Analysis Of The Influence Of Study Time And Study Habits On Student Academic Achievement (Case Study Of Smkn 28 Jakarta)

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Abstract

This study aims to analyze the effect of study time and study habits on the academic achievement of a student (case study of SMKN 28 Jakarta). This research uses quantitative methods by collecting primary data through questionnaires as an instrument distributed to students of SMKN 28 Jakarta. Data was collected by taking a sample of 160 respondents consisting of 2 batches, namely batch 2024 (grade 10) & batch 2023 (grade 11). Then the respondents' answers that have been obtained are processed using Statistical Processor IBM Software for Social Science (SPSS) Version 30.0 software.

Keywords: Study Time; Study Habits; Academic Achievement

1. Introduction

Students can judge educational success based on their academic performance. In this era of increasing competition, it is imperative for educators, parents and education policy makers to understand more about the various components that can affect academic success, including students' study time and their study habits. It has long been considered that study time is critical to students' academic success, both quantitatively and qualitatively.

Various previous studies have shown that study behavior and habits affect academic performance. The results of research conducted by Setiawan and Kurniawati (2015) on accounting students of the Faculty of Economics, Tarumanagara University (FE UNTAR) are interesting. This study found that the learning behavior of accounting students has a positive impact on their academic performance, which indicates that students with good learning behavior tend to achieve better academic results.

A similar study conducted by Soapatty and Suwanda (2014) at Jati Agung Secondary School in Sidoarjo also produced important findings regarding the impact of the full-time school system on students' academic performance. This study showed that the full-time school system has a significant impact on students' academic performance, which suggests that the implementation of a full-time school system may be beneficial for improving students' academic performance.

However, Albarado and Eminita's (2020) study found that the math learning habits of grade VIII students at MTs Khazanah Kebajikan affected their ability in mathematics. These results suggest that understanding and building effective study habits is crucial to improving students' math proficiency.

This study aims to fill this gap by thoroughly analyzing the effect of study time and study habits on students' academic achievement. This is despite the fact that many studies have investigated the elements that influence academic achievement.

No	Question Item	Alternative Answer					Frek
		1	2	3	4	5	
1	Study time affects a student's academic performance	0	0	2	3	5	10
2	Study habits can give good grades	0	0	1	2	7	10
3	A student's achievement is the most important thing in learning	0	0	4	6	0	10
4	Achievement is also a determinant in study time	0	5	3	2	0	10
5	Each student has a different time to study	0	0	0	1	9	10

The values of the scale 1 - 5 are 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree and 5 = Strongly Disagree. Based on this pre-research, it can be seen that some students already feel that student academic achievement can affect study habits but does not really affect student study time. This is in line with research (Arsoniadi, A., Mujidin, M., & Suyono, H. (2021)) that study habits are one of the factors that affect student achievement with a significant influence. However, on the other hand, there are also students who argue that study time also affects students' academic achievement.

2. Literature Review

2.1 Study Time

Study time is the length of the study process. This can be morning, afternoon or evening. Study time also affects students' learning progress. If students have to study at night, they will lose attention, but if they study in the morning, they have a fresh mind and good physical condition. If students study when their bodies are tired or weak, for example during the day, they will have difficulty learning. According to KULEUVEN, study time is the amount of time students need to complete learning activities and assess the course or part of the course. The concepts of power and validity are closely related to the concept of study time. By measuring the distribution of time, you can find out whether the national learning time is the same as the actual learning time at a particular application or OPO level.

Based on some of these definitions, it can be concluded that study time is the time students use for the learning process, whether it is morning, afternoon, evening, or night. study time is also used to complete tasks that need to be done. According to the sources above, there are several indicators that can be used including: 1) Completing learning activities, 2) Teaching and learning process, and 3) The process of completing assignments.

2.2 Study Habits

According to Slameto (2010) in Sari et al. (2017), study habits are habits that a person consistently does in his learning activities, where these habits shape individual learning behavior. However, Nugroho et al. 2021 and Ismiati & Hutagaol 2021 respectively define “study habits” as a learning process that is carried out regularly and repeatedly, both at home and at school. in accordance with Purwanto, 2014 in Zahroh & Wardani, 2020, study habits are skills that a person acquires through daily practice to acquire new knowledge and skills.

