

## **The Influence of Block Games and Coconut Shell Clogs on Students' Physical Fitness in Learning Physical Education, Sports, and Health**

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**Abstract:** The purpose of this study was the effect of the game hadang and Tempurung Bakiak on the physical fitness of students in learning physical education, sports, and health at SMP Negeri 27 Palembang. This research was conducted at SMP Negeri 27 Palembang which is located on Jl. Rejung No. 198, Sako Baru, Kec. Sako, Palembang City, South Sumatra 30961. The method used in this study is an experimental method with a pre-test and post-test one group design. The data collection technique used the bleed test technique or a 20-meter back-and-forth test. The population of this study were all students of class VIII at SMP Negeri 27 Palembang, while there were students in class VIII.2 and VIII.3 with a total of 65 people. The data analysis technique used is the inferential data analysis technique with the help of the t test SPSS version 23.00 for windows. Based on the discussion that has been stated above, it can be concluded that: (1) there is an effect of obstacle games on students' physical fitness in learning physical education, sports, and health; (2) The Effect of Playing Coconut Shell Clogs on Students' Physical Fitness in Learning Physical Education, Sports, and Health.

**Keywords:** Barriers, Coconut Shell Clogs, Games, Physical Fitness

### **A. Introduction**

The development of adult football games Physical education is a psychomotor activity carried out on the basis of knowledge (cognitive), and when carrying it out personal behavior related to attitudes/affective (such as discipline, honesty, confidence, toughness) and social behavior (such as teamwork) will occur. , helping each other). Physical education is an important part of education as a whole, which aims to develop aspects of physical fitness, movement skills, critical thinking skills, social skills, reasoning, emotional stability, aspects of a healthy lifestyle and the introduction of a clean environment, carrying out systematically planned physical activities in order to achieve national education goals. In UU. RI. No. 3 of 2005 Chapter II article IV concerning the national sports system has stated that "national sports aim to maintain and improve health, fitness, achievement and quality of

human life." This means that the importance of health and fitness will greatly affect the quality of human life. Physical fitness is one aspect that greatly influences the quality of healthy human life (UU. RI. No. 3, 2005).

Physical, sports and health education are forms of efforts to improve the quality of Indonesian people which are directed at forming character and personality, high discipline and sportsmanship, as well as increasing achievements that can generate a sense of national pride. Physical, sports and health education activities in schools cover various branches such as sports, games, water sports, martial arts, and so on. Therefore, physical education, sports and health activities are inseparable from elements of fitness for endurance (Sukadiyanto, 2017).

Physical fitness is the body's ability to carry out daily physical work without causing significant fatigue. Without causing fatigue, it means that after someone has done a job, that person still has enough enthusiasm and energy to enjoy his free time for other sudden needs (Wiarso, 2019). Physical fitness has two main components, namely: components of fitness related to health, including: muscle strength, muscle endurance, aerobic endurance, flexibility. As well as components of physical fitness related to skills, including: coordination, agility, movement speed, muscle explosive power, and balance. The components of physical fitness are determining factors for the degree of each individual's condition. A person is said to be fit if he is able to carry out all activities of daily life without experiencing significant obstacles and can carry out the next task immediately (Prasetio, 2017).

Based on the results of the initial observations that the researchers conducted at SMP Negeri 27 Palembang, it was found that the physical condition of all extracurricular students at SMP Negeri 27 Palembang had no physical or mental disabilities, all of them were normal. In addition, the physical fitness of SMP Negeri 27 Palembang students varies (varies). The phenomenon that occurs is that there are some students who still have less physical fitness, such as fatigue after participating in physical education, sports and health lessons. In addition, the class teacher's report also stated that students were sleepy after learning physical education, sports and health.

Various factors affect the physical fitness of students. According to Irianto (2021), factors that can affect a person's physical fitness include eating, resting, and exercising. Sport plays an important role for physical fitness (Irianto, 2021). Therefore, sports should be introduced from an early age and must attract the attention of students. One sport that can arouse students' interest in playing is traditional sports or also called traditional games.

Traditional games are a form of culture of a nation. The traditional game of the Indonesian people is a form of Indonesian culture which is widespread in various regions in Indonesia. The traditional game is a national activity that occupies an important place in people's lives and is a very large resource and has value in

instilling attitudes and skills. Traditional games are a forum for community activities as entertainment or channeling creativity in spare time and as a means of socialization. One of these traditional games is the game hadang (Kusmayadi, 2019) and the clog shell game (Danandjaja, 2019).

There are various types of traditional games. According to Mulyana & Lengkana, (2017) these types of traditional games include fort games, tug of war games, blocking games, stilts games, pillow gebuk games, long jump games, bealok running games, lele/gatrik stake games, dagongan games, blowpipe games, and other games. Furthermore, according to Kusmayadi (2019), there are several traditional games that create children's intelligence such as congklak, teng-teng tenggang, kites, climbing areca nut, tops, clogs, and hide and seek (Danandjaja, 2019).

