

## The Role of Physical Fitness to Improve The Self-Quality of Elementary School Students in The District of Aceh Besar

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### Abstract

This study is entitled "The Role of Physical Fitness to Improve the Self Quality of Elementary School Students in the district of Aceh Besar." The objective of this research is to describe the role of physical fitness in a self quality improvement of Elementary School students in the district of Aceh Besar. The population was the elementary school students in the district of Aceh Besar. The samples numbered 90 students were drawn from four, i.e. 60 from superior schools and 30 from the ordinary schools in the district of Aceh Besar. The method used in this research was descriptive quantitative. The data which were collected using a questionnaire (Liker's scale) were analyzed using simple statistics. From the results of the data analysis, it was found that the responses of the students from the elementary schools in Aceh Besar district on the role of physical fitness in self improvement were as follows. (1) Strongly agree (63%), (2) agree (19%), disagree (10%) strongly disagree (8%). The implication of the results is that it is necessary to maximally apply learning activities that can enhance physical fitness so that the physical education teachers should actively contribute quantitatively and qualitatively to the optimum enhancement. The students who have a good understanding of the importance of physical fitness in various ways will feel the practical implementation of the learning activities conducted by physical education, sports, and health (penjasorkes) teachers both in curricular and extracurricular sessions. Physical education, sports, and health teachers should be able to design learning devices with teaching strategies that can stimulate the development and growth of the students' psychomotor, cognitive, and affective aspects. Physical education, sports, and health learning can improve the students' physical fitness and prevent them from various diseases such as obesity, heart disease, hypertension, and so on. Having a good physical fitness will also prevent them from insomnia and fatigue, and increase metabolism, intelligence, and health in attending the learning process at school. All parties should prioritize the improvement of the Elementary School students' physical fitness in Aceh Besar district. Physical education, sports, and health teachers are suggested to increase the resources in order to implement the learning process using reliable competencies which are appropriate to the growth and development of low-grade elementary school students.

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## INTRODUCTION

Improving the quality of education is the duty of individuals, societies, and institutions, especially educational institutions. This is in line with the development of technology and information in various aspects. The requirements in the education sector should be more optimal and comprehensive and systematically arranged in the frame of planned and appropriate programs. Various educational aspects should get a feasible and responsible place in any effort to improve the ability of the students in order to participate in the development during a globalization era being faced in many parts of the world.

Physical education is an integral or part of the overall education that promotes physical activity and healthy lifestyle pattern formation through increased growth and development of physical, mental, social, and emotional aspects which are harmonious and balanced. In addition to the mastery of a variety of basic motor skills or physical condition, the expected results of physical education is a high degree of health, resulting in an excellent level of the physical fitness of all individuals who are actively involved in a variety of physical activities. Maximum effort should be made by each individual to always do programmed, systematic, and sustainable physical activities, so that their physical qualities can be improved for the optimal formation of the quality of each individual.

The quality of a good physical fitness will be capable of carrying out physical and spiritual activities without experiencing fatigue and capable of completing every task that must be completed both physically and mentally. Many things could be improved in the application of programmatic and systematic physical education such as (1) increasing the growth and development of the body including physical fitness and health, (2) increasing agility and skill, (3) improving knowledge and intelligence, (4) improving creative and recreational social-life. A good level of physical fitness will help facilitate students in learning all subjects at school, and

always be passionate in various activities (Balley, A.J. 2009: 87).

Physical and mental health are closely related to the pattern of physical activities undertaken by each individual and will ultimately lead to the improvement of optimal physical fitness. The improvement of physical fitness should start with physical activities from an early age by considering the level of motoric development and growth which affects the increase of speed in the development and overall growth of children.

Physical education learning and other physical activities are parts of the efforts to improve the quality of students and can lead to the improvement of the body quality as a whole. Physical fitness is required by the students at the school to participate in the learning processes every day that averagely takes five hours and more. Therefore, there is no doubt that physical education is greatly needed by the school students to improve and maintain physical fitness, intelligence, and creativity obtained through physical activities. All should be attached to the personality and abilities of the students. Physical education, sports, and health learning at schools that will increase physical fitness is expected to positively transfer the ability to master cognitive, affective and psychomotor aspects. All are reflected in the students' higher achievement in learning other subjects.

