

## The Effect of Learning Facilities on Student Achievement During the Covid-19 Pandemic



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**ABSTRACT:** This study aims to determine the relationship between learning facilities and the learning achievement of Physical Education, Sports, and Health students at SMA Negeri 1 Sayegan during the Covid-19 pandemic. This type of research is quantitative with a correlational approach. The population in this study were students at SMA Negeri 1 Sayegan, amounting to 97 students who were taken based on the total sampling technique. The learning facility instrument uses a questionnaire, while the Physical Education, Sports, and Health learning achievement uses report cards. The data analysis technique used Pearson Correlation Product Moment analysis. The results showed that there was a significant relationship between learning facilities and the Physical Education, Sports, and Health learning achievement of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic, with a count of 0.552 and a significance value of  $0.000 < 0.05$ . Learning facilities have a relationship with the Physical Education, Sports, and Health learning achievement of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic by 30.50%. These results indicate that if the learning facilities are getting better or fulfilled, the Physical Education, Sports, and Health learning achievement will also be getting better.

**KEYWORDS:** Learning facilities, Physical Education, Sports, and Health learning achievement, covid-19 pandemic.

### INTRODUCTION

Coronavirus Disease 2019 (COVID-19) is a disaster that causes all community activities to be limited and the space for movement in various aspects is limited, without exception in the education aspect (Pereira et al., 2020); (Dhawan, 2020); (Gautam et al., 2021). Education is a conscious and planned effort to create a learning atmosphere and learning process so that students can actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state. (Gaol & Sitepu, 2020). The quality of education is currently experiencing challenges as a result of the Covid-19 outbreak Covid-19 is a global pandemic whose spread is very worrying. As a result, the government must work together to suppress the spread of the Covid-19 virus by issuing a policy so that all members of the community must practice social distancing or maintain a distance. With this policy, all community activities that used to be carried out outside the home by gathering and in groups must now be stopped for a moment and replaced with activities in their homes. School closures due to Covid-19 affect learning and assessment methodologies (Kovacs et al., 2022); (Zviedrite et al., 2021). Especially in the Covid-19 pandemic, now learning and assessment are carried out remotely so that a teacher must be able to assess carefully and by considering the condition of students who have different backgrounds, both from economic factors, the character of students during learning and in terms of family education. Online learning is a new way of teaching and learning process that utilizes electronic devices, especially the internet in the delivery of learning. Online learning makes students communicate through device intermediaries, resulting in reduced interaction between one individual and another. This lack of interaction coupled with the limitation of physical meetings makes students bored (Bano et al., 2019); (Nassoura, 2020); (Sadykova & Meskill, 2019); (Marshall & Kostka, 2020). Online learning is considered to be the only medium for delivering material between teachers and students, during a pandemic emergency (Chansanam et al., 2021). Online learning, is entirely dependent on internet network access.

Various media can also be used to support the implementation of online learning. Examples, virtual classes using Google Classroom, Edmodo, and Schoology services, and instant messaging applications such as WhatsApp (Nadeak, 2020); (Alshaboul et al., 2021). Online learning has been widely carried out in the context of education, as evidenced by several studies that explain this (Mukhtar et al., 2020); (Bączek et al., 2021); (Zylfiu et al., 2020); (Hussein et al., 2020); (Dung, 2020), online learning provides

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benefits in helping to provide access to learning for everyone, thereby removing physical barriers as a factor for learning in the classroom (Pei & Wu, 2019), even it is seen as something that is effective to implement. However, according to (Pilkington, 2018) it is undeniable that not all learning can be transferred to an online learning environment.

The obstacles faced in online learning are the lack of adequate supporting facilities and infrastructure (Khuluqo et al., 2021); (Suherman, 2021); (Karalis, 2020), lack of mastery of technology skills by teachers (Khadka, 2021); (Maphalala et al., 2021); (Pandey et al., 2021), limited internet network (Simamora, 2020); (Bariham et al., 2021). One of the subjects affected by the Covid-19 pandemic is Physical Education, Sports, and Health.

