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THE INFLUENCE OF SELF-REGULATED LEARNING AND LEARNING INTEREST ON STUDENT LEARNING OUTCOMES IN OFFICE MANAGEMENT DEPARTMENT AT SMKN 40 JAKARTA

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Abstract

This study aims to examine the influence of self-regulated learning and learning interest on students' academic achievement in the Office Management and Business Services program at SMK Negeri 40 Jakarta. Specifically, it investigates: (1) the effect of self-regulated learning on learning outcomes, (2) the effect of learning interest on learning outcomes, and (3) the combined effect of both variables. A quantitative research approach was employed using a survey method involving 144 respondents selected through saturated sampling. Data were collected using a Likert-scale questionnaire and analyzed using multiple linear regression. The findings reveal that both self-regulated learning and learning interest significantly and positively influence students' academic performance, both individually and simultaneously. The F-value obtained was 23.225, exceeding the critical F-table value of 3.08 with a significance level of 0.000 < 0.05, indicating a statistically significant regression model. These results suggest that enhancing students' ability to self-regulate their learning and increasing their interest in academic activities can substantially improve their learning outcomes, particularly in Administrative Management subjects.

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh self-regulated learning dan minat belajar terhadap hasil belajar siswa pada jurusan Manajemen Perkantoran dan Layanan Bisnis di SMK Negeri 40 Jakarta. Secara khusus, penelitian ini mengkaji: (1) pengaruh self-regulated learning terhadap hasil belajar, (2) pengaruh minat belajar terhadap hasil belajar, serta (3) pengaruh simultan keduanya terhadap hasil belajar siswa. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei, melibatkan 106 responden yang dipilih melalui teknik sampling jenuh. Data dikumpulkan melalui kuesioner dengan skala Likert dan dianalisis menggunakan regresi linier berganda. Hasil analisis menunjukkan bahwa baik self-regulated learning maupun minat belajar memiliki pengaruh positif dan signifikan terhadap hasil belajar siswa, baik secara parsial maupun simultan. Nilai F hitung sebesar 23,225 lebih besar dari nilai F tabel 3,08 dengan signifikansi 0,000 < 0,05, menunjukkan bahwa model regresi yang dibangun signifikan secara statistik. Temuan ini mengindikasikan bahwa peningkatan kemampuan belajar mandiri serta minat siswa dalam belajar berkontribusi secara nyata terhadap peningkatan hasil belajar, khususnya dalam mata pelajaran Pengelolaan Administrasi Umum.

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Key Words

self-regulated learning, learning interest, learning outcomes

Article History

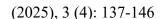
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Kata Kunci

self-regulated learning, minat belajar, hasil belajar

INTRODUCTION

Education plays a vital role in improving the quality of human resources in the era of globalization. One of the key efforts to produce quality human resources is through education that enables students to develop their potential, discipline, self-confidence, and motivation in learning. In vocational schools, especially SMK Negeri 40 Jakarta, education is designed not only to impart knowledge but also to prepare students to enter the workforce with strong competencies and character.





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The implementation of the **Merdeka Curriculum** is one of the Indonesian government's responses to the need for educational reform. This curriculum encourages critical thinking, independence, and collaboration, aiming to create students who align with the Pancasila profile. At SMKN 40 Jakarta, the Merdeka Curriculum began implementation in the 2022/2023 academic year. One of the core subjects in the Office Management and Business Services major is **Administrative Management**, which is essential in equipping students with office administration skills.

Despite this curricular advancement, preliminary research indicates that many students still fail to meet the minimum passing grade (KKM) of 80. In fact, 65% of students in class XI MPLB (Manajemen Perkantoran dan Layanan Bisnis) did not meet this standard. Observations suggest that students often lack motivation and only engage in learning when prompted by assessments or teacher instructions. This problem may stem from low learning interest and poor self-regulated learning skills.

Self-regulated learning refers to students' ability to independently manage and evaluate their own learning processes. Meanwhile, **learning interest** is an internal drive that encourages students to engage in learning activities with enthusiasm. Previous studies (e.g., Ramadhany & Rosy, 2021) have shown that both variables positively affect student learning outcomes.

