



# PROCEEDING



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## IMPROVEMENT OF PHYSICAL FITNESS WITH NET GAMES MODEL FOR ELEMENTARY SCHOOL STUDENTS

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**Abstract:** This research is one group experiment with the treatment as much as 12 session the pre-test and post-test an physical fitness upscale Elementary School 1 Kandangan. The subjects were upper-class as 28 students. The technique retrieval data use Indonesia Physical Fitness Test. The Analysis research using t test. The results were obtained t value of -4.264 with a significance value of 0.000. It turns out that the significance value less than 0.05 was obtained. It can be concluded that the hypothesis is accepted.

**Keywords:** Net game, Physical fitness, Elementary school students

Education as a process of long life human development. In Law no. 20 of 2003 on National Education System (article 1) stated that education is a conscious and planned effort to create an atmosphere of learning and learning process so that learners actively develop their potential to have spiritual power of religion, self-control, personality, intelligence, noble character, as well as the skills that he or she needs, society, nation and State. Education is one of human effort to improve life degree. Through human education can be creative and explore the thinking to the quality of life for the better. National education aims to educate the life of the nation and develop a complete humanity of Indonesia, the human being who believes and cautious against God Almighty and virtuous noble character, possessing knowledge and skills, physical and spiritual health, a solid and independent personality and sense of responsibility to the community and nation (Soenarjo, 2002, p1).

Motion as physical activity is the basis for man to know the world and himself that naturally develops in the direction of the times. The tendency to give meaning to the quality of education is only related to aspects of the ability to think. Physical Education Sport and Health in schools is an integral part of education as a whole, aiming to develop aspects of physical fitness, motion skills, critical thinking skills, social skills, reasoning, emotional stability, moral action, healthy lifestyle aspects and the introduction of a clean environment through activity physical, exercise and health systemically planned in order to achieve national education goals (Ministry of National Education, 2006, p5).

Physical Education Sport and Health plays an important role for learners. It is a process of physical formation that is very necessary students in living everyday life and affect the future of children. In the physical education teaching and learning process, learners are given the opportunity to be directly involved in the activities. This will be an unforgettable learning experience. Briefing of the learning experience is directed to foster physical growth and better psychic development, as well as form a healthy lifestyle and fit throughout life. Lessons learned in elementary schools have a goal to develop children's motion skills and physical fitness. Physical fitness of children is one indicator of teacher for the assessment of learners in learning. So that the physical fitness of learners is one of the main factors in determining the success of learning physical education in elementary school and supported by other aspects. Given the characteristics

of physical education is a physical learning, then the physical fitness of learners to be a benchmark in determining the success of learning outcomes. Good physical fitness is the main basic capital for a person to perform physical activity repeatedly in a relatively long time without causing fatigue which means. By having good physical fitness, it is hoped that someone will be able to work productively and efficiently, not suffering from illness, learn more spirit and can perform optimally, and to be able to face challenging life, whether as a student, student, employee, or athlete. With good physical fitness then the body will also be healthy. Should not be omitted the motto "in a strong body, there is a healthy soul", can be assumed if the body feel healthy and fit then the child is relatively positive thinking in solving the problem. So indirectly will support in carrying out the learning process in school.

The development of physical fitness in the Elementary School is carried out in a variety of physical activities. One of these efforts is through game activity. Game activity is one form of physical activity for the formation of physical fitness in elementary schools in particular in learning physical education sports and health. The game is essentially an element that is firmly attached to the lives of children. In everyday life, they develop themselves based on their involvement in rhythmic games and activities, both consciously and unconsciously. In childhood, playing is an inseparable part of life and tends to be an essential basic need. Even educational experts say that children are identical to play, because almost all his life can not be separated from playing. Playing can lead to cheerfulness, agility, relaxation and harmonization, so one tends to be passionate. Enthusiasm can facilitate the emergence of inspiration, so that children can easily do it, without the need for coercion and obstacles (Syamsir, 2001, p24).

According to the results of the observation learners have a habit of coming to school in a way that is different by cycling, using public transport and escorted family on foot. Of habit habits certainly give effect to the physical fitness of students who go to school with cycling or walking will certainly have a positive effect on physical fitness because it is used to actively move so that spur the heart, lung and muscle work as a whole, so they have better endurance. But there is a gap between hope and reality. The current reality is that learners show a lack of enthusiasm, not concentration, fatigue, pallor, and pain in time for learning the physical education. The hope is enthusiastic learners and concentration in following the learning so that the expected process and learning outcomes for the better. Given physical fitness is one of the goals of physical education, then researchers want to examine the improvement of physical fitness through the game. In this study the game is masasked a net game. The net game is taken because it is considered the most effective and efficient in improving physical fitness in elementary school. Given the equipment in elementary school is relatively less a classic problem. In accordance with the above observations about the physical fitness of learners and the problems found in elementary schools in learning in schools, researchers want to examine the activities of net games and physical fitness of learners in elementary school as the basis of this research problem. Researchers want to provide evidence about the effect of net play on the physical fitness of learners in elementary school.