Various limitations on online learning, Physical Education, Sports, and Health naturally encountered various obstacles and obstacles during the Covid-19 pandemic. Physical Education, Sports, and Health is an important subject because it helps develop students as individuals and social beings so that they grow and develop naturally. The implementation prioritizes physical activity, especially sports, and healthy living habits. One of the main goals of Physical Education, Sports, and Health is to encourage the motivation of the subject to improve academic achievement or physical exercise training. With the presence of Physical Education, Sports, and Health, a person's potential will be able to develop. Physical Education, Sports, and Health is essentially an educational process that utilizes physical activity to produce holistic changes in individual qualities, both physically, mentally, and emotionally. Physical activity is the main and dominant thing in learning physical education. In addition, another uniqueness of physical education is that it can improve the physical fitness and health of students, increase the mastery of rich physical skills, and increase students' understanding of the principles of motion and how to apply them in practice (Quennerstedt, 2019); (Opstoel et al., 2020); (Bukhari et al., 2019); (Prontenko et al., 2020).

One of the external factors that affect learning outcomes is learning facilities. Learning facilities are all equipment, materials, and furniture that are directly used in the learning process that can make it easier for students to learn (Wulandari et al., 2021); (Kingsley, 2019); (Soltaninejad et al., 2021). Learning facilities include all the facilities needed in the teaching and learning process, both movable and immovable so that the achievement of educational goals can run smoothly, regularly, effectively, and efficiently so that students can achieve optimal learning outcomes. The completeness of learning facilities can affect the smoothness and continuity of the learning process. The entirety of learning facilities helps students learn, and the lack of learning tools or facilities hinders learning progress (Eze et al., 2018); (Churiyah et al., 2020).

The learning facilities used during this pandemic are online learning facilities where teachers and students feel that they are not optimal in the learning process due to the lack of learning time and problems with supporting facilities such as inadequate laptops or cellphones. Based on where the learning activities are carried out, the learning facilities are grouped into two: (1) learning facilities in schools and (2) learning facilities at home. Learning facilities influence learning achievement, especially learning facilities at home. The existence of learning facilities will support students' academic and non-academic activities and support the realization of a good learning process (Abdurahman et al., 2019). The availability of learning facilities at home cannot be separated from the role of parents in providing learning facilities and infrastructure. Parents' concern about equipping learning facilities will benefit the learning process (Lase et al., 2022); (Garbe et al., 2020). The availability of complete learning facilities at home can increase students' motivation to learn and improve student learning achievement (Ferri et al., 2020). However, if the facilities are inadequate, it can hinder students' learning process.

### METHOD

This type of research is correlational research. Correlational research is research conducted to determine whether there is a relationship between two or several variables. The method used in this study is a survey method, while the techniques and data collection uses questionnaires and learning outcomes. The survey method is an investigation conducted to obtain facts from existing symptoms and look for factual deficiencies. The population in this study was students at SMA Negeri 1 Sayegan, totaling 135 students. The instrument or tool used to measure learning facilities is in the form of a closed questionnaire. Grid in Table 1:

**Table 1. Home Study Facility Instrument Grid**

Variable	Factor	Indicator	No Items	
			Favorable	Unfavorable
Home Study Facilities	Room or place to study at home	Dedicated study room at home	1	2
		Study room size	3	4
		Study room paint color	5	6
		Air ventilation	8	7
		Study room lighting	9	10

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	Home study furniture	Special study chairs and tables	11	12
		Study lamp	13	14
		Bookshelf	15	16
	Study aids	Stationary	17	18
		<i>Handphone</i>	19	20
		Sports equipment	21	22
		Laptop	23	24
	Learning resources	Textbooks	26	25
		Internet facilities	28	27
<b>Total</b>			<b>28</b>	

The instrument used to determine the Physical Education, Sports, and Health learning achievement of students at SMA Negeri 1 Sayegan is based on the odd semester report cards. The results of the instrument validity test showed that of the 28 items all items were valid. This is because  $r_{\text{arithmic}} > r_{\text{table}}$ , then this instrument can be used for research. The reliability test of this study used the Cronbach Alpha method which was assisted by a computer program. The results of the reliability test were 0.878 out of 28 items.

### FINDING

The results of the descriptive analysis are intended to determine the learning facilities and learning achievements of Physical Education, Sports, and Health students at SMA Negeri 1 Sayegan during the Covid-19 pandemic. The full results are in Table 2.

