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The Influence of Learning Style and Interest on Students' Cognitive Ability in Entrepreneurship Courses

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ABSTRACT

This study aims to analyze the partial influence of Learning Styles (Visual, Auditory, Kinesthetic/VAK) and Learning Interest on students' cognitive abilities in Entrepreneurship courses, focusing on the Wetland Entrepreneurship context at FKIP ULM. The primary objective is to identify how these factors impact students' higher-order cognitive skills (analysis, evaluation, creation), particularly given the high failure rate (78.5% failed pre-test). This quantitative study employs an explanatory correlation design with a case study approach, involving 94 students from the Wetland Entrepreneurship course at FKIP ULM, selected via purposive sampling. Data were gathered through questionnaires (Learning Styles and Interest) and cognitive tests/course scores (Cognitive Ability). Analysis was conducted using One-Way ANOVA for Learning Styles and Simple Regression (t-test) for Learning Interest. The results indicate no significant difference in cognitive abilities across VAK learning style groups (Sig. 0.503 > 0.05). However, Learning Interest emerged as a significant partial predictor of cognitive ability (Sig. 0.000 < 0.05), explaining 51.8% of the variance ($R^2 = 0.518$). The study's implication is that enhancing students' cognitive performance should focus on strategies that foster Learning Interest, rather than prioritizing VAK learning style preferences, which were found to be insignificant in predicting cognitive outcomes. Future research should explore context-based learning models that increase student engagement within the wetland environment.

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INTRODUCTION

The need for entrepreneurship education at the university level is becoming increasingly urgent to prepare students to face complex future challenges, including the rapid development of Industry 4.0 and global climate change issues (Sutrisno & Cokro, 2018; Santoso, 2020). This education is very important for shifting the student paradigm from seeking employment to

creating jobs, thereby contributing to regional economic development (Santoso, 2020; Rahman et al., 2023; Sumual & Maramis, 2022). Notwithstanding its importance, students' cognitive ability in this course often varies and tends to be low. Preliminary observations revealed that 78.5% of 94 students in the FKIP ULM entrepreneurship course failed the pre-test (initial data). According to Afwan et al. (2022), it is important for a 21st-century entrepreneurship curriculum to focus on and encourage critical thinking. This indicates a critical need for a significant increase in students' high-level cognitive skills (analysis, evaluation, and creation) (Lewy et al, 2009).

Factors such as learning style and student interest are believed to have a significant influence on their cognitive ability. Therefore, this research focuses on two main questions: to what extent do differences in students' learning styles (Visual, Auditory, Kinesthetic) influence their cognitive ability in the Entrepreneurship course ?, and how significantly does student learning interest influence their cognitive ability in the Entrepreneurship course?

Several studies support the hypothesis that learning styles affect cognitive scores. For instance, Sheromova (2020) designed and classified personalized teaching methods that can effectively trigger the development of cognitive skills, as learning styles reflect students' inter-hemispheric interactions (neuropedagogy). Al-Khateeb and Al-Zoubi (2021) showed significant differences in student cognitive scores depending on the preferred learning style used. Students whose learning style aligns with the teaching method tend to have a higher GPA (Pujiningsih, 2007; Thi Thu Ha, 2021). However, these findings are not always consistent. Sulaiman et al. (2025) and Yenni et al. (2025), in their study on statistical problem-solving, found that the relationship between VAK learning styles and academic success was weak or insignificant. According to Winalda (2022), the results of her research indicated that there was no significant correlation between learning styles and student cognitive competence (even though the Visual style was the most dominant), suggesting that matching learning styles is not the main determinant of cognitive learning outcomes. They concluded that learning style is not the sole determinant of mastery.

In contrast to learning styles, learning interest has consistently proven to be a strong predictor. Interest can increase motivation and enthusiasm for learning (Lastri, 2020). Renninger and Hidi (2002) highlighted the close relationship between student interest and cognitive ability. Similarly, Hendrawijaya (2022), Febriyanti, K. (2018) Rahmayani, N. et al. (2024), and Ningrum et al. (2023) found that learning interest had a significant positive effect, even mediating the increase in mathematical critical thinking skills. According to Novianti, W. (2023), simultaneously, Learning Interest and Cognitive Ability together have a positive relationship with the Learning Outcomes of Al-Qur'an

and Hadith subjects. High interest triggers engagement and participation, which ultimately enhances high-level cognitive skills (Sudarsono & Sulasmi, 2023).

