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THE INFLUENCE OF LEARNING MOTIVATION AND LEARNING ENVIRONMENT AT SCHOOL ON THE LEARNING DISCIPLINE OF GRADE X STUDENTS IN THE OMBS DEPARTMENT AT SMKN 8 MAKASSAR

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ABSTRACT

This study aimed to examine the effect of learning motivation and learning environment on the learning discipline of Grade X students in the Office Management and Business Services (OMBS) Department at SMKN 8 Makassar. A quantitative approach with a causal associative design was employed. The population consisted of 35 students, and all members of the population were selected as the sample using the total sampling technique. Data were collected through questionnaires based on a five-point Likert scale and analyzed using descriptive statistics, validity and reliability tests, classical assumption tests, Pearson correlation analysis, and multiple linear regression analysis with the assistance of IBM SPSS. The results indicated that all questionnaire items were valid and reliable, with a Cronbach's Alpha coefficient of 0.746. The classical assumption tests confirmed that the data met the requirements of normality, linearity, and multicollinearity. Pearson correlation analysis revealed that learning motivation had a strong positive relationship with learning discipline ($r = 0.723$, $p < 0.001$), while learning environment also showed a strong positive relationship with learning discipline ($r = 0.656$, $p < 0.001$). Multiple regression analysis demonstrated that learning motivation and learning environment simultaneously had a significant effect on learning discipline ($F = 22.936$; $p < 0.001$), with a coefficient of determination (R^2) of 0.589. This indicates that 58.9% of the variance in students' learning discipline could be explained by the two independent variables. Partially, learning motivation contributed 37.01%, whereas learning environment contributed 21.08%. Learning motivation emerged as the dominant factor influencing students' learning discipline. These findings suggest that enhancing students' learning motivation and creating a supportive learning environment are essential strategies for improving learning discipline among vocational high school students.

INTRODUCTION

Vocational education plays a strategic role in preparing competent human resources equipped with technical expertise and professional attitudes required by the labor market. In Indonesia, vocational high schools (Sekolah Menengah Kejuruan/SMK) are expected to produce graduates who possess not only occupational skills but also strong work ethics, responsibility, and discipline. For students enrolled in the Office Management and Business Services (OMBS) Department, learning discipline is particularly important because the nature of their future professions requires punctuality, responsibility, and adherence to organizational procedures. Consequently, learning discipline constitutes one of the essential indicators determining the quality of vocational education outcomes (OECD, 2021).

Learning discipline refers to students' ability to comply with academic regulations, manage learning activities effectively, and consistently fulfill educational responsibilities. Disciplined students tend to demonstrate punctuality, persistence, and responsibility in accomplishing academic tasks, which ultimately contribute to their academic success and professional readiness (Zimmerman, 2019). Recent studies have emphasized that discipline is

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closely associated with self-regulation and behavioral control, both of which are crucial for students' cognitive and social development (Panadero, 2018; Schunk & DiBenedetto, 2020). Therefore, strengthening learning discipline among vocational students is essential for enhancing both academic achievement and employability.

One of the most important internal factors influencing students' learning discipline is learning motivation. Motivation represents the driving force that stimulates students to engage in learning activities and persist in achieving educational goals. According to Self-Determination Theory, motivated students exhibit greater autonomy, persistence, and responsibility in managing their learning behaviors (Ryan & Deci, 2020). Similarly, expectancy-value theory explains that students are more likely to demonstrate disciplined behavior when they perceive learning activities as valuable and believe that they are capable of achieving success (Eccles & Wigfield, 2020). Empirical studies have consistently demonstrated that learning motivation positively influences students' academic engagement, self-regulation, and learning discipline (Mega et al., 2018; Howard et al., 2021). Hence, motivated students are more likely to comply with academic rules and maintain consistent study habits.

Besides internal factors, external environmental conditions also play an important role in shaping students' learning discipline. The school learning environment encompasses physical facilities, interpersonal relationships, classroom climate, and institutional support that collectively influence students' learning experiences. A supportive learning environment provides students with opportunities to develop positive attitudes and adaptive behaviors (Kutsyuruba et al., 2020). In addition, a positive school climate characterized by effective teacher-student relationships and social support contributes significantly to students' academic engagement and behavioral adjustment (Wang & Degol, 2018). Therefore, the quality of the school environment serves as an important contextual factor that facilitates the development of disciplined learning behaviors.

Previous studies have confirmed the significant contribution of school environments to students' academic and behavioral outcomes. Maxwell (2019) found that favorable school conditions positively affect students' attendance, academic achievement, and social behavior. Likewise, Aldridge et al. (2018) reported that supportive school climates promote students' motivation and discipline. In vocational education contexts, conducive learning environments are particularly important because practical learning activities require discipline, collaboration, and responsibility. Consequently, schools are expected to provide both physical and psychosocial environments that encourage students to develop disciplined learning habits.

