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The Influence of Learning Motivation, Discipline, And Teaching Methods on Student Learning Outcomes at SMK Tridharma MKGR Maros

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ABSTRACT

This study aims to examine the influence of learning motivation, discipline, and teaching methods on student learning outcomes at SMK Tridharma MKGR Maros. A quantitative approach was employed, involving 30 respondents from the Office Management and Business Services, Computer and Network Engineering, and Marketing programs. Data were collected using a five-point Likert-scale questionnaire consisting of ten statements for each variable and were analyzed through validity and reliability tests, classical assumption tests, Pearson correlation analysis, and multiple linear regression using SPSS. The results showed that learning motivation, discipline, and teaching methods were all perceived by students at a very good level. However, correlation analysis revealed weak and statistically non-significant relationships between each independent variable and learning outcomes, with motivation showing r = 0.259, discipline r = 0.058, and teaching methods r = 0.275 (all p > 0.05). Multiple regression analysis indicated that the three variables jointly accounted for only 13.3 percent of the variance in learning outcomes (R = 0.365, R square = 0.133), and the overall regression model was not statistically significant (F = 1.328, p = 0.287). These findings differ from most previous studies, which generally report positive relationships between motivation, discipline, teaching methods, and learning outcomes in vocational education settings. This discrepancy suggests that factors beyond the three variables examined may play a more decisive role in shaping student learning outcomes at this school. Further research involving larger and more diverse samples is recommended to obtain a more comprehensive understanding of the determinants of learning outcomes in vocational high schools.

Keywords: learning motivation, discipline, teaching methods, learning outcomes, vocational high school

INTRODUCTION

Student learning outcomes in Vocational High Schools (SMK) reflect the extent to which the learning process successfully shapes students' knowledge, attitudes, and skills in accordance with the required competencies. Various studies indicate that

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learning achievement does not occur in isolation but is influenced by several interrelated factors, including learning motivation, discipline, and the teaching methods applied by teachers.

Learning motivation is understood as an internal drive that leads students to engage actively in learning, persist through difficulties, and put forth greater effort to complete tasks. Several studies conducted in vocational education settings indicate that motivation, particularly intrinsic motivation, plays an important role in fostering learning success, as motivated students tend to be more persistent and perform better in assignments and assessments (Chakraborty, 2020; Nguyen et al., 2024; Soimah et al., 2024; Szőköl, 2022).

Discipline, which includes the ability to self-regulate and set learning goals, is also considered a factor that helps students manage their learning process more effectively. Self-regulated learning has been associated with higher academic achievement, particularly in mastering vocational competencies that require consistent practice and application (Held & Mejeh, 2024a; Radovan & Radovan, 2015; Rozendaal et al., 2005; Szőköl, 2022).

In addition, the teaching methods used by teachers also influence student motivation and understanding. Interactive teaching approaches that are relevant to workplace demands—such as problem-based learning, cooperative learning models, blended learning, and competence-based instructional units—have been reported to bridge theory and practice and to promote better skill mastery (Ágnes & Ágnes, 2017; Budhyani et al., 2022; Dinihari et al., 2021; Mahyiddin, 2019; Tanjung et al., 2025; Winarsih et al., 2019). Teacher behavior and instructional strategies also have a direct impact on students' motivation and skill development (Suyatmo et al., 2025).

These three factors appear to be interrelated: motivation functions as an internal driver that enables students to persist and achieve better outcomes, particularly in vocational settings that emphasize practical skills (Abiodun et al., 2023; Dong et al., 2025; Susantyo et al., 2023) discipline, including self-regulation and goal-setting, helps students manage their learning process so that vocational competencies can be mastered more consistently (Held & Mejeh, 2024a; Radovan & Radovan, 2015; Szőköl, 2022) while teaching methods that are interactive, relevant, and tailored to vocational needs not only enhance motivation but also foster deeper understanding and skill mastery (Budhyani et al., 2022; Dinihari et al., 2021; Mahyiddin, 2019; Tanjung et al., 2025; Winarsih et al., 2019).

