

STUDENTS' MOTIVATION IN LEARNING PHYSICAL EDUCATION USING THE GAME-BASED METHOD

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ABSTRACT

The background of this research problem is unmatched between the kinesthetic students characteristic and the reality on the field. Our observations many students are less interested participating in learning, because they feel boring, so our hypothesis is The gaming-method suspect effective because students with kinesthetic characteristics have physical skills that involve intelligence and cognitive as well as affective and attitudes. Therefore, interactive, holistic, integrative, scientific, contextual, thematic, effective, collaborative, and student-centered learning is needed, as well as the implementation of learning in the field that is directed using learning models/methods related to these characteristics. This study aims to determine is there a correlation or influence the modification of learning with the gaming-method in students motivation, so it can be used as an innovation in "PJOK" learning. This research method is Class Action Research (CAR) with an empirical model. Data were analyzed using the Likert Scale and qualitative descriptive analysis carried out in 2 cycles with two meetings discussing the topic of student characteristics and the selection of appropriate learning methods. The participants of this research are student in class "9 C of SMPN 7 Kediri" were 32 students. Research shows that play method has an effective relationship and can increase student motivation in "PJOK" lessons in class "9 C of SMPN 7 Kediri".

Keywords . motivation, physical education, multi-faceted approach, Game-Based Method.



INTRODUCTION

In the of “Pedoman Pendidikan Jasmani dan Olahraga” compiled by Sudrajat et al., Physical Education (Pembelajaran Pendidikan Jasmani, Olahraga, dan Kesehatan; PJOK) is a process that combines various aspects of life (integral learning), healthy living aspect and the introduction of clean environment through physical activities, exercises, health and education which can improve physical fitness, develop motor skills, knowledge and practice of healthy and active lifestyle behavior, sportiveness, and emotional intelligence, planned systematically to achieve the national education goals. Previous studies explained a close association between students with kinesthetic characteristics and physical education. Andi et al. suggested a significant correlation between kinesthetic students and physical education in their research, which is in line with the learning topic of physical education in integral and holistic education. Therefore, this requires students with kinesthetic characteristics, with cognitive and affective, to align the body. In conclusion, students with those characteristics will be more interested in physical education. (Sudrajat Wiradihardja 2017) (Andi Anwar Ishar 2023) (Fauza Akbar Shomat 2024) (Febriana Pratiwi 2024)

Based on the data that we collected, SMPN 7 Kediri conducts a psychological test on its students each year. The result of the test is beneficial in determining students' learning characteristics. It shows that students of 9C in SMPN 7 Kediri mostly show kinesthetic characteristics. We understand that kinesthetic students prefer learning with movements, especially physical education. However, the results of the psychological test were not in accordance with the learning conditions in the field. During our student field experience in Class 9C of SMPN 7 Kediri, we observed that students show opposite behavior. Many, and almost all, of the students were lazy and got tired easily during physical education class. We suspect that the physical education the students have received is considered less interesting. Therefore, they were not motivated to learn. This is what encouraged us to conduct classroom action research on modification of learning to improve students' motivation in physical education through play, especially in Class 9C SMPN 7 Kediri.

