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# Analysis of Physical Activity of Physical Education Students in Attending Lectures

Karlina Dwijayanti<sup>1</sup>, Arif Rohman Hakim<sup>2</sup>, Slamet Santoso<sup>3</sup>, Rima Febrianti<sup>4</sup>

1,2,3,4 Physical Education, Faculty of Teacher Training and Education, Universitas Tunas Pembangunan Surakarta <sup>1</sup>karlina.dwijayanti@lecture.utp.ac.id, <sup>2</sup>rima.febrianti@lecture.utp.ac.id

#### ARTICLE INFO

## ABSTRACT

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#### Keywords

Physical Pctivity; Students; Physical **Education**  Physical education has physical activity for students that is classified as high and heavy because during the lecture period there are theoretical lectures and also practical lectures. The purpose of this study was to determine the physical activity of fourth semester students. This research is a quantitative descriptive study with the aim of describing research data with the help of quantitative data. The research sample was fourth semester students totaling 30 people. This study uses data collection techniques consisting of several tests that aim to measure the physical activity of students which include sit ups, push ups, pull ups, vertical jump, band & leg dynamometer, exspanding dynamometer, sit and reach, reaction time (reaction time meter), foot eye coordination test, modified bass test, hand grip dynamometer, vertical jump, two hand medical ball put, and MFT. The data that has been obtained will then be analyzed using statistical calculations with descriptive percentage analysis. The results showed that 4 students (13.3%) were categorized as less, 21 students (70%) were categorized as moderate, and 5 students (16.7%) were categorized as good. Based on the results of the above research, most students are categorized as moderate. There is a need for improvement for students to maintain their physical condition, active lifestyle, increase the volume of exercise in order to improve fitness and health optimally.

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### INTRODUCTION

Physical activity is a series of body movements that use energy (Widiyatmoko & Hadi 2018).. Physical activity is an expenditure of energy that requires body movements produced by skeletal muscles (Sholihin & Sugiarto 2015). (Sholihin & Sugiarto 2015).. The energy expenditure in question is of a certain duration and is carried out regularly. The higher the level of activity, the higher the energy expenditure. The benefits obtained from doing physical activity are reducing the risk of depression, diabetes, hypertension, colon cancer, breast cancer, coronary heart disease, and stroke (Farradika et al., 2015). (Farradika et al., 2019).. Physical activity provides favorable conditions for the whole body optimally, not just the muscular system (Azhyppo et al., 2019). (Azhyppo et al., 2018; Shuba, 2017)..

Physical activity is the most basic thing that every student must have (Malina, Bouchard, & Bar-Or 2004).. Students need fit physical activity so that the lecture schedule can be carried out as much as possible, both activities while on campus and activities outside the campus. (Hardiansyah, 2018). Good physical activity can improve student physical fitness. Physical fitness is a physical strength including (strength, speed, endurance, agility and flexibility) and gradually deteriorates due to the irrational division of study and rest time and a lazy lifestyle or a team of rebahan. (TIu, Vorobiov, & Bezverkhnia, 2011; Skead & Rogers 2016; Kozina, et al. 2016; Iermakov, Podrigalo, & Jagiełło 2016).. Because physical activity is also a requirement in addition to the techniques needed in improving the performance of an athlete (Iker et al., 2020). Physical exercise is needed to improve the performance system of an athlete's body, even a need that cannot be postponed so it is considered a basic need. (Hanief & Puspodari 2017; Nugroho, et al. 2021).. From an early age, training is carried out continuously, tiered and in accordance with the training program so that physical conditions can achieve optimal performance. (Bafirman & Wahyuri, 2019). Physical condition is also an ability of the body's organs to carry out physical activities to support the athlete's performance according to their function. (Fatihin et al., 2021).. A good physical condition indicates that a person has a strong, healthy body and is able to carry out various physical activities well (Hooker et al., 2008; Suu et al., 2019). (Hooker et al., 2008; Sui et al., 2007).. Physical condition is the achievement of achievements in specifications according to their respective sports seen from physical quality, psychological quality, and functional abilities of body equipment (Ermral, 2017). (Ermral, 2017). Some of the above opinions can conclude that physical condition is a physical activity that is carried out periodically specifically designed and structured to achieve the goals to be achieved.