According to the background of the problem, the identification of problems in this research are: (1) Physical Fitness Learners in SD Negeri 1 Kandangan Kediri Kediri Regency is considered less by showing the attitude of less passionate, not concentrated, tired, pale, and there is a pain (2) The need to improve the quality of physical activity in improving the health and physical fitness of the students of SD Negeri 1 Kandangan Kediri as the success of the learning process, (3) The net game method as one of the effective methods in learning the physical education in elementary school (5) Lack of

student data about physical fitness as student evaluation, (6) Not yet known about the effect of net game on physical fitness of upper class learner.

### **Physical Education, Playing, Net Game, Physical Fitness**

Physical education is an education that actualizes the potential of human activities in the form of acts and actions to be given the form of content and direction to roundness of personality according to the ideals of humanity. According to Suherman (2001, p1), physical education of sport and health as an integral part of education as well as the whole has an important position because of the unique contribution to the growth and development of children. A unique contribution to the growth and development of learners because the world of physical education and sports education is a movement that includes various sports activities. It can be concluded that physical education sports and health is a vehicle or a container to educate children both physically and spiritually in order to grow and develop well so as to have a good personality as well.

The world of children is a world of play, in the lives of children most of the time spent with play activities. Play is important for children as a medium of learning. Musfiroh (2008, p1) states that play is an activity that is done on the basis of pleasure and without bringing the final result. Play is very important for learners where elementary school age is still in the age category of children. Experts agree that learners should play in order to interact to learn to create knowledge gained in the school environment. Belka (2000, p22-30) explains that game types can be classified into five types of games: (1) game games, (2) target games, (3) net games and wall (net and wall games), (4) game attack (invasion games), and (5) game field (Fileding Games).

The net game is one of the game methods used in Primary School Teaching in particular. The net game is a game that is executed in a Speech lesson that uses a net tool or that confines between the two sides of the field. According to Belka (2000, p22-30) that, "net and wall play is a game that involves the ability to move and control objects to be difficult for the opponent or hard to return opponent to the wall". The net game in this study is a game that is adopted from badminton games. The field and net are used using the equipment in badminton. As a base, badminton and net badminton fields almost all primary schools have it. So the equipment used is easy to obtain and practical. In addition to the characteristics of elementary school children, high net badminton is not too difficult to reach. So the child will easily do it and will feel happy in carrying out the net game.

Physical fitness is the main capital for all human life. Athletes need a good level of physical fitness to help achieve high sports achievements, workers, employees need sufficient physical fitness to work well, so as to enhance workforce and high productivity not to mention elderly humans also need physical Fitness for his health. According to Irianto (2004, p10) that, "physical fitness is the ability of a person to perform daily work efficiently without excessive fatigue so as to enjoy his spare time". Sumosardjuno (1989, p42) states that "physical fitness is a person's ability to accomplish everyday tasks easily, without excessive fatigue, and has the reserves of energy to enjoy his spare time and for immediate needs." From another source Lutan (2002, p7) points out that, "the meaning of physical fitness related to health is one's ability to perform physical tasks that require strength, endurance, and flexibility." Fitness is achieved through a combination of regular practice and ability attached to someone. According to Sharkey (2003, p3) that, "physical fitness is a part of maintaining health, the higher the level of one's physical fitness, the better the level of one's health".



## METHOD

The method used in this research is one group design experiment. Population and Sample Research. The population in this study is all the upper class students SD Negeri 1 Kandangan Kediri. Sampling using purposive sampling technique and got 28 children used as sample. The test instrument used for the pretest and final measurement (posttest) using the students' physical fitness is obtained by the Indonesian Physical Fitness Test (TKJI) with the following items: (1) Running 40 meters, (2) Hanging body, (3) Sit ups, (4) upright jumps, and (5) run 600 meters. Data collection techniques in this study refers to the Indonesian Physical Fitness Test (TKJI).

Hypothesis test using t-test by using SPSS 16 program aid, that is by comparing mean between pre test group and post test. If the value of t arithmetic smaller than t table, then  $H_a$  rejected, if t arithmetic greater than t table then  $H_a$  accepted. Hypothesis test in this research, the researcher use SPSS 16 program aid. To fulfill the assumption in anava technique, the normality test with Lilliefors test and Homogeneity variance test by Bartlett test.

