

THE EFFECT OF SELF REGULATED LEARNING, HIGH SCHOOL MAJORS, AND NATIONAL EXAMINATION SCORES ON ACADEMIC ACHIEVEMENT OF ACCOUNTING STUDENTS IN JAKARTA

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ABSTRACT

The purpose of this research is to determine the impact of self-regulated learning (SRL), high school majors, and national examination scores on the academic achievement of accounting students in Universities in Jakarta. The data is collected with questionnaires with a random sampling method, and the samples obtained are 150 samples. The method of analysis is by using multiple linear regression. The results show that there is no significant relationship between self-regulated learning (SRL) and academic achievement (AA), high school majors (HSM) show results that have a negative and significant effect on academic achievement, while the national examination scores (NES), it can be concluded that there is a significant positive relationship between the national examination scores and academic achievement.

Keywords: *Self-Regulated Learning, High School Majors, National Examination Scores, Academic Achievement, Accounting Student.*

INTRODUCTION

Law Number 2 of 1989, Article 16, paragraph (1), Higher Education is a continuation of secondary education organized to prepare students to become community members with academic and professional abilities who can apply, develop and create science, technology, and the arts. Saleh (2014) said that at the higher education level, students are required to be active in the teaching and learning process through existing media, such as libraries, journals, and the internet. In higher education, academic achievement becomes a significant output. Academic achievement is also commonly known as learning achievement. Learning achievement can be interpreted as real skills that knowledge and attitudes can measure and skills as an active interaction between learning subjects and learning objects during the teaching and learning process to achieve learning outcomes (Sunarsi, 2017). Gaha (2018) studied the process of higher education, and the GPA is one of the benchmarks that has been quantitative and, to some extent, has been standardized. The better the student's academic

mastery, the better the achievement. Therefore, it is essential to study whether a person's academic achievement is influenced by self-regulated learning, majoring in high school, or influenced by national exam scores.

Self-regulated learning (SRL) is a critical competency that lays the foundation for lifelong learning (Dent & Koenka, 2016). Individuals with better SRL strategies show better academic performance, are more satisfied with their studies, can more easily cope with the transition between school and university, and are less likely to quit (Theobald, 2021). According to Putrie (2021), self-regulation has three aspects. Each aspect has indicators based on 1) meta-cognitive ability, 2) emotional control ability, and 3) ability to regulate behavior. Indicators of self-regulation can be seen in each aspect of self-regulation, where elements of self-regulation include metacognition, motivation, and behavior. Several studies have examined whether there is a predicted relationship between self-regulated learning and the cumulative achievement index (GPA).

One external factor that greatly affects academic achievement is school (Putrie, 2021).

When entering the High School Majors level, majors in natural science (IPA) and social science (IPS) are the initial choices before entering the world of lectures. Arifin (2014) says that external factors capable of influencing learning outcomes can be in the form of facilities and infrastructure related to completeness and use in the learning process, such as teachers, programs, curriculum, media, teaching materials, methods, and techniques. Thus, when the handbooks used by students graduating from natural sciences (IPA) and social sciences (IPS) programs contain the same information and data in the economics (accounting) field, the knowledge gained by students is also the same.

Measurement of the teaching and learning process while attending High School Majors using the national exam scores (NES) which are carried out simultaneously in all schools in Indonesia. High School Majors (HSM) national final exam scores affect academic achievement and are used to predict future abilities (Hasanah et al., 2018). Suppose the value of the national exam is seen as a value that affects academic achievement. In that case, it is interesting to study how far the relationship between the national exam scores is with the success of students in their studies. Because almost all subjects are correlated, research will be carried out regarding the relationship between the cumulative achievement index (GPA) and national exam scores (Ferdhiana et al., 2015).

Several benchmarks can be used to determine academic achievement. This study limits the variables to be used, namely the independent variable in the form of self-regulated learning (SRL), High School Majors, and national exam scores, to the dependent

variable, namely the academic achievement of college accounting students in Jakarta.

