



LEARNING INTEREST AND DISCIPLINE ON THE MOTORCYCLE BUSINESS ENGINEERING STUDENT LEARNING OUTCOMES

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Abstract

This research aimed to analyze the relationship between learning interest and discipline on the learning outcomes of 11th-grade Motorcycle Business Engineering students at SMK Negeri 1 Sintuk Toboh Gadang. A quantitative correlational research method was used with all 11th-grade Motorcycle Business Engineering students as subjects. Data collection techniques used questionnaires to measure learning interest and discipline, and documentation for learning outcome data. Data analysis used the product-moment correlation test. Results showed no significant relationship between learning interest or learning discipline and learning outcomes. However, a strong positive correlation was found between learning interest and discipline. Most students demonstrated moderate to good learning interest and discipline levels, with satisfactory learning outcomes. In conclusion, although students' learning interests and discipline were fairly good, this was not reflected in their learning outcomes, indicating the need for further research on other factors influencing vocational high school students' learning outcomes.

Keywords: learning interest, learning discipline, learning outcomes

INTRODUCTION

Education is a process that is planned and carried out with full awareness, both individually and in groups, to develop positive personalities and abilities to achieve predetermined goals and objectives (Pemerintah Republik Indonesia, 2003). One of the educational programs is vocational education, commonly referred to as vocational high school, in Indonesia, known as *sekolah menengah kejuruan* (SMK). SMK is a level of secondary education that focuses on increasing students' capacity to work in specific sectors, adapt to the work environment, recognize career choices, and advance their personal development (Pemerintah Republik Indonesia, 2003).

The role of SMK in producing skilled middle-class workers needs to be enhanced. Not all vocational school graduates can meet the demands of the job market by their field of expertise. The mismatch between the skills

possessed by graduates and the demands of the business world and industry is the cause of the low work readiness of SMK graduates.

The most fundamental task in the entire educational process at school is learning. The learning process that students go through as learners determines the success of education. Three main domains are involved in learning: cognitive, emotional, and psychomotor. A product of this learning process is created and referred to as learning outcomes.

Many students still have difficulties in the Basic Automotive Engineering Work subject, and many receive grades in this subject that do not meet the minimum completeness criteria, in Indonesia, known as *kriteria ketuntasan minimum* (KKM). Based on observations and interviews with the teacher, one of the productive subjects in automotive training. Only a small portion of the Basic Competencies in the Basic Automotive Engineering Work subject is still

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below the KKM, so not all basic competencies in that subject are considered failed. The use value of SMK Negeri 1 Sintuk Toboh Gadang is 75. Many elements affect the student learning process. Among them are things that come from outside the student, often called external factors, and things that come from within the student, often called internal factors, and so on.

Based on observations made, it was found that classes often have difficulty answering questions, many of them do not pay attention to the teacher while teaching, often play with mobile phones during learning, and rarely complete homework or review material at home, are late, often do not attend learning activities, and often leave the room during class hours. In lessons, students usually do not obey school policies or cheat during tests, and these actions have a significant impact on student learning outcomes.

In the learning process at SMK, student learning outcomes become an important thing to pay attention to. However, it is often found that student learning outcomes are not optimal. This can be caused by several factors, including student interest in learning and learning discipline. Low student interest in learning can lead to a lack of attention and motivation to follow the learning process (Sanjaya, 2015).

Meanwhile, a lack of learning discipline can cause students to be unable to learn regularly and in a structured manner, thus hindering the achievement of optimal learning outcomes (Syaifullah et al., 2024). If student interest and discipline in learning are not improved, it can impact suboptimal learning outcomes (Rifdarmon et al., 2023). This can be detrimental to students in achieving learning objectives and hinder their academic progress (Asih, 2020).

Efforts made to overcome this problem require efforts to increase student interest in learning and learning discipline. One effort that can be made is to implement interesting and innovative learning strategies, as well as instill the importance of learning discipline for students (Rahayu, 2017). Several relevant studies have been conducted related to interest in learning, learning discipline, and student learning outcomes. Student interest and discipline in learning have a positive and significant effect on PAI learning outcomes of class X students at SMKN 1 Dumai (Asih,

2020). Learning independence, interest in learning, learning discipline, and learning environment affect student learning outcomes (Rahayu, 2017).