According to several definitions, study habits are consistent patterns of behavior or approaches shown by a person in learning activities that are carried out regularly, repeatedly, and over a long period of time. Study planning, study techniques, study time management, and more fall under this category. Building effective study habits can help you achieve your learning goals. Unique study habits are built by each student both in class and at home. Students do not need to be forced to study because their study habits are naturally good. Based on some of the definitions above, there are several indicators that can be used including: 1) Study planning, 2) Study techniques, 3) Study time management.

2.3 Academic Achievement

According to Tarmidzi (2012) in Awaluddin et al. (2018), student learning outcomes are called academic achievement. However, some experts argue differently. According to Hartaji (2012) in Utari et al., academic achievement is the learning outcome of cognitive learning activities at school or college, which is usually measured and assessed. In addition, the definition of academic achievement given by Tu'u (2004) in Firmansyah (2015) is very interesting because it is seen from the student's perspective. He stated that academic achievement is the result that students achieve during the learning process by considering their abilities within a certain period of time.

Based on these concepts, academic achievement can be defined as the results or achievements that students have achieved during the learning process. These results are usually indicated by test scores, numerical grades, or perceptions of personal growth after participating in educational activities. Based on some of the definitions above, there are several indicators that can be used including: 1) Learning outcomes, 2) Test scores, 3) Personal growth.

2.4 Hipotesis

This study will explain how the effect of Study Time (X1) and Study Habits (X2) as independent variables on Academic Achievement (Y) as the dependent variable, so this study can determine the hypothesis as follows:

H1 = There is a positive direct influence between study time (X1) on student academic achievement (Y)

H2 = There is a positive direct effect between study habits (X2) on students' academic achievement (Y)

H3 = There is a positive direct effect between study time (X1) and study habits (X2) on student academic achievement (Y)

3. Material and Method

3.1 Design Study

This research will be conducted at one of the vocational schools in Jakarta, namely SMK Negeri 28 Jakarta. Researchers in this study will use quantitative methods in the form of numbers as a method of research and use the Likert Scale on each question item with several answer options that can be selected to represent the question. As a data collection technique, researchers will use a questionnaire as their data collection technique. Active students of batch 2022 and 2023 of SMK Negeri 28 Jakarta became the population in this study with a sample size of 160 respondents to represent the entire population using the Taro Yamane formula.

3.2 Data Analysis

This research uses quantitative analysis to analyze the data. For data analysis, descriptive analysis, multiple liner regression, validity, reliability, classical assumption test, and hypothesis testing were used. The data used in this study were processed using the Statistical Processor IBM Software for Social Science (SPSS) Version 30.0. This study used the following data analysis methods: descriptive analysis, multiple liner regression, validity test, reliability test, classical assumption test, and partial (t test) and simultaneous (f test) hypothesis testing.

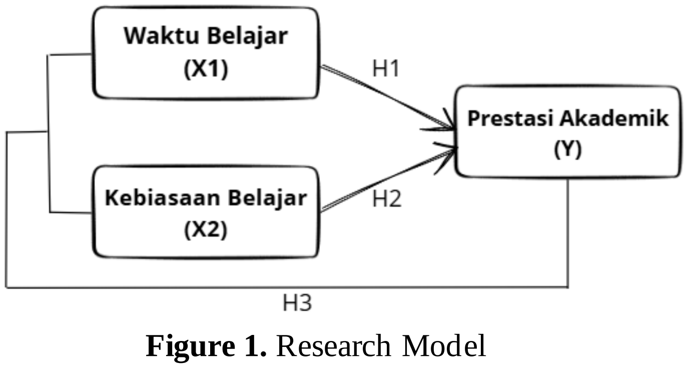


Figure 1. Research Model

4. Result

4.1 Deskripsi Data

In this study there are two independent variables and one dependent variable. The independent variables in this study are study time (X1) and study habits (X2), while the dependent variable in this study is academic achievement (Y). The data description in this study can be grouped into two parts, the first is the respondent profile, including information about age, as well as class, and the second is the analysis of variable data descriptions.

4.1.1 Profil Responden

The respondent profile in this study is students and female students of public high school 28 Jakarta. The population in this study was 160 students of class 2023 (grade 11) and 2024 (grade 10) with a sample of 119 respondents. The survey in this study was conducted through filling out a questionnaire with Google Form media.