However, the literature is not entirely uniform on this point. A number of studies suggest that the influence of learning motivation, discipline, and teaching methods on learning outcomes is not always direct or consistently strong, and may instead be mediated or overshadowed by broader contextual variables. For instance, when the vocational curriculum or teaching approach is not well aligned with actual industry needs, learning outcomes tend to remain suboptimal regardless of how motivated or disciplined students are (Hafid et al., 2019; Ikhsannudin & Hatmojo, 2025; Sariwulan et al., 2020). Inadequate facilities and infrastructure have likewise been reported to constrain the practical effect of motivation and teaching quality on learning outcomes (Safitri et al., 2024), while institutional and environmental factors, such as school

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management and industry partnerships, can further shape how strongly these variables translate into achievement (Sariwulan et al., 2020). In addition, individual student characteristics, including differences in self-regulation capacity, confidence, and special educational needs, may moderate the extent to which motivation and teaching methods are reflected in actual learning outcomes (Babu & Charles, 2024; Howard et al., 2021; Soimah et al., 2024). This inconsistency across studies indicates that the strength of the relationship between motivation, discipline, teaching methods, and learning outcomes is highly context-dependent, and therefore needs to be verified empirically at the school level rather than assumed from general theory.

Despite this theoretical foundation, empirical evidence on the strength of these relationships varies across contexts, depending on school conditions, student characteristics, and the actual learning environment. A research gap therefore remains in verifying, through primary empirical data, whether these theoretically supported relationships hold in a specific vocational school setting. This study was conducted to empirically examine the influence of learning motivation, discipline, and teaching methods on student learning outcomes at SMK Tridharma MKGR Maros.

METHODS

This study was conducted at SMK Tridharma MKGR Maros, located at Jalan Jenderal Sudirman No. 59, Alleritengngae Village, Turikale Subdistrict, Maros Regency, Indonesia. The school offers three study programs: Office Management and Business Services (MPLB), Computer and Network Engineering (TKJ), and Marketing.

A quantitative research design was employed, involving 30 respondents drawn from the three study programs. Data were collected through a questionnaire consisting of ten statements for each of the four variables under study—Learning Motivation (X1), Discipline (X2), Teaching Methods (X3), and Learning Outcomes (Y)—using a five-point Likert scale with response options ranging from strongly agree to strongly disagree.

Prior to use, the instrument was tested for validity, using a critical r-table value of 0.361 at a 5% significance level with df = n - 2 = 28, and for reliability, using Cronbach's Alpha with a minimum acceptable threshold of 0.700. Subsequently, the data were analyzed through classical assumption tests (linearity, normality, and multicollinearity), Pearson correlation analysis, and multiple linear regression analysis using SPSS.

RESULT AND DISCUSSION

Validity and Reliability Test

Validity and reliability tests were conducted to ensure that the questionnaire was appropriate for measuring each variable. A summary of the results is presented in Table 1.

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Table 1. Summary of Validity and Reliability Test Results

Variable	Validity Result	Cronbach's Alpha	Remark
Learning Motivation (X1)	All 10 items valid	0.808	Reliable
Discipline (X2)	1 item (no. 1) invalid	0.637	Not reliable
Teaching Methods (X3)	All 10 items valid	0.943	Reliable
Learning Outcomes (Y)	1 item (no. 10) invalid	0.745	Reliable

Source: Authors' primary data (2024).

As shown in Table 1, the instruments for Learning Motivation and Teaching Methods were fully valid and reliable. The Learning Outcomes instrument was also reliable despite one invalid item. In contrast, the Discipline instrument contained one invalid item and yielded a reliability coefficient below the 0.700 threshold, indicating comparatively lower internal consistency for this variable.

Descriptive Statistics (Mean, Median, Mode)

Table 2. Descriptive Statistics of the Research Variables

Variable	Mean	Median	Mode	Category
Learning Motivation	45.13	45.50	50	Very good
Discipline	43.30	44.00	43	Very good
Teaching Methods	42.73	43.00	50	Very good
Learning Outcomes	40.48	40.00	40	Very good

Source: Authors' primary data (2024).

As presented in Table 2, all four variables fall into the very good category, with relatively high mean values on their respective measurement scales. This indicates that, overall, students perceived themselves as having good learning motivation, discipline, and experience with the teaching methods applied, and rated their own learning outcomes favorably.