Although previous research has examined these variables, there is a gap that this research seeks to fill: previous research has not specifically addressed the significant partial influence of Learning Styles (Visual, Auditory, Kinesthetic/VAK) on students' Cognitive Abilities in the Wetland Entrepreneurship course at the Faculty of Teacher Training and Education, Faculty of Teacher Training and Education, University of Lambung Mangkurat (ULM). Is there a significant partial influence between Learning Interest and Students' Cognitive Abilities in the Wetland Entrepreneurship course at the Faculty of Teacher Training and Education, Faculty of Teacher Training and Education, University of Lambung Mangkurat (ULM)?

The purpose of this study is to analyze and test the partial influence of Learning Styles (Visual, Auditory, Kinesthetic/VAK) on students' Cognitive Abilities in the Wetland Entrepreneurship course at the Faculty of Teacher Training and Education, Faculty of Teacher Training and Education, University of Lambung Mangkurat (ULM), as well as the partial influence of Learning Interest on Students' Cognitive Abilities in the Wetland Entrepreneurship course at the Faculty of Teacher Training and Education, Faculty of Teacher Training and Education, University of Lambung Mangkurat (ULM).

The unique context of the wetland might require adaptive teaching strategies that have not yet been accommodated. This research attempts to re-examine the contradictory findings regarding the influence of learning styles in the context of applied entrepreneurship material, while simultaneously confirming the dominant influence of the interest variable.

This research offers originality (state-of-the-art) by conducting the first empirical analysis of the relationship between learning styles and interest on the cognitive ability of entrepreneurship students whose study is set in the FKIP ULM wetland environment. The results can be used to develop a learning model that suits local conditions, and the contribution of this research is presenting adaptive learning strategy recommendations based on partial test results and the coefficient of determination. If interest proves to be more dominant, the focus of the learning strategy should be directed at motivation and relevance, not solely at adjusting to visual/auditory/kinesthetic styles.

This research aims to analyze the influence of learning style (Visual, Auditory, Kinesthetic) on students' cognitive ability in the Entrepreneurship course in the FKIP ULM wetland environment and to analyze the partial influence of learning interest on students' cognitive ability in the Entrepreneurship course in the FKIP ULM wetland environment.

RESEACH METHOD

Research Design

This research used a Quantitative approach with an Explanatory Correlational Research design. This design was chosen to test hypotheses and explain the cause-and-effect relationship (influence) between independent variables (Learning Style and Learning Interest) on the dependent variable (Cognitive Ability) (Sugiyono, 2019). The results of the quantitative statistical analysis were used to test the significance of the relationship between the studied variables.

Population and Sample

The population of this study consists of all students at the Faculty of Teacher Training and Education, Lambung Mangkurat University (FKIP ULM) who take the Entrepreneurship Course in the Wetland Environment. The sample size is 94 students drawn from this population. The sampling technique used is non-probability sampling, specifically *purposive sampling*, with the criterion that respondents must have taken and/or be currently taking the Entrepreneurship Course.

Research data were collected using a closed-ended questionnaire distributed to all respondents. The questionnaire included two types of instruments:

1. Learning Style Instrument (X1): Visual, Auditory, and Kinesthetic Learning Styles (VAK) based on Bobislamet DePorter and Mike Hernacki (2009). This instrument was used to identify respondents' dominant learning style tendencies (Visual, Auditory, and Kinesthetic).
2. Learning Interest Instrument (X2), with interest indicators according to Slameto (2010): feeling happy, attraction, acceptance, involvement, attention, satisfaction, attachment, and participation. and Cognitive Ability (Y): Cognitive Domain based on Bloom's Taxonomy (Revised by Anderson & Krathwohl, 2001): Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating. Both were measured using a Likert Scale with 5 response options (e.g., 1 = Strongly Disagree to 5 = Strongly Agree).