METHODS

This study was conducted on students majoring in accounting at universities in Jakarta who are undergoing a study period from semester 3 to semester 8. Data collection was carried out using a questionnaire consisting of an interval scale of 1 to 4 for GPA (Ferdhiana, 2015); 33 questions on a Likert scale interval 1 to 7 for self-regulated learning (Iwamoto, 2017); a nominal scale of 1 to 2 for high school major (Putri, 2020); and ordinal scale for examination score (Ferdhiana, 2015). The number of samples used is 150 students.

Before the data is processed, validity and reliability tests are first performed for questions with an interval scale. Further testing was carried out to obtain the results of statistical calculations using multiple regression.

RESULT AND DISCUSSION

From the results of the questionnaires that have been distributed, it can be conclude that: First, the effects of self-efficacy indicate that respondents have sufficient self-confidence in studying accounting and can follow accounting courses well. It can be seen in the distribution of respondents' answers regarding self-efficacy, with which most of them agree. Second, the Intrinsic Value results show that respondents are very interested in the knowledge they are learning and feel that the knowledge they are learning provides benefits for respondents for their lives and future. It can be seen in the distribution of respondents' answers regarding the intrinsic value, most of

Table 1 Results of the Self-Regulated Learning Questionnaire

Indicator	Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Do not agree	Strongly Disagree
<i>Self efficacy</i>	11%	28%	34%	19%	6%	2%	1%
<i>Intrinsic Value</i>	22%	32%	27%	13%	4%	1%	1%
<i>Test Anxiety</i>	16%	22%	22%	19%	12%	8%	3%
<i>Cognitive Strategy Use</i>	22%	33%	25%	11%	6%	2%	1%
<i>Self Regulated</i>	19%	27%	23%	17%	6%	6%	3%

which agree. Third, the Anxiety Test results showed that the respondents had problems with nervousness in dealing with the exam questions given. Respondents felt that the questions they were working on made them unable to do the questions better—the distribution of respondents who agreed more when answering questions about test anxiety. Fourth, cognitive strategies showed the most results, agreeing with this cognitive strategy. It indicates that the respondents process the lessons received well to do the practice questions well. The respondents can translate the information received into a language that the respondents easily understand. Fifth, self-regulated results show that respondents can motivate themselves to study well even though sometimes respondents do not like the subjects being studied. However, they still encourage themselves to keep learning. Distribution of answers of respondents who answered more agree when answering questions about self-regulated.

Table 2 Descriptive Results of High School Majors

Majors	Number of Respondents	Percentage
Science	59	39%
Social	91	61%

Of the 150 respondents who have filled out the questionnaire, the data obtained are 59 respondents, or 39% are respondents who majored in natural science (IPA). In contrast, in high school, 91 respondents, or 61%, were respondents who majored in social science (IPS) while in high school.

Table 3 Descriptive National Examination Scores (NES)

National Examination Scores	Number of Respondents	Percentage
<20	0	0%
20-25	14	9%
25-30	44	29%
30-35	69	46%
35-40	23	16%

Of 150 respondents, the data obtained from the NES mainly were between 30-35. It can be seen from the number of respondents who got the National Examination scores ranging from 30-35, with the number of respondents being 69 or 46% of the total respondents. It shows that respondents have a

reasonably sizeable national exam score. Meanwhile, those who get national exam scores below 30 and above 30 are not too many.