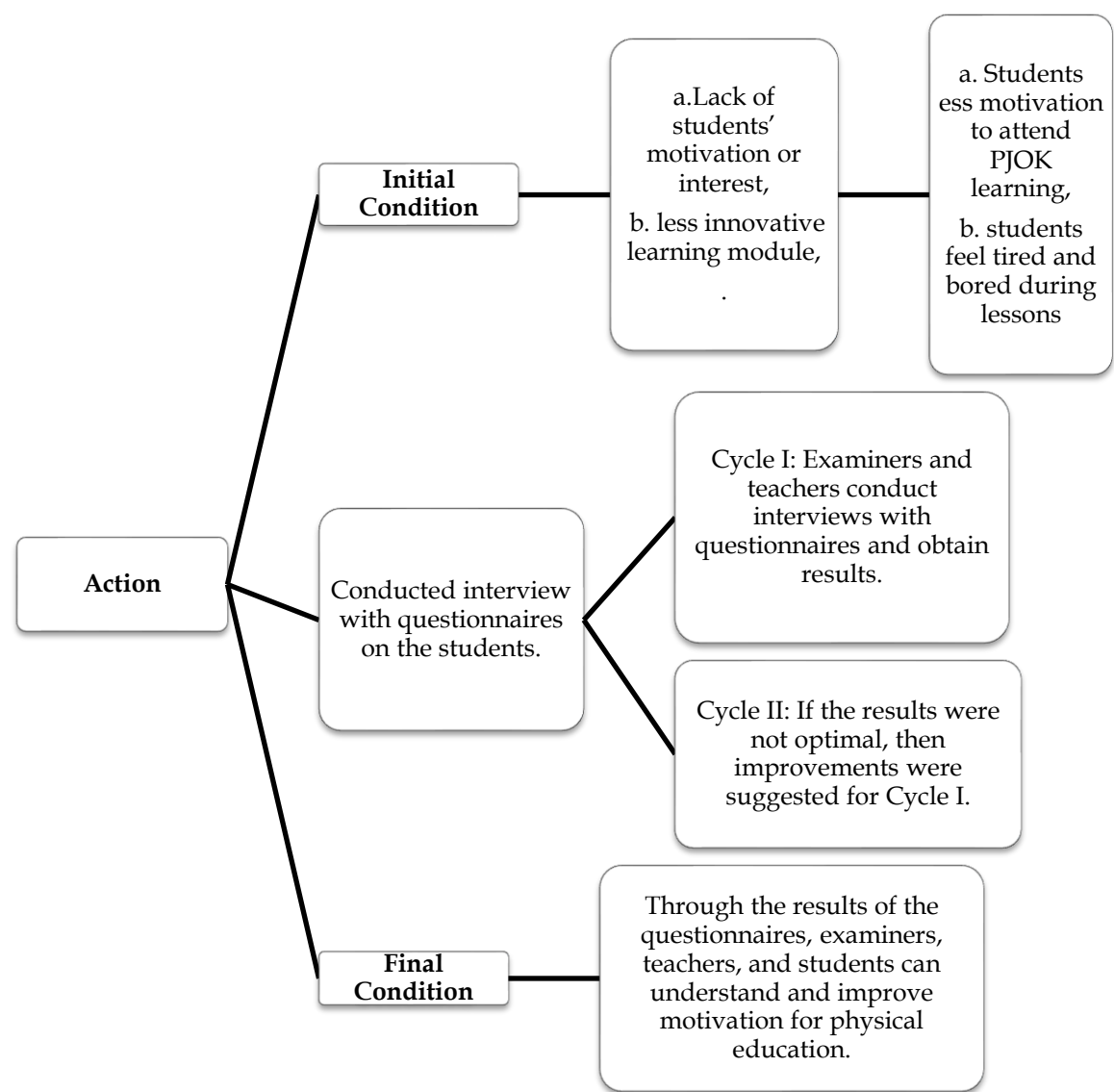
Sindi et al. stated that the play method for learning can optimize physical education, with traits related to interactive, holistic, integrated, scientific, contextual, thematic, effective, and collaborative learning, which focuses on the students. Furthermore, field learning is directed to use learning models/methods associated with those traits. Therefore, we summarized from previous studies that game-based learning is effective and efficient and can be used in physical education. (Sindi Ladya Baharizqi 2023) (Ahmad Roisuddin 2023) (Ningsih 2020) (Anindya Syifa Nuraini 2024) (Dr. dr. Zaenal Muttaqien Sofro 2021) (American College of Cardiology Clinical 2024)

The play method has the potential to improve the interest in learning physical education, especially when combined with technology and local wisdom. However, the implementation requires teacher training and proper infrastructure. This study was in line with Nagla et al., who showed an 18% mean increase in students' participation through gamification of learning. (Nagla El-Tanahi 2024) (Andi Anwar Ishar 2023) (Ali Asmi 2018) (Ahmad Roisuddin 2023) (Tuansikal 2015) This study aims to determine is there a correlation or influence the modification of learning with the gaming-method in students motivation, so it can be used as an innovation in "PJOK" learning.