**Table 2. Descriptive Statistics of Learning Facilities**

Statistic	
<i>N</i>	135
<i>Mean</i>	54,99
<i>Median</i>	55,00
<i>Mode</i>	57,00
<i>Std. Deviation</i>	10,60
<i>Minimum</i>	33,00
<i>Maximum</i>	81,00

When displayed in the form of an Assessment Norm, student learning facilities at SMA Negeri 1 Sayegan during the Covid-19 pandemic are presented in Table 3.

**Table 3. Learning Facility Assessment Norms**

No	Interval	Category	Frequency	Percentage
1	$95 < X$	very good	0	0,00%
2	$78 < X \leq 95$	good	10	7,41%
3	$61 < X \leq 78$	enough/moderate	39	28,89%
4	$44 < X \leq 61$	not good	68	50,37%
5	$X \leq 44$	not very good	18	13,33%
<b>Total</b>			<b>135</b>	<b>100%</b>

Based on Table 3 above, it shows that student learning facilities at SMA Negeri 1 Sayegan during the Covid-19 pandemic were in the "not very good" category of 13.33% (18 students), "not good" of 50.37% (68 students), "enough/moderate" by 28.89% (39 students), "good" 7.41% (10 students), and "very good" 0.00% (0 students).

The statistical description of the Physical Education, Sports, and Health learning achievement data of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic is complete in Table 4.

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**Table 4. Descriptive Statistics of Physical Education, Sports, and Health Learning Achievement**

Statistic	
<i>N</i>	135
<i>Mean</i>	74,93
<i>Median</i>	76,00
<i>Mode</i>	76,00
<i>Std. Deviation</i>	5,60
<i>Minimum</i>	64,00
<i>Maximum</i>	86,00

When displayed in the form of an Assessment Norm, the Physical Education, Sports, and Health learning achievement of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic is presented in Table 5.

**Table 5. Norms of Physical Education, Sports, and Health Learning Achievement Assessment**

No	Interval	Category	Frequency	Percentage
1	75 ≤	Fulfill Minimum Mastery Criteria (KKM)	78	57,78%
2	≤ 74	Not fulfill Minimum Mastery Criteria (KKM)	57	42,22%
<b>Total</b>			<b>135</b>	<b>100%</b>

Based on Table 5 above, shows that the Physical Education, Sports, and Health learning achievement of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic was in the "Fulfill Minimum Mastery Criteria" category of 57.78% (78 students) and "Not Fulfill Minimum Mastery Criteria" 42.22% (57 learners).

The normality test of the data in this study used the Kolmogorov-Smirnov method. The results of the data normality test carried out in each group were analyzed using the SPSS version 20.0 software program for windows with a significance level of 5% or 0.05. A summary of data is presented in Table 6.

**Table 6. Normality Test Results**

No	Variable	<i>p</i>	<i>Sig</i>	Description
1	Learning Facilities (X)	0,436	0,05	Normal
2	Physical Education, Sports, and Health Learning Achievement (Y)	0,351	0,05	Normal

Based on the statistical analysis of the normality test that has been carried out using the Kolmogorov-Smirnov test in Table 6, the variables of learning facilities and learning achievement of Physical Education, Sports, and Health students obtained normality test results with a significance value of  $p > 0.05$ , which means the data is normally distributed.

The linearity test of the relationship was carried out through the F test. The relationship between the independent variable (X) and the dependent variable (Y) was declared linear if the sig value  $> 0.05$ . The results of the linearity test can be seen in Table 7 below:

**Table 7. Linearity Test Results**

Functional Relationship	<i>p</i>	<i>Sig.</i>	Description
Learning Facilities (X)* Physical Education, Sports, and Health Learning Achievement (Y)	0,257	0,050	Linier

From Table 7 above, it can be seen that the significance value ( $p$ )  $> 0.05$ . So, the relationship between the variables of learning facilities and the learning achievement of the Physical Education, Sports, and Health of students is stated to be linear.

