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Analysis of Sports Facilities and Infrastructure for Academic Achievement of UMJ Sports Education Students

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Abstract
This study aims to see how much the influence of facilities and infrastructure affects the academic achievement of sports education students at Muhammadiyah University Jakarta. The indicator taken is an analysis of the facilities and infrastructure used for sports practice lectures. From these indicators it can be seen that what causes an increase or decrease in student academic achievement. This research uses quantitative methods on sports education students at Muhammadiyah University Jakarta. This research has an output target, namely the analysis of facilities and infrastructure that will be published in research journals.
Keywords: *Infrastructure, Sports*

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INTRODUCTION

Exercise is a physical activity that individuals do to gain physical fitness. People usually choose time to exercise on holidays such as Saturday and Sunday because most people who live in urban areas do sports in their spare time. There are several reasons why people engage in sports activities. First, those who do sports activities for educational purposes. Secondly, they do sports activities for achievement purposes. Third, those who do sports just for recreation to fill their spare time and hobbies.

Physical education, sports and health are an integral part of the overall education, which aims to develop aspects of physical fitness, movement, critical thinking, social sports, logic,

emotional stability, moral action, aspects of healthy living, and a preface to clean terrain in order to achieve the pretension of public education. Physical education is an integral part of the overall education system, which aims to develop aspects of physical fitness, body movement, critical thinking skills, emotional stability, social mentality, logic and moral action through total planned physical conditioning within the framework of the general education system (Herlina & Suherman, 2020). In the era of scientific and technological advances at this time has provided very significant changes to the behavior and lifestyle of humans themselves (Firdaus M, Mardiyanto A, Purnomo I, 2015).

Physical learning education can run well and easily, because it is determined by some aspects including: 1) teacher competence; 2) student participants; 3) curriculum; 4) procedures; 5) facilities and infrastructure; 6) supporting areas; and 7) evaluation. Teachers are a very influential aspect in the process of physical learning education, but more successful if supported by other aspects as mentioned above. Physical learning facilities and infrastructure are one of the significant parts that support the success of physical learning education. Physical Education, Sports and Health (PJOK) is part of the standard curriculum of educational institutions that aims to develop the potential of students including knowledge, skills, reasoning and emotional development (Sudarmono et al., 2013).

Physical education requires learning media facilities, tools and equipment. Tools and media that are in accordance with the needs and characteristics of students will optimally develop their potential and skills (Saleh & Ramdhani, 2020). To support teaching and learning activities of physical education and health at school, facilities and infrastructure are needed. Facilities and infrastructure are components or instructions used by physical education teachers to practice all the material taught (Irawan, 2018). The availability of adequate public space can trigger motivation for sports activities in the community (Achmad Bajuri F, Furqon Hidayatullah M, Kristiyanto A, 2018). Thus, a physical education teacher not only explains theoretically about learning but also explains practically in accordance with the theory.

Good physical condition is supported by aspects of physical fitness, one of the most important to note is the aspect of *endurance*. Endurance is the ability of a sportsman's organs to avoid fatigue during the course of sports activities or work in a long enough period of time. When players have poor endurance, they will certainly experience difficulties in carrying out activities in the field. Another thing that is no less important is the anthropometric aspect of the body, in this

case body weight and body fat percentage. An individual's body weight must be at an ideal level to support the body in performing movements based on endurance. When the body is *overweight*, players will experience difficulties in sports activities.

Facilities and infrastructure in learning physical education sports and health is one of the main factors for the smooth teaching and learning process. Adequate facilities and infrastructure will reflect the quality of learning carried out, so that educational goals will be achieved properly (Pratomo AT, 2013). In the psychological aspect, the condition of school facilities and infrastructure supports students in providing good learning motivation so that the achievement of the learning process runs effectively (Sudibyo N, Nugroho N, 2020). Sports facilities and infrastructure are supporting forces consisting of all types of equipment and places in the form of buildings used in meeting the prerequisites set for the implementation of sports programs (Al Hasad H, 2020). Developing a physical activity certainly requires an adequate sports facilities and infrastructure (Wijaya F, 2017).

