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## LEARNING OUTCOMES OF PHYSICAL EDUCATION FOR ELEVENTH GRADE STUDENTS OF SENIOR HIGH SCHOOL

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**Abstract** This study aims to analyze and determine the effect of physical activity, learning environment, and learning motivation on physical education, sport. This study used quantitative approach with a descriptive method. This research was conducted at Senior High School 1 Cikarang Timur with a sample of 90 students of eleventh grade through simple random sampling technique. The data analysis technique used is path analysis. The results of this study indicate that (1) there is a positive direct effect of physical activity on physical education learning outcomes with a calculation of 0.258, (2) there is a positive direct influence of the learning environment on physical education learning outcomes with a calculation of 0.212, (3) there is a positive direct effect of learning motivation on physical education learning outcomes with a calculation of 0.288, (4) there is a direct positive effect of physical activity on learning motivation with a calculation of 0.325, and (5) there is a direct positive effect of the learning environment on learning motivation with a calculation of 0.334. Thus, the conclusion shows that physical activity, learning environment, and learning motivation are important factors to improve learning outcomes at Senior High School 1 Cikarang Timur.

**Keyword** : learning outcomes, activity, physical education.

## **INTRODUCTION**

Education is the main vehicle for the development of the quality of human resources. With education, people are increasingly aware of the importance of the thought process to determine the quality of their future. Through education a person can determine his future starting from school. Many also believe that education and science are absolutely necessary to survive in the era of global competition that is happening in every nation. Education is not only obtained from school but from various sources including the social environment, family environment and from the news media, both print and electronic.

One of the efforts to create a human form that has knowledge, skills, physical and spiritual health is physical education. Physical Education, Sports, and Health is one of the subjects carried out at the elementary, secondary, and even higher education levels. The purpose of physical education is to develop aspects of physical fitness, movement skills, critical thinking skills, social skills, reasoning, emotional stability, moral action and aspects of a healthy lifestyle. Physical Education is a medium to encourage physical growth, psychological development, motor skills, knowledge and reasoning, appreciation of values.

Physical education is an integral part of the total educational process, and therefore physical education is included in the

educational curriculum. Campos (2014) said "physical education is an integral part of the overall education that aims to improve individuals organically, neuromuscular, intellectually through physical activity." While the teacher in learning physical education as a motivator and facilitator who has an important role in giving meaning.

The implementation of Large-Scale Social Restrictions to break the chain of the spread of Covid-19 requires teachers to carry out WFH (work from home) in carrying out their duties as educators. The condition of teaching activities that suddenly changed drastically has become a challenge for teachers, especially physical education teachers, so that the goals and objectives of sports and health physical education can be achieved. Although through the circular letter of the Minister of Education and Culture No. 4 of 2020 regarding home learning guidelines during the pandemic period, it requires teachers not to burden students through demands for curriculum achievements as a condition for grade promotion. Physical education subjects, sports and health are very important subjects for students to learn today, because with knowledge about health and sports practice students can fortify themselves, one of which is by increasing body resistance (immunity) to prevent the corona virus. Regular exercise is one way to maintain health.

However, the pattern of learning at home certainly has its own challenges, especially for teachers of physical education, sports and health, learning carried out from home of course must be able to improve the level of student fitness, motor skills and values that include cognitive, affective, and social aspects. social education, so that the subject matter must be carefully rearranged so that the physical education learning experience is obtained by students, but adjusted to the ability to carry out student learning at home.

Based on the results of previous observations, it can be seen that student learning outcomes in physical education, sports and health lessons are not very encouraging. From the results of the evaluation of physical education learning in semester 1 of the 2018/2019 academic year, out of 419 students in eleventh grade, only 54.93% of students scored completely. The reason is, this lesson is considered only a lesson that prioritizes movement activities, so only a few students are interested in participating in the lesson. Then also, the learning hours in the classroom are not conducive, the learning materials are less attractive to students, so the learning objectives for students are not clearly explained by the teacher. Thus, causing student learning outcomes that have not achieved maximum results.