However, research specifically examining the influence of self-regulated learning and learning interest in the context of vocational education, particularly in **Administrative Management subjects**, remains limited. This study seeks to fill that gap by investigating how these two factors influence learning outcomes among class XI students at SMKN 40 Jakarta.

LITERATURE REVIEW Learning Outcomes

Learning outcomes are indicators of the level of knowledge, skills, and attitudes achieved by students after undergoing a learning process. According to Hertarini et al. (2022), learning outcomes represent the success of students in achieving instructional goals. These outcomes can be seen not only through academic scores but also through behavioral changes, cognitive mastery, and skill development (Darmawan Harefa, 2023). Bloom's Taxonomy classifies learning outcomes into three domains: cognitive (knowledge), affective (attitudes), and psychomotor (skills) (Nisa et al., 2021).

Self-Regulated Learning (SRL)

Self-regulated learning refers to students' ability to actively control their own learning processes, including goal setting, strategy application, monitoring, and self-reflection (Zimmerman, 1989). SRL comprises three main components: cognition (e.g., learning strategies), motivation (e.g., self-efficacy), and behavior (e.g., time management and environmental structuring).

Several indicators of SRL include learning initiative, planning, strategy application, monitoring progress, evaluating learning results, and motivation to overcome difficulties (Zamnah, 2017). Zimmerman also suggests that effective self-regulated learners evaluate their performance, seek feedback, and refine their learning approaches.

Learning Interest



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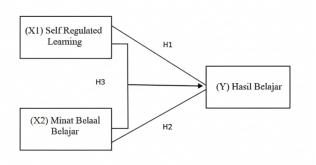
Self-Learning interest is defined as a student's tendency to engage in learning activities driven by internal desire and enjoyment (Achru, 2019). It is a crucial motivational component that can significantly enhance learning engagement and outcomes.

Factors affecting learning interest include student motivation, teacher influence, family support, facilities, and peer environment (Susanto in Achru, 2019). Indicators of learning interest include positive feelings towards learning, focus and attention, willingness to learn, and active participation (Rahmi et al., 2020; Friantini & Winata, 2019)

Hypothesis

Based on the theoretical background and previous studies, this research proposes the following hypotheses:

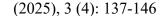
- H1: Self-regulated learning has a significant effect on student learning outcomes.
- H2: Learning interest has a significant effect on student learning outcomes.
- H3: Self-regulated learning and learning interest simultaneously affect student learning outcomes.



METHOD

The research study employs a quantitative cross-sectional design, utilizing questionnaire-based data collection to examine the influence of self-regulated learning and learning interest on students' academic achievement. The research was conducted at SMKN 40 Jakarta, with a focus on students enrolled in the Office Management and Business Services (MPLB) department. A total of 144 students from grades X to XI were selected as the sample using proportional stratified random sampling to ensure representation across grade levels. The data were collected using a validated Likert-scale questionnaire designed to measure all relevant variables. The instrument was distributed via Google Forms to maximize accessibility. The instrument testing process involved a thorough validity and reliability analysis, aimed at ensuring the integrity of the collected data. The collected data were then subjected to analysis using SPSS version 25, encompassing descriptive statistics, classical assumption testing, multiple linear regression, and hypothesis testing. This approach aimed to provide empirical insight into how self-regulated learning and learning interest jointly contribute to the academic achievement of vocational high school students.

RESULTS AND DISCUSSION Multiple Linear Regression





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Multiple linear regression is a statistical technique used to determine how two or more independent variables simultaneously influence a single dependent variable. In this study, multiple linear regression analysis was conducted using SPSS version 25 to assess the effect of Self-Regulated Learning (X_1) and Learning Interest (X_2) on Academic Achievement (Y) among vocational high school students. The resulting regression equation is as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + \dots + b_n X_n + e$$

 $Y = 71,394 + 0,202X_1 + 0,111X_2 + 0,680$

This equation indicates that when Self-Regulated Learning (X_1) increases by one unit, Academic Achievement (Y) is expected to increase by 0.202 units, under the assumption that Learning Interest (X_2) remains constant. Similarly, for each one-unit increase in Learning Interest, Academic Achievement increases by 0.111 units, while maintaining X_1 constant. The constant 71.394 represents the predicted Academic Achievement when both independent variables are zero. The error term (e) in this model is 0.680, calculated using the R^2 value (0.537). A lower error value suggests that the regression model aligns with the actual data with a reasonable degree of accuracy.