Learning interest and discipline have a positive and significant effect on student learning outcomes (Dukalang, 2024). Student interest in learning and discipline significantly influence student learning outcomes (Oknaryana & Irfani, 2022). Learning interest and discipline have a positive and significant effect on the learning achievement of office administration students in archiving subjects (Hidayatulloh & Dwihartanti, 2018).

This research has several novelties compared to previous studies mentioned. First, this research focuses on the relationship between learning interest and discipline on the learning outcomes of class XI Motorcycle Business Engineering students at SMK Negeri 1 Sintuk Toboh Gadang. This provides a new perspective on the importance of paying attention to student learning interest and discipline to improve learning outcomes, especially in the Motorcycle Business Engineering study program at SMK. Second, this research uses the latest references, such as research conducted in 2024, so it can provide the latest insights on the topics studied.

Based on the problems that have been described, this research aimed to analyze the relationship between learning interest and discipline on the learning outcomes of 11th-grade Motorcycle Business Engineering students at SMK Negeri 1 Sintuk Toboh Gadang

METHOD

The method in this research used quantitative research with a correlational research design, aiming to determine the relationship between learning interest and discipline on student learning outcomes. The research subjects were 11th-grade students of Motorcycle Business Engineering at SMK Negeri 1 Sintuk Toboh Gadang. The research population encompasses all 11th-grade students of Motorcycle Business Engineering at the school, with the sample taken using a total sampling technique, where the entire population is used as the research sample. The total number of respondents in this research was 49 students.

Data collection techniques include questionnaires to measure students' learning interest and learning discipline, as well as documentation to obtain data on student learning

outcomes. Data analysis was conducted using the product-moment correlation test to determine the relationship between the variables of learning interest and learning discipline on student learning outcomes.

Through this method, researchers can measure the strength of the relationship between these variables and draw conclusions regarding their influence on the learning outcomes of 11th-grade Motorcycle Business Engineering students at SMK Negeri 1 Sintuk Toboh Gadang.

RESULTS AND DISCUSSION

The research results on students’ learning interest displayed in Table 1, learning discipline in Table 2, and learning outcomes in Table 3.

Table 1. Frequency Distribution of Interest

Interval	Category	Frequency	Percentage (%)
>84.21	Very Good	1	2
75.39-84.20	Good	15	30
66.75-75.38	Medium	19	38
57.75-66.74	Poor	10	20
57.75	Very Poor	4	8
Total		49	100

Table 1 indicates that students’ learning interest were divided into five categories. The “Medium” category dominates with 19 students or 38% of the total respondents. The “Good” category ranks second with 15 students or 30% of the total. The “Poor” category was represented by 10 students or 20% of the total. The “Very Poor” category accounts for 4 students or 8% of the total. Meanwhile, the “Very Good” category was represented by only 1 student or 2% of the total respondents. This data illustrated that most students have a learning interest at medium to good levels, with a cumulative percentage reaching 68% for these two categories.

Table 2 indicates that students’ discipline levels were divided into five categories. The “Medium” category dominates with 21 students or 42% of the total respondents. The “Poor” category ranks second with 10 students or 20% of the total. The “Good” category was represented by 8 students or 16% of the total. The “Very Poor” category accounts for 6 students or 12% of the total. The “Very Good”

category was represented by 4 students or 8% of the total respondents.

Table 2. Frequency Distribution of Discipline

Interval	Category	Frequency	Percentage (%)
>84.21	Very Good	4	8
75.39-84.20	Good	8	16
66.75-75.38	Medium	21	42
57.75-66.74	Poor	10	20
57.75	Very Poor	6	12
Total		49	100

This data illustrated that most students have a discipline level in the medium category, with a percentage reaching 42%. However, it should be noted that there was a significant percentage in the poor and very poor categories, totaling 32% of all respondents.