The correlation coefficient significance test was carried out by consulting the r table. If the calculated r is consulted with the r table using an error rate of 5%. If the significance value of  $p < 0.05$ , then the hypothesis is accepted and the significance value of

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$p > 0.05$ , then the hypothesis is rejected. If  $r$  count is greater than the  $r$  table, then there is a positive and significant relationship between the variables tested. The results of hypothesis testing are presented as follows.

**Table 8. Correlation Test Results**

Functional Relationship	$r$ count	Sig.	Description
Learning Facilities (X)* Physical Education, Sports, and Health Learning Achievement (Y)	0,552	0,000	Significant

Based on Table 8 above, the calculated  $r$  coefficient is 0.552, while the significance value is 0.000. The calculated  $r$  value is 0.552, and the significance value is  $0.000 < 0.05$ , it can be interpreted that there is a significant relationship between learning facilities and the learning achievement of Physical Education, Sports, and Health students at SMA Negeri 1 Sayegan during the Covid-19 pandemic. The correlation coefficient is positive, meaning that if the learning facilities are getting better or fulfilled, the Physical Education, Sports, and Health learning achievement will also improve.

The coefficient of determination ( $R^2$ ) is essentially used to measure how far the regression model's ability to explain the variation of the dependent variable is. The results of the analysis in Table 9 are as follows.

**Table 9. Results of the Coefficient of Determination Analysis ( $R^2$ )**

<i>Model Summary</i>				
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	0.552 <sup>a</sup>	0.305	0.298	4.69183
a. Predictors: (Constant), Learning Facilities (X1)				

The value of the coefficient of determination  $R$  Square or the contribution of learning facilities to the learning achievement of the Physical Education, Sports, and Health students at SMA Negeri 1 Sayegan during the Covid-19 pandemic was 0.305 or 30.50%. This means that the learning facility variable has a relationship with the learning achievement of the Physical Education, Sports, and Health of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic by 30.50%. At the same time, the rest is influenced by other factors of 69.50% outside this study. Other variables that affect Physical Education, Sports, and Health learning achievement include learning motivation, interests, talents, learning environment, and others.

## DISCUSSION

Based on the results of the study shows that there is a significant relationship between learning facilities and the Physical Education, Sports, and Health learning achievement of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic. Learning facilities have a relationship with the Physical Education, Sports, and Health learning achievement of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic by 30.50%. These results indicate that if the learning facilities are getting better or fulfilled, the Physical Education, Sports, and Health learning achievement will also improve. The results of this study are in line with several previous studies, including studies conducted (Eze et al., 2018); (Bakar, 2018); (Almusharraf & Khahro, 2020) shows that there is a positive and significant relationship between learning facilities and learning outcomes.

The results of the descriptive analysis showed that the student learning facilities at SMA Negeri 1 Sayegan during the Covid-19 pandemic were mostly in the less category, which was 50.37% (68 students). Due to the current pandemic, learning activities, especially on Physical Education, Sports, and Health practice materials, will cause difficulties for students because not all students have complete sports facilities at home. Students need additional facilities such as electronic devices such as mobile phones to find additional information that can be viewed on various sites. For example, you can view videos downloaded from Youtube and read and view images on your cellphone. However, an internet quota is also needed to run a connection to view videos, pictures, and explanations of Physical Education, Sports, and Health material on the internet. All the facilities owned by students will affect the value of learning.

(Ramij & Sultana, 2020) examined the readiness and practicality of online education in Bangladesh during the pandemic. This study analyzes primary information collected through surveys. A logistic regression model was applied to explain the assumptions, in line with the descriptive interpretation of the collected data. The results show that lack of technical infrastructure, high internet prices, low internet speed, financial crisis, and mental stress on students are the main barriers to online education in Bangladesh for most students.

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(Emon et al., 2020) examined the problems in Bangladesh due to online learning in higher education during COVID-19 imposed school closures. In Bangladesh, all universities are directed by the Ministry of Education to conduct online education. While some see this as an education-friendly policy, a recent survey of 2038 students at 45 higher education institutions run by BioTED, a new training and research initiative, found that a third of Bangladeshi students do not want to engage in online academic activities. The same study also found that 55 percent of students did not have adequate internet connectivity, and 44.7 percent did not have access to a computer (i.e., laptop, PC, tablet, etc.) to participate effectively in online teaching.