The game of hadang and the game of bakiak shell certainly have various benefits, one of which is to improve physical fitness. According to Mulyana & Lengkana, (2017) the game of blocking is a game that is played on a rectangular field and often uses a slightly wider field. The purpose of this game is to fill free time, play, increase team cohesiveness, and make people happy, improve fitness, and socialize (Mulyana, & Lengkana, 2017). In addition, according to Danandjaja, there are several benefits of shell clogs including children becoming more creative, therapy for children, training instincts and accuracy in acting, increasing physical and mental endurance, training sportsmanship in life, fostering socialization in relationships, and preserving traditions. and local wisdom (Danandjaja, 2019).

Based on the background above, the authors intend to conduct research with the title "The Influence of Block Games and Coconut Shell Clogs on Students' Physical Fitness in Learning Physical Education, Sports, and Health"

## **B. Methods**

The method used in this study is the pre-experimental design experimental method. The research design used in this study was a pre-test and post-test one group design. In this design, observations were made 2 times, namely before the experiment (O1) and after the experiment (O2) (Sugiyono, 2018). The data collection technique used in this study was the bleep test technique or a 20-meter back-and-forth test (Ismaryati, 2018). The population of this study were all students of class VIII at SMP Negeri 27 Palembang. The sample was selected by means of simple random sampling and obtained students of class VIII.2 and VIII.3 with a total of 65 people.

This study consisted of two independent variables, namely the game of blocks (X1) and the game of coconut shell clogs (X2), while the dependent variable was the physical fitness of students (Y). The data analysis technique used is inferential data analysis technique. The use of descriptive data analysis techniques to obtain an

overview of the characteristics of the distribution of values for each variable studied. In this study, the authors used data analysis techniques with the help of the t-test SPSS version 23.00 for windows.

### **C. Results and Discussion**

#### **The Effect of Obstruction Games on Students' Physical Protection in Learning Physical Education, Sports, and Health**

Based on the results of Hardjasuganda (2017), it was stated that the correlation between the initial test, namely the test given before the research object received experimental treatment, in this case the term game blockade and the final test, namely when the research object was given experimental treatment, was  $r = 0.97$   $t$  count = 24.596 >  $t$  table = 2.021 which means there is a significant (real) relationship or influence. The correlation between the physical fitness value of the initial test and the final test obtained coefficient  $r = 0.97$  and  $y$  count = 24.596 >  $t$  table = 2.021 at a positive confidence level (Hardjasuganda, 2017).

The results of Divine (2023) stated that from the results of the t-test, a  $t$  count of 6,093 was greater than a  $t$  table of 2,011 ( $6,093 > 2,011$ ), so that there was a significant difference in the data before and after being given treatment. Thus, it can be interpreted that there is an influence of the traditional game of hadang on the level of physical fitness of students in grades IV and V of SD Negeri 72 Bengkulu City (Divine, 2023).

The results of Apriani (2021) prove that using the obstacle course game has a significant effect on increasing the physical fitness of UKM Petanque UIR athletes. A different thing happened in the game of fort which was not proven to have a significant effect on the level of physical fitness of UKM Petanque UIR athletes with a value of 0.603. If seen in table 1, the mean value of the game of blocking is 1.12, while the game of fortification is -62, this can be interpreted that the game of blocking is better than the game of fortress. This research can be carried out by other sports as well as more traditional games so that sports are more enthusiastic (Apriani, 2021).

Traditional game of hadang, which is rarely played by children, has a positive contribution in improving one's physical fitness. Folk games that have developed for quite a long time need to be preserved, because apart from being a sport of entertainment, fun and a need for social interaction, this sport also has the potential to improve the physical quality of the perpetrators as well as the traditional game of fortification (Kusnandar, et al., 2019).

Based on the results of previous research and the theory above which states that obstacle games affect physical fitness abilities. Thus the author's assumption of this

study is that the effect of obstacle games has an effect on students' physical fitness in learning physical education, sports, and health at SMP Negeri 27 Palembang.

### **The Effect of Playing Coconut Shell Clogs on Students' Physical Fitness in Learning Physical Education, Sports, and Health**

The results of the research by Laely & Yudi, (2015) stated that the column asymp.sig. (2-tailed)/asymptotic significance for the two-tailed test is 0.001. Since the case is a one-tailed test, the probability becomes  $0.001 / 2 = 0.0005$ . Here the probability is 0.05 ( $0.0005 < 0.05$ ). Then  $H_0$  is rejected, or there is a difference in the kinesthetic intelligence of children in the initial measurement and the final measurement after being given learning activities with the traditional game of coconut shell stilts (Laely, & Yudi, 2015).

