

# Implementation of Game-Based Physical Fitness Exercises for Fourth Grade Students at SD Negeri 99 Palembang

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## Abstrak

Penelitian ini bertujuan untuk mendeskripsikan penerapan latihan kebugaran jasmani berbasis permainan pada siswa kelas IV di SD Negeri 99 Palembang serta mengetahui respon siswa terhadap pembelajaran tersebut. Latar belakang penelitian ini didasarkan pada rendahnya aktivitas fisik dan kurangnya antusias siswa dalam mengikuti pembelajaran PJOK yang dilakukan secara monoton. Oleh karena itu, diperlukan metode pembelajaran yang lebih menarik dan menyenangkan melalui pendekatan berbasis permainan. Metode yang digunakan dalam kegiatan ini adalah observasi, asistensi mengajar, dan praktik mengajar mandiri selama kegiatan Pengenalan Lapangan Persekolahan (PLP). Dalam pelaksanaannya, penulis menerapkan beberapa permainan seperti gerobak dorong, estafet lari, squat berjalan, dan jogging untuk melatih daya tahan otot, kekuatan, koordinasi gerak, dan kelincahan siswa. Hasil pelaksanaan menunjukkan bahwa penerapan latihan kebugaran jasmani berbasis permainan mampu meningkatkan aktivitas fisik, semangat belajar, serta keterlibatan siswa dalam proses pembelajaran PJOK. Siswa terlihat lebih aktif, antusias, dan mampu bekerja sama dengan baik selama kegiatan berlangsung. Selain itu, pembelajaran berbasis permainan menciptakan suasana belajar yang lebih menyenangkan sehingga siswa tidak mudah merasa bosan. Dengan demikian, penerapan latihan kebugaran jasmani berbasis permainan dinilai efektif untuk mendukung pembelajaran PJOK di sekolah dasar karena dapat meningkatkan kebugaran jasmani sekaligus motivasi belajar siswa.

**Kata kunci:** Kebugaran Jasmani, Pembelajaran Berbasis Permainan, PJOK, Siswa Sekolah Dasar.

## Abstract

This study aims to describe the implementation of game-based physical fitness training for fourth-grade students at SD Negeri 99 Palembang and to determine students' responses to this learning. The background of this study is based on low physical activity and lack of enthusiasm among students in participating in monotonous physical education (PJOK) lessons. Therefore, a more engaging and enjoyable learning method through a game-based approach is needed. The methods used in this activity were observation, teaching assistance, and independent teaching practice during the School Field Introduction (PLP) activities. In the implementation, the author implemented several games such as wheelbarrows, relay races, walking squats, and jogging to train students' muscular endurance, strength, motor coordination, and agility. The results showed that the implementation of game-based physical fitness training increased physical activity, enthusiasm for learning, and student engagement in the PJOK learning process. Students appeared more active, enthusiastic, and able to work well together during the activities. Furthermore, game-based learning created a more enjoyable learning atmosphere, preventing students from easily becoming bored. Therefore, the implementation of game-based physical fitness training is considered effective in supporting PJOK learning in elementary schools because it can improve both physical fitness and student motivation.

**Keywords:** Physical Fitness, Game-Based Learning, PJOK, Elementary School Students.

## 1. INTRODUCTION

Physical education is one of the important aspects in improving the quality of human resources. Through education, students not only gain knowledge but also develop the skills, attitudes, and character needed in everyday life. Good education must be able to develop all

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students' potential comprehensively, including cognitive, affective, and psychomotor aspects. Law Number 20 of 2003 concerning the National Education System states that education is a conscious and planned effort to create a learning atmosphere and learning process so that students can actively develop their potential. Therefore, the educational process must be carried out in a structured manner to achieve educational goals effectively.

One of the subjects that plays an important role in supporting students' physical development is Physical Education, Sports, and Health (PJOK). PJOK is part of the educational process that utilizes physical activities to improve physical fitness, motor skills, body health, and character building (Setiawan et al., 2024; Langnes & Bratten, 2023; Suyato et al., 2024). According to the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia (2020), PJOK learning aims to help students develop motor skills, physical fitness, healthy lifestyles, as well as values of sportsmanship, discipline, responsibility, and cooperation through planned physical activities.

PJOK learning at the elementary school level is very important because students are in a period of rapid physical growth and development (Wardika, 2019; Yustiyati et al., 2024; Al Ardha, 2022). At this age, students need sufficient physical activity to support the development of muscles, bones, movement coordination, and overall health. Regular physical activity can also improve students' concentration, learning motivation, and social skills (Sember et al., 2020; Whitehead, 2019; Slapsinskaite et al., 2020).

Physical fitness is the ability of the body to carry out daily activities without excessive fatigue and still have energy reserves for other activities (Anjana, 2021; Rani, 2021; Siedentop & Mars, 2022). Physical fitness is an important element in PJOK learning because it is directly related to students' health conditions and physical abilities. According to the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia (2020), physical fitness activities for elementary school students aim to improve endurance, muscle strength, agility, balance, and movement coordination through regular and planned physical activities.