4.1.2 Analisis Deskriptif Data Variabel

The variables in this study are Study Time (X1) and Study Habits (X2) and Academic Achievement (Y), data obtained through the distribution of google forms and obtained as many as 119 respondents. The results of descriptive statistical calculations in this study are as follows.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Waktu Belajar	119	13	17	14.94	1.463
Kebiasaan Belajar	119	9	12	10.40	.933
Prestasi Akademik	119	4	8	6.08	.894
Valid N (listwise)	119				

Based on the table above, the number of people involved in this study, 119 people, is represented by the value of N. The value of N for the variable Study Time (X1) is 13, the variable Study Habits (X2) is 9, and the variable Academic Achievement (Y) is 4, while the value of N for the variable Study Time (X1) is 17, the variable Study Habits (X2) is 12, and the variable Academic Achievement (Y) is 8. The average (Mean) value for the Study Time variable (X1) is 14.94, the Study Habits variable (X2) is 10.40, and the academic achievement variable (Y) is 6.08. The standard deviation for the variable Study Time (X1) is 1.463, the variable Study Habits (X2) is 0.933, and the variable Academic Achievement (Y) is 0.894 each shows the standard deviation.

4.2 Uji Asumsi Klasik

4.2.1 Uji Multikolinearitas

Coefficients[a]

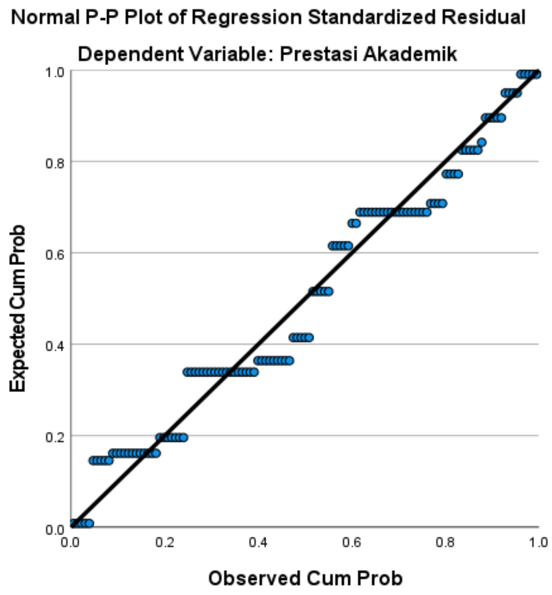
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.278	.786		.354	.724		
	Waktu Belajar	.189	.071	.309	2.644	.009	.428	2.339
	Kebiasaan Belajar	.286	.112	.299	2.559	.012	.428	2.339

a. Dependent Variable: Prestasi Akademik

Based on the calculation results in the table above, it shows that the Tolerance value for the Study Time and Study Habits variables is 0.428> 0.10. While the VIF (Variance

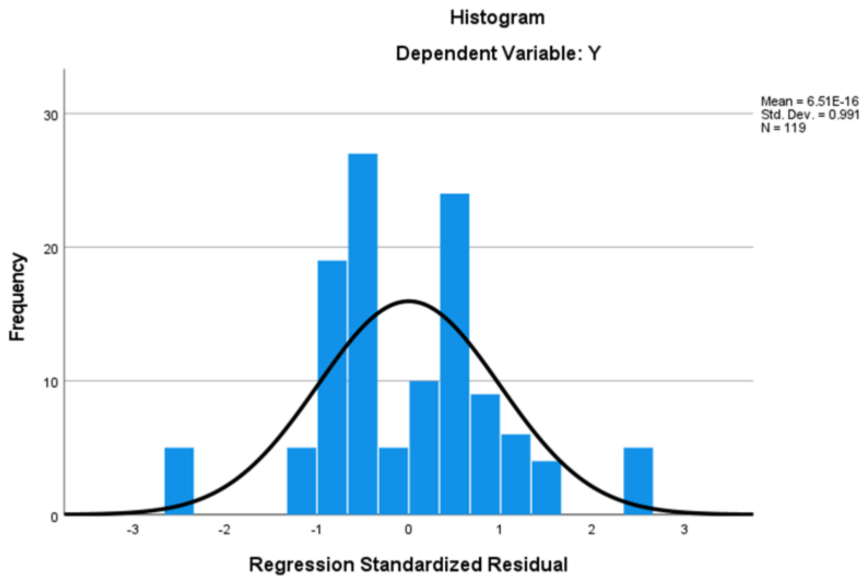
Inflation Factor) value for the two variables is 2.339 < 10. This indicates that there is no multicollinearity in the independent variables in this study.

4.2.2 Uji Heteroskedastisitas



Based on the figure above, it can be concluded that there is no heteroscedasticity. In the heteroscedasticity test, the data points are randomly scattered around the diagonal line and do not form a clear pattern. This shows that the residual variance is consistent, so it can be said that the data fulfills the assumption of homoscedasticity.