Students have problems with incompatible devices, sharing devices with other family members, unstable internet connection, restricted or unavailable internet access, data costs, purchase of new equipment, new programs or applications, lack of experience with ICT, lack of ICT skills, and inadequate learning platforms (Rahiem, 2020).

Conditions during the Covid-19 pandemic, the shift in learning methods or methods adjusts and follows the flow so that learning can take place. The solution so that the teaching and learning process can take place is to use online learning or e-learning, which is unavoidable and must be accepted by educational institutions (Fatonja et al., 2020); (Batubara, 2021); (Heng & Sol, 2021); (Jena, 2020). The implementation of education in learning specifically combines technology that connects internet networks and electronic technology. The internet is present in almost everything that is used. Starting from television, mobile phones and the internet can be found anywhere. The use of the internet allows students to find comfort and convenience; students can find various kinds of help, tutorials, and other types of aid materials that can be used to improve learning academically (Raja & Nagasubramani, 2018).

One of the challenges of online learning is that it requires adequate facilities and infrastructure such as laptops, smartphones, computers, and internet networks (Laksana, 2021); (Simamora, 2020). A student does not all have a laptop and a computer. The supporting factors of online learning using internet-based applications, therefore the readiness of internet infrastructure facilities and the need to carry out the teaching and learning process through learning media. However, the problem lies in the issue of quotas and internet networks. The problem with this network is due to the conditions and areas where students live in remote areas and do not all have a strong internet network.

Talking about learning facilities, actually not only schools as institutions for learning, but parents also play a role in providing facilities that can support the success of students. Complete facilities at home are needed by students to learn, for example: learning facilities which include tables, chairs, cupboards/bookshelves, rooms, stationery and pictures and lighting. Regarding the prerequisites that must be met regarding learning facilities at home to be said to be good, it can also refer to the prerequisites regarding learning facilities in schools as well as regarding the room.

Learning facilities are facilities and infrastructure that support learning activities such as rooms, books, media, materials and other supporting facilities. Furthermore, learning facilities are movable or immovable aspects that are intentionally given to students to facilitate learning activities so that students can achieve the expected goals (Batubara, 2021); (Kaso et al., 2021), (Kaso et al., 2021). Learning facilities are something that can lead to motivation for students. With more complete and adequate learning facilities, students will be more motivated in learning. Complete learning facilities will provide encouragement to students to study harder so that the learning outcomes of these students become better or increase. Thus, learning outcomes will increase or decrease according to the availability of learning facilities. The higher the learning facilities owned by students, the motivation to learn will also increase, and further learning outcomes are also higher or better.

Learning facilities at home are beneficial for students to do the assignments given at school that must be done at home and finds information related to the subject matter. With adequate home learning facilities, it is hoped that student outcomes will increase because adequate facilities foster students' enthusiasm for learning at home and make learning more enjoyable. Whether or not the learning equipment is complete, whether owned by the students themselves or those of the school, can have certain consequences on student learning achievement; a shortage of learning equipment can have negative repercussions; Among other things, for example, students cannot learn well, so it is difficult to expect to achieve high achievements. To support the learning process, in addition to learning resources that must be provided in a complete and reasonable manner, of course, are learning equipment. Infrastructure whose existence is not used for the teaching and learning process, but it directly supports the implementation of online learning, namely the home of each student, because the implementation of online learning is carried out learning from home. The availability and adequacy of facilities are one of the requirements to support the success of online learning or e-learning (Oladele & Modebelu, 2021); (Nugroho, 2020); (Silvana et al., 2021).

### CONCLUSION

The conclusion of the study shows that there is a significant relationship between learning facilities and the learning achievement of the Physical Education, Sports, and Health of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic, with  $r$  count of 0.552 and a significance value of  $0.000 < 0.05$ . Learning facilities have a relationship with the Physical Education, Sports, and Health



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learning achievement of students at SMA Negeri 1 Sayegan during the Covid-19 pandemic by 30.50%. These results indicate that if the learning facilities are getting better or fulfilled, the Physical Education, Sports, and Health learning achievement will also be getting better.

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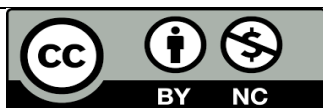
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