By physical education, sports and health learning at schools it is intended that the students can more easily master the concepts and skills, resulting in the transfer of physical education learning outcomes which are positive to the acquisition of knowledge, attitudes and motoric skills. Therefore, physical education will form the level of physical fitness of the children who have a very important role in every effort to improve the quality of self-quality in many ways.

Based on the above explanation, it is perceived the importance of physical fitness of the students in improving their ability of cognitive, affective and psychomotor skills. The

concept of physical fitness that is possessed and carried out by each student ranges from physical fitness health and fitness related to performance.

The role of physical fitness is very important for the life of every individual. Every student's spiritual and physical work ability is strongly influenced by the level of physical fitness he/she has. Therefore, every daily task can be implemented optimally so as to get maximum results. The role of physical fitness to develop strength, ability, and creative ability, as well as durability of each student, is helpful to enhance the power of work in the construction and defense of the Nation (Kholid, 2008: 5).

Kholid (2008: 3) explains that the special role of physical fitness consists of three categories as follows. (1) The first group is based on the work: physical fitness for the athlete to improve performance in sports, physical fitness for employees to improve work productivity, and physical fitness for students to enhance learning ability. For athletes or employees, the role of physical fitness intends to improve the physical abilities, in order to improve performance in sports to win the championship in any sports event. Meanwhile, possessing a good physical fitness, an employee will be able to work with the high level of creativity and the physical quantity as well as quality to do each job perfectly and achieve maximum results as part of his/her performance. (2) The second category is based on the circumstances, such as physical fitness for people with disabilities or children with special needs for rehabilitation, and physical fitness for pregnant women to prepare for the condition during childbirth. This second group specifically prepares him/herself to improve so that the disadvantages that can be repaired, while pregnant women require a level of fitness in order to have more energy and healthcare delivery. (3) The third category is based on age: for children to stimulate growth and development, and physical fitness for older people to improve the physical durability. This category is very important especially for children or elementary school students, It is very important for them to have a solid base

foundation with regard to the state of physical fitness.

The Department of Education and Culture (2011: 94) states that physical education, sports, and health are a process of learning activities to guide each student to become a stronger person in maintaining the stability of the body. Students require optimal physical education to be able to maintain good and regular health. However, the educational activities have their own principles in order to achieve objectives. The principles of education are the same everywhere, including the principles of physical education, sports, and health.

It takes an understanding of some fundamental principles to provide knowledge of physical fitness to the students. Because learning does not always need a teacher who always has to accompany the students, many physical activities or spiritual practices are beyond the involvement of the teacher as the person who accompanies them. Learning at home tends to be aloof and not too many students expect help from others, especially for physical activities; they prefer a friend as a partner to perform their chosen activities.

Pitters (2011: 193) says that "the implementation of physical education requires a number of approaches in order for the implementation to succeed as expected, with some approaches such as emotional approach, rational approach, and functional approach".

Emotional approach is an approach to arouse the emotions of students because emotion is a psychological trait within oneself. Emotion is related to feeling and someone who has the feeling can definitely feel something, either a physical feeling or spiritual feeling. Spiritual feeling includes a sense of intellectual, aesthetic feeling, social feeling, and a feeling of self-esteem. A state of feeling is the actualization of the work of the heart as the material in the structure of the human body, and feeling as a mental activity is a soul statement that is subjective."

Emotions or feelings is something sensitive and will give a response when there is a

stimulus from outside oneself. Both verbal and non-verbal stimuli will affect a person's emotional content. Verbal stimuli include lectures, stories, satire, praise, ridicule, news, dialogue, advocacy, orders and so on, while non-verbal stimuli includes the form of non-verbal behavior such as attitudes and actions.

The rational approach is an effort of providing the reason in understanding and accepting each student's subject. A student is an individual created by God as the most perfect and different from other creatures. The difference lies in the mind, while other creatures such as animals and the like do not have any sense. Thus, it is only humans who can think, while other creatures are not. The development of child way of thinking is led to a better direction, according to the child's age level. The development of children's way of thinking ranges from the abstract to the concrete. Proving something related to truth, proposition, principle, or law requires of things that range from the very simple to the complex ones. The proof of something related to religious issues should be in accordance with the level of the children's ways of thinking. Error in proving would be fatal for the children's mental development. The most important effort of the teachers is how to provide roles to the ratio in understanding and accepting the truth of doctrine, including trying to understand the wisdom and the function of religious teachings.