Data were collected through a survey using instruments that were tested for validity and reliability on a trial sample before being distributed to the main sample. Prior to data collection, the research instruments were tested for validity and reliability using correlation techniques and Cronbach's Alpha to ensure the instruments were fit for use. Data analysis was performed using descriptive and inferential statistical techniques with the aid of the SPSS program (Ghozali, I, 2021). Data analysis was conducted using statistical software (SPSS) and divided into two main stages:

Data Analysis Techniques

Data analysis was performed using descriptive and inferential statistical techniques with the aid of the SPSS program.

1. Descriptive Analysis

This was used to describe sample characteristics (gender) and variable tendencies for Learning Style (X1) and Learning Interest (X2), including frequency, percentage, mean, and standard deviation, specifically to present Gender Composition and Learning Style Tendencies.

2. Inferential Analysis

A. Partial Effect Test for Learning Style (X1): One-Way ANOVA

a. Because Learning Style (X1) is measured as a categorical variable (Visual, Auditory, Kinesthetic), a One-Way ANOVA test was used to examine whether there are differences in the mean Cognitive Ability (Y) among the three learning style groups. If the significance value (p-value) of the ANOVA is <0.05, there is a significant difference in cognitive ability between the learning style groups.
b. Decision Criterion: If the significance value (*p-value*) of the ANOVA is <0.05, there is a significant difference in cognitive ability between the learning style groups.
c. B. Partial Effect Test for Learning Interest (X2): Simple Regression (t-test)
d. Simple Regression Model, this analysis is used to individually test the influence of Learning Interest (X2) on Cognitive Ability (Y).
e. $Y=\beta 0+\beta 2X2+\epsilon$
f. t-test (Partial), Tests the significance of the influence of X2 on Y.
    1) The (partial) t-test is used to test the significance of the influence of the independent variable, Learning Interest (X2), on the dependent variable, Cognitive Ability (Y) individually. Statistical decisions are based on a comparison of the significance value (p-value) with the significance level (α): if the significance value (p-value) of the t-test is <0.05, then Learning Interest (X2) has a significant influence on Cognitive Ability (Y) (Ghozali, 2021).
    2) Coefficient of Determination (R2), Used to measure the proportion of variance in Cognitive Ability explained by Learning Interest. The Coefficient of Determination (R2) serves to measure the extent to which the model is able to explain the variation in the dependent variable (Ghozali, 2021).

RESULT AND DISCUSSION

Result

This section presents the findings obtained from the quantitative statistical analysis of survey data collected from students enrolled in the Entrepreneurship Course within the Wetland Environment of FKIP ULM. The data analysis was conducted to address the research objectives regarding the influence of learning style and interest on students' cognitive ability.

1. Description of Sample Characteristics

The study involved 94 students taking the Entrepreneurship Course in the Wetland Environment of FKIP ULM. The sample description is presented based on gender composition and learning style tendencies.

1.1. Gender Composition

The 94 respondents involved in the study were predominantly female, as presented in Table 1.

Table 1. Gender Composition of Respondents

Gender					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Man	**13**	**13,8**	13,8	13,8
	Woman	**81**	**86,2**	86,2	100,0
	Total	**94**	**100,0**	100,0	

The sample composition is significantly dominated by female respondents, accounting for 86.17% of the total.

1.2. Learning Style Tendencies (X1)

Students' learning style tendencies were identified using the VAK model (Visual, Auditory, Kinesthetic). The frequency distribution results are presented in Table 2.

Table 2. Students' Learning Style Tendencies (X1)

		Frequency	**Percent**	Valid Percent	Cumula Percer
Valid	Visual (Images, graphs, diagrams, etc.)	**46**	**48,9**	48,9	48,9
	Auditory (Listening to lectures or discussions)	**12**	**12,8**	12,8	61,7
	Kinesthetic (Hands-on practice or experiments)	**36**	**38,3**	38,3	100,(
	Total	**94**	**100,0**	100,0	

The majority of students exhibit a Visual Learning Style tendency (48.94%), followed by Kinesthetic (38.30%), and Auditory (12.77%).

2. Partial Influence of Learning Style (X1) on Cognitive Ability (Y)

To test the hypothesis that there is a difference in students' cognitive ability across different learning style groups, the One-Way ANOVA statistical test was used. The test results are presented in Table 3.