Table 3. Frequency Distribution of Learning Outcomes

Interval	Category	Frequency	Percentage (%)
>84.21	Very Good	4	8
75.39-84.20	Good	19	38
66.75-75.38	Medium	18	36
57.75-66.74	Poor	5	10
57.75	Very Poor	3	6
Total		49	100

Table 3 indicates that students’ learning outcomes were divided into five categories. The “Good” category dominates with 19 students or 38% of the total respondents. The “Medium” category ranks second with a nearly equal number, 18 students or 36% of the total. The “Poor” category was represented by 5 students or 10% of the total. The “Very Good” category accounts for 4 students or 8% of the total. The Very Poor category was represented by 3 students or 6% of the total respondents.

This data illustrated that most students have learning outcomes at good to medium levels, with a cumulative percentage reaching 74% for these two categories. This indicated that the majority of students showed satisfactory academic performance, although there was still room for improvement, especially for the 16% of students in the poor and very poor categories.

After obtaining the research data, the data is then analyzed, consisting of a normality test displayed in Table 4 and a hypothesis test displayed in Tables 5 to 7.

Table 4. Normality Test

		Interest	Discipline	Learning Outcomes
	N	49	49	49
Normal Parameters	Mean	70.9796	70.1020	75.5102
	Std. Deviation	8.82112	9.79423	8.79423
Most Extreme Differences	Absolute	.084	.067	.314
	Positive	.056	.061	.223
	Negative	-.084	-.067	-.314
Kolmogorov-Smirnov Z		.587	.470	2.195
Asymp. Sig. (2-tailed)		.881	.980	.300

Table 4 indicates that the data distribution for the three research variables: interest, discipline, and learning outcomes. For the interest variable, a mean value of 70.9796 with a standard deviation of 8.82112 was obtained. The Kolmogorov-Smirnov Z value was 0.587 with an Asymp. Sig. (2-tailed) of 0.881. The discipline variable had a mean of 70.1020 with a standard deviation of 9.79423, a Kolmogorov-Smirnov Z value of 0.470, and an Asymp. Sig. (2-tailed) of 0.980.

Meanwhile, the learning outcomes variable showed a mean of 75.5102 with a standard deviation of 8.79423, a Kolmogorov-Smirnov Z value of 2.195, and an Asymp. Sig. (2-tailed) of 0.300. The sample size (N) for all variables was 49. Referring to the Asymp. Sig. (2-tailed) values, which are all greater than 0.05, it can be concluded that all three variables have a normal data distribution.

This indicated that the research data meets the normality assumption, which is an important prerequisite for further parametric statistical analysis.

Table 5. Correlation between Interest and Learning Outcomes

		Interest	Learning Outcomes
Interest	Pearson Correlation	1	.027
	Sig. (2-tailed)		.855
	N	49	49
Learning Outcomes	Pearson Correlation	.027	1
	Sig. (2-tailed)	.855	
	N	49	49

Table 5 shows that the Pearson correlation coefficient between the two variables was 0.027, indicating a very weak positive relationship. The significance value

(Sig. 2-tailed) of 0.855 far exceeds the 0.05 threshold, which is commonly used as the standard for statistical significance.

The interpretation of these results indicated that there was no statistically significant correlation between students' interest and learning outcomes. In other words, the level of student interest did not have a strong or significant relationship with their learning outcomes in the context of this research. This finding may contradict general expectations and requires further analysis to understand other factors that may influence student learning outcomes beyond the interest variable.

Table 6. Correlation between Discipline and Learning Outcomes

		Discipline	Learning Outcomes
Discipline	Pearson Correlation	1	.060
	Sig. (2-tailed)		.683
	N	49	49
Learning Outcomes	Pearson Correlation	.060	1
	Sig. (2-tailed)	.683	
	N	49	49

Table 6 shows the Pearson correlation coefficient between the two variables was 0.060, indicating a very weak positive relationship. The significance value (Sig. 2-tailed) of 0.683 far exceeds the 0.05 threshold, which is commonly used as the standard for statistical significance.

