

The Influence of School Structure, Assets, and Facilities on the Learning Motivation of Eighth-Grade Students at SMP Negeri 3 Tebing Tinggi

Afni Maulani Octavia Siagian*

Universitas Islam Sumatera Utara

Email: octavia1s@gmail.com

Abstract

This study aims to determine the influence of school facilities and infrastructure on the learning motivation of grade VIII students of SMP Negeri 3 Tebing Tinggi. The method used is a quantitative method with a population of 100 students. Data collection was carried out through the distribution of questionnaires, and data analysis was carried out using the SPSS program. The results showed that the variable structure of infrastructure facilities had a significant effect on students' learning motivation with a t-calculation value of $7,707 > t\text{-table of } 1,660$ and a significance value of $0.000 < 0.05$. The magnitude of the influence of these variables on learning motivation was 61.4%, while the remaining 38.6% was influenced by other factors outside of this study. These findings indicate that the quality of governance and the availability of school facilities play an important role in increasing students' motivation to learn.

Keywords: *Infrastructure; Learning Motivation; Students of SMPN 3 Tebing Tinggi*

Abstrak: Penelitian ini bertujuan untuk mengetahui pengaruh sarana dan prasarana sekolah terhadap motivasi belajar siswa kelas VIII SMP Negeri 3 Tebing Tinggi. Metode yang digunakan adalah metode kuantitatif dengan populasi sebanyak 100 siswa. Pengumpulan data dilakukan melalui penyebaran angket, dan analisis data dilakukan menggunakan program SPSS. Hasil penelitian menunjukkan bahwa variabel struktur sarana prasarana berpengaruh signifikan terhadap motivasi belajar siswa dengan nilai t-hitung sebesar $7.707 > t\text{-tabel } 1.660$ dan nilai signifikansi $0,000 < 0,05$. Besarnya pengaruh variabel tersebut terhadap motivasi belajar adalah sebesar 61,4%, sedangkan sisanya sebesar 38,6% dipengaruhi oleh faktor lain di luar penelitian ini. Temuan ini mengindikasikan bahwa kualitas tata kelola dan ketersediaan fasilitas sekolah berperan penting dalam meningkatkan motivasi belajar siswa.

Kata Kunci: *Sarana Prasarana; Motivasi Belajar; Siswa SMPN 3 Tebing Tinggi*

Introduction

The availability of adequate educational facilities and infrastructure is one of the many aspects that affect the effectiveness of educational programs through the teaching and learning process. Educational facilities and infrastructure play an important and vital role in supporting the educational process in schools. To achieve this goal, effective management or administration of existing facilities and infrastructure in schools is needed.

School facilities and infrastructure can be in the form of buildings and all their contents, libraries and their equipment, as well as extracurricular infrastructure such as sports fields and other supporting facilities. To facilitate students' learning activities by meeting their learning needs, things that need to be provided include school infrastructure and facilities such as teaching aids, learning tools, and school furniture. Classrooms, libraries, laboratories, skills rooms, art rooms, and sports facilities are some examples of facilities needed in schools to ensure learning activities run smoothly and successfully.

School infrastructure and facilities consist of several elements, such as books or learning materials, props, equipment, furniture, and rooms. Based on this statement, it can be concluded that facilities and infrastructure are determining factors for success in the teaching and learning process and student learning achievement. Therefore, the fulfillment of learning facilities and infrastructure is very important to support the success of the teaching and learning process and improve student learning achievement.

As happened to grade VIII students at SMP Negeri 3 Tebing Tinggi, students' motivation to learn is not optimal to follow the teaching and learning process. This is due to the lack of availability of educational support tools that should exist but are not complete. The facilities and infrastructure they have are inadequate, for example classrooms whose number still does not meet standards. Learning tools are also insufficient, such as the lack of educational teaching aids, libraries, laboratories, and places of worship that are not available until now. This condition of course has an impact on students' motivation and enthusiasm for learning.

Method

This study uses a quantitative approach with an experimental method to measure the effect of the application of *the Project Based Learning* (PJBL) model on student learning outcomes in Islamic Religious Education subjects. The population in this study is all students of grade VIII of SMP IT Dod Medan which totals 120 people.

The data collection technique is carried out through two stages, namely: (1) Pre-Test is given to students before the implementation of *the Project Based Learning learning model*. The purpose of this pre-test is to find out the initial level of students' ability to understand Islamic Religious

Education material before treatment. (2) Post-Test After the implementation of the PJBL model, students are again given a test (post-test) with the aim of finding out the improvement of learning outcomes after learning is carried out using the model.