4.2.3 Uji Normalitas



For a regression model with dependent variable Y, the histogram above shows the distribution of standardized residuals. This residual distribution has an almost symmetrical shape around zero and forms a bell-shaped curve indicating a normal distribution pattern. Most of the residual values are clustered around zero, with few values scattered to the left and right, indicating that there are not many outliers.

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			119
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		.73505409
Most Extreme Differences	Absolute		.108
	Positive		.108
	Negative		-.101
Test Statistic			.108
Asymp. Sig. (2-tailed)[c]			.002
Monte Carlo Sig. (2-tailed)[d]	Sig.		.001
	99% Confidence Interval	Lower Bound	.000
		Upper Bound	.002

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Based on the data processing results in the figure above, it is known that the significance value for the Kolmogorov-Smirnov test on standardized residuals is 0.002 (Asymp. Sig. 2-tailed) or 0.001 with Monte Carlo correction. These results indicate that the data is not normally distributed because the significance value is smaller than 0.05. Thus, it can be concluded that the data does not meet the assumption of normality.

4.3 Uji Regresi Linear Berganda

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.278	.786		.354	.724
	Waktu Belajar	.189	.071	.309	2.644	.009
	Kebiasaan Belajar	.286	.112	.299	2.559	.012

a. Dependent Variable: Prestasi Akademik

The results of multiple linear regression show that Study Time and Study Habits have a significant and positive effect on Academic Achievement. The coefficient of Study Time of 0.189 (Sig. 0.009) and Study Habits of 0.286 (Sig. 0.012) indicates that an increase in these two variables contributes to an increase in Academic Achievement. These two variables proved significant in the model, where the higher the Study Time and Study Habits, the better the Academic Achievement.

4.4 Uji Hipotesis

4.4.1 Uji Koefisien Regresi Parsial (Uji t)

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.278	.786		.354	.724
	Waktu Belajar	.189	.071	.309	2.644	.009
	Kebiasaan Belajar	.286	.112	.299	2.559	.012

a. Dependent Variable: Prestasi Akademik

The results of the Partial Regression Coefficient Test (t test) show that both Study Time and Study Habits have a partially significant effect on Academic Achievement. Study Time has a t value of 2.644 with a significance of 0.009, while Study Habits has a t value of 2.559 with a significance of 0.012. Since both significance values are smaller than 0.05, it can be concluded that each independent variable, namely Study Time and Study Habits, has a partially significant effect on Academic Achievement.

4.4.2 Uji Koefisien Regresi Simultan (Uji f)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.563	2	15.282	27.804	<,001[b]
	Residual	63.756	116	.550		
	Total	94.319	118			

a. Dependent Variable: Prestasi Akademik

b. Predictors: (Constant), Kebiasaan Belajar, Waktu Belajar

The results of the Simultaneous Regression Coefficient Test (F Test) in the ANOVA table show that the regression model as a whole is significant in explaining the effect of the independent variables (Study Time and Study Habits) on the dependent variable (Academic Achievement). The F value of 27.804 with a significance of less than 0.001 (<0.05) indicates that this regression model is significant, which means that Study Time and Study Habits simultaneously affect Academic Achievement. Thus, these two variables together make a significant contribution in predicting academic achievement.

4.4.3 Uji Koefisien Determinasi (R^2)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.569[a]	.324	.312	.741

a. Predictors: (Constant), Kebiasaan Belajar, Waktu Belajar

b. Dependent Variable: Prestasi Akademik

Based on the table above, it can be seen that the value of **(R^2)** is 0.324, which means that the independent variables (Study Habits & Study Time) explain about 32.4% of the variation in the dependent variable (Academic Achievement). This indicates that the model has a moderate fit and the independent variables represent most of the variability in students' academic performance. The remaining 67.6% of the variation in the dependent variable is not explained by the predictors included in the model and may be due to other factors not considered in this analysis.

5. Discussion

(H1) The effect of study time on students' academic achievement

This study aims to test whether there is an influence between study time on student academic achievement at SMKN 28 Jakarta. There are several indicators used in this study, including, Completing learning activities, Teaching and learning process, The process of completing assignments.