METHODS

This study is a Class Action Research (CAR) with an empirical model. Data were analyzed using the Likert Scale and descriptive analysis. The study applies four components, including planning, action, observation, and reflection. The location is in Class 9C of SMPN 7 Kediri. CAR was conducted in two cycles, with each cycle comprising two meetings, one with the conventional approach, and the other with the play method on the physical fitness subject. The meetings were conducted from 5 February 2025 to 26 February 2025. Data collection was non-test, using observation, documentation, and a questionnaire to obtain students' opinions on the learning method. (Buku Pedoman FKIP UNS 2016). (Ali Asmi, 2018). (Said Aidil Fajar, 2022)

Framework Thinking



source : Brilliant Chandra Wibawa (2025)

Data analysis on students' motivation in Class 9C of SMPN 7 Kediri on physical education was conducted using a scale level with the following steps (Fauza Akbar Shomat 2024) (Febriana Pratiwi 2024) (Hezron Alhim Dos Santos 2020):

- a. Maximum range = highest score x number of items
- b. Minimum range = lowest score x number of items
- c. Distribution distance = maximum – minimum range
- d. Theoretical mean

$$(\mu) = \frac{\text{maximum score} + \text{minimum score}}{2}$$

Subjects or answers were divided into three motivation levels of students of 9C in SMPN 7 Kediri on physical education using the following formula (Hezron Alhim Dos Santos 2020) (Muhammad Hamdan Jaya 2023):

$X < (\mu - 1,0 \sigma)$ low motivation

$(\mu - 1,0 \sigma) < X < (\mu + 1,0 \sigma)$ moderate motivation

$(\mu + 1,0 \sigma) < X$ high motivation

The population used as study objects uses the formula from Hariadi in Ria Santosa (2009) in (Ali Asmi 2018) and (Said Aidil Fajar 2022), as follows:

$$P = \frac{F}{N} \times 100\%$$

P = Percentage

F = The number of students involved in each aspect

N = The number of students present

Afterward, the results of students' interest were clarified using a scoring system with the Likert scale, which uses four choices. Individual interests of students can be categorized in the following table:

Tabel 3. 1 Students Motivation Category

Students Score	Motivation Category
More than 48	Very High/Very Good
42 till 47	High/Good
30 till 41	Low
Less than 30	Very Low

Source: (Ali Asmi, 2018). (Said Aidil Fajar, 2022)

Result and Discussion

The students' answers on questionnaires for two cycles of learning suggested that they show interest in physical education through the play method. The results are described as follows.

1.1 Discussion 1

Results of Learning with the Conventional

Calculate the percentage of conventional studied method are using this formula:

$$P = \frac{F}{N} \times 100\%$$

$$P \text{ High} = \frac{0}{32} \times 100\% = 0 \%$$

$$P \text{ Moderate} = \frac{7}{32} \times 100\% = 21,8 \%$$

$$P \text{ Low} = \frac{25}{32} \times 100\% = 78,12 \%$$

Table 4. 4 Percentage of Study Motivation in Conventional Metod

Category	Frequency	Percentage
Low	25	78,12%
High	0	0%
Moderate	7	21,8%
Total	32	100%

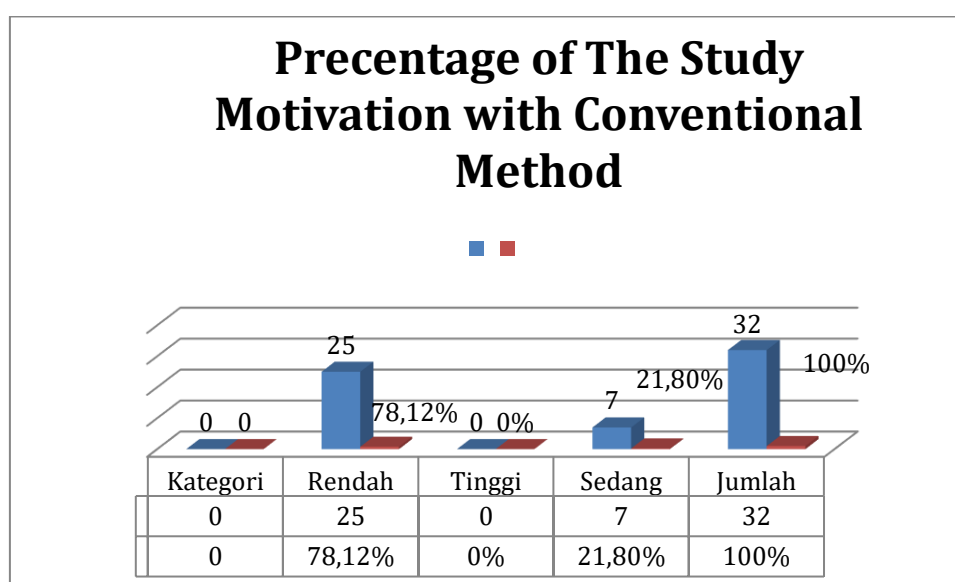
Source: Brilliant Chandra Wibawa 2025.

