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Survey of Facilities and Infrastructure for Physical Education, Sports and Health SMAN 19 Medan

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#### **ABSTRACT**

This study utilises the survey methodology to gather descriptive information. SMA Negeri 19 Medan boasts a wide range of resources and infrastructure that effectively support the implementation of physical education, health, and sports (PJOK) education. The aim of this inquiry is to determine the presence, amount, and state of these facilities and infrastructure at SMA Negeri 19 Medan. The study focuses on examining the facilities and infrastructure related to physical education, health, and sports (PJOK) at SMA Negeri 19 Medan. The study subject encompasses the entirety of the population under consideration. The PJOK facilities will be the focus of examination in this particular case. The findings of this analysis suggest that the infrastructure and amenities provided for each sport are unique. This applies universally to all sports, including acrobatics, athletics, volleyball, basketball, and football. Unlike game sports facilities, which exhibit a 50% rate of adherence and a 50% rate of nonadherence, athletic sports facilities demonstrate a 40% rate of adherence and a 60% rate of non-adherence. The compliance rate of gymnastics facilities is 14%, while the noncompliance rate is 86%. The compliance rate of infrastructure facilities is 67%, while the noncompliance rate is 33%. Therefore, it can be inferred that the average percentage result for all the physical education, health, and sports (PJOK) facilities and infrastructure at SMA Negeri 19 Medan is 39%, indicating that it meets the criteria, and 61%, indicating that it does not meet the norms. The physical education, health, and sports (PJOK) facilities and infrastructure at SMA Negeri 19 Medan do not satisfy the standards set by the Regulation of the Minister of National Education Number 24 of 2007. They fall short of the minimum requirement by less than fifty percent. Therefore, it is reasonable to deduce that the facilities and infrastructure are insufficient.

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#### INTRODUCTION

Education is the systematic process of promoting the intellectual, emotional, and physical growth of individuals to help them achieve their highest capabilities. Education is the systematic process of instructing and training individuals to overcome and eliminate ignorance and lack of knowledge. Oftentimes, scientific progress and educational breakthroughs occur simultaneously. Schools, learning, instructors, and students are all interchangeable terms that refer to the process of acquiring knowledge and skills known as education. To attain educational goals, it is crucial to possess infrastructure and amenities that can aid the process of learning, encompassing both formal and non-formal education (Muchtar and Suryani 2019).

Physical education is an instructional method that use a range of physical activities, such as sports and games, to accomplish educational goals. This definition reinforces the notion that physical education is an essential component of the broader educational experience. The objective, as articulated by Baresi, Permadi, and Hermawan (2023), is to provide children with assistance to enhance their innate growth and development in alignment with the goals of national education, which aim to foster a well-rounded Indonesian individual.

Understanding the significance of physical education requires careful consideration of the connection between play and sport, two terms that were formerly prominent and are now commonly employed in the context of daily activities. This understanding will be beneficial for both educators and the general public in terms of grasping the role and function of physical education from a conceptual standpoint (Pradana 2021).

An essential factor that enhances the smooth functioning of these processes is the presence of educational facilities that create a favourable environment for teaching and learning. The educational infrastructure categories that can be used for physical education encompass buildings, locations, and spaces (Putri and Apriyanto 2021). Physical education is required when teaching and learning methods do not involve physical movement.

The word "facilities and infrastructure" refers to the indirect tools used to accomplish educational goals, as seen from an etymological standpoint. The resources encompass financial assets, sporting facilities, educational infrastructure, and various other sites. The school boasts remarkable availability of facilities and infrastructure, as it is equipped with all the required resources to enhance the learning process of physical education (Saputra et al. 2023).

Providing adequate and high-quality educational facilities and infrastructure is expected to support and improve the teaching and learning process. According to Erniyanti, Hudain, and Basith (2017), physical education, sports, and health facilities

and infrastructure refer to the places, tools, and equipment used for carrying out physical education and sports activities.

Educational facilities refer to the tools and resources that are specifically utilised to enhance the educational process, including laboratory equipment and library materials. Educational infrastructure refers to the physical facilities that provide indirect support to the educational process. This includes the placement of school buildings, playing grounds, and financial resources (Asmawi, Julianti, and Prof. Dr. Samsudin 2023).