Table 1. Multiple Linear Regression

Coe	fficients ^a					
			ndardized	Standardized		
	_	Coef	ficients	Coefficients		
Mod	lel	В	Std. Error	Beta	t	Sig.
1	(Constant)	71.394	0.920		77.588	0.000
	SRL	0.202	0.032	0.497	6.364	0.000
	Learning Interest	0.111	0.029	0.298	3.812	0.000
a. D	ependent Variables: Ac	cademic Ach	nievement			

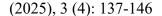
The results indicate that Self-Regulated Learning exerts a more significant influence on Academic Achievement in comparison to Learning Interest, as evidenced by the higher regression coefficient. These results suggest that students' ability to autonomously manage and direct their learning plays a more substantial role in enhancing academic achievement than interest alone.

Partial Test

The partial test (t-test) was conducted to determine whether each independent variable, Self-Regulated Learning and Learning Interest, has a statistically significant partial effect on Academic Achievement. The decision rule for the test is that if the t-statistic exceeds the critical t-value (t-table) and the significance value (p-value) is less than 0.05, the variable is considered to have a significant individual effect.

Table 2. Partial Test

tandardized Coefficients Beta	t	Sig.
Beta	t	Sig.
	77.588	0.000
0.497	6.364	0.000
0.298	3.812	0.000
	0.157	





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Utilizing a sample size of 144 and two predictors (k = 2), the degrees of freedom (df) for the T-test are 141, and the corresponding critical t-value at a 5% significance level is approximately 1.656. The analysis yielded a t-value of 6.364 for Self-Regulated Learning, with a significance level p-value = 0.000, while Learning Interest exhibited a t-value of 3.812 and a significance level p-value = 0.000. Given that both t-values exceed the critical threshold and their p-values are well below 0.05, it can be concluded that each variable has a significant and independent effect on students' academic achievement.

These findings indicate that enhancing students' ability to self-regulate their learning processes, in conjunction with cultivating a strong interest in learning, is instrumental in optimizing academic achievement among vocational high school students.

Simultaneous Test

The Simultaneous Test (F-test) was used to determine whether the independent variables, Self-Regulated Learning and Learning Interest, have a statistically significant simultaneous effect on Academic Achievement. According to the decision rule, if the calculated F-value exceeds the critical F-value, and the significance level is less than 0.05, it indicates that the independent variables collectively influence the dependent variable.

		Table 3. Simultan	eous Te	st		
		ANO	VA ^a			
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	585.322	2	292.661	81.792	$0.000^{\rm b}$
	Residual	504.515	141	3.578		
	Total	1089.838	143			

a. Dependent Variable: Academic Achievement b. Predictors: (Constant), Learning Interest, SRL

In this study, the F-value obtained was 81.792, with a significance level (p) of 0.000. The critical F-table value, based on degrees of freedom $df_1 = 2$ and $df_2 = 141$ at a 5% significance level, was determined to be 3.06. Given that the F-calculated value (81.792) exceeds the F-critical value (3.06), and the p-value is less than 0.05, it can be concluded that the combination of Self-Regulated Learning and Learning Interest exerts a statistically significant impact on students' academic achievement. These results confirm that the two predictor variables, when considered simultaneously, contribute meaningfully to academic outcomes among vocational high school students.

Normality Test

The normality test was conducted to determine if the residuals from the regression model were normally distributed. In this study, the Kolmogorov–Smirnov test was used, supported by a quantile-quantile (Q-Q) plot for visual assessment. According to the testing criteria, if the p-value is greater than 0.05, the data are considered normally distributed. Based on the Kolmogorov–Smirnov test results, the Asymp. Sig. (2-tailed) value was 0.058, which is greater than the 0.05 threshold. This indicates that the residuals follow a normal distribution.