The functional approach is an attempt to present lessons emphasized on the utility to students in their daily lives. Knowledge learned by children at school is not just filling the brain but is expected to be useful for the children's lives, both as individuals and as social beings. Children can utilize their knowledge for everyday life in accordance with the level of development.

Through these approaches, the pattern of improvement of physical fitness should be an important task that must be run absolutely by each physical education, sports, and health teacher at school. Through the implementation of physical education, sports, and health, learning particularly in primary schools with the play approach would be able to optimally improve the students' physical fitness.

## **METHODS**

This study used a descriptive approach, i.e. research that systematically and accurately describes facts and characteristics of the population (Anwar, 2010: 7). Descriptive research is characteristics as proposed Furchan (2007: 152) that (1) A descriptive study tends to describe a phenomenon as it exists by examining it systematically, give priority to objectivity, and doing it carefully. (2) There is no controllable treatment given, and (3) there is no hypothesis testing. The research design is the design of research implementation or data collection which is described in detail (Nana, 2007: 287).

The population in this study was elementary school students in the academic year of 2015/2016 in Aceh district. The sampling technique used in this study was proportional random sampling, i.e. the random sampling technique without paying attention to the existing amount of population. Using proportional random sampling, the number of samples consists of 60 superior elementary school students and 30 regular elementary school students with a total number of samples as many as 90 students. These techniques resulted in the total number and distribution of students in each school as follows.

**Table 1.** The sample distribution of the elementary school students.

No	School	Population	Sample (20%)	Notes
1	SD Kuta Malaka	120	24	Male and Female
2	SD Lampeuneurut	109	22	Male and Female
3	SD Peukan Bada	108	22	Male and Female
4	SD Lambada	113	23	Male and Female
Total		450	90	

Data were obtained with data collection techniques using a Likert-scaled questionnaire. The questionnaire is a technique of data collection done by giving a set of questions or a written statement to the respondents to answer (Sugiyono, 2009: 199). The questionnaire in this study was a closed questionnaire expecting the respondents to choose one answer for each question provided relating to the physical fitness to enhance the quality of elementary school students in the district of Aceh Besar. The primary data were obtained through a

questionnaire in the form of the students' responses to physical activities and physical fitness to improve the self-quality, physical activity associated with (material, methods, models and benefits), and the impacts that occur with regard to changes in student behavior (respectful to oneself and other people and the environment, responsibility, discipline, self-supporting), compliance (clarity of behavior and knowledge, consistency of response, balance, harmony of culture and expectations, compliant behavior).

**Table 2.** Outline of the role of physical fitness in enhancing the students' self-quality.

NO	INDICATOR	SUB-INDICATOR	QUESTIONS
1	Physical Fitness	Physical quality	1,2,3, and 4
2	Physical activities	Material contents Methods Model Contribution	5,6,7,8,9,10,11, and 12
3	Impacts	Behavior Self-respect Respecting others Respecting the environment responsibility discipline self-reliance	13,14,15,16,17,18,19,20,21, and 22
4	Relations between physical fitness and enhancement of the students' self-quality	clarity of behavior and knowledge response consistency balance harmony of culture and expectation compliant behavior	23,24,25,26,27,28,29,30,31, and 32

Based on the instruments as described above, the questionnaire responses of students' physical fitness to increase the self-quality of the

students with a Likert Scale, the alternative answers are chosen by marking (√) in the sheet that has been provided, i.e. strongly agree (SS),

agree (S), disagree (TS), and strongly disagree (STS). The answer to every item of the instrument that uses the Likert Scale has a gradation from very positive to very negative and the preparation of the questionnaire was

based on the theoretical study based on the indicators from the existing variables. The alternative scores of the students' answers can be seen in the following table.

**Table 3.** The alternative scores of the students' answers.

Positive Statement		Negative Statement	
Response	Score	Response	Score
Strongly agree (SS)	4	Strongly agree (SS)	1
Agree (S)	3	Agree (S)	2
Disagree (TS)	2	Disagree (TS)	3
Strongly disagree (STS)	1	Strongly disagree (STS)	4

The data analysis employed in this research was simple statistic tests in the form of percentage test. The statistic formula is as follows.

$$P = \frac{f}{N} \times 100$$

(Hadi, in Supriyanto, 2009)

Notes:

f = subject frequency

N = total amount

The calculation process of the value or percentage combined with the existing categorical value results in inferences confirmed with graphic forms.