The data obtained from the pre-test and post-test results were then analyzed using the help of SPSS statistical software. The data test included normality tests, homogeneity tests, and *paired sample t-tests* to see the significance of the differences between pre-test and post-test results. The results of this analysis are the basis for drawing conclusions about the effectiveness of the PJBL method in improving student learning outcomes.

Results and Discussion

Result

Table 1. Results of the Validity Test of the Infrastructure

No. Butir	r_{hitung}	r_{tabel}	Status
1	0.650	0.195	Valid
2	0.678	0.195	Valid
3	0.704	0.195	Valid
4	0.670	0.195	Valid
5	0.667	0.195	Valid
6	0.667	0.195	Valid
7	0.716	0.195	Valid
8	0.694	0.195	Valid
9	0.680	0.195	Valid
10	0.680	0.195	Valid

Table 2. Results of Validity Test of Variables of Learning Motivation

No. Butir	r_{hitung}	r_{tabel}	Status
1	0.672	0.195	Valid
2	0.670	0.195	Valid
3	0.663	0.195	Valid
4	0.683	0.195	Valid
5	0.581	0.195	Valid
6	0.666	0.195	Valid
7	0.700	0.195	Valid
8	0.668	0.195	Valid
9	0.668	0.195	Valid
10	0.668	0.195	Valid

Reliability Test

Table 3. Reliable Levels Based on Alpha Levels

Alpha	Reliability Level
100,00 s/d 0,20	Less Reliable

>0,20 s/d 0,40	Somewhat Reliable
>0,40 s/d 0,60	Quite Reliable
>0,60 s/d 0,80	Reliable
>0,80 s/d 1.00	Very Reliable

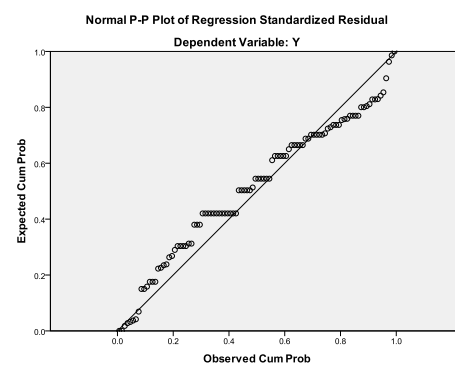
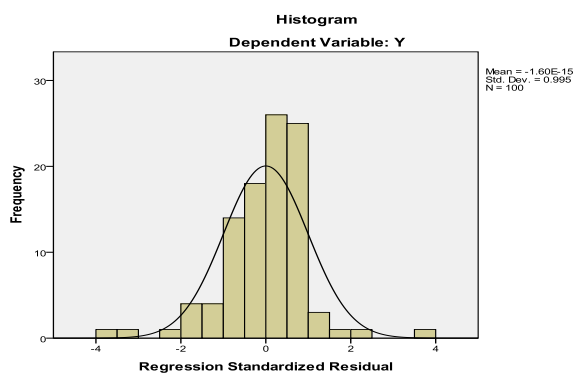
Table 3. Variable Instrument Reliability Test Results

Variabel	Cronbac's Alpha	Alpha Minimal	Status
Sarana prasarana X	0,688	0,60	Reliabel
Lirtersir Keruangan Y	0,660	0.60	Reliabel

Normality Test

Table 4. Results of the Kolmogorov-Smirnov Data Normality Test

		Struktur, Assert dan sarana prasarana	Motirvasir Berajar
N		100	
Normal Paramerters ^a	Meran	756777423	829106541
	Std. Derviraton	124781834	573779612
Most Exrtremer Dirffererncers	Absoluter	.112	.127
	Posirtirver	.058	.127
	Nergatirver	-.112	-.084
Kolmogorov-Smirnov Z		.550	
Asymp. Sirg. (2-tairlerd)		.923	



Simple Linear Regression Test

Table 5. Regression Model Test Results

Coefficients. ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.775	3.103		5.405	.000
	X	.580	.075	.614	7.707	.000
a. Dependent Variable: Y						

T Test

Table 6. Test Results [†]

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.775	3.103		5.405	.000
	X	.580	.075	.614	7.707	.000
a. Dependent Variable: Y						

Determinant Tests

Table 7. Determinant Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.614 ^a	.377	.371	4.02430	2.017
a. Predictors: (Constant), X					
b. Dependent Variable: Y					

Discussion

Based on the results of the above test, it was obtained that the significance value was $0.000 < 0.05$ and the calculated t value was $7.707 > t$ table was 1.660 . These results show that the variables of school structure, assets, and facilities partially have a significant effect on students' learning motivation with a positive influence direction. Thus, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. This means that there is a positive and significant influence

between structural variables, assets, and infrastructure facilities on the learning motivation of grade VIII students of SMP Negeri 3 Tebing Tinggi.