Calculating mean interest score

$$\bar{x} = \frac{988}{32}$$

$$= 30,88$$

The recapitulation results in Table 4.4 above showed that the mean motivation of students in following the physical education subject through the Conventional was Low. Out of the 100% sample students, 21,8% were moderate, 0% were high, and 78,12% were low.



Source: Brilliant Chandra Wibawa 2025

1.2 Discussion 2

Results of Learning with the Game-Based Learning

Calculate the percentage of Game-based Learning studied method are using this formula:

$$P = \frac{F}{N} \times 100\%$$

$$P \text{ High} = \frac{12}{32} \times 100\% = 37,5 \%$$

$$P \text{ Moderate} = \frac{20}{32} \times 100\% = 62,5 \%$$

$$P \text{ Low} = \frac{0}{32} \times 100\% = 0 \%$$

Tabel 4. 1 Percentage of Study Motivation in Game-Based Method

Category	Frequency	Percentage
Low	12	37,5%
High	20	62,5%
Moderate	0	0%
Total	32	100%

Source: Brilliant Chandra Wibawa 2025.

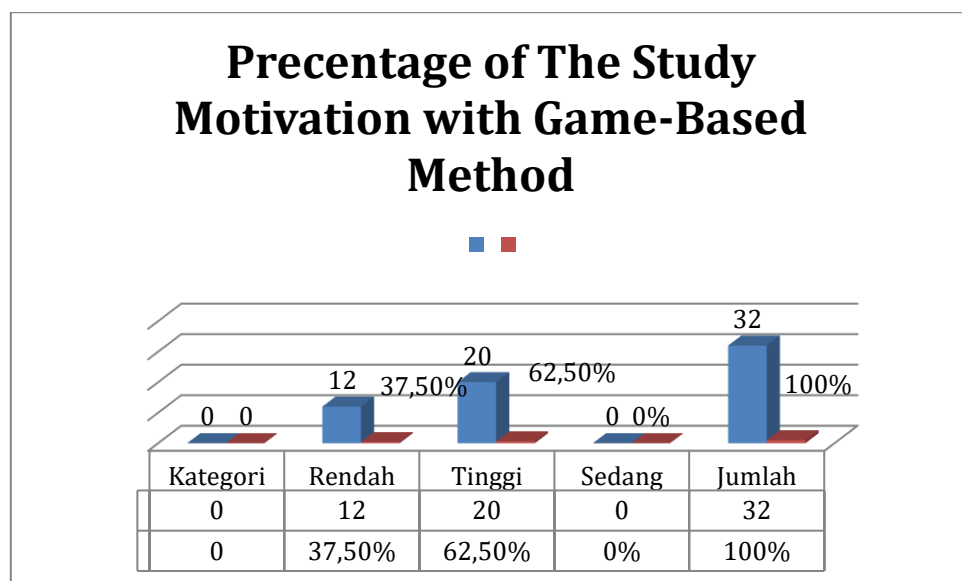
Calculating mean interest score

$$\bar{x} = \frac{\sum x}{N}$$

$$\bar{x} = \frac{2607}{32}$$

$$= 81,5$$

The recapitulation results in Table 4.7 above showed that the mean motivation of students in following the physical education subject through the play method was Average. Out of the 100% sample students, 62.5% were moderate, 37.5% were high, and 0% were low.



Source: Brilliant Chandra Wibawa 2025.

Conclusion

In conclusion, physical education using the play method correlates with an increase in students' interest in learning the subject. A significant difference in students' learning motivation between the conventional method and the play method showed low interest in the conventional method and moderate interest in the play method.

As in previous research, Sindi et al. stated that the play method for learning can optimize physical education, with traits related to interactive, holistic, integrated, scientific, contextual, thematic, effective, and collaborative learning, which focuses on the students. Furthermore, field learning is directed to use learning models/methods associated with those traits. Therefore, we summarized from previous studies that game-based learning is effective and efficient and can be used in physical education. (Sindi Ladya Baharizqi 2023) (Ahmad Roisuddin 2023) (Ningsih 2020) (Anindya Syifa Nuraini 2024) (Dr. dr. Zaenal Muttaqien Sofro 2021) (American College of Cardiology Clinical 2024)

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Gratitude

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