 Table 4. Normality Test

 One-Sample Kolmogorov-Smirnov Test

 Unstandardized Residual

 N
 144

 Normal Parameters^{a,b}
 Mean
 1.6157

 Std. Deviation
 .94836

 Most Extreme Differences
 Absolute
 .073



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	Positive	.054
	Negative	073
Test Statistic		.073
Asymp. Sig. (2-tailed)		.058°

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Additionally, the Q–Q plot shows that the data points closely align with the diagonal reference line, further supporting the assumption of normality. Therefore, it can be concluded that the regression model in this study meets the normality assumption, allowing for further parametric statistical analyses.

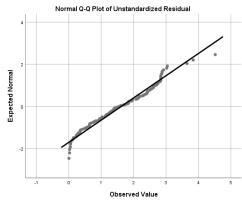


Figure 1. Normal Probability Plot

Linearity Test

This study conducted a linearity test to determine if the relationship between the independent variables (Self-Regulated Learning and Learning Interest) and the dependent variable (Academic Achievement) meets the linearity assumption. According to the criteria, if the significance value for deviation from linearity is greater than 0.05, the relationship is considered linear.

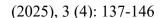
Table 5. Linearity	Test Self-Regulated	Learning on A	Academic Achievement
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		ANOVA Ta	able				
			Sum of		Mean		
			Squares	df	Square	F	Sig.
Academic	Between	(Combined)	619.251	24	25.802	6.525	0.000
Achievement	Groups	Linearity	533.325	1	533.325	134.865	0.000
*		Deviation from Linearity	85.926	23	3.736	0.945	0.541
SRL	Within G	roups	470.587	119	3.955		
	Total		1089.838	143			

The linearity test between self-regulated learning and academic achievement showed a significance value of 0.541, exceeding the 0.05 threshold. Therefore, the relationship between these two variables is linear and satisfies the linearity assumption.

Table 6. Linearity Test Learning Interest on Academic Achievement

		ANOVA Ta	able				
			Sum of		Mean		
			Squares	df	Square	F	Sig.
Academic	Between	(Combined)	598,772	24	23,951	5,755	0.000
Achievement	Groups	Linearity	440,387	1	440,387	105,822	0.000
*		Deviation from Linearity	158,385	23	6,599	1,586	0.541





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	•	
Learning Interest Within Groups	491,065 118 4,1	.62
Total	1089,838 143	

Similarly, the linearity test between learning interest and academic achievement yielded a significance value of 0.541, which is greater than 0.05. Thus, the relationship between Learning Interest and Academic Achievement is also linear. These results suggest that both independent variables satisfy the linearity assumption and can be used in the multiple linear regression model applied in this study.

Discussion

Self-Regulated Learning's Impact on Learning Outcomes

The results of the regression analysis suggest that Self-Regulated Learning (SRL) has a significant positive influence on academic achievement. This is evidenced by a t-value of 6.364 (which exceeds the critical value of 1.656) and a significance level p-value = 0.000 (which is below the 0.05 threshold). The regression coefficient of 0.202 indicates that for every one-unit increase in SRL, academic achievement increases by 0.202 units, under the assumption that other variables remain constant. The results indicate that students who demonstrate proficiency in planning, monitoring, and regulating their learning tend to exhibit superior academic performance.

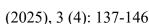
Among the SRL dimensions, Learning Strategies emerged as the most dominant factor, reflecting students' ability to set goals, choose appropriate methods, and manage their time effectively. This finding aligns with Zimmerman's (2002) theory that self-regulated learners proactively adapt their strategies to achieve academic objectives. This finding is further strengthened by Ge et al. (2025), who developed the SRLAgent system, which integrates large language models to assist students in gamifying their learning strategies, resulting in substantial enhancements in the planning and monitoring phases of SRL. Furthermore, Setiawati and Septiyaningtyas (2023) underscore the significance of learning strategies as cognitive tools that directly impact academic outcomes. Meanwhile, Sukatin et al. (2022) added that learning strategies also need to be designed by teachers and students so that the learning process runs effectively and efficiently. Concurrently, the findings of Tarumasely (2020), Sinaga et al. (2023), and Zahro & Surjanti (2021) have demonstrated a consistent pattern of significance in the relationship between SRL and academic achievement across diverse educational levels.