In the realm of education, the effective use of facilities and infrastructure, together with their level of utilisation and creativity, is crucial and highly important in promoting the smoothness and convenience of the learning process. Educational facilities refer to all essential facilities, whether mobile or stationary, that ensure the consistent, effective, and efficient achievement of educational objectives during the teaching and learning process. According to Yaya Ruyatnasih and Megawati (2018), sports infrastructure facilities encompass all sports grounds, structures, and equipment that are utilised for conducting certain sports activity programmes.

It is crucial to ensure an equilibrium between the quantity of individual pupils and the expenses associated with acquiring infrastructure and facilities. However, it is a fact in educational institutions that the proportion of tools to students should not be unreasonably large, since it can hinder the learning process. This does not imply that the number of students must be exactly the same as the number of pieces of sports equipment; instead, it suggests that the ratio should not be significantly different. The presence of sports equipment that fulfils the required criteria, along with the amount of passion displayed by students towards physical activity, is a crucial determinant. Ensuring adequate facilities and infrastructure for physical education will showcase the educational quality and ultimately contribute to the successful achievement of educational objectives. On the other hand, the inadequate infrastructure and facilities for physical education would worsen the already poor quality of education, and the curriculum will not be able to be put into practice (Dr. H. Elbadiansyah and Rosidah 2023).

The provision of facilities and infrastructure has a substantial impact on the implementation of teaching and learning activities in the field of Physical Education, Sports and Health (PJOK). The adequacy of Physical Education, Sports, and Health (PJOK) facilities, including football, volleyball, basketball, and sports equipment such as discs, javelins, and projectiles, should be commensurate with the number of pupils present. This ensures that the operation According to Sinuraya and Barus (2020), educators in Indonesia have a crucial role in improving the quality of education through the implementation of Physical Education, sports, and health courses. This is in addition to the available infrastructure facilities.

Therefore, it can be inferred that without adequate infrastructure and facilities, physical education cannot be effectively and efficiently done for optimal learning. This is because most physical education materials require a wide range of facilities and infrastructure, or facilities that are suitable for the topic being taught (Rahman 2023).

## RESEARCH METHOD

It is crucial to ensure a balance between the student population and the expenses associated with acquiring infrastructure and facilities. However, it is a fact in educational institutions that the proportion of tools to learners should not be extremely large, since it can hinder the learning process. This does not imply that the number of students must be exactly the same as the number of pieces of sports equipment; rather, it suggests that the ratio should not be excessively different. The presence of sports equipment that complies with the required criteria, along with the degree of students' passion for physical activity, is a crucial determinant. Ensuring adequate facilities and infrastructure for physical education will showcase the education's quality and ultimately contribute to the effective achievement of educational goals. Insufficient infrastructure and facilities for physical education will worsen the already low quality of education and hinder the execution of the curriculum.

The execution of educational and instructional activities in the domain of Physical Education, Sports, and Health (PJOK) is greatly impacted by the availability of facilities and infrastructure. The adequacy of Physical Education, Sports, and Health (PJOK) facilities, including football, volleyball, basketball, and sports equipment such as discs, javelins, and projectiles, should be commensurate with the number of pupils present. This ensures that the operation The role of instructors, along with the infrastructure amenities, greatly enhances the quality of education in Indonesia. This is accomplished through the fields of physical education, athletics, and health.

Based on this, it can be inferred that physical education cannot function effectively and efficiently for learning without adequate infrastructure and amenities. This is because nearly all physical education materials require specific types of infrastructure and facilities that are designed for the specific content being taught in the course.



Figure 1.
Research design

Description:

X = Facilities and Infrastructure

Y = Physical Education

The study technique utilises the "survey method using observation sheets as a data collection tool to record the results of the survey conducted." This instrument utilises the findings of Rahmawati's research completed in 2017 and verified by Hardodi Sihombing, S.Pd., M.Pd.

## **RESULT AND DISCUSSION**

Enhancements to facilities and infrastructure that enhance the effectiveness of learning in the domains of Physical Education, Sports, and Health (PJOK). This illustrates that having a larger number of facilities and infrastructure for Physical Education, Sports, and Health (PJOK) creates an environment that is more favourable for learning in these areas. Below is a detailed report on the data regarding the availability, quantity, and condition of Physical Education, Sports, and Health (PJOK) facilities and infrastructure. The assessment covers game sports, athletic sports, gymnastics sports, and playgrounds/sports.

Table 1.