Learning outcomes are a series of sentences consisting of two words, namely results and learning. Where the two words are interrelated between the two and have different meanings. Taylor (2019) defines learning as a relatively steady change in behavior thanks to practice and experience. Learning is actually the difference between humans and animals. Learning that is done by humans is a part of life, lasts a lifetime, anytime and anywhere whether at school, in class, on the road, or in a predetermined time. Baser and Kilink (2015) Explaining that learning is a change in behavior or appearance with a series of activities, for example by reading, observing, listening, imitating.

Achievement is always associated with the implementation of an activity or activity. Learning outcomes are things that cannot be separated from learning activities, because learning activities are a process, while learning outcomes are the output of the learning process. Learning is the process of people acquiring various skills, skills, and attitudes (Tartari, 2015). Learning can also be interpreted as an effort process carried out by a person to obtain a new behavior change as a whole as a result of his own experience in interaction with his environment. Learning outcomes are often referred to as academic achievement.

Physical Education is an educational process that utilizes physical activity and is

planned systematically aimed at improving individuals organically, neuromuscular, perceptually, cognitively, socially and emotionally, with a focus on developing aspects of physical fitness, movement skills, critical thinking skills, emotional stability, social skills, reasoning and moral action through physical activity. Physical education is one of the subjects that must be taught in secondary schools. Physical education plays an important role in coaching and personal development both individually and in groups in supporting physical and spiritual growth and development. Students in school play activities are part of most activities at school.

Furthermore, the factor that is considered capable of determining the success of student learning outcomes is students' physical activity (Hamed and Hassan, 2019). Learning activity is an activity carried out in the process of interaction (students and students, students with teachers, and students with learning resources) in order to achieve learning objectives. The activity referred to here is the emphasis on students, because with the activities of students in the learning process, an active, creative, and fun learning is created. Active learning is a learning system that emphasizes the activeness of students both physically, mentally and emotionally in order to obtain learning outcomes in the form of a combination of cognitive, affective, and psychomotor aspects.

Physical activity is any body movement that requires energy to do it. While exercise is a physical activity that is planned and structured and involves repeated body movements and aims to improve physical fitness (Edwards, 2011). Physical activity is any body movement that increases energy and energy expenditure or burning calories (Ministry of health, 2015). Physical activity is defined as any physical movement produced by skeletal muscles that requires energy expenditure. This term covers the full range of all movements of the human body ranging from competitive sports and physical exercise to hobbies or activities carried out in everyday life. On the other hand, physical inactivity can be defined as a condition in which body movement is minimal and energy expenditure is close to resting metabolic rates (WHO, 2015).

Kayal (2016) Physical activity is a physical movement carried out by the body's muscles and supporting systems. Physical activity is any bodily movement produced by skeletal muscles that requires energy expenditure. Absent physical activity (lack of physical activity) is an independent risk factor for chronic disease, and overall is estimated to cause death globally (WHO, 2010). So, the conclusion from the notion of physical activity is the movement of the body by the muscles of the body and its supporting systems that require energy expenditure.

Lees, (2016) said that "activity means activity or activities. So everything that is done or activities that occur, both physical and non-physical, is an activity". Furthermore, it is revealed that "activity is any activity that is carried out either physically or spiritually." Thus, activities are activities that are carried out both physically and non-physically.

Teenagers need physical activity because there are benefits for them in the long term and benefits for them, especially in the years or periods of growth so that their growth can be optimal.

Next, the learning environment is one of the learning resources that affect student learning outcomes and in the learning process. According to Hopkins (2019) said that the environment is something that exists in the natural environment that has a certain influence on individuals. This means that an effective learning condition is a condition that is truly conducive and supports the smoothness and continuity of the teaching and learning process.

The learning environment is one part of the learning process to achieve learning goals, where the environment will affect teaching and learning activities in schools (Winarno, 2012).