Sports facilities and equipment are very important for global sports achievements, and the role of teaching staff is also important, both of which play a role in improving the quality of learning quality in schools in learning physical education sports and health (Diejomaoh et al., 2015). Mobile-based Sports Facilities Center Online Ordering Service System as a tool system to facilitate ordering sports facilities (Yosua Sinaga R, Sucipto A, 2020). However, in this case, not a few schools in Indonesia do not have infrastructure that meets the eligibility standards. Learning is an activity that is carried out anywhere and throughout life (Mulya & Lengkana, 2020). Learning is a learning process organized by teachers to teach students to acquire knowledge, skills and attitudes (Dimyati & Mudjiono, 2013).

In essence, the learning process is a process of interaction that occurs two flows or reciprocal relationships between teachers, students and between fellow students in learning units by craving optimal learning outcomes (Arimbawa et al., 2017). To create an atmosphere of exercise as part of life and regardless of age, religion, and caste in the University environment, it would be good to be supported by infrastructure that can accommodate these sports activities (Irawan R, 2017). Student sports coaching is definitely closely related to the amount of infrastructure provided by the university in supporting student sports activities (Basuki S, 2017). An educational institution must provide sports facilities and infrastructure needed in the lecture process that matches the number of students and can be used safely so that the lecture process can

run according to the existing lecture reference standards (SAP) (Yulianti M, Fransazeli M, Murdiana Nasution R, et al, 2020).

Based on the research gap that has been explained, researchers want to know the condition of the learning facilities and infrastructure for sports education students at Muhammadiyah University Jakarta.

METHOD

This research is quantitative research. Quantitative research is a systematic scientific study of parts and phenomena and their causal relationships. The purpose of quantitative research is to develop and use mathematical models, theories and/or hypotheses related to natural phenomena. Quantitative research is a process of discovering knowledge that uses data in the form of numbers as a means of analyzing information about what you want to know. Kasiram (2008: 149).

While the instruments in this study are grouped into two parts, namely, research instruments for learning facilities and infrastructure for physical education, sports and health and research instruments for facilities and infrastructure in the form of Table 1.

Table 1. Research Instruments Facilities and Infrastructure

No.	Type	Standard	Description
1	Means		
	Table Tennis Equipment	1 set	5 Table Tennis Table
	Athletic Equipment	1 set	Javelin, Bullet, Disc, Jumping Mat
	Floor Gymnastics Equipment	1 set	Mattress
	Soccer Tools	1 set	20 pieces of balls
	Archery Tools	1 set	Bow and arrow
	Volleyball Tools	1 set	20 pieces of balls
2	Infrastructure		
	Football Stadium	1 set	Conforms to Standard
	Gor	1 set	Conforms to Standard
	Basketball Court	1 set	Conforms to Standard
	Volleyball Court	1 set	Conforms to Standard

RESULTS AND DISCUSSION

Result

The results of the data analysis can be described as follows. The following is an explanation of facilities and infrastructure equipment.

Based on the results of data analysis, the suitability of learning facilities and infrastructure at Universitas Muhammadiyah Jakarta shows the level of suitability, namely: 1) Facilities by 64%; 2) Infrastructure 68%; this shows that the standards above 80% have not been met, but in the implementation of infrastructure facilities are suitable for use as a place of learning.