Physical Education, Sports and Health (PJOK) Facilities and Infrastructure at SMA

Negeri 19 Medan seen from the Game Sports Branch

Sports Games								
		Existence		Number	State			
No	Name of facility	Existing	Not		Good	Bad	Description	
1	Football	√	-	2	2	1	Not Standard	
2	Goal Net	√	-	3	2	-	Standard	
3	Football Goal	1	-	3	2	-	Standard	
4	Volleyball	√	-	6	6	-	Standard	
5	Volleyball Net	√		1	1	-	Standard	
6	Basketball	-	√	0	-	-	Not Standard	
7	Basketball Net	-	√	0	-	-	Not Standard	
8	Basketball hoop	-	V	0	-	-	Not Standard	

The provided table presents an assessment of the Physical Education, Sports, and Health (PJOK) amenities of SMA Negeri 19 Medan, focusing on game sports such as volleyball, basketball, and football.

- 1. There are three soccer balls, with two being in good condition, representing 67% of the total, and one being in terrible shape, representing 33% of the total, based on the game of football. Based on Minister of National Education Regulation No. 24 of 2007, which requires a minimum of six footballs in the football apparatus, it may be concluded that the football game does not satisfy the standards.
- 2. There are six volleyballs that are in pristine condition, meaning they are in perfect shape according to the rules of the volleyball game. According to Minister of National Education Regulation No. 24 of 2007, it is required for volleyball apparatus to include at least six balls. Therefore, we may infer that the volleyball game meets the specifications.

3. The absence of basketballs is apparent, as demonstrated by the basketball game. As per Regulation No. 24 of 2007, issued by the Minister of National Education, a basketball apparatus set must have a minimum of six balls. Therefore, it is possible to deduce that the basketball game fails to match the established criteria.

Based on the evidence of the athletics games, it can be inferred that the physical education facilities at SMA Negeri 19 Medan are good. This conclusion is based on the previously described reasoning. Four things meet or surpass the standard, while four do not. There are a total of eight objects. A pie chart, like the one shown below, can be used to visually depict it:



Figure 2.
Circle Diagram of Game Sport Facilities

Table 2.

Physical Education, Sports and Health (PJOK) Facilities at SMA Negeri 19 Medan seen from the Athletic Sports Branch

Athletics								
		Existence		Number	State			
No	Name of facility	Existing	Not		Good	Bad	Existing	
1	Baton Relay	-	√	-	-	-	Not Standard	
2	Disc	√	-	3	3	-	Standard	
3	Javelin	-	√	-	-	-	Not Standard	
4	Bullets	1	-	3	3	-	Standard	
5	Jumping Tub	-	√	-	-	-	Not Standard	

The table above indicates that athletic sports facilities consist of relay sticks, discs, javelins, bullets, and leaping tubs. It is possible to reach the following conclusion:

- 1. There were a total of three cassettes, and each tape was in great shape, or at least one hundred percent.
- 2. There were three projectiles, all of which were in impeccable shape, or one hundred percent.

The Physical Education, Sports, and Health (PJOK) Facilities of SMA Negeri 19 Medan are deemed adequate, as they are easily observable during sporting events. This inference can be derived from the previously offered elucidation. Out of the five items, only two meet the criterion, while the other three fall short by a significant margin of sixty percent. A pie chart, like the one shown below, can be used to visually depict it:



Figure 3.
Circle Diagram of Athletic Sports Facilities

Table 3.

Physical Education, Sports and Health (PJOK) Facilities at SMA Negeri 19 Medan seen from Gymnastics Sports Branch

	Gymnastics								
		Existence		Number	State				
No	Name of facility	Existing	Not		Good	Bad	Existing		
1	Mat	√		1	1	-	Not Standard		
2	Jumping Chest	-	√	-	-	-	Not Standard		
3	Simapi	-	V	-	-	-	Not Standard		
4	Plastic Ball	-	V	-	-	-	Not Standard		
5	Stick	-	√	-	-	-	Not Standard		
6	Single crossbar	-	V	-	-	-	Not Standard		
7	wristbands	-	V	-	-	-	Not Standard		

The Physical Education, Sports, and Health (PJOK) Facilities of SMA Negeri 19 Medan, specifically observed from the gymnastics department, fail to exceed the established criteria, as evidenced by the previously presented table. One mattress is in satisfactory shape and fulfills 14% of the criteria, even though there are seven pieces in total. In contrast, the remaining six goods do not meet the criterion by 86%. A pie chart, like the one shown below, can be used to visually depict it:

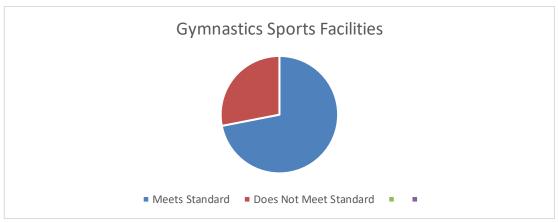


Figure 4.
Circular diagram of gymnastics facilities

Table 4.
Physical Education, Sports and Health (PJOK) Infrastructure at SMA Negeri 19 Medan

Sports Field								
		Existence		Number	State			
No	Name of facility	Existing	Not		Good	Bad	Existing	
1	Football Field	√	-	1	1	-	Standard	
2	Volleyball Court	√	-	1	1	-	Standard	
3	Basketball Court	-	√	-	-	-	Not Standard	

It may be inferred that the Physical Education, Sports and Health (PJOK) Infrastructure at SMA Negeri 19 Medan, which includes a volleyball court, a basketball court, and a football pitch (which is also used for athletics), meets the necessary criteria. However, the observations reveal that there are just two types of infrastructure, specifically football fields and volleyball courts, which make up 67% of the overall amount. In addition, the absence of a basketball court explains the remaining 33%. A pie chart, like the one show below, can be used to visually depict it:

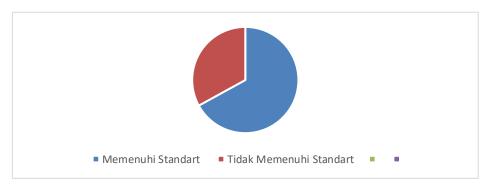


Figure 5.
Infrastructure Circle Diagram

The findings indicate that the Physical Education, Sports, and Health (PJOK) facilities and infrastructure at SMA Negeri 19 Medan vary throughout different branches of the school. This is evident from the research data, which clearly demonstrates that the infrastructure and facilities of PJOK are unique. The findings of this inquiry provide substantiation that this is indeed true. Out of the eight components that make up the game of sports, four items fulfil the standards by fifty percent, while four items fail to reach the norms by fifty percent. Among the five items, two meet the standards, representing forty percent, while three do not meet the norms, representing sixty percent. There is a single item in the gymnastics facilities that fulfils the criterion, representing 14% of the total. Out of the total, 86% of the items do not meet the criterion, leaving only six that do. The infrastructure is deemed satisfactory, as both the volleyball court and the football pitch are in excellent condition. From the previous explanation, it can be inferred that a standard is considered met when it surpasses fifty percent, and it is considered not met when it falls below fifty percent of the standard set by Regulation of the Minister of National Education Number 24 of 2007. The three sports were merged after a thorough evaluation of the Physical Education, Sports, and Health (PJOK) Facilities and Infrastructure at SMA Negeri 19 Medan. The investigation concluded that the Physical Education, Sports, and Health (PJOK) Facilities and Infrastructure of SMA Negeri 19 are in a satisfactory condition. Medan was commonly categorised as a "lesser" city. Only football games and athletic sports are considered permitted, as there are only three sports. Basketball is the sole sport that fails to match the established criteria.

The Physical Education, Sports, and Health (PJOK) infrastructure and facilities at SMA Negeri 19 Medan heavily depend on the school's resources and support from the government. Overall, the Physical Education, Sports, and Health (PJOK) Facilities and Infrastructure of SMA Negeri 19 Medan are considered insufficient or not meeting the required standards set by the Regulation of the Minister of National Education Number 24 of 2007. The implementation of this legislation occurred in 2007.

# **CONCLUSION**

Based on the data analysis completed by the researchers, it can be concluded that the Physical Education, Sports, and Health (PJOK) amenities and Infrastructure have not been able to provide enough infrastructure and amenities. The conclusions drawn from the research done on the state of Physical Education, Sports, and Health (PJOK) Facilities and Infrastructure in SMA Negeri 19 Medan can be derived from the findings. 62.25% of the facilities meet the requirement, while 37.75% do not. Therefore, the facilities and infrastructure used for physical education at SMA Negeri 19 Medan are insufficient, in accordance with the Regulation of the Minister of National Education No. 24 of 2007 for Senior High Schools.

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