
	A2B2	6.8057*	1.5885	0
A2B1	A1B1	-1.9444	1.5885	0.614
	A2B1	-9.6759*	1.5885	0
	A2B2	-2.8702	1.5885	0.279
A2B2	A1B1	0.9257	1.5885	0.937
	A2B1	-6.8057*	1.5885	0
	A1B2	2.8702	1.5885	0.279

Based on the table above, the results of the Tukey test calculation on the asterisk sign (*) indicate that the pairs that have interactions or pairs that are significantly different (significant) are: (1) A1B1-A2B1, (2) A1B2-A1B1, (3) A1B2-A1B2, (4) A1B2-A2B2, (5) A2B1-A2B1, (6) A2B2-A2B1.

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DISCUSSION

The interaction results show that in this study, the main factors in the form of two factors show a significant interaction. This means that within each cell or group, there is a difference in the effect arising from combining each group. The following are the pairs that show significantly different effects.

- (1) The group of students using the Teaching Games for Understanding learning model with high learning motivation is better than students using the Direct Instruction learning model with high learning motivation with a p value <0.05.
- (2) The group of students using the Teaching Games for Understanding learning model with high learning motivation is better than the group of students using the Direct Instruction learning model with low learning motivation with a p value <0.05.
- (3) The group of students using the Teaching Games for Understanding learning model with high learning motivation is better than the group of students using the Teaching Intruccion learning model with low learning motivation with a p value <0.05.

CONCLUSION AND SUGGESTION

Conclusion

The research conclusion is that there are interactions and differences in the influence between DI and TGfU models with learning motivation on learning outcomes of volleyball underpass, and there are differences in the influence between students who have high and low learning motivation on learning outcomes of volleyball underpass.

Suggestion

For further research, especially in examining other variables, this learning model can be developed specifically and more deeply.

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