Classical Assumption Test

The linearity test indicated that the relationship between each independent variable and learning outcomes was linear, as the Deviation from Linearity significance values for all three variables exceeded 0.05 (Learning Motivation = 0.132; Discipline = 0.407; Teaching Methods = 0.514), and the F-calculated values were smaller than the F-table values in each case.

The Kolmogorov-Smirnov normality test produced an Asymp. Sig. value of 0.200, which is greater than 0.05, indicating that the residuals were normally distributed.

The multicollinearity test showed Variance Inflation Factor (VIF) values of 1.026 for Learning Motivation, 1.010 for Discipline, and 1.028 for Teaching Methods. Since all VIF

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values were below 10, it can be concluded that no multicollinearity occurred among the independent variables in the regression model.

With the assumptions of linearity, normality, and the absence of multicollinearity satisfied, the data were considered suitable for further correlation and multiple regression analysis.

Pearson Correlation Analysis

Table 3. Pearson Correlation Between Independent Variables and Learning Outcomes

Variable	Pearson r	Sig. (2-tailed)	Interpretation
Learning Motivation - Learning Outcomes	0.259	0.167	Weak, not significant
Discipline - Learning Outcomes	0.058	0.762	Negligible, not significant
Teaching Methods - Learning Outcomes	0.275	0.142	Weak, not significant

Source: Authors' primary data (2024).

As shown in Table 3, the Pearson correlation analysis indicates that all three independent variables have weak relationships with learning outcomes, and none reach statistical significance at the 0.05 level (r-calculated values for all variables are below the r-table value of 0.349). This suggests that, individually, the levels of learning motivation, discipline, and perceived variation in teaching methods do not show a strong or statistically convincing association with students' learning outcomes in this sample.

Multiple Linear Regression Analysis

The multiple regression analysis produced a multiple correlation coefficient (R) of 0.365 and a coefficient of determination (R Square) of 0.133. This means that learning motivation, discipline, and teaching methods jointly explain only 13.3% of the variance in student learning outcomes, while the remaining 86.7% is accounted for by other factors outside this research model.

The F-test produced an F-calculated value of 1.328 with a significance of 0.287. Because the F-calculated value is smaller than the F-table value (1.328 < 3.35) and the significance level exceeds 0.05, the research hypothesis is rejected. In other words, learning motivation, discipline, and teaching methods do not simultaneously have a significant influence on student learning outcomes at SMK Tridharma MKGR Maros.

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Table 4. Multiple Regression Coefficients

Variable	B	Beta	Sig.	Contribution (%)
Constant	15.199	-	0.313	-
Learning Motivation (X1)	0.287	0.228	0.228	5.9
Discipline (X2)	0.100	0.094	0.612	0.6
Teaching Methods (X3)	0.189	0.249	0.191	6.8

Source: Authors' primary data (2024).

As shown in Table 4, none of the three variables have a statistically significant partial effect on learning outcomes, as all significance values exceed 0.05. The largest contribution comes from Teaching Methods (6.8%), followed by Learning Motivation (5.9%) and Discipline (0.6%), together accounting for the 13.3% total contribution reflected in the R Square value.

Based on the regression coefficients obtained, the multiple linear regression equation for this study is:

$$Y = 15.199 + 0.287X1 + 0.100X2 + 0.189X3$$

This equation indicates that when learning motivation, discipline, and teaching methods are held constant at zero, learning outcomes are predicted to be 15.199. A one-unit increase in learning motivation, discipline, or teaching methods is mathematically associated with a small increase in learning outcomes; however, because the significance tests indicate non-significant effects, these coefficients cannot be generalized as a strong causal relationship.

