

Effects of the Traditional Terompa Game on Gross Motor Skills in Grade 7 Student

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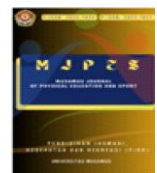
Abstract

This study aims to determine the effect of the traditional game "Terompa" on improving gross motor skills in seventh-grade students at Paya Pinang Private Junior High School in the 2025/2026 academic year. The problem in this study, based on initial observations conducted on seventh-grade students at Paya Pinang Private Junior High School, was that motor skills were still relatively low. Students experienced difficulty performing movements during activities and lacked coordination.

This research is an experimental study. The research design used in this study was a "one-group pretest-posttest design." The population in this study was 25 students. From the population of 25, the author determined a total sampling technique, namely all seventh-grade students, making up a sample of 25 students.

Based on the results of data analysis from the calculation of the Homogeneity test, the t-test obtained for sit-ups was 6.52, 20-meter run 18.17, shuttle run 17.09, sit and reach 29.80, tests Bleep 28.63, and vertical jump 8.04 and t table 2.064, then the price is consulted with the t table price at the significance level $\alpha = 0.05$ with $dk = n-1$ ($25-1$) = 24 then this result shows that there is a significant difference with an increase of 37% sit up, 15% run 20 meters, 14% Shuttel run, 37% sit and reach, 31% test Beep and 37% vertical jump. Thus the alternative hypothesis (H_a) which reads "There is an Effect of Increasing Gross Motor Skills of Class VII Students of Paya Pinang Private Middle School in the 2025/2026 Academic Year"

Keywords: Traditional Terompa Game, Motor Skills, Junior High School Students

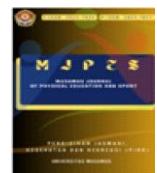


Introduction

Physical Education is an educational discipline that teaches how to manage the body and mind to achieve better health and fitness. It incorporates instruction in various sports—both team and individual—making it an enjoyable subject that students look forward to. Physical education plays a strategic role in supporting the holistic development of students across physical, cognitive, affective, and social domains. It instills values such as character, sportsmanship, and perseverance. Through systematically planned physical activities, this subject—often referred to as PJOK (Physical Education, Sports, and Health)—aims to enhance physical fitness, motor skills, and sportsmanship, while fostering healthy, active lifestyle habits in students' daily lives.(Yuliantini, 2024)

A primary focus of the PJOK curriculum, particularly at the junior high school (SMP) level, is the development of physical activities performed during lessons. These activities help develop both gross and fine motor skills. Motor skills are acquired through the various forms of activity students engage in—both at school and in their daily lives—to support their overall well-being.(Parista, 2016)

Gross motor skills involve the use of large muscle groups—such as those in the arms, legs, and core—enabling students to walk, run, change positions, and execute coordinated movements (such as eye-foot and eye-hand coordination) in an integrated manner(Tarigan et al., 2025). During the junior high school years, gross motor development enters a phase of refinement and maturation. If students do not receive sufficient and varied movement stimulation during this phase, their gross motor development risks being delayed or failing to reach its full potential(C. Winata et al., 2025). Field observations conducted by the researcher indicate that the gross motor skills of students at Paya Pinang Private Junior High School remain low. This is largely attributed to changing student lifestyles, characterized by minimal physical activity and a preference for sedentary pastimes such as playing mobile games or watching television(D. C. Winata, Sari, et al., 2023). Undoubtedly, advancements in technology—particularly the use of mobile devices, online gaming, and social media—have led students to spend more time in solitary activities rather than engaging in active play with peers. This situation is exacerbated by limited time and a lack of variety in physical education (PE) lessons at school, further restricting opportunities for movement. Consequently, there is a need for varied instructional methods and physical activities that foster more meaningful physical engagement among students(Ginting et al., 2025).

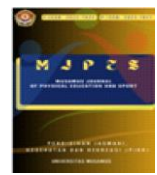


Furthermore, PE instruction in schools tends to rely on conventional approaches that prioritize mastering specific sports techniques. Such instructional patterns often overlook students' developmental characteristics and fail to provide safe, enjoyable movement experiences. As a result, student motivation and enthusiasm for PE decline, active participation drops, and the goal of maximizing gross motor skill development remains unfulfilled.(Haku, 2022)

Addressing this issue requires innovation in physical education—specifically, approaches that comprehensively boost student movement while offering meaningful, enjoyable, and engaging learning experiences. One viable alternative is the use of traditional games as an instructional medium. Traditional games offer distinct advantages: they are simple to organize, require no complex facilities, and incorporate cultural elements and social values relevant to students' daily lives. Moreover, they are easily played, making them an excellent tool for promoting physical activity and fitness.