Learning Interest's Impact on Learning Outcomes

The analysis further demonstrated that Learning Interest exerts a substantial influence on academic achievement, as evidenced by a t-value of 3.812 and a p-value of 0.000, with a regression coefficient of 0.111. This finding suggests that an increase in students' interest in learning contributes positively to improved academic performance, under the assumption that other variables remain constant.

Among the various dimensions evaluated, the indicator Curiosity exhibited the most significant contribution. This component is indicative of the extent to which students find learning materials enjoyable, intriguing, and emotionally engaging. In the field of educational psychology, interest is a widely recognized catalyst for intrinsic motivation, influencing students' propensity to engage, explore, and persevere in academic endeavors. According to Cahyono et al. (2022), learning interest comprises affective elements such as enjoyment, enthusiasm, and a desire for mastery, all of which foster deep engagement with learning content.

This finding is further substantiated by the research of Harackiewicz et al. (2016), who emphasized in their theoretical model of interest development that interest is central to





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promoting deep learning and sustained engagement. When students are genuinely interested in a topic, they are more likely to concentrate, apply effort, and use meaningful learning strategies. Similarly, Rotgans and Schmidt (2017) have noted that situational interest, which arises during the learning process, stimulates more profound cognitive processing, thereby enabling students to form conceptual connections and improve long-term retention. Their research found that even temporary spikes in curiosity can enhance academic performance by increasing time-ontask and improving focus. In this context, interest functions as both a cognitive and emotional mechanism that serves to bridge motivation and performance. These findings are consistent with those of Sidiq et al. (2020), Nugroho et al. (2020), Herlambang et al. (2021), and Wahyuningsih et al. (2021), who demonstrated that students' interest in learning is significantly and positively related to academic achievement across multiple educational settings.

The Combined Influence of Self-Regulated Learning and Learning Interest on Academic Achievement

The results of the multiple linear regression analysis demonstrate that Self-Regulated Learning and Learning Interest collectively exert a statistically significant influence on students' academic achievement. The F-value of 81.792 is greater than the critical F-table value of 3.06, with a significance level p-value = 0.000, confirming that the independent variables have a simultaneous and meaningful effect on the dependent variable.

The regression equation derived is:

 $Y = 71.394 + 0.202X_1 + 0.111X_2$

The regression coefficients are positive, indicating that improvements in SRL or learning interest are associated with increases in academic achievement. Specifically, an increase in SRL by one unit has been demonstrated to enhance academic achievement by 0.202 points, while an increase in Learning Interest has been shown to improve academic achievement by 0.111 points, under the assumption that all other factors remain constant. The coefficient of determination ($R^2 = 0.537$) indicates that 53.7% of the variance in academic achievement is explained by the combination of self-regulated learning and learning interest. The residual 46.3% is attributable to other variables not incorporated within the model. According to Sugiyono (2019), this value reflects a moderate to strong level of influence (categorized between 0.400-0.599), further emphasizing the substantial explanatory power of these two variables.

These results align with the findings of prior studies conducted by Ramadhany and Rosy (2021), Mattoliang et al. (2021), and Fiveronica et al. (2022), which substantiated the critical role of the integration of cognitive self-management and affective engagement in predicting academic success. Collectively, these findings imply that self-regulated learning and learning interest are not distinct traits but interconnected drivers of performance, a notion that assumes particular significance in vocational high school contexts, where autonomous and motivated learning is paramount.

CONCLUSION

Based on the results and findings of this study, it can be concluded that self-regulated learning and learning interest have a significant positive effect on students' learning outcomes in the Office Management and Business Services program at SMK Negeri 40 Jakarta. Students who are able to manage their learning independently, including planning, monitoring, and evaluating their study process, tend to achieve better academic performance. Likewise, students who show greater learning interest—demonstrated by enthusiasm, attention, and active participation—also achieve higher outcomes. Together, these two factors contribute meaningfully to improving student achievement, and their combined influence accounts for

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30.9% of the variance in learning outcomes based on the multiple regression analysis conducted added.

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