Adhariah (2018) stated that the average pretest experimental class score was 46.9 (poor), increasing to 68.76 (good) for the posttest score. That the level of physical fitness of students who were initially lacking has now increased to be good. The average value of the pretest control class was 43.3 (poor) to 54.03 (moderate) for the posttest score. Whereas the level of physical fitness of students who were initially lacking has now increased to moderate. The data of this study indicate that there is an influence of the traditional bakiak shell game on increasing students' physical fitness. This is evidenced by the arithmetic significance value in the t-test of  $t\text{-count} = 17.12$ , while  $t\text{-table} = 2.001$ . Because  $t\text{-count} > t\text{-table}$ ,  $H_0$  is rejected and  $H_a$  is accepted (Adhariah, 2018).

Based on observation, assistance, data collection, and test results that have been carried out, it can be concluded that there is a significant influence of playing coconut shell stilts to increase kinesthetic intelligence and foster interest in traditional games in group A children TK 02 Mazro'atul Ulum Paciran Lamongan. This conclusion is based on an independent sample t-test in which a probability value of  $p\text{-value} < 0.05$  and a  $t\text{count}$  of 12.457 which is in the  $H_0$  area is rejected (Hasan, et al., 2021).

Based on the results of previous research and the theory above which states that playing coconut shell clogs has an effect on physical fitness abilities. Thus, the author's assumption of this research is that the effect of playing coconut shell clogs has an effect on students' physical fitness in learning physical education, sports, and health at SMP Negeri 27 Palembang.

### **D. Conclusion**

Based on the discussion that has been stated above, it can be concluded that: (1) there is an effect of obstacle games on students' physical fitness in learning physical

education, sports, and health; (2) The Effect of Playing Coconut Shell Clogs on Students' Physical Fitness in Learning Physical Education, Sports, and Health.

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### **References**

- Adhariah, I. (2018). *The Effect of Traditional Games on Increasing Physical Fitness of Students (Quasi-Experimental Students of Class V SDN Bojong Loa)*. Faculty of Tarbiyah and Teacher Training, State Islamic University of Sultan Maulana Hasanuddin Banten.
- Apriani, L. (2021). Experimental Study at the Petanque Student Activity Unit at the Islamic University of Riau: Improving Physical Fitness through Block and Fortress Games. *MensSana Journal*, 6 (1).
- Danandjaja, J. (2019). *Indonesian Folklore*. Jakarta: Press Graffiti.
- Divine. (2023). The Influence of Traditional Hadang Games on the Level of Physical Fitness of Students at SD Negeri 72 Bengkulu City. *De\_Journal (Dharmas Education Journal)* 4(1) [http://ejournal.undhari.ac.id/index.php/de\\_journal](http://ejournal.undhari.ac.id/index.php/de_journal)
- Hardjasuganda, D. (2017). The Effect of Obstruction Games on Increasing Physical Freshness of Class V-IV SD Sukamaju and Babakan Hurip North Sumedang District. *Journal Basic Education*, 8.
- Hasan, M.N., Husnah, R., & Parastuti, S.A. (2021). Utilization of Coconut Shell Stilts to Improve Children's Kinesthetic Intelligence and Grow Interest in Traditional Games. *Awwaliyah: PGMI Journal*, 4(2).
- Irianto, D. P. (2021). *Handbook of Practical Exercising for Fitness and Health*. Yogyakarta: Andi.
- Ismaryati. (2018). *Sports Tests and Measurements*. Surakarta: March Eleventh
- Kusmayadi, I. (2019). *Dismantling Children's Intelligence (Detecting Children's Talents and Potential Early)*. Jakarta: Our Book.
- Kusnandar, K., Purnamasari, D., Nurcahyo, P., & Darjito, E. (2019). The Effect of Gol-Golan Banyumas Traditional Games on the Level of Physical Fitness of Elementary School Students in Banyumas Regency. *Physical Activity Journal*, 1(1), 18-26.
- Laely, K., & Yudi, D. (2015). The Effect of Playing Coconut Shell Stilts on Increasing Children's Kinesthetic Intelligence. *Empowerment: Scientific Journal of Out-of-School Education Study Program*, 4(1).

- Mulyana, Y., & Lengkana, A. S. (2017). *Traditional Game*. Bandung: Greetings Humans.
- Prasetio, E. (2017). Physical Fitness Levels Based on Body Mass Index in North Bengkulu 29 Public Middle School Students. *Kinesthetic: Scientific Journal of Physical Education*, 1(2).
- Sugiyono. (2018). *Quantitative Qualitative Research Methods and R&D*. Bandung: Alfabeta.
- Sukadiyanto. (2017). *Introduction to Theory and Methodology of Physical Training*. Bandung Lubuk Agung. Bandung: Lubuk Agung.
- UU. RI. No. 3 of 2005 Chapter II article IV concerning the national sports system.
- Wiarso, G. (2019). *Exercise Guide for Health and Fitness*. Yogyakarta: Graha Ilmu.