Table 3. One-Way ANOVA Test Results (Learning Style on Cognitive Ability)

	Sum of Squares	df	Mean Square	F	**Sig.**
Between Groups	402,954	2	201,477	0,692	**0,503**
Within Groups	26476,791	91	290,954		
Total	26879,745	93			

The significance value (Sig. or *p-value*) obtained from the One-Way ANOVA test is 0.503. Since the value 0.503 is greater than 0.05 (Sig.>0.05), it is concluded that there is no significant difference in the mean Cognitive Ability of students caused by the differences in Learning Style groups (Visual, Auditory, or Kinesthetic).

This finding suggests that students' individual learning style preference (although visual-dominated) is not the sole determinant factor in the difference in cognitive ability levels within the Entrepreneurship course. This result aligns with previous studies that also found a weak or insignificant relationship between learning style and academic success. For example, Sulaiman et al. (2025) concluded that learning style was not the primary factor determining mastery of statistics material, implying that learning success depends on factors other than VAK learning tendencies. In the context of entrepreneurship, which demands higher-order cognitive domains (application, analysis, creation), teaching effectiveness may rely more on *methods* that encourage active engagement rather than *suitability* of the learning style.

3. Partial Influence of Learning Interest (X2) on Cognitive Ability (Y)

Testing the influence of Learning Interest (X2) on Cognitive Ability (Y) was conducted using Simple Regression analysis.

Table 4. Model Summary and Correlation

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Change Statistics**	**R Square Change**	**F Change**	**df1**	**df2**	**Sig. F Change**
1	0,720	0,518	0,513	11,864	0,518	98,966	1	92	0,000	

1. Correlation Value (R): A value of 0.720 indicates a strong and positive relationship between Learning Interest and Cognitive Ability.
2. Coefficient of Determination (R2): A value of 0.518. This means that 51.8% of the variation occurring in Cognitive Ability can be explained by the Learning Interest variable (X2). The remainder (48.2%) is explained by other factors outside of this model.

Table 5. Anova

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	**Sig.**
1	Regression	13930,158	1	13930,158	98,966	**<,001[b]**
	Residual	12949,586	92	140,756		
	Total	26879,745	93			
a. Dependent Variable: Cognitive Ability _Y						
b. Predictors: (Constant), Learning Interest X2						

The results of the ANOVA test show that the variable Learning Interest (X2) significantly influences the Level of Thinking Ability (Y) of students. The very large calculated F value (98.966) also strengthens the conclusion that the influence of the predictor variable (Learning Interest) is very strong in explaining variations in the dependent variable (Level of Thinking Ability).

3.2. Significance Test (t-test)

The t-test was used to determine whether Learning Interest significantly influences Cognitive Ability.

Table 6. Regression and t-test Results (Learning Interest)

Model	**Unstandardized Coefficients**	**Standardized Coefficients**	**T**	**Sig.**	**Collinearity Statistics**	**Tolerance**	**VIF**
	B	**Std. Error**	**Beta**				
1	(Constant)	23,104	8,899		2,596	0,011	
	Learning Interest _X2	4,501	0,452	0,720	9,948	0,000	1,000

1. The significance value (Sig.) for Learning Interest is 0.000. Since 0.000 is less than 0.05 (Sig.<0.05), Learning Interest (X2) has a positive and significant partial influence on Cognitive Ability (Y).
2. The regression coefficient (B) for Learning Interest is positive (4.501). This confirms a direct relationship: the higher the students' Learning Interest, the higher their Cognitive Ability.

Simple Regression Equation:
Y=23.104+4.501X

This finding is significant because Learning Interest proved to be a very strong predictor (contributing 51.8%) of Cognitive Ability. This finding is consistent with previous literature (Sudarsono & Sulasmi, 2023; Ningrum et al., 2023) showing that high interest stimulates deeper cognitive processing. High interest facilitates key dimensions of interest (such as enjoyment, attention, and participation), which directly encourage students to engage in higher-order thinking (analysis, evaluation, and creation) that are essential in Entrepreneurship courses. In other words, in entrepreneurship courses, "desire to learn" is far more important than "preferred learning style" in determining cognitive achievement. This provides a strong recommendation for developing learning strategies that focus on student engagement and emotional relevance.