## RESULTS AND DISCUSSION

The measurement results were made with regard to the role of physical fitness in improving the self-quality of the Primary School students in the district of Aceh Besar during the 2015/2016 academic year. Based on the data

analysis, the elementary school students in the district of Aceh Besar during the 2015/2016 academic year stated that the role of physical fitness in improving their self-quality: strongly agree (63%), agree (19%), disagree (10%) and strongly disagree (8%). The results showed that the respondents strongly agreed with the role of physical fitness to improve the quality of their students. Physical fitness should be given serious attention by all parties and they should endeavor to improve the physical fitness of the students, especially those from the elementary schools in the district of Aceh Besar. The learning process was carried out in schools and presumably should be oriented to correspond with the development level of the learners. Primary schools should give more emphasis on the playing approach pattern with the modified model including its learning media. The quality of affection should be a serious concern with regard to the pattern of the improvement in addition to psychomotor and cognition. Furthermore, the research data are presented.

**Table 4.** The classification of the elementary students' response regarding the their physical fitness and self-quality.

NO	Category	Response (%)
1	Strongly agree (SS)	0.63
2	Agree (S)	0.19
3	Disagree (TS)	0.10
4	Strongly disagree (STS)	0.08
Total		100

Based on the responses seen in Table 4 above, it can be described that 63% of students strongly agree with the role of fitness to improve their self-quality. Meanwhile, 19% of students agreed with that role, 10% did not agree that fitness can improve their self-quality and only 8% said it did not agree with that role.

### **The Role of Physical Activity to Improve Fitness**

Physical activity will improve the children's physical fitness and will provide impact to the emotional intelligence including self-control, diligence, perseverance, and the ability to motivate oneself. This is one of the factors determining the success of students' learning. More importantly is that science can shape a child's personality. Children can benefit from the knowledge gained at school. Kids utilize the value of science for the benefit of their life. Using the right approach would create health and physical fitness for students. It will even generate happiness in doing exercise so that children will naturally feel compelled to carry out physical activities.

Actually, all matters related to physical education are basically a process that is set up to organize the environment that exists around children, so as to foster and encourage the children do learn. Sudjana (2009: 29) explains that "the next phase of the teaching process is to provide guidance/assistance to the students in the learning process".

The improvement of the quality of physical education is related to the achievement of physical education, sports, and health learning objectives that can improve the physical fitness of the students in relation to some elements of the health-related fitness. Hoeger (2010: 18) states that: "physical fitness is closely related to their daily activities without experiencing significant fatigue and low risk of the disease since early hypokinetic. The components of health-related fitness are a cardiorespiratory endurance (aerobic), muscle strength and endurance, muscular flexibility, and body composition. "

Physical activity is also closely related to physical fitness itself; the physical fitness will cause the students to carry out their daily work effectively. Physical fitness is one of the benefits of physical exercise that will be felt, and it will affect the components of physical fitness as follows. (1) The benefits of physical fitness exercises are for cardiorespiratory endurance (CR) i.e. the efficiency at which the body provides oxygen and nutrients needed for muscle activity and transportation of waste products from cells. (2) The benefits of physical fitness exercises are also of muscle strength. The total greatest strength muscle groups are capable of exerting a single effort. (3) The benefits of physical fitness exercises for the components of fitness is muscular endurance. The ability of the muscle group to perform repeated movements with maximum strength in a long time is one of the benefits of physical fitness exercises. (4) The benefits of physical fitness exercises are for the flexibility, i.e. the ability to move a joint or group of joints through a range of joint, and the entire normal range of motion. (5) The benefits of physical fitness exercises are also for body composition, i.e. the percentage of body fat compared to the total body mass. If the amount of fat in the body is excessive, it will reduce the other fitness components, reducing performance, and affecting health (Magill, Richard A., 2007: 286).

Physical activities which can improve physical fitness can help reduce the likelihood of degradation and circumstances related to physical activity. The physical potential possessed does not appear by itself, it needs exploration in advance so as to maximize this potential. Improving the self-quality of the students had to be dug out of the knowledge of how to manage oneself and his/her potentials. If not handled optimally, the students' potential of quality will be undetected and it will not provide a meaningful contribution to the life and the environment. "The lack of physical activity is a risk factor for obesity that affects nearly one in five children aged 6-11 at 1-2 State of England. According to a national study using accelerometer data, 42% of the children had to

do the minimum recommended activity at Level 3. They were at higher risk of becoming inactive, including women, racial and ethnic minorities residing in a neighborhood with several or 4- 6 public recreation facilities." (Fernandes, MandSturm, R.2011).