Table 4 SRL Validity Test Results

Number	Pearson correlation	R table N=150	Description
1	0,558	0,159	Valid
2	0,620	0,159	Valid
3	0,633	0,159	Valid
4	0,634	0,159	Valid
5	0,718	0,159	Valid
6	0,664	0,159	Valid
7	0,726	0,159	Valid
8	0,712	0,159	Valid
9	0,509	0,159	Valid
10	0,614	0,159	Valid
11	0,465	0,159	Valid
12	0,603	0,159	Valid
13	0,533	0,159	Valid
14	0,466	0,159	Valid
15	0,537	0,159	Valid
16	0,330	0,159	Valid
17	0,424	0,159	Valid
18	0,376	0,159	Valid
19	0,318	0,159	Valid
20	0,530	0,159	Valid
21	0,374	0,159	Valid
22	0,465	0,159	Valid
23	0,608	0,159	Valid
24	0,549	0,159	Valid
25	0,644	0,159	Valid
26	0,651	0,159	Valid
27	0,541	0,159	Valid
28	0,529	0,159	Valid
29	0,638	0,159	Valid
30	0,214	0,159	Valid
31	0,452	0,159	Valid
32	0,548	0,159	Valid
33	0,285	0,159	Valid

This table shows that all statements in the self-regulated learning variable are valid because the Pearson correlation or r count is more significant than the r table N = 150, which is 0.159. It means that the statement is feasible to define self-regulated learning variables in the questionnaire.

Table 5 SRL Reliability Test Results

No.	Variable	Cronbach's Alpha coefficient	Description
1	Self-Regulated Learning	0,911	Reliabel

Based on Table 5, which has been processed, the results of testing on 150 respondents show that the coefficient of Cronbach's Alpha on the self-regulated learning variable is 0.911. These results indicate that the variable is reliable and meets the requirements of good reliability (i.e., Cronbach's Alpha > 0.7). It can be concluded that the variable is reliable.

Table 6 Normality Test Result

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
GPA	.078	150	.028	.973	150	.004
SLR	.072	150	.055	.983	150	.063
HSM	.396	150	.000	.620	150	.000
NES	.263	150	.000	.866	150	.000

The table above shows that the SRL is normally distributed because the sig value in the Kolmogorov-Smirnov table is above 0.05. It can be seen from the sig value in the Kolmogorov-Smirnov column, which is below 0.05. Meanwhile, GPA, Majors, and National Examination scores are not normally distributed.

Table 7: Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	SRL	.985	1,016
	HSM	.988	1,012
	NES	.996	1,004

a. Dependent Variable: GPA

Based on the test results above, the tolerance value or VIF produced has met the criteria for a good regression model. It can be explained that there is no tolerance value smaller than 0.10, and there is no VIF value greater than 10.

Table 8: Heteroscedasticity Test Results

Model	Unstandardized Coefficients		Std. Coef		T	Sig.
	B	Std. Error	Beta			
1 (Constant)	.007	.128			.053	.958
SRL	.002	.001	.218		2,686	.008
NES	-.018	.017	-.085		-1,050	.296

a. Dependent Variable: ABS_RES

The results of the heteroscedasticity test show that one variable has heteroscedasticity problems, namely SRL because the sig value is below 0.05.

Table 9: Multiple Linear Regression Test Results

Model	Unstandardized Coefficients		Std. Coef		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	2,818	.223			12,613	.000
SRL	.002	.001	.114		1,433	.154
HSM	-.106	.051	-.163		-2,062	.041
NES	.092	.030	.245		3,108	.002

a. Dependent Variable: GPA

Based on the processing results listed in table 4.8, it can explain that the multiple linear regression equation is as follows:

$$\text{GPA} = 2.818 + 0.002 \text{ SRL} - 0.106 \text{ HSM} + 0.092 \text{ NES} + \epsilon$$

From the multiple linear regression equation above, it can be seen that if the SRL, Department, and National Examination (NES) are zero, then the Grade Point Average (GPA) has a value of 2.818. Self-Regulated Learning (SRL) has a B value or a coefficient of 0.002. It is concluded that every increase in SRL by one will increase the Grade Point Average (GPA) of 0.002. High School Majors have a B value or a coefficient of -0.106. It can conclude that every significant decrease will affect an increase in the Grade Point Average (GPA) of 0.106. National examination scores have a B value or a coefficient of 0.092. It can conclude that every increase in the National Examination by one will increase the Grade Point Average (GPA) of 0.092.