According to Danilewicz (2018) the learning environment is an environment that affects the learning process, both the physical environment and the social environment. The environment will affect the individual and

vice versa, the individual can also affect the environment (Lisa, 2017). The learning environment such as facilities and infrastructure, the size of the environment, lighting and noise have a great influence on the assessment of whether the learning environment is pleasant or not so that it can affect motivation and the learning process. Comfortable classroom conditions will help students to concentrate more easily, obtain maximum learning outcomes and be able to enjoy learning activities well (Stanojevic, 2018).

The learning environment is a place where teaching and learning activities and processes occur. The learning environment is everything that is used in the learning process which includes the conditions, circumstances and facilities that exist in the environment. Through the learning environment, a person can get an education either directly or indirectly which is influenced by the natural environment and social environment. It is a challenging and stimulating environment for learning as well as a sense of security and satisfaction so that it can achieve the expected learning goals. Overall, the learning environment includes physical, social, intellectual, values and relationships with educators (Yuda, 2015). The learning environment is divided into the physical environment, socio-emotional relationships, peer and community environments and influences from the foreign environment. The

learning environment is not only classrooms but also includes room designs such as laboratories, libraries, tutorial rooms and non-formal learning places (United Nations of Educational, Scientific and Cultural Organization (UNESCO), 2012). The learning environment can affect the success of a learning process. The learning environment is not only inanimate objects that are around the learning place, but the people who are in that place also include the learning environment.

The next suspected factor is the learning conditions that have not been able to build student motivation. As said by Ohuruogu (2016) The learning process in educational units is held interactively, inspiring, fun, challenging, motivating students to participate actively. Therefore, teachers need to make learning interesting and fun for students.

Kendal and Widodo (2018) that "human behavior is essentially goal-oriented in other words that a person's behavior is generally stimulated by the desire to achieve some goal." Motivation, sometimes this term is used interchangeably with other terms, such as needs, desires, urges, enthusiasm or impulses.

Learning motivation is one of the factors that determine effectiveness in learning. A student will learn well if there is a motivating factor, namely learning motivation. Students will study seriously if

they have high learning motivation. According to Al-omari and Okasheh (2017) learning motivation is internal and external encouragement to students who are learning to conduct behavior, generally with several indicators or supporting elements. These indicators include: the desire and desire to succeed, the drive and need for learning, hopes and aspirations for the future, appreciation in learning, and a conducive learning environment."

Other than that, Arthur et al (2015) states that learning motivation is the overall psychic driving force in students that causes learning activities to achieve a goal. In line with the opinion above Anggraini, Kusumawardhana and Ramadhan (2019) explained that learning motivation is the entire driving force in students who lead to learning activities that ensure the continuity of learning activities that provide direction to learning activities so that the goals desired by the learning subject can be achieved.

## **METHOD**

This study uses a quantitative approach with descriptive methods and path analysis techniques. The path analysis is used to analyze the effect of physical activity, learning environment, learning motivation, and physical education learning outcomes.

This research was conducted at Senior High School 1 Cikarang Timur. The population in this study were 419 students of eleventh grade, with a sample of 90 through

random sampling technique (Sugiyono, 2014).

Data collection techniques using documentation study for variable Y, and questionnaire instrument, where each variable X1, X2 and X3 the number of instrument items is 30 statements.

Data analysis techniques used for this research are descriptive statistics and inferential statistics. To test the analysis requirements test, namely normality test, homogeneity test and linearity test. As for testing the hypothesis using path analysis.

## RESULTS AND DISCUSSION

### Results

Based on the description of the results of data analysis and hypothesis testing of the research that has been carried out, it can be explained as follows:

**Table 1.** Mean Value and Standard Deviation

Variable	mean	Standard Deviation
Physical Activity	19.89	2,488
Learning Environment	116.57	5.178
Motivation to learn	104.79	7,656
Physical Education Learning Outcomes	81,12	5,771

After the average value and standard deviation are known, the next step is to test the normality of the data and test the homogeneity of the data. test results can be seen in the following table:

**Table 2.** Normality Test Results

	N	Lo count	Sig. (2-tailed)	Results
Y over X1	90	0.054	0.200	Normal
Y over X2	90	0.062	0.200	Normal
Y over X3	90	0.042	0.200	Normal
X3 over X1	90	0.049	0.200	Normal
X3 over X2	90	0.083	0.169	Normal

From the list of table 2 above, overall sig.2 = 0.200 > 0.05, so the null hypothesis is accepted, thus the data on physical activity, learning environment, learning motivation, and physical education learning outcomes are normally distributed.