Physical activity should be carried out properly in elementary school because the students in elementary school are those who are in a period of growth and development, especially physical and bodily ones. Physical fitness needs to be improved through physical activities that are fun and systematically arranged according to the goals and objectives need to be achieved. The maintenance and improvement of organ function can be passed by way of improving the quality of the physical activities in a sustainable, purposeful, and structured manner for the increasing physical workload. In line with the increase in activity patterns, the children's physical and mental health will be realized, and the quality of the child will both physically and emotionally increase.

The implementation of physical activities must be in accordance with the standard of needs contained in the teaching materials in primary schools. Furthermore, teachers should be able to determine appropriate learning methods to suit the material being taught so that the purpose of learning, especially the psychomotor, cognitive and affective abilities can be achieved. The growth and development of all three areas which should be achieved in any learning process are cognitive, affective and psychomotor skills can be maximized. Eventually, the students will gain a good performance in all of the three domains. The magnitude of the role of physical fitness for students, especially primary school students, in order to optimize the self-improvement of various sectors is so extensive and primary school children need physical and mental strength leading to the growth and development at later stages.

### **Physical fitness and the Improvement of Students' Self-Quality**

An Effort to optimize the educational process is an activity with the principle of providing direction and guidance to achieve the goals that have been determined. In physical education sports and health, physical fitness can be interpreted as efforts to make bodily motions in realizing physical health education to achieve the goals set in the outline of the teaching program (Harsono, 2009: 17).

The quality of the students can be improved in line with physical exercise that can improve physical fitness. The main characteristic of physical fitness is very dependent on the person's maximum aerobic capacity, i.e. the ability of the heart-lung. Aerobic physical exercises that are performed on a regular basis will affect or improve the cardiovascular endurance and reduce body fat (Ruhayati and Fatmah, 2011: 142).

The fitness improvement has to be achieved through appropriate planning starting from material content. The implemented activities should pay attention to the individual, age, and level of growth and development. The material should be packaged well, interesting, creative and innovative, so as to encourage the students to carry it out properly. The school is responsible for the learning design for the improvement of the students' physical fitness that is aligned with activity breaks. "For the global increase in the prevalence of overweight and obesity among children and adolescents, there was no more urgent need for an effective program of physical activities. The purpose of this review in the form of a narrative is to summarize the evidence of the effectiveness of interventions as well as reports of physical activity in children aged 4-12 years. Most of the interventions were delivered through a school setting (57 interventions), nine family settings, six primary cares, and four community-based settings or the Internet. The most effective Intervention to the children's physical activity is in a school setting that includes some focus on physical education, leisure activities, and family strategies. (Dwayne P.S. & Kat.L 2012).



Physical fitness is very beneficial for students' lives both physically and spiritually in filling the daily needs at school and in other environments. Health will be maintained optimally if the fitness levels are always improved and maintained properly and it will have an impact on the lives of the students. The improvement of physical fitness is very important from an early age so that the intensity of the physical quality and quantity is always maintained. "It is important to encourage young people to take part in sports or physical activities of moderate to high intensity to improve their body composition, aerobic capacity, and physical fitness" (Petroski et al, 2012: 139-146).

The dimensions of the quality of a particular activity can be determined by the following eight dimensions. (1) Performance is related to the functional aspects of an activity and the main characteristics that are considered when carrying out physical activities in order to improve the physical fitness. (2) Features, namely the aspect of performance, is useful to add to the basic functions, with regard to the choices of models and methods in its development. (3) Reliability is related to the probability of a successful physical activity to function whenever implemented within a certain period of time and under certain conditions. (4) Conformance is related to the level of conformity with the specifications predetermined by the desire of the implementers. Confirmation reflects the degree of accuracy between the characteristics, models and methods in doing activities with the quality characteristics of motion that has been determined. (5) Durability is a reflection of the economic life in the form of a measure of power or the period or duration of the motion quality to survive. (6) Serviceability is the characteristics related to speed, competence, convenience, and accuracy in determining the pattern and model of the kind of motion. (7) Aesthetics is a characteristic that is subjective about aesthetic values related to personal considerations and reflections on the individual preferences. (8) Fit and finish, the subjective character, is associated with actor's feeling about the existence of physical activity

such as efforts to achieve the quality ultimate goal.