The magnitude of the influence given by school structures, assets, and facilities on student learning motivation is 61.4%, while the remaining 38.6% is influenced by other factors that are not explained in this study.

Theoretically, the use of infrastructure in the world of education plays an important role in supporting smooth interaction between teachers, students, and all school components. A clear organizational structure, adequate asset support, and proper infrastructure can help teachers in delivering learning materials effectively, as well as creating a conducive learning environment for students (Umar et al., 2024).

The results of this study are in line with previous research conducted by (Ya'cub & Ga'a, 2021) In his research, it is explained that the management of facilities and infrastructure includes the planning, procurement, utilization, and disposal of educational assets. The principal's strategy in increasing students' interest in learning includes directing teachers to apply interesting learning methods, providing enthusiasm for learning, creating a pleasant classroom atmosphere, and encouraging students to have strong internal motivation.

Furthermore, the results of the study (Rahayu et al., 2024) also show a similar thing. Based on the results of simple linear regression analysis using the SPSS version 29 program, the value of F calculated = 89.032 with a significance of $0.001 < 0.05$ was obtained. The value of the determination coefficient (R Square) of 0.574 shows that learning facilities and infrastructure have an influence of 57.4% on student learning motivation, while the remaining 42.6% is influenced by other variables. The results of the t test also showed that t calculation = 9.436 > t table = 1.668 with a significance of 0.000, so it can be concluded that there is a significant influence between learning infrastructure facilities on the learning motivation of class X students of SMK Bina Latih Karya (BLK) Bandar Lampung.

Thus, based on the empirical findings in this study, it can be concluded that the alternative hypothesis (H_a) is accepted, namely that there is a significant influence between school structures, assets, and infrastructure facilities on the learning motivation of grade VIII students of SMP Negeri 3 Tebing Tinggi. These results make an important contribution to the development of school management that is oriented towards improving the quality of student learning through the optimization of educational facilities and infrastructure.

Conclusions

Based on the discussion above, the author can draw the following conclusions:

1. The availability of school facilities and infrastructure has a significant effect on the learning motivation of grade VIII students of SMP Negeri 3 Tabir Selatan. This is indicated by a t-count value of 7.707 which is greater than the t-table of 1.660 ($7.707 > 1.660$) in a positive

- direction. Thus, H_0 is rejected and H_a is accepted, which means that the variable of the effectiveness of infrastructure facilities partially has a positive and significant effect on students' motivation to learn.
2. The magnitude of the influence of infrastructure facilities on student learning motivation is 61.4%, while the remaining 38.6% is influenced by other factors that were not studied in this study.

References

- Rahayu, S., Jumaili, S., Rahayu, R., Saudagar, F., & Utomo, P. E. P. (2024). Penguatan Manajemen Aset Tetap dan Akademik Sekolah untuk Meningkatkan Kinerja Layanan Pendidikan. *Jurnal JUPEMA*, 3(2), 86–94. <https://doi.org/10.22437/jupema.v3i2.37403>
- Rudin, A., Kusrina, T., & Apriani Fr, D. (2024). Pengaruh Sarana Prasarana dan Prasarana terhadap Minat Belajar Siswa di Sekolah Dasar Negeri Kecamatan Suradadi Kabupaten Tegal. *Journal of Education Research*, 5(2), 1925–1930. <https://doi.org/10.37985/jer.v5i2.1093>
- Susiani, K. (2022). Meningkatkan Kualitas Pendidikan di Indonesia: Pengelolaan Sarana dan Prasarana Sekolah Dasar. *Jurnal Penjaminan Mutu*, 8(02), 173–184. <https://doi.org/10.25078/jpm.v8i02.912>
- Umar, S., Senang, S., & Sunardi, S. (2024). Peningkatan Mutu Pembelajaran Melalui Pengembangan Sarana dan Prasarana. *Irsyaduna: Jurnal Studi Kemahasiswaan*, 4(1), 16–28. <https://doi.org/10.54437/irsyaduna.v4i1.1552>
- Ya'cub, M., & Ga'a, D. S. (2021). Strategi Kepala Sekolah dalam Meningkatkan Kualitas Pembelajaran Melalui Pengembangan Sarana Prasarana. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 2(2), 60–69. <https://doi.org/10.31538/munaddhomah.v2i2.67>
- Yahya, D. P., Rahman, K. . R., & Mulyadi, M. (2023). MANAGEMENT OF EDUCATIONAL FACILITIES AND INFRASTRUCTURE: LITERATURE REVIEW ON EDUCATIONAL MANAGEMENT. *Indonesian Journal of Educational Development (IJED)*, 4(3), 380–387. <https://doi.org/10.59672/ijed.v4i3.3221>