The interpretation of these results indicated that there was no statistically significant correlation between students' discipline and learning outcomes. In other words, the level of student discipline did not have a strong or significant relationship with their learning outcomes in the context of this research. This finding may also contradict general expectations and suggests the need for further research to identify other factors that may have a greater influence on student learning outcomes besides discipline.

Table 7 reveals several important findings. First, there was a strong and significant positive correlation between interest and discipline, with a correlation coefficient of 0.742 and a significance level of 0.000 ($p < 0.01$). This indicated that the higher the students' learning interest, the higher their discipline level, or vice versa. However, the relationship between interest and learning outcomes showed a very weak negative correlation (-0.027) and not significant ($p = 0.855$). Similarly, the relationship between discipline and learning outcomes also showed a

very weak negative correlation (-0.060) and not significant ($p = 0.683$). Both of these results indicated that neither interest nor discipline had a significant relationship with learning outcomes in the context of this research.

Table 7. Correlation between Interest, Discipline, and Learning Outcomes

		Interest	Discipline	Learning Outcomes
Interest	Pearson Correlation	1	.742	-.027
	Sig. (2-tailed)		.000	.855
	N	49	49	49
Learning Outcomes	Pearson Correlation	.742	1	-.060
	Sig. (2-tailed)	.000		.683
	N	49	49	49

These findings showed that although there was a strong relationship between interest and discipline, both variables did not seem to have a significant influence on students' learning outcomes. This indicates the presence of other factors that have a greater influence on learning outcomes that are not covered in this research. These results also highlight the importance of further research to identify factors that significantly determine students' learning outcomes.

The analysis showed surprising findings that differ from general expectations and some previous studies. First, regarding learning interest, most students (68%) were in the medium to good category. However, Pearson correlation analysis showed no significant relationship between learning interest and learning outcomes. This finding contradicts previous studies which found a positive and significant influence between learning interest and learning outcomes (Gardner et al., 2023; Lavonen et al., 2021; Kwarikunda et al., 2020; König, 2020; Romdhane & Khacharem, 2021; Lee et al., 2024; Chang, 2024; Tan et al., 2024).

Second, regarding learning discipline, most students (42%) were in the medium category, with 32% in the poor and very poor categories. Similar to learning interest, correlation analysis showed no significant relationship between learning discipline and learning outcomes. This also differs from previous studies that stated a significant influence of learning discipline on learning outcomes (Zhang & Pladevall-Ballester, 2021; Abulela & Bart, 2020; Ko et al., 2021; Al-Thani

et al., 2023; Pimentel-Mannan et al., 2023).

Interestingly, a strong and significant positive correlation was found between learning interest and learning discipline. This indicated that students with high learning interest tend to have good learning discipline, or vice versa. However, this strong relationship was not reflected in its influence on learning outcomes. Students' learning outcomes themselves showed fairly good performance, with 74% of students in the good to medium category. Nevertheless, no significant correlation was found between learning interest or learning discipline and these learning outcomes.

These findings raise questions about other factors that might have more influence on student learning outcomes at SMK Negeri 1 Sintuk Toboh Gadang, particularly in the Motorcycle Business Engineering study program. This also showed that although students' interest and learning discipline were quite good, there was still a gap in transforming this interest and discipline into optimal learning outcomes. This research provides a new perspective that differs from some previous studies, underlining the complexity of the relationship between learning interest, discipline, and outcomes in the context of vocational education.

These findings emphasized the importance of further research to identify other factors that might play a more significant role in determining SMK students' learning outcomes, as well as effective strategies to improve learning outcomes considering the unique characteristics of SMK students and specific study programs.

CONCLUSION

Based on the research results and discussion, it can be concluded that there was no significant relationship between learning interest and learning outcomes of 11th-grade Motorcycle Business Engineering students at SMK Negeri 1 Sintuk Toboh Gadang. Although most students have learning interest in the medium to good category, this was not reflected in their learning outcomes. Similarly, no significant relationship was found between learning discipline and student learning outcomes, even though the majority of students have a learning discipline level in the medium category.

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