These findings contrast with several earlier studies that report positive and significant relationships between learning motivation, discipline, teaching methods, and learning outcomes in vocational education settings (Held & Mejeh, 2024; Winarsih, 2018). At the same time, they are consistent with another body of evidence indicating that the influence of these three factors on learning outcomes is not always direct or strong, and may instead be mediated or overshadowed by broader contextual variables. Several studies report that when the curriculum or teaching approach is not well aligned with industry needs, learning outcomes remain limited regardless of students' motivation or discipline level (Hafid et al., 2019; Ikhsannudin & Hatmojo, 2025; Sariwulan et al., 2020). Others point to the role of inadequate facilities and infrastructure in constraining the practical effect of motivation and teaching quality on outcomes (Sujana et al., 2023), as well as institutional and environmental factors such as school management and industry partnerships (Sariwulan et al., 2020), and individual student characteristics, including self-regulation capacity, confidence, and special educational needs (Howard et al., 2021). Viewed against this literature, the weak and non-significant relationships found in the present study are plausible: they may reflect the influence of unmeasured contextual and institutional factors at SMK Tridharma MKGR Maros, rather than indicating that motivation, discipline, and

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teaching methods have no genuine relevance to learning outcomes in vocational education generally.

Several methodological considerations may also explain this discrepancy. First, the relatively small sample size (30 respondents) limits the statistical power to detect relationships that may genuinely exist in the population. Second, other factors not examined in this study—such as family support, learning facilities, teachers' specific competencies, or students' socioeconomic conditions—may play a more dominant role in shaping learning outcomes at this school. Third, because motivation, discipline, teaching methods, and learning outcomes were all measured through students' self-reports, response bias may have influenced the observed relationships. In addition, the relatively low reliability of the Discipline instrument (Cronbach's Alpha = 0.637) is worth noting, as an instrument with weaker internal consistency may reduce measurement accuracy and, in turn, affect the correlation and regression results for this variable.

CONCLUSION

This study set out to determine whether learning motivation, discipline, and teaching methods influence student learning outcomes at SMK Tridharma MKGR Maros. Descriptively, students rated all three variables at a very good level. However, neither the partial nor the simultaneous statistical tests found a significant effect of these variables on learning outcomes, with a combined contribution of only 13.3%. These results point to the likely presence of other, unmeasured determinants of student achievement at this school, and underscore the need for further studies employing larger and more diverse samples, as well as a broader set of explanatory variables, to build a more complete understanding of what drives learning outcomes in vocational high schools.

REFERENCES

Abiodun, P. O., Owolabi, O. A., Efe, S., Shokouhian, M., Aladeokin, O., Olude, A. I., Shourabi, N. B., Ikiriko, S., Bista, K., Gaulee, U., Efe, F., Rahman, M. M., Abedoh, H., & Ladeji-Osias, J. (2023). *Evaluating the Impact of Experiment-Centric Pedagogy on Civil Engineering Undergraduates' Motivation*.

Ágnes, C., & Ágnes, G. (2017). *Motivation and Encouragement in Vocational Education: Students' Perceptions of the Incentive Power of Certain Pedagogical Tools Based on Variables of Their Social Background* . *27*(1), 4–29.

Babu, B., & Charles, M. A. A. (2024). *Impact of life skill development program to improve teaching skills of teacher trainees*. *8*(6), 5551–5561. https://doi.org/10.55214/25768484.v8i6.3229

Budhyani, I. D. A. M., Candiasa, M., Sutajaya, M., & Nitiasih, P. K. (2022). *The effectiveness of blended learning with combined synchronized and unsynchronized settings on*

self-efficacy and learning achievement. *11*(1), 321–332. https://doi.org/10.11591/ijere.v11i1.22178

Chakraborty, D. (2020). Motivating factors in a teacher's research and developmental activities and their impact on effective quality teaching in higher education institutions. *Journal of Applied Research in Higher Education*, *12*(4), 609–632. https://doi.org/10.1108/JARHE-07-2018-0161

Dinihari, P., Effendy, E., Rahayu, S., & Dasna, I. W. (2021). *Evaluation of learning cycle 4E-RE to improve chemistry learning of vocational high school students*. *13*(2), 108–114. https://doi.org/10.30880/jtet.2021.13.02.010

Dong, H., Sun, K., & Liu, Q. (2025). *Study and Evaluation of Learning Motivation among Students in Capital Vocational Colleges Utilizing the Support Vector Machine Technique*. 492–497. https://doi.org/10.1145/3764206.3764282

Hafid, D., Djohar, A., Abdullah, A. G., & Komaro, M. (2019). *Work based learning in vocational education*. *1402*(4). https://doi.org/10.1088/1742-6596/1402/4/044066