The traditional game of *terompa* (long-plank racing) holds significant potential for developing gross motor skills among students at the kindergarten, elementary, and junior high school levels. Played using a long wooden plank fitted with foot straps, the game requires participants to coordinate their leg movements, maintain balance, and synchronize their stepping rhythm to move forward in unison and effectively with their teammates. In practice, the game engages various gross motor components—such as leg muscle strength, static and dynamic balance, movement coordination, and agility—as well as teamwork, particularly when played in groups of three to five people on a single plank.(Khafidoh & Maulida, 2021)

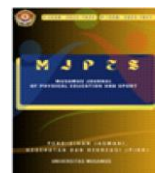
From a pedagogical standpoint, the *terompa* game provides comprehensive and continuous movement stimulation. Students are required not only to be physically active but also to control their bodies, synchronize their movement rhythms, and collaborate with teammates. The game's challenging yet enjoyable nature boosts students' intrinsic motivation to move, allowing physical activity to proceed optimally without inducing boredom or a sense of compulsion.



While this activity can be incorporated into school physical education (PE) lessons, the traditional *terompa* game remains underutilized by teachers and students at both elementary and secondary levels. PE teachers tend to favor common, conventional instructional materials, leaving the potential of traditional games as a medium for gross motor development largely unexplored. Furthermore, scientific research specifically examining the impact of the *terompa* game on improving students' gross motor skills is limited. Most prior studies have focused on contemporary team games or formal sports, creating a research gap regarding the effectiveness of traditional games within the context of physical education. This research is grounded in the gap between students' needs for gross motor skill development and the limited use of traditional games in physical education instruction. The study, which examines the impact of the *terompa* (long wooden sandal) traditional game on improving students' gross motor skills, aims to provide empirical evidence regarding the effectiveness of traditional games as an alternative physical education teaching model. Furthermore, the research seeks to contribute to the preservation of traditional games by integrating them into the educational landscape.(D. C. Winata, Pertiwi, et al., 2023)

The *terompa* game involves five participants using a long wooden sandal measuring 235 cm in length, 10 cm in width, and 2.5 cm in thickness, with a pair weighing approximately 8 kg; these specifications adhere to the regulations set by PORTINA (the Indonesian Traditional Sports Association). The game is played on a flat surface—whether grass, concrete, or packed earth—and aims to test cohesion, balance, and teamwork. The long sandal is constructed from wood cut to standard dimensions for five people, featuring foot straps made from tire rubber nailed to the board at adjusted intervals. The course covers a distance of approximately 10 meters, including a turnaround point, meaning the start and finish lines are at the same location. This activity is enjoyable and offers numerous benefits.

This research is significant for examining both the physical aspects and the social skills of students—specifically their ability to communicate and coordinate leg movements while sharing a single *terompa* board to move forward effectively, as well as maintaining the balance required to avoid falling during the activity. It also fosters character development in the affective domain, specifically regarding cooperation, communication, and leadership. Through the *terompa* game, students practice body coordination and balance while moving—running and jumping—on the sandals, while also learning to cooperate, resolve conflicts, and build healthy, strong interpersonal relationships. Beyond the physical aspects, this study also helps preserve ancestral heritage and culture—specifically, traditional games. These games not only demonstrate a positive contribution to student development and promote healthy physical activity but also play a role in maintaining the sustainability and relevance of traditional games in modern society.



By integrating existing facts and relevant perspectives, this research serves a crucial role in establishing a solid scientific foundation and providing a deeper understanding of how traditional games—specifically *terompa*—impact students' optimal development across various aspects of life.

Given this context, conducting research on the influence of the traditional *terompa* game on the improvement of students' gross motor skills is both important and relevant. The findings are expected to yield not only theoretical benefits for the advancement of physical education, but also practical value by serving as a reference for physical education teachers in designing lessons that are innovative, effective, and aligned with students' developmental characteristics.

Materials and Methods

Study Design

This study employs an experimental research method. The experimental method is defined as a systematic approach aimed at investigating the influence of one variable on another through the application of a specific treatment and strict control of conditions. The research design utilized is the one-group pre-test-post-test pre-experimental design. This design involves a single group that undergoes a pre-test (O), receives a treatment (X), and subsequently takes a post-test.