Physical fitness is the basic capital that is very important for elementary school students. Physical fitness is required for the productivity and effectiveness of work, but it is also needed to improve learning ability as well as for children's growth and development and to maintain their physical condition. "That inactive life will cause disease has been the focus of attention; it is increasingly understood that physical activity has benefits for cognitive skill improvement and it strengthens the necessity for intervention and is managed to increase physical activities to promote health and productivity" (John J. Ratey and James E.Loehr, 2011).

The fitness level of each person is different. If examined theoretically, it means that not everyone has the physical fitness of the same category. Physical activity is a key indicator that affects physical fitness. Therefore, someone who does not possess good physical fitness does not have good productivity. (Mahardika, 2009: 79).

### **Changing Impact of Physical Fitness**

Physical education provides a positive and direct impact felt by the students, namely in the aspects of motivation and attitude, the development of self-esteem, as well as the social and moral aspects. Physical education has an impact on the students' behavior, and the impact is expected to appear is the students' mind as a result of physical education. Such impacts include, among others,

1. A change in attitude for physical activity from negative to positive
2. An improvement of the efficiency in social relations skills
3. The existence of improvement of perception in the given senses and responses
4. The development of a healthy and prosperous positive feeling and psychological or mental health
5. An increase of relaxation
6. Providing relief and reducing the symptoms of psychosomatic disorders and

7. An increasing mastery of motion skills (Ibrahim, 2011: 134).

The operation of physical education sports and health at schools needs to become an activity with wider coverage. Therefore, its implementation is not only in the natural form of education about physical activities, but physical education should be an educational partner for all. Therefore, learning experiences in physical education should contribute substantially to the needs of present and future students, the social environment, and culture. Physical education should have become a broader study because it involves the whole dimensions of human education; possessing physical and mental health, people will be able to carry out physical and mental activities.

Recognizing the potential of the students will allow teachers to design physical activities in accordance with the students' abilities. Early analysis of the needs and cognitive, affective and psychomotor potential will have an impact on growth and development. Finally, the quality of the students will be increased to the maximum. Students who are healthy and maintain their fitness will be more productive and enthusiastic in carrying out their daily activities. The self-quality of the students can be improved by maintaining their fitness and health through physical activities, balanced with a balanced diet and full of nutrition. As one of the most representative places to carry out directed and programmed physical activities is quite active. Furthermore, (Judith Rink: 2011) says: "Physical education for every class in each school only lasts one day to provide an opportunity to carry out physical activities. During the class, the children are vigorously assigned or suggested to become quite active, at least for a minimum of half of the period of activities in the classroom".

Discipline and consistency are two things that should not be overlooked in any effort to improve the quality of self and devote all the attention. Each obstacle is found to be fought, and not to the students to flee what had been done. Setting up a quality time for yourself is important, so it will evoke the spirit will be full concentration before doing physical activity.

Comfort with controlling emotions with complete peace both at the time of the move as well as before and after the move will have a positive impact on the maximum final results obtained so that it will form a sense of responsibility and self-reliance in the move, which will ultimately result in maximum self-quality.

The efforts to increase good and right physical fitness require the components of comprehensive physical fitness, among others: the durability of the heart/circulation and lungs, body shape, muscle strength, muscle endurance, power explosive muscle, speed, agility, flexibility, reaction speed, and coordination. Various forms of training methods are applied to improve the overall students' physical fitness. However, it does not matter to what extent the learning method is able to make the learning process be more effective and enjoyable for students.

Through physical education it is expected that students are able to gain a variety of experiences to express personal impression that is fun, creative, innovative, skillful, improving and maintaining physical fitness and understanding of human motion and an increase of self-quality. Nevertheless, the learning process that has been carried out so far is not effective and efficient in improving the physical fitness of students. It can be seen from the results of physical fitness tests conducted by the physical education teachers.

As an individual, a student has the urge to grow and eventually cause him to be aware of where he/she is. The development that takes place is subsequently aided by the formation of his/her self-quality and will have a tremendous power to develop. All success is highly dependent on the way individuals perceive quality capabilities. The views and negative attitudes towards the quality of the capabilities result in students looking at the whole task as a difficult thing to complete. On the other hand, positive view of the quality of students' capabilities causes the students to see the whole tasks as easy to complete. Self-quality is a combination of self-confidence of the students

about their characteristics that include physical, psychological, social, emotional aspects and aspirations as well as achievements.