The first thing to do is to conduct a classic assumption test. The classic assumption tests carried out are multicollinearity test, heteroscedasticity test, and normality test. Based on the multicollinearity test results, the VIP value of study time shows a VIF of 2.339 < 10.00 which indicates that the data is good data and avoids multicollinearity. Based on multiple linear regression tests, the coefficient value of the study time variable (X1) is 0.189, which means that study time (X1) is positive for student academic achievement (Y). This shows that sufficient and appropriate study time can significantly improve a student's academic achievement.

Based on the results of the hypothesis test, namely the t test. the results of the t test show that the learning time variable (X1) is 0.009 <0.05, meaning that it is positive or has an effect on student academic achievement (Y). This is in line with the research of Lisnawati Soapatty and Dr. Tototk Suyanto, M.Pd with the title "The Effect of Full Day School System on Academic Achievement of Students of Smp Jati Agung Sidoarjo" the results of the research show that Full Day School (learning time) will be able to affect student academic achievement if the school adjusts facilities and infrastructure tailored to student needs, curriculum, teacher creativity and student circumstances.

(H2) There is a positive influence between study habits on students' academic achievement.

This study aims to test whether there is an influence between study habits on student academic achievement at SMKN 28 Jakarta. There are several indicators used in this study, including Completing learning activities, Study planning, Study techniques, and Study time management.

The first thing to do is to conduct a classic assumption test. The classic assumption tests carried out are multicollinearity test, heteroscedasticity test, and normality test. Based on the multicollinearity test results, the VIP value of study time shows a VIF of 2.339 < 10.00 which indicates that the data is good data and avoids multicollinearity. Based on multiple linear regression tests, the coefficient value of the study habits variable (X2) is 0.286, which means that study habits (X2) have a positive value on student academic achievement (Y). This shows that adequate and appropriate study habits can significantly improve a student's academic achievement.

Based on the results of the hypothesis test, namely the t test. the t test results show that the study habits variable (X2) is 0.012 <0.05, meaning that it is positive or has an effect on student academic achievement (Y). This is in line with the research of Riyyatul Hamdiyah, Muhammad Yusron Maulana El Yunusi, and Didit Darmawan with the title "The Effect of Study Habits, Self-Regulation and Social Environment on Student Learning Achievement at MTs Al-Ikhwan Gresik" The results of the analysis show that study habits affect student learning outcomes at MTS Al-Ikhwan. Students who can make good study habits tend to have better learning achievements.

(H3) There is a positive direct effect between study time and study habits on student academic achievement

This study aims to examine whether there is an influence between study time and study habits on student academic achievement at SMKN 28 Jakarta. There are several indicators used in this study, including learning outcomes, test scores, personal growth. Classical assumption tests were conducted, including multicollinearity, heteroscedasticity, and normality. The results showed no multicollinearity in the independent variables in this study. The results of the hopitesis test show that study time and study habits have a significant effect on the academic achievement of students of public high school 28 Jakarta. So study time and study habits affect the value of a student.

6. Conclusion, Implication, and Recommendation

6.1 Conclusion

The purpose of this research is to see whether there is an influence between study time and study habits on student academic achievement at SMK Negeri 28 Jakarta. In this study after several tests, it can be concluded that:

1. There is a positive and significant relationship between study time (X1) and academic achievement (Y).
2. There is a positive and significant relationship between study habits (X2) and academic achievement (Y).
3. There is a positive and significant correlation between study time (X1) and study habits (X2) of students of public high school 28 Jakarta with academic achievement (Y).

6.2 Implication

This study shows findings on how academic achievement is positively and significantly affected by study time and study habits. This finding will illustrate the importance of increasing students' study time which will affect their academic achievement. In addition, it is important for students to have good and regular study habits because study habits will help encourage them to optimize their learning process and end up achieving good academic achievement. And it will be easy for students to achieve high academic performance if these two factors can be aligned.

6.3 Recommendation

1. Study time in time management Schools can provide training to students to manage study time effectively, such as making a daily study schedule. Teachers can also encourage students to utilize free time at school, for example by studying in the library or group discussions, and teachers can provide assignments or learning activities that require students to utilize study time outside of school hours.

2. Positive study habits can be formed by schools organizing programs such as group tutoring or providing guidance on making good study notes and involving counseling guidance teachers to monitor the development of students' study habits and provide support if needed.
3. Coleration of time and study habits Schools can incorporate time management training and study habits into counseling or extracurricular activities and encourage cooperation between teachers and parents in monitoring and supporting students' study time and study habits.
4. Parents can also assist children in making a realistic study schedule at home, provide a conducive learning environment, such as reducing distractions during study time and communicate with schools to support children's learning needs according to the program implemented at school.

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