Although theoretical and empirical evidence suggests that learning motivation and school learning environment positively influence learning discipline, preliminary observations conducted among Grade X students of the Office Management and Business Services Department at State Vocational High School 8 Makassar revealed several disciplinary issues. Some students demonstrated inconsistency in attending classes, delays in completing assignments, and limited responsibility in maintaining classroom and practice-room cleanliness. These conditions indicate the existence of disparities between expected and actual levels of learning discipline among students.

Despite numerous studies examining the relationships between motivation, school environment, and academic achievement, empirical evidence focusing specifically on learning

discipline among vocational high school students remains relatively limited, particularly within the Indonesian context. Furthermore, the unique characteristics of vocational education require a more comprehensive understanding of factors contributing to students' disciplinary behavior. Therefore, this study aims to investigate the effects of learning motivation and school learning environment on the learning discipline of Grade X students in the Office Management and Business Services Department at State Vocational High School 8 Makassar. The findings are expected to provide empirical evidence for designing educational interventions aimed at strengthening students' discipline and improving the quality of vocational education.

METHOD

This study employed a quantitative approach using a descriptive-associative design to examine the influence of school facilities and learning discipline on students' learning interest at SMAN 21 Makassar. Quantitative research enables researchers to investigate relationships among variables objectively through statistical procedures and empirical measurements (Creswell & Creswell, 2018). The descriptive approach was used to describe the condition of each variable, whereas the associative approach aimed to determine the effects of school facilities and learning discipline on students' learning interest. The study was conducted at SMAN 21 Makassar in October 2025.

This study employed a quantitative approach with a causal associative design to examine the effects of learning motivation and school learning environment on students' learning discipline. Quantitative research is appropriate for investigating causal relationships among variables through objective measurement and statistical analysis (Hair et al., 2019). Specifically, the study aimed to determine both the partial and simultaneous effects of learning motivation and school learning environment on the learning discipline of Grade X students in the Office Management and Business Services (OMBS) Department at State Vocational High School 8 Makassar. Since no treatment or manipulation was administered to the participants, the study can also be categorized as ex post facto research (Creswell & Creswell, 2018).

The research was conducted during the first semester of the 2025/2026 academic year at State Vocational High School 8 Makassar, South Sulawesi, Indonesia. The target population comprised all Grade X students enrolled in the Office Management and Business Services Department. Considering the relatively small population size, total sampling was employed, resulting in a sample of 35 students. Total sampling allows all members of the population to participate in the study, thereby increasing representativeness and minimizing sampling bias (Campbell et al., 2020).

Learning motivation (X_1) was operationally defined as students' internal and external drives that encourage them to engage in learning activities, characterized by persistence, interest, and learning independence. The school learning environment (X_2) referred to the physical and psychosocial conditions surrounding students within the school, including facilities, interpersonal relationships, and school climate. The dependent variable, learning discipline (Y), was defined as students' adherence to academic rules, punctuality, responsibility, and consistency in performing learning activities. Data were collected using closed-ended questionnaires based on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Prior to data collection, the instrument was developed according to established indicators and subsequently evaluated through validity and reliability testing. Item validity was examined using Pearson Product-Moment correlation, whereas reliability was assessed using Cronbach's alpha coefficient, with values above 0.70 indicating satisfactory internal consistency (Hair et al., 2019; Taber, 2018).

Data analysis was conducted using descriptive and inferential statistics. Descriptive

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statistics included mean, median, and mode to describe the characteristics of each variable. Before hypothesis testing, classical assumption tests were performed, including normality, linearity, and multicollinearity tests to ensure the appropriateness of multiple linear regression analysis. Normality was evaluated using the Kolmogorov-Smirnov test, linearity was assessed through Test for Linearity, and multicollinearity was examined using Variance Inflation Factor (VIF), where VIF values below 10 indicated the absence of multicollinearity (Field, 2018). Hypothesis testing employed multiple linear regression analysis to determine the simultaneous and partial effects of learning motivation and school learning environment on learning discipline. The regression model used in this study can be expressed as follows:

$$\mathbf{Y = a + b_1X_1 + b_2X_2 + e}$$

where Y represents learning discipline, a denotes the constant, b_1 and b_2 are regression coefficients, X_1 refers to learning motivation, X_2 represents school learning environment, and e denotes the error term. In addition, Pearson correlation analysis was performed to determine the strength and direction of the relationships among variables. Statistical significance was determined at the 0.05 level.

RESULT AND DISCUSSION

Descriptive Analysis of Research Variables

Descriptive analysis was conducted to provide an overview of students' learning motivation, learning environment, and learning discipline. Based on the data collected from 35 respondents, the mean, median, and mode values of each variable are presented in Table 3.4.