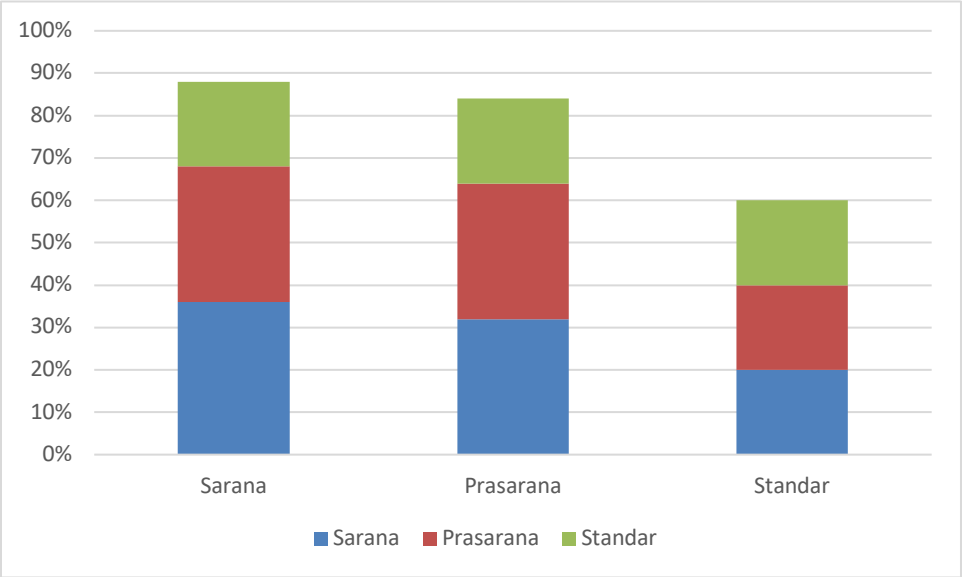

Figure 1. Facilities and Infrastructure Results

Discussion

According to Pratama (2018), with the title Survey of Physical Education Sports and Health Infrastructure Facilities, Junior High School and Equivalent, the results of research on the five State Junior High Schools in Purbalingga City show that the state of sports facilities and infrastructure is ideal enough to support the learning of physical education sports and health. State junior high school sports teachers in Purbalingga City have been able to innovate in creating sports modification tools. Modification tools that are made are mostly used for learning in athletics, by utilizing simple materials. The utilization of modified tools is effective in overcoming the limitations of learning infrastructure, namely, the narrowness of the sports field.

According to Muliadi (2021), physical education facilities and infrastructure are one of the factors supporting the success of physical education, and are elements that are a problem everywhere, especially in Indonesia. The lack of appropriate physical education learning facilities

and infrastructure will make the learning process less smooth and the learning objectives are not fully achieved, due to the lack of physical education facilities and infrastructure that can hinder the manipulation of motion in students. Students queue in turn using physical education equipment, so students get bored and students rest a lot, this can result in fitness will not be achieved. This must be avoided for the sake of student fitness, therefore facilities and infrastructure must be adjusted to the number of students and condition them properly so that physical education learning can run well. The availability of infrastructure in schools is one aspect that is used as a benchmark for school quality, so it needs to be improved along with the development of science and technology (Kristivan, 2013).

Facilities and infrastructure in learning physical education sports and health is one of the main factors for the smooth teaching and learning process. Sports facilities and equipment are very important for global sports achievements, and the role of teaching staff is also important, both of which play a role in improving the quality of learning quality in schools in physical education learning sports and health (Diejomaoh et al., 2015). However, in this case, not a few schools in Indonesia do not have infrastructure that meets the eligibility standards. Learning is an activity that is carried out anywhere and throughout life (Mulya & Lengkana, 2020). Learning is a learning process organized by teachers to teach students to acquire knowledge, skills and attitudes (Dimyati & Mudjiono, 2013). In essence, the learning process is a process of interaction that occurs two flows or reciprocal relationships between teachers, students and among fellow students in a learning unit by craving optimal learning outcomes (Arimbawa et al., 2017).

CONCLUSION

From the results and discussion of this research, it is concluded that sports facilities at Muhammadiyah University Jakarta have supported to improve sports achievements while the infrastructure of Muhammadiyah University Jakarta is also good in terms of appreciation in the form of training and scholarships for outstanding students and many others.

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