The success of the treatment is determined by comparing the pre-test and post-test scores. In this one-group pre-test-post-test pre-experimental study, the initial step involves selecting the research sample and organizing it into a single study group. The subsequent step is administering a pre-test to measure gross motor skills.

Tabel 1. Desain one group pre-test post-test
Sumber : (John Creswell, 2010: 172)

O1	X	O2
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Legend:

O1: Pre-test

O2: Post-test

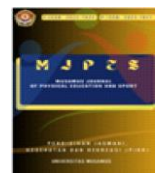
X: Treatment

The intervention in this study employs a play-based approach. According to Sukadiyanto, training yields optimal results—specifically a 50% improvement—when conducted over an eight-week period; however, due to time and budget constraints, this study will be carried out over a period of five weeks (one month and one week). Participants will undergo the intervention ten times over the course of the month, with a frequency of three sessions per week.

Study Participants

The population for this study consists of the entire group of 25 Grade VII students at Paya Pinang Private Junior High School during the 2025/2026 academic year. The study utilizes the entire population of 25 students as the sample, employing the total sampling technique.

Statistical Analysis



Mansyur (2008: 248) defines data analysis as the activities of organizing, sequencing, grouping, coding or marking, and categorizing data to enable the discovery and formulation of a working hypothesis based on that data.

1. Description of Research Results

To describe the pre-test and post-test results, the following formula is used:

$$\text{Class Interval} = 1 + 3.3 \log N$$

2. Analysis Prerequisite Tests

Before hypothesis testing is conducted, prerequisite tests must be performed. These prerequisite tests consist of normality and homogeneity tests.

3. Hypothesis Testing

Once the data has been collected, the next step is to analyze it. The technique used to analyze experimental data from a pre-test/post-test design is the t-test. According to Suharsimi (2005: 395), the t-test formula for a pre-test/post-test design is as follows:

Where:

t = t-value for correlated samples

D = (difference), the difference between initial and final test scores for each individual

$\bar{D}$ = mean of the difference values (mean of D); D^2 = square of D

N = number of research subjects

To determine whether the research hypothesis is accepted or rejected, the calculated t-value (t_{count}) is compared to the t-table value (t_{table}) at a 5% significance level. If $t_{\text{count}} > t_{\text{table}}$, a significant difference exists in the study. Consequently, the null hypothesis (H_0) is rejected, and the working hypothesis (H_a) is accepted.

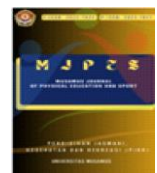
This study also requires data on the percentage of improvement to assess the progress of extracurricular participants following underhand passing training using a game-based method. The formula used is as follows:

$$\text{Percentage of improvement} =$$

These results will serve as a reference for any future studies of a similar nature. Thus, the abilities of extracurricular participants will be monitored through research data.

Results

Pretest data regarding the gross motor skills of 7th-grade students at Paya Pinang Private Junior High School (Academic Year 2025/2026) were collected on April 13, 2026. Subsequently, a target-based training intervention was conducted over ten sessions, scheduled twice weekly on Mondays and Thursdays. Posttest data were collected on May 20, 2026. The pretest and posttest results concerning the



improvement of gross motor skills among these students are presented in Table 1 below:

Tabel 1. Pretes and Posttes Gross Motoric

No	Komponen	Lari 20 m	Shuttle run	sit up	Sit and Reach	Tes Beep	Vertical jump
1	Pretes	58,1	98,2	489	872	125,3	6305
2	Posttes	68,1	284,8	669	1210	156,9	6383

Based on the table above, the lowest and highest pretest scores were 11 and 28, respectively; for the 20-meter run, the scores ranged from 2.5 to 5.9; for the shuttle run, the range was 12.03 to 16.55; for the sit-and-reach test, the range was 27 to 42; for the beep test, the range was 4.5 to 5.4; and for the vertical jump, the range was 30 to 269. These results pertain to the gross motor skills of Grade VII students at Paya Pinang Private Junior High School for the 2025/2026 academic year.

Based on the table above, the post-test results show the following ranges: sit-ups (13 to 37), 20-meter run (1.27 to 4.57 seconds), shuttle run (9.01 to 14.94 seconds), sit-and-reach (41 to 58), beep test (5.8 to 6.7), and vertical jump (30 to 269). These results pertain to the gross motor skills of Grade VII students at Paya Pinang Private Junior High School during the 2025/2026 academic year.