The first hypothesis is that self-regulated learning (SRL) positively impacts the academic achievement of college accounting students. Based on the results of the t-test above, it shows that the self-regulated learning variable has a significant value of 0.154, smaller than the alpha value of 0.05 and the coefficient value of 0.002. An alpha value of 0.05 is the maximum error determined by 5% or 0.05 (as a benchmark by the researcher), indicating how extreme a data should be (ideal data) so that it can show a difference with other data (reject H0). The conclusion drawn is that the self-regulated learning variable does not affect the academic achievement of students majoring in accounting.

Based on the results of the t-test above, the major variable has a significant value of 0.041, smaller than the alpha value of 0.05 with the coefficient value of -0.106. The conclusion drawn is that the significant variable has a negative effect on the academic achievement of students majoring in accounting. The second hypothesis is that the majors positively affect the academic achievement of college accounting students. Based on the results of the t-test above, it shows that the majors variable has a significant value of 0.002, smaller than the alpha value of 0.05 and the coefficient value of 0.092. The third hypothesis is that the national examination scores positively affect the academic achievement of college accounting students. The conclusion drawn is that the national examination scores (UN) variable positively influences the academic achievement of students majoring in accounting.

Table 11: F Statistical Test Results

Model	R	Adjusted R Square	Std. Error of the Estimate
1	,313 ^a	,098	,079

The results of table 11 show that the sig value in the F test is 0.002 below the value of 0.05, which indicates that the model is fit for research. Then the adjusted R square value of 0.079 indicates that the variation of the independent variable can explain the interpretation of the dependent variable only 7.9%, and the remaining 92.1% is explained by other factors not included in the model.

Based on the test results of the first hypothesis, there is no influence between self-regulated learning and the academic achievement of accounting students in college. Some respondents still have not applied the motivation to study well independently to produce results that are not following the first hypothesis. Cahyani et al. (2020) stated that during the pandemic conditions, the online learning system currently being carried out caused a lack of motivation to learn due to the lack of direct interaction between lecturers and students. Suryabrata in Sitepu (2014) states that the human factor in socializing directly or indirectly affects a person's learning motivation. The results of this study do not follow Feliarosa & Simanjuntak (2021), which

state that self-regulated learning influences academic achievement.

Based on the test results of the second hypothesis, there is a negative and significant influence between the majors and the academic achievement of accounting students in college. It shows that if the respondent at the time of high school majoring in Natural Sciences (IPA) has less good academic achievement than respondents who majored in social science (IPS) at the time of high school and above. The results of this study follow the research of Naser and Peel (in TL et al. 2017) and Sa'adah and Ariati (2018), which state that graduates majoring in Natural Sciences (IPA) will have less good academic scores than graduates majoring in social sciences. (IPS) this is because the major in social sciences (IPS) has a higher student engagement than students majoring in natural sciences (IPA).

Based on the results of testing, the third hypothesis shows a positive and significant effect between national examination scores and academic achievement of accounting students in college. It shows that higher national examination scores will result in increased academic scores. The national exam as an evaluation model is used as a national standard to determine the quality of education in Indonesia. Students are declared to have passed the national exam if they meet the minimum score criteria, increasing every year. Therefore, various efforts are made to improve the quality of education in general and learning achievement. These results are under Faridah et al. (2019) research, which states that national examination scores affect academic achievement.

CONCLUSION

Self-regulated learning and High School Majors do not significantly affect the academic achievement of students majoring in accounting. But National examination scores significantly impact the academic achievement of students majoring in accounting.

The results of this study can enrich knowledge about what things affect student learning outcomes. The different results may find different results in other majors. In this case, the test is the national exam score. Other factors also have an influence but at an

insignificant level.

The research implications may lead universities to target prospective new students with high national exam scores as one of the primary considerations to produce graduates with high GPA.

The use of academic achievement indicators in terms of value should be taken more and not only using GPA, but also with other educational achievement values, such as championships in national/international accounting competitions. The university provides unconditional freedom to prospective students/students to choose majors in college without distinguishing the background of the High School major (both natural sciences (IPA) and social sciences (IPS)).

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