## RESULTS

The results of the study are described using descriptive statistical analysis as follows, for the result of pre test minimum value = 14, max value = 17, mean (mean) = 15,07, median value = 15, = 15, with standard intersection (std. Deviation) = 0.81. Then the pre test data is arranged in the frequency distribution table by first determining the number of classes (KI) =  $1 + 3.3\log N = 1 + 3.3\log 28 = 5$ ; range (R) = max-value value min =  $17 - 14 = 3$ ; and length of class (P) =  $R / KI = 3/5 = 0.6$ . The following table of frequency distribution obtained:

**Table 1. Frequency Distribution**

Class of Interval	Frequency	Relative Frequency	Cumulative Frequency
14 - 14,6	7	25%	7
14,7 - 15,3	13	46%	20
15,4 - 16	7	25%	27
16,1 - 16,7	0	0	27
16,8 - 17,4	1	3%	28
Total	28	100%	

As for the posttest minimum value = 15, maximum value = 18, mean (mean) = 16.25, median value = 16, value often appears (mode) = 16, with standard intersection (std. Deviation) = 1.17. Furthermore pretest data is arranged in the frequency distribution table following the frequency distribution table obtained:

**Table 2. Frequency Distribution (2)**

Class of Interval	Frequency	Relative Frequency	Cumulative Frequency
15 - 15,6	9	32%	9
15,7 - 16,3	10	36%	19
16,4 - 17	0	0%	19
17,1 - 17,7	2	7%	21
18,3 - 18,9	7	25%	28
	28	100%	

The hypothesis proposed in this study is "There is an increase in physical fitness with the net game model in upper class students of Primary School Negeri 1 Kandangan Kediri". If the results of the analysis show a significant difference, then the net game has an effect on improving physical fitness of upper class students SD Negeri 1 Kandangan. Based on the analysis results obtained data as follows.

**Table 3. Bartlet Test Result**

Variable	Mean	t <sub>count</sub>	Df	Sig	Information
Pre test	15,071	-4.264	27	0,000	Significant
Post test	16,00				

Based on the above table, obtained t value arithmetic equal to -4.264 with value Signifikansi 0.000. It turns out that the calculated Sig value obtained 0.000 is smaller than 0.05. thus it can be concluded that the hypothesis is accepted. It can be concluded that the hypothesis is accepted, it means There is an increase in physical fitness with the net game model in upper class students of Kandangan Kabupaten Kediri Elementary School.

## DISCUSSION

The results of this study increased physical fitness in students of SD Negeri 1 Kandangan Kediri showed good. This is indicated from the results of data analysis with significance values that show smaller than 0.05. Increasing physical fitness in upper-class students is not merely the result of the successful learning of Physical education. There are other factors that may affect the improvement of physical fitness. But in this study the net game became the subject's control, so the students' physical fitness increased with the net game. In addition, upper class students SD Negeri 1 Kandangan Kediri have a healthy lifestyle. Can be seen in the daily activities of students doing a lot of motion activity outside of the treatment. Given that it increases the fitness of students to be better.

This study aims to determine the improvement of physical fitness with a net game model in upper class students of Primary School 1 Kandangan Kediri District. Hypothesis testing results obtained the result that the hypothesis is accepted, ie There is an increase in physical fitness with the net game model in upper class students of Primary School 1 Kandangan Kediri. The mean of hypothesis test result can be seen that pre test is bigger than post test. This is because karen badminton net game has a character of many motion activities. In addition to the body moves back and forth, the left and right sides of the movement throw kok also provide its own motion activity. With the movement is quite a lot of muscles that work almost the entire body. Like an element of physical fitness itself, physical fitness is one aspect of total fitness.

Game is a model approach in learning that is widely used as learning to children. This is based on the characteristic of a child who has a great deal of physical activity is to play. The game in this study is a net game aimed at children's learning. The net game is a game using a net tool as a limit or an obstacle. Physical activity with net game is expected to improve the physical fitness of children in learning physical education.

One's physical fitness is determined by the overall quality of motion. It is clear that every physical activity (physical gain) requires a level of physical fitness supported by a body physique that will subsequently change physical fitness. The principle of the net game in this study is the movement of a person in a certain period of time with a predetermined intensity. This makes the components of physical fitness work with incentives. The physical fitness component itself consists of: (1) endurance, (2) muscle strength, (3) muscle explosive power, (4) speed, (5) bending power, (6) dexterity, (7) coordination, (8) balance, (9) precision, (10) reaction speed. The overall component of

physical fitness is covered in the net game in this study. So it can be concluded game net badminton can improve fitness of upper class learners.

## CONCLUSION

Based on the result of the research, it can be concluded that there is influence of net badminton game to physical fitness of upper class students SD Negeri 1 Kandangan Kediri Regency.

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