Table 1.
Descriptive Statistics of Research Variables

Variable	Mean	Median	Mode
Learning Motivation (X1)	41.31	42.00	44.00
Learning Environment (X2)	41.34	42.00	43.00
Learning Discipline (Y)	37.31	37.00	32.00

Source: research results

The findings indicate that students generally demonstrated relatively high levels of learning motivation. The average score of learning motivation was 41.31, with a median value of 42 and a mode value of 44. These results suggest that students possess strong internal and external drives to engage in learning activities. According to Schunk and DiBenedetto (2020), students with high motivation are more likely to participate actively in learning and maintain persistence in achieving academic goals.

Similarly, the mean score of the learning environment variable was 41.34, indicating that students perceived their learning environment positively. A supportive learning environment, characterized by adequate facilities, positive interpersonal relationships, and a conducive school climate, contributes significantly to students' academic engagement and behavioral development (OECD, 2019; Fraser, 2012).

Regarding learning discipline, the average score was 37.31. This result reflects that students generally possess a relatively good level of discipline in carrying out academic responsibilities. Learning discipline is closely associated with students' ability to manage time, comply with school regulations, and complete academic tasks consistently (Tu'u, 2018).

Instrument Quality Testing

Validity Test

The validity test was conducted using Pearson Product Moment correlation. Based on the

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analysis, the critical value of r-table at a significance level of 5% with degrees of freedom (df = n – 2 = 33) was 0.334. An item was considered valid if the calculated correlation coefficient (r-count) exceeded the r-table value.

The results showed that most questionnaire items had correlation coefficients higher than 0.334, indicating that the instrument was capable of measuring the intended constructs accurately. According to Hair et al. (2019), validity refers to the extent to which an instrument measures what it is intended to measure.

Reliability Test

The reliability analysis yielded a Cronbach's Alpha coefficient of 0.746. Since the obtained value exceeded the minimum threshold of 0.70, the instrument was considered reliable. This finding indicates that the questionnaire items possessed satisfactory internal consistency and were capable of producing stable and dependable measurements. Taber (2018) stated that a Cronbach's Alpha value above 0.70 is generally regarded as acceptable in educational and social science research.

Classical Assumption Tests

Normality Test

The Kolmogorov-Smirnov test revealed an Asymp. Sig. value of 0.200, which is greater than 0.05. Therefore, the residual data were normally distributed. Normality is an important assumption in regression analysis because normally distributed residuals ensure unbiased parameter estimation (Field, 2018).

Linearity Test

The Deviation from Linearity significance value between learning motivation and learning discipline was 0.580 (>0.05), while the significance value between learning environment and learning discipline was 0.057 (>0.05). Furthermore, the calculated F-values were lower than the corresponding F-table values. These results indicate that the relationships between the independent variables and the dependent variable are linear. Consequently, increases in learning motivation and improvements in the learning environment are followed by proportional increases in students' learning discipline.

Multicollinearity Test

The multicollinearity analysis showed that the Variance Inflation Factor (VIF) value for both independent variables was 1.661, whereas the tolerance value was 0.602.

Since the VIF values were below 10 and the tolerance values exceeded 0.10, it can be concluded that no multicollinearity problem existed in the regression model. According to Hair et al. (2019), a good regression model should be free from multicollinearity to ensure that each predictor contributes independently to explaining the dependent variable.

Correlation Analysis

The Pearson correlation analysis demonstrated significant positive relationships among the variables. Specifically, learning motivation was positively correlated with learning discipline ($r = 0.723$, $p < 0.001$), while learning environment was positively correlated with learning discipline ($r = 0.656$, $p < 0.001$). Additionally, learning motivation and learning environment were positively associated ($r = 0.631$, $p < 0.001$). According to Cohen et al. (2018), correlation coefficients ranging from 0.60 to 0.79 indicate strong relationships. Therefore, these findings suggest that students with higher motivation and better learning environments tend to exhibit stronger learning discipline.

Multiple Linear Regression Analysis

The multiple regression analysis produced the following equation:

$$\mathbf{Y=-3.276+0.654X1+0.329X2+0.411}$$

where:

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- **Y** = Learning Discipline
- **X1** = Learning Motivation
- **X2** = Learning Environment

The regression coefficients indicate that a one-unit increase in learning motivation would increase learning discipline by 0.654 units, whereas a one-unit increase in the quality of the learning environment would increase learning discipline by 0.329 units. The coefficient of determination (R^2) was 0.589, indicating that 58.9% of the variation in students' learning discipline could be explained jointly by learning motivation and learning environment, while the remaining 41.1% was influenced by other factors not included in the model.

Moreover, the ANOVA results revealed an F-value of 22.936 with a significance level of 0.000 (<0.05), confirming that learning motivation and learning environment simultaneously exert a significant influence on learning discipline.