Held, T., & Mejeh, M. (2024). *Students' motivational trajectories in vocational education: Effects of a self-regulated learning environment*. *10*(8). https://doi.org/10.1016/j.heliyon.2024.e29526

Howard, J. L., Bureau, J., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). *Student Motivation and Associated Outcomes: A Meta-Analysis From Self-Determination Theory*. *16*(6), 1300–1323. https://doi.org/10.1177/1745691620966789

Ikhsannudin, W., & Hatmojo, Y. I. (2025). *The Effectiveness of Developing the Teaching Factory Learning Model in the Concentration of Industrial Automation Engineering Expertise*. *3281*(1). https://doi.org/10.1063/5.0261685

Mahyiddin, Z. (2019). *Improving Motivation and Learning Outcomes of MTsN 2 the Great Aceh Students in Vocational Processing Subject Through the Cooperative Learning Model Think Pair and Share*. *1232*(1). https://doi.org/10.1088/1742-6596/1232/1/012034

Nguyen, T. T. D., Nguyen, D. T., & Huynh, V. A. (2024). The mediating effect of individual capital in the relationship between entrepreneurship education and social entrepreneurship intentions. *International Journal of …*. https://doi.org/10.1108/IJEM-09-2023-0454

Radovan, D. M., & Radovan, M. (2015). *Facilitating students' motivation and learning through competence-based didactic units*. *47*(2), 249–268. https://doi.org/10.2298/ZIPI1502249M

Rozendaal, J. S., Minnaert, A., & Boekaerts, M. (2005). *The influence of teacher perceived administration of self-regulated learning on students' motivation and information-processing*. *15*(2 SPEC. ISS.), 141–160. https://doi.org/10.1016/j.learninstruc.2005.04.011

Safitri, R., Alnedral, Gusril, Wahyuri, A. S., & Ockta, Y. (2024). The Impacts of the Project-Based Learning and Problem-Based Learning Models with Self-Confidence on Students' Learning Outcomes. *Indonesian Research Journal in Education |IRJE|*, *8*(1).

Sariwulan, T., Perdana, N. S., & Agung, I. (2020). *The influence of absorption graduates vocational education: A case study*. *9*(2), 55–71. https://doi.org/10.36941/ajis-2020-0023

Soimah, H., Baqi, S., & Daryono, R. W. (2024). … of Education Quality and Self-Ability on Students' Decisions to Choose an Islamic Education Program in Higher Education: Exploring the Mediating Role of …. In *…: Jurnal Ilmiah Untuk …*. pdfs.semanticscholar.org.

Susantyo, B., Habibullah, H., Irmayani, N. R., Erwinsyah, R. G., Nainggolan, T., Sugiyanto, S., Rahman, A., Arifin, J., As'Adhanayadi, B., & Nurhayu, N. (2023). Social cash assistance for food security during a disaster: Lesson learned from Indonesia. *IOP Conference Series: Earth and Environmental Science*, *1180*(1). https://doi.org/10.1088/1755-1315/1180/1/012047

Suyatmo, S., Prayitno, H., Wirawan, W. A., Pratiwi, D. I., & Waluyo, B. (2025). *Preparing industry-ready graduates: Interplay of lecturer behavior, self-motivation, and soft skill development in vocational education*. *261*. https://doi.org/10.1016/j.actpsy.2025.105892

Szőköl, I. (2022). *Learning Motivation and Quality of the Educational Process*. *390 LNNS*, 199–209. https://doi.org/10.1007/978-3-030-93907-6_21

Tanjung, D., Syahwani, A. K. I., Ayuningtyas, G., Sholihah, W., & Rivtryana, D. A. (2025). *Evaluating the impact of the teaching factory model on Vocational High School student competencies in the SMK Centre of excellence program*. *171*. https://doi.org/10.1051/bioconf/202517104015

Winarsih, S. (2018). Gaya Kepemimpinan Kepala Sekolah dalam Meningkatkan Kinerja Guru. *International Conference of Moslem Society*, *2*, 95–106.

Winarsih, S., Sangka, K. B., & Octoria, D. (2019). *The effect of direct instruction and problem based learning on millennial*. *2194*. https://doi.org/10.1063/1.5139873