



Differences in the influence of Direct Instruction and Demonstration in Volleyball Games for Elementary Madrasah Students on Student Learning Motivation

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Abstract

This study aims to test the effect of the Direct Instruction (DI) model and demonstration on the learning motivation of elementary school students and to test the differences in the effect of the DI model and demonstration on the learning motivation of elementary school students. The research method uses an experiment with nonequivalent control group design. Participants were 56 students of Madrasah Ibtidaiyah Miftahul Huda Sukadana. The research instrument used a learning motivation questionnaire in physical education for elementary school students. Data analysis techniques used statistical descriptions, paired sample t-tests, and independent samples t-tests. The results of the study concluded that there was an influence of the DI and demonstration models on the learning motivation of students of Madrasah Ibtidaiyah and there was a difference in the influence of the DI and demonstration models on the learning motivation of students of Madrasah Ibtidaiyah seen from the average difference. Recommendations for teachers or instructors that the selection of a model greatly influences the learning motivation of students in participating in volleyball learning. Thus, students who have high motivation can develop and improve the quality of education itself, especially in volleyball sports.

Keywords: *Direct Instruction, Demonstration, Volleyball, Elementary School, Motivation*

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INTRODUCTION

Physical education is a subject that cannot be separated from the whole learning process in education in Indonesia. This is known from the obligation of physical education to be held at every level and level of education. Physical Education is an educational process about and through physical activities, games and sports that are selected to achieve educational goals (Ramadhan, Ma'mun, & Mahendra, 2018). The problem that becomes an issue in the Learning and Teaching Process is the dominance of teachers. This Learning issue is also interesting, the issues that arise are low professional competency standards and the teaching and learning process (Ramadhan et al., 2018). Therefore, it is necessary to use a model or method to address these issues in the physical education learning process.

One of the effective learning models is the Direct Instruction (DI) model. The DI model has long been considered a viable method for teaching students (Kanfush, 2014). Furthermore, in the DI model, teachers design all stages of learning starting from managing routines,

managing the core of the learning process, and managing the environment and learning materials, but teachers do not become authoritarian (Ginanjar, 2022). Meanwhile, the demonstration method is a method of showing something using aids that has been proven effective with both large and small groups (Sidik NH. & Winata, 2016). The results of the study stated that the DI model was successful in improving student learning outcomes, especially for the concept of measurement and there was a significant difference in learning outcomes between the experimental class using the DI model and the control class using demonstrations (Sidik NH. & Winata, 2016).

In the Physical Education curriculum, volleyball is one of the materials taught to students at all levels of education, both elementary school, junior high school, and high school. Even volleyball is taught in college in the sports department. The first thing taught in volleyball material is the basic techniques, namely Passing, Serve, Spike, Block (Kharisma, 2019). Volleyball games can increase students' learning motivation in Physical Education learning (Putri & Wijaya, 2024). Learning motivation is an individual's desire to do or make various efforts to encourage learning to achieve the desired goals (Putri & Wijaya, 2024). Therefore, it is necessary to see how students' learning motivation is during physical education learning using both the DI and demonstration models. Because previous research has focused more on the results of learning movement or psychomotor in elementary school students (Alit, 2019; Jumhana & Agustan, 2016; Suherlan, 2019).

This study aims to see the increase in student learning motivation by using the DI model and demonstration on students of Madrasah Ibtidaiyah which is equivalent to elementary school. Different from previous studies that looked more at learning outcomes. The purpose of this study is to test the effect of the DI model and demonstration on the learning motivation of students of Madrasah Ibtidaiyah and to test the difference in the effect of the DI model and demonstration on the learning motivation of students of Madrasah Ibtidaiyah.

METHOD

The research method used an experiment with nonequivalent control group design. Participants used 56 students of class 5A and 5B of Madrasah Ibtidaiyah Miftahul Huda Sukadana. The sampling technique used purposive sampling. Purposive sampling is a sampling determination technique with certain considerations (Ginanjar, 2019). Based on this, 28 students of class 5A were used as the experimental group using the DI model and 28 students of class 5B were used as the control class using the demonstration. This was also based on the

suggestion of the physical education teacher at the school. The implementation of the two research groups was given eight times outside the pre-test and post-test. Both research groups received the same volleyball material, which distinguished the experimental class using the DI model and the control class using a demonstration. For more details, the volleyball material provided can be seen in Table 1.