DISCUSSION

This section presents an in-depth analysis of the statistical findings obtained, interpreting the regression coefficients and significance, and comparing them with established theories and previous research. The discussion focuses on two main questions: the influence of Learning Style (X1) and Learning Interest (X2) on the Cognitive Ability (Y) of Entrepreneurship course students.

1. The Influence of Learning Style (Visual, Auditory, Kinesthetic) on Cognitive Ability

The results of the One-Way ANOVA test (Table 3) indicate that the obtained significance value (Sig.) is 0.503. Since this value is considerably greater than the critical threshold (alpha = 0.05), it is concluded that there is no significant difference in the average Cognitive Ability of students grouped based on their Learning Style (Visual, Auditory, or Kinesthetic).

This finding aligns with previous research that shows contradictory results regarding the consistency of Learning Style's influence on cognitive outcomes, such as those found by Sulaiman et al. (2025), Yenni et al. (2025), and Winalda (2022). Winalda (2022) specifically concluded that no significant correlation exists, indicating that matching learning styles is not the sole main determinant of cognitive learning outcomes.

In the context of the Entrepreneurship course, which is based on the Revised Bloom's Taxonomy (Anderson & Krathwohl, 2001) and targets Higher Order Cognitive Skills (Analysis, Evaluation, and Creation), this finding is reinforced by the following assumptions:

The learning process, which demands practical application and the creation of business ideas (C6), is inherently multimodal and complex. High-level cognitive skills are influenced more by the quality of tasks and challenges (Higher Order Thinking Skills - HOTS) than by mere preference for information input channels (VAK). This result suggests that, in an effective teaching environment, the partial impact of a specific learning style is reduced. This strengthens the argument that in HOTS instruction, the level of engagement and cognitive complexity is more dominant.

2. The Partial Influence of Learning Interest on Cognitive Ability

In contrast to the Learning Style variable, the results of the Simple Regression analysis demonstrate that Learning Interest (X2) has a very strong and significant influence on Cognitive Ability (Y).

a. Strength of Relationship and Coefficient of Determination (R^2)

The correlation coefficient value (R = 0.720) indicates a strong and positive relationship. The Coefficient of Determination (R^2 = 0.518) means that 51.8% of the variance observed in students' Cognitive Ability is explained by the Learning Interest variable. This confirms the dominant role of Learning Interest in determining cognitive achievement.

b. Significance and Direction of Influence (t-test)

The t-test results (Table 5) show a significance value (Sig. = 0.000), which statistically confirms that Learning Interest (X2) has a positive and significant partial influence on Cognitive Ability (Y). This finding is strongly consistent with prior research that has consistently proven that interest is a powerful predictor of learning outcomes. Renninger and Hidi (2002) highlight the close link between interest and cognitive capacity, while Hendrawijaya (2022), Febriyanti (2018), Rahmayani et al. (2024), and Ningrum et al. (2023) found a positive and significant effect of Learning Interest, even in mediating the improvement of critical thinking skills.

Theoretically, high interest triggers: Cognitive Reinforcement: Interest allocates attention and focus to information, which is essential for processing information and achieving high-level cognitive mastery (C4-C6). Increased Engagement: Interest motivates participation and persistence (Sudarsono & Sulasmi, 2023), which is highly necessary for complex tasks in Entrepreneurship. The regression equation (Y = 23.104 + 4.501X2) also confirms the direct relationship: the higher the students' Learning Interest, the higher their Cognitive Ability.

3. Implications and Research Originality

a) Implications for Cognitive Enhancement

Based on the finding that Learning Interest is the dominant variable (R^2 = 51.8%), intervention strategies to address low cognitive ability (initial data: 78.5% of students failed the pre-test) must be directed toward enhancing Interest and the Relevance of the material, rather than focusing on the diversification of VAK Learning Styles.

2) Originality and the Wetlands Context

This research provides originality through the first empirical confirmation of the relationship between Learning Style and Interest on the Cognitive Ability of Entrepreneurship students within the unique context of the FKIP ULM Wetlands Environment. The results of a One-Way ANOVA analysis showed no significant difference in mean Cognitive Ability (as measured by Entrepreneurship course scores) between students with Visual, Auditory, and Kinesthetic Learning Styles (VAK). This finding is supported by a significance value of 0.503 ($p > 0.05$).