However, technological development today has led to a decline in physical activity among elementary school children. Many students spend more time using gadgets, playing digital games, and watching videos rather than engaging in physical activities or sports. This condition causes students to become less physically active, which may affect their physical fitness.

According to the World Health Organization (2022), school-age children are recommended to engage in at least 60 minutes of moderate to vigorous physical activity per day to maintain health and physical fitness. However, in reality, many students still do not meet this requirement. Lack of physical activity can make students easily fatigued, less active, and less enthusiastic in participating in school learning activities.

According to Wahid and Kurniawan (2023), the physical fitness level of elementary school students is still relatively low, so learning approaches that can increase students' involvement in active and enjoyable physical activities are needed. Therefore, teachers must use appropriate learning methods that match the characteristics of elementary school students so that they become more active during the learning process.

In addition to low physical activity levels, PJOK learning in schools also faces several challenges. Based on observations during the School Field Introduction Program (PLP) at SD Negeri 99 Palembang, the author found that some Grade IV students were less enthusiastic when participating in physical fitness learning conducted through conventional exercises. Several students appeared to become bored quickly and less active because the learning was monotonous and repetitive.

This condition caused student engagement in learning to be less optimal, so the PJOK learning objectives were not fully achieved. Therefore, a more interesting and enjoyable learning approach is needed to increase students' motivation in physical fitness learning.

According to Rahmat and Nurhayati (2023), PJOK learning in elementary schools should use an active and enjoyable approach so that students are more motivated to participate. Attractive learning can increase student participation in physical activities, making learning objectives easier to achieve.

Elementary school students generally have active characteristics, enjoy playing, and prefer learning through direct experiences. Children are more interested in activities involving movement and games rather than monotonous learning. Therefore, game-based learning is considered suitable for PJOK learning in elementary schools.

Game-based learning is a learning approach that utilizes games as a means to achieve learning objectives. Through games, students can perform physical activities in a fun atmosphere, making them more active and enthusiastic. In addition, game-based learning can also improve motivation, cooperation, discipline, and self-confidence.

According to Suryadi and Kurniawan (2024), game-based learning can improve motivation and physical activity among elementary school students because learning takes place in an enjoyable and interactive environment. Furthermore, research by Hezron Alhim Dos Santos and Adnan Hudain (2023) explains that game-based learning models are effective in increasing physical activity and student engagement in PJOK learning.

Based on observations during PLP at SD Negeri 99 Palembang, the author observed that Grade IV students showed higher enthusiasm when learning was conducted through games compared to traditional exercises. Students appeared more physically active, more enthusiastic, and more cooperative when participating in group games.

In implementing the learning activities, the author applied several game-based physical fitness activities such as wheelbarrow walking, relay running, and squat walking. These games involved physical movements that helped train endurance, muscle strength, coordination, and agility. Through these activities, the learning atmosphere became more active and enjoyable, increasing students' motivation in PJOK learning.

The implementation of game-based physical fitness exercises is expected to create a more active, interesting, and enjoyable PJOK learning environment for elementary school students. In addition, it is also expected to increase students' participation and physical activity during the learning process. Based on the explanation above, the author is interested in preparing a PLP report entitled "Implementation of Game-Based Physical Fitness Exercises for Grade IV Students at SD Negeri 99 Palembang."

## **2. METHODOLOGY**

This study used a qualitative descriptive method. The descriptive qualitative method was used to systematically describe the process of implementing game-based physical fitness exercises for Grade IV students at SD Negeri 99 Palembang and to identify students' responses during the learning process. This study was carried out through the School Field Introduction Program (PLP), which aims to provide real teaching experience for university students in an elementary school environment.

The study was conducted at SD Negeri 99 Palembang, located on Jalan Pertahanan, 16 Ulu, Seberang Ulu II District, Palembang City, South Sumatra. The research activities were carried out from March 2 to May 15, 2026. The subjects of the study were Grade IV students at SD Negeri 99 Palembang who participated in Physical Education, Sports, and Health (PJOK) learning, particularly on physical fitness material related to health.

Data collection techniques in this study were carried out through observation, teaching practice, and documentation. Observation was conducted at the initial stage of the PLP program to identify the school environment, facilities and infrastructure, student characteristics, and the PJOK learning process in the classroom. In addition, observation was also conducted during the learning process to assess students' activeness, enthusiasm, cooperation, and engagement in game-based learning activities.

Teaching practice was conducted by applying game-based physical fitness exercises in PJOK learning. In its implementation, the researcher used several types of games such as wheelbarrow walking, relay running, squat walking, jogging, and other movement-based games aimed at improving students' endurance, muscle strength, movement coordination, balance, and agility. The learning activities were carried out actively and enjoyably to increase students' motivation to participate in learning.