After knowing the data from each test is normally distributed, then the steps The next step is to test the hypothesis and the path coefficient can be seen in the following table.

**Table 3.** Hypothesis Testing Results

	Path Coefficient t	thit
Y over X1	0.258	2.58
Y over X2	0.212	3.16
Y over X3	0.288	2.54
X3 over X1	0.325	3.36
X3 over X2	0.334	3.45

### Discussion

Based on the research results, it can be discussed that:

1. The Effect of Physical Activity on physical education Learning Outcomes

Based on the results of the study, the effect of physical activity on learning outcomes of physical education for eleventh grade students of Senior High School 1 Cikarang Timur was 25.8%. These results indicate the analysis that the physical activity of eleventh grade students is needed to improve learning outcomes. The results of this study are in line with the opinion of several experts that appropriate physical activity can increase cognitive in the process of receiving information during learning. By doing physical activities, the brain's ability to supply oxygen to translate knowledge transfer information is maximized (Anderson, 2011). The recommended activities must be in accordance with the needs of students so that the maturity of the brain will be more dynamic and develop perfectly. By doing a routine of moving for motoric freshness, fitness is avoided from apathy towards the environment, so that students who feel they are doing enough movement will look healthier and more active when in the school environment. The explanation is as Dadge and Casey (2015) that, ". . . doing a moving routine for freshness causes fitness to avoid apathy towards the school environment".

Activities cause flexibility of movement so that it can lead to motor development of students. Motor

development makes innovative and creative maturity, it makes students look more active in positive things and boosts the immune system. Increasing the immune system makes students more confident and more ready to accept more complex material. This will support the value of learning outcomes to be more leverage so as to improve learning outcomes. Sudino (2018) that, "increasing the immune system makes students more confident and more prepared to accept more complex material". The increase applies to all subjects even though lesson one cannot be the same because of the difference in the character of the subjects (Miles, 2018). With sufficient activity and appropriate intensity, students feel fit and will have a significant effect on grades in a more systematic learning process.

## 2. The Effect of Learning Environment on physical education Learning Outcomes

Based on the results of the study, the effect of the learning environment on the learning outcomes of physical education for eleventh grade Senior High School 1 Cikarang Timur students was 21.2%. These results indicate the analysis that a conducive learning environment is needed to improve student learning outcomes in eleventh grade of Senior High School 1 Cikarang Timur.

The results of this study are in line with the opinions of several experts including those who state that a positive environment will lead to an increase in learning outcomes indirectly or directly, it is evident that students will feel more comfortable, conducive and able to control all needs that if used for the learning process. (Welser, 2016).

A conducive, comfortable, orderly, supportive learning environment will have a significant effect on learning outcomes. Not only movement learning but also other learning, especially in physical education subjects that must be carried out systematically with the support of a positive environment (Danilewicz, 2018). Therefore, the learning environment will greatly affect learning. A positive environment causes the use value or final value in the physical education learning process to be maximized. Physical education learning focuses on fine and gross motor skills, all of which are supported by a positive learning environment. Among them, the environment causes changes in the character of the participants from negative to positive by touching several affective aspects which are supported by existing cognitive and motor aspects. (Ekawati, Hakim, & Noor, 2016).

### 3. The Effect of Learning Motivation on physical education Learning Outcomes

Based on the results of the study, the effect of learning motivation on the learning outcomes of physical education for eleventh grade students of Senior High School 1 Cikarang Timur was 28.8%. This result shows the analysis that the existence of learning motivation given to eleventh grade students of Senior High School 1 Cikarang Timur can improve learning outcomes.