Table. 1. Volleyball Material

Lesson	Material
1	Pre-test
2	Under passing
3	Over passing
4	Under service
5	Over service
6	Smash/spike
7	Block
8	Player position structur
9	Competing between groups
10	Post-test

The instrument used a learning motivation questionnaire in physical education for elementary school students. The instrument initially consisted of 46 test items which were then analyzed using Cronbach's Alpha to determine the validity of the valid items and reliability, which had been tested on 50 students and produced 30 valid test items with a reliability of 0.90. (Nur, Ginanjar, Malik, & Pingon, 2021). The statement form for each test item of the instrument can be seen in Table 2.

Table. 2. Statement form for learning motivation questionnaire in physical education of elementary school students

No. Test Item	Statement	Yes	No
1	<i>Saya hadir di kelas mata pelajaran pendidikan jasmani dan olahraga sebelum bel masuk berbunyi</i>		
2	<i>Saya sering datang terlambat ke pelajaran pendidikan jasmani dan olahraga</i>		
3	<i>Saya merasa rugi jika tidak masuk pendidikan pelajaran jasmani dan olahraga</i>		
4	<i>Saya mengikuti pelajaran pendidikan jasmani dan olahraga sampai jam pelajaran berakhir</i>		
5	<i>Saya tidak mengikuti pelajaran pendidikan jasmani dan olahraga jika materi pelajarannya itu tidak saya suka</i>		
6	<i>Saya tetap mengikuti pelajaran pendidikan jasmani dan olahraga siapapun guru yang mengajarnya</i>		
7	<i>Saya berlatih pendidikan jasmani dan olahraga di rumah/luar sekolah dengan jadwal belajar yang telah diatur</i>		
8	<i>Untuk memahami pelajaran pendidikan jasmani dan olahraga saya sempatkan berlatih di rumah/luar sekolah</i>		

9	<i>Jika sudah sampai di rumah/luar sekolah saya malas untuk berlatih pelajaran pendidikan jasmani dan olahraga</i>
10	<i>Saya suka mengulur-ngulur waktu berlatih pelajaran pendidikan jasmani dan olahraga di rumah/luar sekolah</i>
11	<i>Saya akan mengabaikan pelajaran pendidikan jasmani dan olahraga jika itu sulit dilakukan</i>
12	<i>Saya cenderung malas berlatih jika menghadapi kesulitan dalam pelajaran pendidikan jasmani dan olahraga</i>
13	<i>Saya berlatih sampai terasa lelah untuk melakukan gerakan materi pendidikan jasmani dan olahraga dengan baik</i>
14	<i>Saya membiarkan saja kesulitan yang saya temui dalam pelajaran pendidikan jasmani dan olahraga</i>
15	<i>Jika sudah mencoba dan tidak dapat mengatasi kesulitan materi pelajaran pendidikan jasmani dan olahraga saya tidak mau berusaha lagi</i>
16	<i>Saya memperhatikan pelajaran pendidikan jasmani dan olahraga yang diberikan guru dengan baik</i>
17	<i>Saya mengobrol dengan teman ketika guru menerangkan pelajaran pendidikan jasmani dan olahraga sedang berlangsung</i>
18	<i>Saya menyimak pelajaran pendidikan jasmani dan olahraga yang guru berikan dengan baik</i>
19	<i>Saya kurang bersemangat jika guru memberi materi gerakan pendidikan jasmani dan olahraga yang tidak bisa saya lakukan</i>
20	<i>Saya tidak memiliki keinginan mencapai prestasi yang tinggi dalam pelajaran pendidikan jasmani dan olahraga</i>
21	<i>Saya ingin berprestasi dalam pelajaran pendidikan jasmani dan olahraga lebih baik dari sebelumnya</i>
22	<i>Saya tidak memiliki target prestasi harus lebih baik dari sebelumnya dalam pelajaran pendidikan jasmani dan olahraga</i>
23	<i>Saya tidak memiliki target dalam prestasi pelajaran pendidikan jasmani dan olahraga</i>
24	<i>Saya berusaha berlatih dalam waktu yang relatif lama agar materi pelajaran pendidikan jasmani dan olahraga dapat dikuasai secara optimal</i>
25	<i>Saya malas berlatih lama-lama dalam mempelajari materi pelajaran pendidikan jasmani dan olahraga</i>
26	<i>Saya selalu berusaha bersungguh-sungguh dalam mempelajari materi gerakan pelajaran pendidikan jasmani dan olahraga</i>
27	<i>Saya melakukan gerakan pendidikan jasmani dan olahraga yang penting bisa alias seadanya saja</i>
28	<i>Jika jam pelajaran pendidikan jasmani dan olahraga kosong, maka saya mempelajari materi pelajaran olahraga yang sebelumnya</i>
29	<i>Saya lebih senang di kantin kalau ada jam pelajaran pendidikan jasmani dan olahraga kosong</i>
30	<i>Saya jarang atau tidak pernah menggunakan kesempatan berlatih materi pelajaran pendidikan jasmani dan olahraga di luar jam pelajaran</i>

Data analysis techniques use Average, Standard Deviation, Variance to find out the description of the data. To find out the effect of the DI model and demonstration on student learning motivation using paired sample t-test and to find out the difference in the effect of the

DI model and demonstration on student learning motivation using independent samples t-test. All data analysis uses SPSS assistance according to the calculation procedure according to (Ginanjar, 2021).