Documentation was used as supporting data in the form of learning activity photographs, lesson plans, teaching modules, and activity notes during the learning process. This documentation was used to strengthen the results of observations conducted during the study.

The data analysis technique was carried out descriptively through steps of collecting data, classifying data, describing observation results, and drawing conclusions based on the implementation of the learning process. The collected data were analyzed to determine how the implementation of game-based physical fitness exercises could improve students' physical activity, learning motivation, and engagement in PJOK learning.

Through this research method, it is expected that a clear picture can be obtained regarding the effectiveness of implementing game-based physical fitness exercises in creating active, enjoyable PJOK learning that is suitable for the characteristics of elementary school students.

## **3. RESULT AND DISCUSSION**

### **Result**

The implementation of the School Field Introduction Program (PLP) at SD Negeri 99 Palembang provided the author with real experience in understanding the learning process in elementary schools, especially in Physical Education, Sports, and Health (PJOK). The PLP

activities were carried out through several stages, namely observation, teaching assistance, and independent teaching practice.

Based on the observation results, PJOK learning in Grade IV showed that students preferred learning activities that involved games and direct movement compared to monotonous instruction. Some students appeared less active when learning was conducted only through explanations without engaging activities. However, when learning was combined with games, students became more enthusiastic and actively participated in the learning process.

During the independent teaching practice stage, the author implemented game-based physical fitness exercises in the health-related physical fitness material. The games used included wheelbarrow walking, relay running, squat walking, and jogging. These activities aimed to train students' muscular endurance, body strength, movement coordination, balance, and agility.

The results of the learning implementation showed that the application of game-based physical fitness exercises was able to increase students' physical activity and engagement during the learning process. Students appeared more physically active, more enthusiastic, and more confident in participating in every activity provided. In addition, students were also able to work well with their group members during the games.

Game-based learning also created a more enjoyable learning atmosphere so that students did not easily feel bored or tired during PJOK lessons. Students appeared more focused in following the teacher's instructions and were more motivated to complete each learning activity given.

In addition to increasing students' activity and learning motivation, the implementation of game-based physical fitness exercises also helped students understand the importance of maintaining physical fitness through enjoyable physical activities. Through these activities, students were able to train their physical endurance while also learning cooperation, discipline, and sportsmanship in group activities.

## **Discussion**

Based on the results of the learning implementation, the application of game-based physical fitness exercises was proven to be effective in PJOK learning for Grade IV students at SD Negeri 99 Palembang. The use of games in learning was able to create an active, interactive, and enjoyable learning atmosphere in accordance with the characteristics of elementary school students who tend to prefer learning through play.

Games such as wheelbarrow walking, relay running, squat walking, and jogging provided opportunities for students to be physically active during the learning process. These activities not only helped improve students' physical fitness but also trained their motor coordination, body balance, and cooperation among students.

The implementation of game-based learning also increased students' learning motivation. This was evident from students' enthusiasm during learning activities. Students appeared more energetic, actively asked questions, and were more confident when performing game activities with their peers. Learning became more engaging because students could learn while playing in a fun atmosphere.

The results of this study are in line with the opinion of Suryadi and Kurniawan (2024), who state that game-based learning can improve students' motivation and engagement in PJOK learning. In addition, the study by Dos Santos and Hudain (2023) also explains that game-based learning models are effective in increasing physical activity and participation of elementary school students.

In addition to providing positive impacts on students, the PLP activities also provided valuable experience for the author as a prospective educator. The author gained experience in developing lesson plans, selecting appropriate teaching methods and media, classroom management, and creating an active and enjoyable learning environment.

Thus, the implementation of game-based physical fitness exercises can be considered an effective alternative learning method in PJOK at elementary schools because it is able to improve physical activity, learning motivation, and student engagement during the learning process.

#### **4. CONCLUSION**

Based on the results of the School Field Introduction Program (PLP) implementation at SD Negeri 99 Palembang, it can be concluded that the application of game-based physical fitness exercises in PJOK learning for Grade IV students was able to create a more active, interactive, and enjoyable learning atmosphere. The use of games such as wheelbarrow walking, relay running, squat walking, and jogging increased students' physical activity, enthusiasm, motivation, and engagement during the learning process.

The implementation of game-based learning also helped students improve muscular endurance, movement coordination, balance, cooperation, discipline, and self-confidence. Students appeared more enthusiastic and did not easily feel bored because the learning activities were carried out through play-based activities that matched the characteristics of elementary school students.

In addition to providing positive impacts for students, the PLP activities also provided valuable experience for the author as a prospective educator in understanding the learning process, classroom management, lesson planning, and the selection of appropriate teaching methods. Thus, game-based physical fitness exercises can be used as an effective alternative learning method in PJOK at elementary schools to improve students' physical fitness and learning motivation.

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