Gleave et al (2016) states that all aspects of educator support for students make a positive influence on students. The influence of positive learning motivation will make students more enthusiastic and participate in learning maximally with certain goals (Koenig et al., 2014). The students have a tendency to compete with each other against other students, therefore learning motivation is important for students. Jakovina and Jakovina (2017) which explains learning motivation is very influential on learning outcomes.

Physical education learning that has a character in its lawyer has a different character from other learning. With the motivation to learn by educators, it will make the spirit that is many times more challenging towards the learning objectives of physical education and

sports(Gomez, Mendoza, & Paino, 2016).

Like teachers or researchers, they must have motivation and motivate their students so that the learning process takes place optimally and with benchmarks, student learning outcomes will be better and maximal. Encouragement of students is needed for smoothness in the learning process.

It can also be from educators that motivation for students greatly affects student learning outcomes, it is proven that in sports education learning, teachers will be required to have creativity in motivating participants. This will have an effect if the participant is not able to perform a certain movement which will affect the learning outcomes at the end. Based on, "Motivation for students greatly impacts the learning outcomes of students, it is proven that in sports education learning, teachers will be required to have creativity in motivating participants".

#### 4. The Effect of Physical Activity on Learning Motivation

Based on the results of the study, the effect of physical activity on the learning motivation of eleventh grade students of Senior High School 1 Cikarang Timur was 32.5%. These results indicate an analysis that physical activity carried out by eleventh students of Senior High

School 1 Cikarang Timur can improve learning outcomes.

Masolo et al (2015), "learning motivation is directly influenced by physical activity which can increase physical activity will result in an increase in learning motivation". Physical activity is closely related to the influence of student learning. An educator must be able to make a learning concept by inserting a physical aspect in it, this is intended to attract the interest and motivation of students to learn.

Learning motivation occurs because students and teachers have a synergistic bond because both have comfort in carrying out their respective roles and duties.

Physical activity has a close relationship with learning motivation. It was further explained by Miles (2018) that physical activity that can make learning motivation will affect all aspects of students' lives, this affects the character of participants to be able to protect and adapt to the new environment in school. Learning motivation is closely related to the physical activity that has been done (Osburn, 2011). A teacher sometimes has a deficiency in providing a stimulus in the form of motivation to students. It should be noted that not all students have

the confidence to carry out an instruction given by the teacher.

5. The Effect of Learning Environment on Learning Motivation

Based on the results of the study, it showed that the influence of the learning environment on the learning motivation of eleventh grade students of Senior High School 1 Cikarang Timur was 33.4%. These results indicate an analysis that a conducive learning environment can improve student learning outcomes in eleventh grade students of Senior High School 1 Cikarang Timur.

Increased learning environment will result in increased motivation to learn. The results of this study are in line with the opinion Ryan (2015) which states, "the learning environment has a tendency to influence some students who do not have special characters. The learning environment has a character that can shape the personality of students". The learning environment has a tendency to affect some students who do not have a special character. The learning environment has a character that can shape the personality of students, this will have an impact on student achievement so that it can provide a positive stimulus to student achievement. Student achievement is also determined from the learning motivation that has been given by the teacher to the students.

A teacher must have an encouragement in providing knowledge to students in today's students concerned (Deakin, Fraser & Co, 2014). The learning environment is a supporting factor for learning motivation which will later become an indicator of learning outcomes.

A positive learning environment will make students' abilities more optimal in digesting information. Students' abilities as measured by grades make students motivated to get the greatest value and will feel unworthy to get a less score. Learning motivation is important in this case to lift mentally if students feel that they have fallen with the treatment or some systematic teaching carried out by the teacher (Saracho et al., 2017). Physical education learning has an important role in motivating a student to follow certain lessons. If students feel confident and also feel given responsibility by other students or teachers, the motivation in students will be higher. If this happens continuously automatically student learning motivation will continue to increase this will have an impact on student achievement.

## CONCLUSION

Based on the results of hypothesis testing and discussion of research results, it can be concluded as follows: Learning motivation has the greatest influence on learning outcomes of physical education in eleventh grade students of Senior High School 1 Cikarang Timur by 28.8%. In addition, the learning environment has a significant influence on learning motivation by 33.4%.

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