Students majoring in Physical Education are more energy drained than students in other majors (Supriyadi, 2018). So the problem of student physical activity is quite relevant because of the various factors that influence it. Factors that affect a person's physical condition can include various aspects such as physical activity, nutrition, genetics, environment and overall lifestyle. (Blair, et al. 1989; Tudor-Locke, et al. 2011; Sallis, et al. 2016)...

The results of observations as a lecturer teaching the test & measurement course at the Physical Education Study Program at the University of Tunas Pembangunan Surakarta (UTP) in March 2023, encountered the problem that in attending lectures many students often experience fatigue, after doing practical lectures then theoretical lectures many students are

sleepy, even sleeping during theoretical lectures, students also often stay up late to play online games, diet and rest tend to be irregular, and many other factors. So research was conducted from the above problems regarding the analysis of physical activity of physical education students with the hope of becoming a benchmark for further research and being able to provide solutions to students about the problems experienced by students in the future.

#### **METHODS**

This research is a type of descriptive research. According to Sugiyono (2013) descriptive research is a type of research designed to provide a description of what is being studied using the sample as it is, without making analysis and conclusions that apply to the audience. As a collection method, as in data collection techniques with testing. The subjects of this study were class of 2020 PE students totaling 30 students. Data collection techniques using student physical activity tests (Fenanlampir, 2015). The data collection used is the test and its measurement. The student physical activity test consists of 15 test items, namely abdominal muscle strength with (*sit ups*), arm muscle strength (*push ups*), arm muscle strength (*pull ups*), power test (*vertical jump*), power test (*band & leg dynamometer*), coordination test (*band & leg dynamometer*), leg dynamometer), hand eye coordination test, hand muscle strength (*exspanding dynamometer*), flexibility (*sit and reach*), reaction *time* (*reaction time meter*), foot eye coordination test, balance (*modified bass* test), strength (hand grip dynamometer), power test (*vertical jump*), power test (*two hand medical ball put*), cardiovascular endurance (MFT).

Data analysis is one of the important steps in a study. In this study using data analysis methods using statistical calculations with descriptive percentage analysis, the formula to be used is as follows:

$$P = \frac{F}{N} \times 100\%$$

Description

P = Percentage

F = number of scores earned

N = maximum number of scores

Descriptive Results Conclusion:

Very good = 5

Good = 4

Medium = 3

Less = 2

Very Poor = 1

Determination of categories as follows:

Table 1. Percentage Interval Categories

| Percentage Interval | Category       |  |
|---------------------|----------------|--|
| 85%-100%            | Excellent      |  |
| 68%-84%             | Good           |  |
| 53%-67%             | Medium         |  |
| 37%-52%             | Less           |  |
| 20%-36%             | Less than Once |  |

#### RESULTS AND DISCUSSION

Based on the results of the processed data analysis, it shows that the average value of physical activity is 49.990 with a standard deviation value of 4.322. The minimum value of physical condition is 41.3 and the maximum value is 58.4.

Table 2. Descriptive Statistics of Physical Activity of PE Students

| Description        | N  | Minimum | Maximum | Mean    | Std.Deviation |
|--------------------|----|---------|---------|---------|---------------|
| Physical activity  | 30 | 41,30   | 58,40   | 49,9900 | 4,32159       |
| Valid N (listwise) | 30 |         |         |         |               |

Table 3. Frequency distribution of physical activity

|       | Twell extrequency distriction of physical activity |           |         |               |                    |  |  |  |
|-------|--|-----------|---------|---------------|--------------------|--|--|--|
|       |  | Frequency | Percent | Valid Percent | Cumulative Percent |  |  |  |
| Valid | Less   | 4         | 13,3    | 13,3          | 13,3               |  |  |  |
|       | Medium   | 21        | 70,0    | 70,0          | 83,3               |  |  |  |
|       | Good   | 5         | 16,7    | 16,7          | 100,0              |  |  |  |
|       | Total  | 30        | 100,0   | 100,0         |                    |  |  |  |

The table above shows the physical activity of 2020 class of PE students. Based on the table above, it is known that 4 students (13.3%) are categorized as less, 21 students (70%) are categorized as moderate, and 5 students (16.7%) are categorized as good. Based on this information, it is known that most students are categorized as moderate.