The impact of increased physical fitness can affect the ability to learn or increase the students' knowledge and psychological abilities. According to Fedewa, et.al (2011) "It is common knowledge that physical activity leads to various health and psychological benefits. However, the relationship between physical activity and academic achievement of children has been debated in the literature. Some studies have found a strong and positive relationship between physical activity and cognitive outcomes".

### **Relations between Physical Fitness and Self-Quality Improvement**

The efforts to maximize the implementation of each element are associated with the knowledge and understanding of the skills to design and implement a fitness or weight control programs, fitness evaluation, and security as well as comfort to participate in physical activities. The correspondence between knowledge, rules, strategies, and techniques to increase participation in the variety of physical activities should be considered being the part that is addressed and followed up to maximize the achievement of doing physical activities. The suitability of models and methods in doing activities can improve a person's ability to solve problems in certain emotional situations to change valuable aspects to be focused more on achieving the quality of motion. Students also need to learn the process to display the physical skills and the basic principles of motion (such as balance and power absorption) that often exist in a variety of physical activities. Behaviour, knowledge, and consistency in performing focused and measured physical activities are an important role in the level of physical fitness to improve the quality of the students.

The level of students' physical fitness will contribute to improving the self-quality related to the nerve structures such as the changes in brain structure and the improvement of perceptual abilities involving vision, balance,

sensation and motion atmosphere. Cognitive function will also evolve through the imitation of symbolic role, the development of language, the use of symbols in the early age, and the development of strategic learning abilities, the decisions making, the integration of information, and the problem solving in the development of the next age. Besides that, the affirmation and strengthening of bones and tissues may also maintain the body fat, but it also reduces the body fat composition. Controlling obesity due to the excessive energy expenditure, will increase appetite, increase the metabolic system of the body, and control the future of body fat.

Students who regularly perform physical activity has a better level of physical fitness characterized by the improvement of aerobic fitness, muscle endurance, muscle power, and strength of the heart muscle that is indicated by the increase of the heart rate volume (stroke volume), cardiac output, heartbeat volume, and total hemoglobin. The improvement of physical fitness affects the development of social competence, moral reasons, problem-solving, and creativity, the improvement of self-concept and self-esteem as an indication of increased competence and confidence, emotional stability, independence, and self-control.

During the educational process, physical education teachers should develop character as expressed by David Shield and Brenda Bredemeir consisting of compassion, fairness, sportsmanship, and integrity. With the sense of compassion, learners can be encouraged to look at the opponents as comrades in the game who are equally valuable and equally deserve the award. Justice involves the absence of partisanship and the share of common responsibility. The agility in exercise involves an intensive effort leading to success, both individually and in teams. Freeman (2010: 215) recommends five basic areas of ethics that should be given, i.e. "1) justice and equality, 2) respect for ourselves, 3) respect for the judgment of others, 4) respect for the rules and authority, and 5) a sense of the perspective or relative values."

As a driving force at the school, teachers should foster a positive attitude towards physical activities that lead to an active lifestyle for periods of time possessed by the students in order to provide effective inhibition of mental illness, and the transfer of mental burden. Physical education, sports, and health has various advantages, which can improve the quality of the students such as (a) Human Capital, (b) Mental Health, (c) Healthy Lifestyle, (d) Health and Physical Fitness, (e) Personality, (f) the self-image, (g) Cognitive development, (h) Mental Health and Welfare, (i) social capital, (j) Transmission of standard values and norms, (k) the socio-moral development. The self-quality can be achieved because physical education is not only as an individual and community education carried out consciously. Physical education is an educational process for persons as individuals as well as a member of the community that is done consciously and systematically through various physical activities in order to obtain increased capacity and physical skills, intelligence and character development (Thomas Riyanto, 2009: 12).

## CONCLUSIONS

Based on the data analysis and discussion in the previous section, it can be concluded that

Physical fitness is very important in improving the self-quality of primary school students in the district of Aceh Besar in the 2015/2016 academic year. Physical activity is a key indicator in the improvement of physical fitness.

Materials and methods should be prepared and well designed so that the implementation of physical activity has a high value of benefits.

The level of physical fitness has an impact on the behavior such as respecting oneself and others as well as the environment, stimulating the growth the value of honesty, discipline, and responsibility.

Teachers of physical education sports and health must have a mental health that is creative, innovative and entertaining in the

implementation of physical education in elementary schools.

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