RESULTS AND DISCUSSION

Result

From the results obtained, in the pre-test DI the average motivation was 21.57, the standard deviation was 5.43, and the variance was 29.58. The pre-test demonstration average motivation was 16.25, the standard deviation was 3.88, and the variance was 15.08. The post-test DI average motivation was 25.11, the standard deviation was 2.96, and the variance was 8.76. The post-test demonstration average motivation was 17.96, the standard deviation was 4.06, and the variance was 16.55. The gain DI average motivation was 3.53, the standard deviation was 3.45, and the variance was 11.96. The gain demonstration average motivation was 1.71, the standard deviation was 3.93, and the variance was 15.47. See Table 3.

Table. 3. Data Description

Variable	Average	Standard Deviation	Variance
Pre-test DI	21.57	5.43	29.58
Pre-test Demonstration	16.25	3.88	15.08
Post-test DI	25.11	2.96	8.76
Post-test Demonstration	17.96	4.06	16.55
Gain DI	3.53	3.45	11.96
Gain Demonstration	1.71	3.93	15.47

The results of data analysis using paired sample t-test related to the research objective are to test the influence of the DI model and demonstration on the learning motivation of Madrasah Ibtidaiyah students. In the DI model, the t-count value is 5.41 with a Sig. of 0.00 < 0.05. Meanwhile, in the demonstration, the t-count value is 2.31 with a Sig. of 0.03 < 0.05. This means that there is an influence of the DI model and demonstration on the learning motivation of of Madrasah Ibtidaiyah students. See Table 4.

Table. 4. Paired sample t-test

Variable	t	Sig.
DI	5.41	0.00 < 0.05
Demonstration	2.31	0.03 < 0.05

The results of the related data analysis want to test the difference in the influence of the DI model and demonstration on the learning motivation of of Madrasah Ibtidaiyah students, the t-value is 1.84 with Sig. of $0.07 > 0.05$, which means there is no difference in the influence of the DI model and demonstration on the learning motivation of of Madrasah Ibtidaiyah students. For more details, see Table 5.

Table. 5. Independent Sample t-test

Variabel	t	Sig.
DI <> Demonstrasi	1.84	$0.07 > 0.05$

Discussion

The results of this study can support existing literature that the DI model can be used in physical education for elementary school students (Alit, 2019; Jumhana & Agustan, 2016; Suherlan, 2019). This study shows that the level of student learning motivation has a positive impact by using DI, which is different from previous studies that were more focused on psychomotor aspects. In addition, demonstrations can also be used in physical education for junior high school students (Lubis, Ramadan, & Deliana, 2018), n high school students (Supardanayasa, 2021), and in elementary school students (Alit, 2019). In contrast to previous research, this research provides more improvements to students' learning motivation, especially for students at Madrasah Ibtidaiyah which is equivalent to elementary school.

Although this study states that there is no difference in the influence of the DI model and demonstration on student learning motivation. However, when viewed from the average, the DI model is better than the demonstration. The DI model is one of the teaching approaches that is specifically designed to support the student learning process related to declarative knowledge and well-structured procedural knowledge that can be taught with a gradual, step-by-step activity pattern.(Kusumawati, 2016).

Field findings show that the DI model is more effective in encouraging students to actively participate in Physical Education. This happens because the activity is carried out independently, in the classroom itself, by involving the students themselves through planned, implemented and evaluated actions that have an impact on systematic feedback on what has been done in teaching and learning activities (Salim, Nasuka, & Abid, 2020). In line with this, the management system and learning environment, as well as readiness as a model are needed so that learning activities can take place with good results (Setaya, Santyasa, & Kirna, 2013).

CONCLUSION

This study concludes that there is an influence of the DI model and demonstration on the learning motivation of students at Madrasah Ibtidaiyah and there is a difference in the influence of the DI model and demonstration on the learning motivation of students at Madrasah Ibtidaiyah seen from the average difference. So that students can be motivated to learn and become more active. Recommendations for teachers or instructors that the selection of a model greatly influences the learning motivation of students in participating in volleyball learning. For students themselves, it is hoped that they will continue to foster a sense of enthusiasm for learning and increase motivation in participating in learning, so that students who have high motivation can develop and improve the quality of education itself, especially in volleyball sports.

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