The researcher's first step was to identify the problem to be studied by observing the students' gross motor skills—specifically their level of mastery and enthusiasm during training sessions. This was done to assess changes in the students' gross motor skill performance following the training.

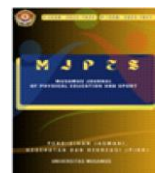
Prior to the study, the researcher interviewed the teacher to gather information on the students' gross motor skill levels. Subsequently, the researcher conducted training sessions followed by a post-test. Preparatory actions involved planning the training program before executing the research stages.

The stages were as follows:

- The researcher introduced themselves and explained the purpose and objectives of the study.
- The researcher explained the training program designed to improve the students' motor skills.
- After completing the training program over ten sessions, the participants took the post-test using the designated assessment instrument. Upon completion of the study, the results from both the pre-test and post-test were obtained. The description of the pretest data is based on results obtained from measurements taken prior to the intervention; subsequently, ten training sessions were conducted, followed by a posttest. The descriptive analysis of the gross motor skill data for Grade VII students at Paya Pinang Private Junior High School (Academic Year 2025/2026) utilized six test items, namely: *Tes Sit Up*, *Tes Lari 20 Meter*, *Tes Shuttel Run*, *Tes Sit and Reach*, *Tes Daya Tahan Beep*, *Vertical jump*.

This study aims to determine the improvement in gross motor skills among Grade VII students at Paya Pinang Private Junior High School during the 2025/2026 academic year. The results indicate a significant effect on the improvement of gross motor skills for this group of students.

The calculated t-values were 6.52 for sit-ups, 18.17 for the 20-meter run, 17.09 for the shuttle run, 29.80 for the sit-and-reach test, 28.63 for the Beep test, and 8.04 for the vertical jump; the t-table value was 2.064. Comparing these figures against the t-table value at a significance level of $\alpha=0.05$ with degrees of freedom (df) = n-1 (25-1) = 24



revealed significant differences, with improvements of 37% in sit-ups, 15% in the 20-meter run, 14% in the shuttle run, 37% in the sit-and-reach test, 31% in the Beep test, and 37% in the vertical jump. Thus, the alternative hypothesis (H_a)—stating that there is an effect on the improvement of gross motor skills among Grade VII students at Paya Pinang Private Junior High School during the 2025/2026 academic year—is supported.

Junior high school age represents a developmental phase at the secondary education level. According to Sumantri and Sukmadinata (cited in Wardani, 2012), the characteristics of children at this school age include: (1) enjoying play; (2) enjoying movement; (3) enjoying working in groups; and (4) enjoying experiencing or doing things firsthand. At this age, children also undergo motor and social development.

Traditional games also constitute an important part of local and regional wisdom, helping to foster social harmony within the community. Through this game, values, norms, and customs are instilled, strengthening social solidarity within a diverse society. To address the impact of globalization, it is essential to cultivate virtuous behavior in individuals' daily lives.

Traditional games embody values and norms that reflect the community's identity through a philosophical lens, serving to foster strong character development in students. Gross motor skills are closely linked to the function of the body's large muscle groups; children typically utilize these skills when participating in sports activities.

Acknowledgments

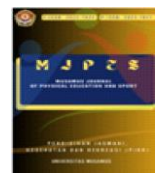
Based on the data analysis and homogeneity test calculations, the obtained t-values were 6.52 for sit-ups, 18.17 for the 20-meter run, 17.09 for the shuttle run, 29.80 for the sit-and-reach test, 28.63 for the Bleep test, and 8.04 for the vertical jump, while the t-table value was 2.064. These values were compared against the t-table value at a significance level of $\alpha = 0.05$ with degrees of freedom (df) = $n - 1$ ($25 - 1$) = 24. The results indicate a significant difference, with improvements of 37% in sit-ups, 15% in the 20-meter run, 14% in the shuttle run, 37% in the sit-and-reach test, 31% in the Bleep test, and 37% in the vertical jump. Thus, the alternative hypothesis (H_a)—stating that there is an effect on the improvement of gross motor skills among Grade VII students at Paya Pinang Private Junior High School for the 2025/2026 academic year—is supported.

Conflict of Interest

Thank you to the teachers, students, and principal SMP Swasta Paya Pinang Tahun Ajaran 2025/2026.

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