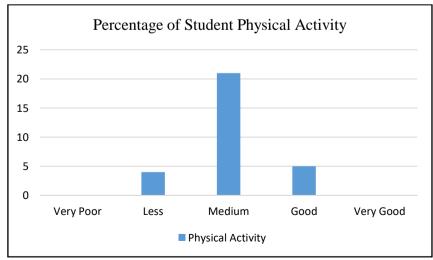


Figure 1. Physical Activity of PE Students

#### Discussion

This study aims to determine physical activity of physical education students class of 2020 and get research results stating that the physical activity of physical education students class of 2020 is categorized as moderate. The results of physical activity research are in line with previous research which reveals that the level of activity is categorized as moderate (Hardiansyah, 2018; Irawan & Fitranto, 2020; Zulbahri, 2022; Zhannisa, et al. 2018). This is contrary to the results of the study (Bahauddin & Sulistyarto, 2022; Hidayat et al., 2023) which states that physical activity is very less. The results of this study support previous research which confirms that students' physical activity can be done through bodyweight exercises if done regularly can affect body composition and maintain students' physical condition. (Dwijayanti et al., 2023).. The factors causing the low physical activity of PE students are as follows: the unbalanced number of theory and practice courses, the absence of student demands in systematic physical exercise every semester; low student motivation towards the importance of increasing physical exercise; lack of interest in maintaining their physical condition in their spare time; too focused on quickly completing lectures; many students prefer to play online games with boarding house friends without balancing it with physical activity. From the various causes above, it is necessary to maintain the physical condition of the body properly. Good physical activity is an indication that a person has a strong, healthy body, and is able to perform various physical activities well on a regular and measured basis. Types of physical activity include aerobic exercise, endurance, flexibility and body balance. (Kusumo, 2020). Meanwhile, physical exercise according to (Bafirman & Wahyuri 2019) a physical component that cannot be separated because it is a unity in improving body condition, several components of physical exercise, namely endurance, power, strength, speed and agility. The component of physical exercise is a component that supports a person's physique to be able to carry out daily activities or sports to the maximum, which in turn can still do other additional activities without significant fatigue. (Küchelová, et al. 2014; Saputra & Indra 2019). Programs are designed by getting used to reading from various sources or the latest references such as research articles, attending the latest physical trainer training / training in accordance with the field of physical exercise and making programs to upgrade the knowledge of all the training team. (Rustiawan et al., 2021). This also needs to be known as a parameter for the ability of a student's physical condition in the training process. Following physical training so that students can implement programs that are designed regularly, and measured with the appropriate dose and duration of time, thus causing significant physical changes, generating greater energy to carry out other activities and can improve their physical appearance. (Ramadhan et al., 2023). To determine the ability of athletes' physical condition, tests are given that can represent several core components of physical activity. With these tests given reference norms that have their respective categories, so that a student can know the level of physical ability every year. This research is still simple, so it needs improvement from the number of samples, research variables and the need for varied exercises so that the effects resulting from the exercise are successful in increasing the physical activity of students. So it is necessary to develop further research by adding training variables or looking for correlations between variables and developing models to increase students' physical activity.

#### **CONCLUSIONS**

Based on the results of the study, it is known that 4 students (13.3%) are categorized as less, 21 students (70%) are categorized as moderate, and 5 students (16.7%) are categorized as good. Based on the results of the above research, most of the students' physical activity is categorized as moderate. There is a need for improvement for students to maintain their physical condition, active lifestyle, increase the volume of exercise in order to improve fitness and health optimally.

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