Discussion

The Effect of Learning Motivation on Students' Learning Discipline

The results indicated that learning motivation had a positive and significant effect on students' learning discipline, as evidenced by the standardized beta coefficient of 0.512 and a significance value of 0.001. This finding suggests that students with higher levels of motivation tend to demonstrate stronger discipline in managing their academic responsibilities. Students who are highly motivated are more likely to comply with school regulations, complete assignments on time, and actively participate in learning activities. These findings are consistent with Self-Determination Theory proposed by Deci and Ryan (2000), which emphasizes that intrinsic motivation encourages individuals to engage voluntarily and persistently in activities.

Schunk and DiBenedetto (2020) further argued that motivation plays a central role in students' academic engagement and self-regulated learning. Highly motivated students exhibit greater perseverance and responsibility in achieving academic goals. The findings of this study support previous empirical studies conducted by Mega et al. (2014), Kusurkar et al. (2013), and Vansteenkiste et al. (2020), which reported that academic motivation is one of the strongest predictors of learning behavior and academic achievement. Therefore, learning motivation can be considered a crucial internal factor in shaping students' learning discipline.

The Effect of Learning Environment on Students' Learning Discipline

The partial regression analysis demonstrated that the learning environment significantly influenced learning discipline, with a standardized beta coefficient of 0.333 and a significance value of 0.029. This finding implies that a conducive learning environment contributes to the development of disciplined learning behavior among students. Positive interactions between teachers and students, adequate facilities, and a supportive school atmosphere create favorable conditions that enhance students' commitment to academic activities.

These results are consistent with Bronfenbrenner's Ecological Systems Theory (1979), which emphasizes that environmental factors play a crucial role in individual development. Similarly, OECD (2019) reported that positive school climates contribute to students' well-being, engagement, and academic behavior. Fraser (2012) also highlighted that effective learning environments enhance motivation, participation, and academic achievement. Furthermore, previous studies by Wang and Degol (2016), Kutsyuruba et al. (2015), and Aldridge and McChesney (2018) demonstrated that school climate significantly affects students' behavioral and academic outcomes. Thus, improving the quality of the learning environment is essential for promoting better learning discipline among students.

The Simultaneous Effect of Learning Motivation and Learning Environment on Students' Learning Discipline

The simultaneous test results showed that learning motivation and learning environment significantly affected students' learning discipline, as indicated by an F-value of 22.936 and a significance level of 0.000. The coefficient of determination (R^2 = 0.589) suggests that both variables jointly explain 58.9% of the variance in students' learning discipline. Among the two predictors, learning motivation contributed 37.01%, whereas learning environment contributed 21.08%.

These findings indicate that internal and external factors interact in shaping students' disciplinary behavior. This conclusion is in line with Bandura's Social Cognitive Theory (1986), which posits that human behavior results from reciprocal interactions among personal factors, environmental influences, and behavioral processes. Likewise, Zimmerman (2000) and Pintrich (2003) emphasized that self-regulated learning and academic discipline are influenced by both motivational and contextual factors. Richardson et al. (2012) further found that psychological and environmental factors are among the most important determinants of academic performance.

From a practical perspective, the findings imply that improving students' learning discipline should not rely solely on enforcing school rules. Instead, schools should also focus on enhancing students' motivation and creating supportive learning environments. Teachers and school administrators should develop instructional strategies that foster intrinsic motivation, provide adequate learning facilities, and establish a positive school climate that encourages responsible and disciplined learning behavior.

Overall, the present study provides empirical evidence that learning motivation and learning environment are important determinants of students' learning discipline, with learning motivation emerging as the dominant predictor. This finding reinforces contemporary educational theories emphasizing the interplay between individual and environmental factors in shaping students' academic behavior.

CONCLUSION

Based on the findings and discussion, it can be concluded that learning motivation and learning environment have positive and significant effects on the learning discipline of Grade X students in the Office Management and Business Services (OMBS) Department at SMKN 8 Makassar. Students with higher levels of learning motivation tend to exhibit better discipline in fulfilling academic responsibilities, managing study time, and complying with school regulations, while a supportive learning environment characterized by adequate facilities, positive interactions, and a conducive school climate contributes to the development of disciplined learning behavior. Simultaneously, learning motivation and learning environment account for 58.9% of the variance in students' learning discipline, whereas the remaining 41.1% is explained by other factors beyond the scope of this study. Furthermore, learning motivation emerged as the dominant predictor, contributing 37.01%, compared with the learning environment, which contributed 21.08%. These findings indicate that internal factors play a more prominent role than external factors in shaping students' disciplinary behavior and highlight the importance of enhancing students' motivation alongside creating supportive learning environments to foster better learning discipline.

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