This finding challenges the long-held paradigm in education, which often emphasizes the importance of tailoring instruction to individual learning style preferences (Deporter & Hernacki, 2009; Thi Thu Ha, 2021). This research aligns with the findings of Winalda & Ristiono (2022) and Sheromova et al. (2020), which stated that the effectiveness of VAK learning styles on cognitive outcomes, particularly in higher-level domains (analysis and evaluation), is often minimal or insignificant. This indicates that to achieve complex cognitive abilities in the 21st century (Sumual & Maramis, 2022), the quality of instructional design, cognitive stimulation, and intrinsic motivation are far more crucial than simply the method of completing the material (audio, visual, physical).

Simple Regression Analysis demonstrated that Learning Interest has a highly significant and dominant influence on Cognitive Ability (Sig. $0.000 < 0.05$). With a coefficient of determination (R^2) of 0.518, Learning Interest explains 51.8% of the variation in students' cognitive abilities.

This strong dominance of Learning Interest reaffirms the Situational and Individual Interest Theory (Renninger & Hidi, 2002), which emphasizes interest, relevance, and curiosity as the primary drivers of deep cognitive processes. High interest triggers attentional focus (Slameto, 2010), increases active engagement in learning (Hendrawijaya, 2022), and encourages students to process information at higher taxonomic levels (Anderson & Krathwohl, 2001; Sudarsono & Sulasmi, 2023). These results empirically support the importance of creating contextually engaging learning environments (Rahman et al., 2023) rather than simply focusing on rigid learning style differentiation.

The results offer a strategic recommendation: the development of learning models should focus on triggering interest through local relevance (e.g., case studies of businesses based on wetland potential) to ensure the attainment of high-level cognitive domains.

CONCLUSION

This study examined the influence of learning style and learning interest on the cognitive ability of students in the Entrepreneurship Course within the specific context of the FKIP ULM Wetland Environment, directly addressing the urgency of improving low baseline cognitive skills in this subject. The findings conclusively demonstrate that the diversity in students' preferred learning styles (Visual, Auditory, Kinesthetic) does not significantly differentiate their cognitive ability (Sig. 0.503>0.05). This suggests that merely tailoring instruction to specific VAK preferences may not be the most effective strategy for boosting higher-order thinking in this applied subject. Conversely, learning interest emerged as the most dominant and critical factor, exhibiting a strong positive correlation (R=0.720) and accounting for over half of the variance in students' cognitive achievement (R^2 =0.518). This confirms that the student's level of engagement, attention, and perceived relevance is paramount: when students are genuinely interested, their cognitive performance, particularly in complex domains like entrepreneurship, dramatically improves (Sig. 0.000<0.05). Therefore, the essential conclusion for educational practice is that efforts to enhance teaching quality in this unique wetland environment must prioritize instructional methods that sustain and elevate student interest over strict adherence to learning style matching. Future research should focus on developing and testing specific context-based learning models that are designed to maximize student interest and emotional engagement within the wetland environment to empirically validate the translation of this finding into improved learning outcomes. The results of this study are highly bound to the specific context of the Entrepreneurship Course within the unique FKIP ULM Wetland Environment. Therefore, these findings may not be directly generalizable (extrapolated) to other subjects (such as pure science or humanities courses), different educational levels, or institutions located outside this unique wetland setting.

REFERENCES

Afwan, B., Vahlia, I., & Sholiha, S. (2022). Analisis kebutuhan pembelajaran kewirausahaan di era abad 21. *SNPPM-4 (Seminar Nasional Penelitian dan Pengabdian kepada Masyarakat)*, 0(0), 00–00.

Al-Khateeb, S. S., & Al-Zoubi, A. S. (2021). The effect of learning styles on students' academic achievement and critical thinking skills. *International Journal of Cognitive Research in Science, Engineering and Education*, 9(3), 45-56.

Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives* (Complete ed.). Longman.

Deporter, B., & Hernacki, M. (2009). *Quantum learning*. PT. Mizan Pustaka.

Febriyanti, K. (2018). Kontribusi minat belajar, lingkungan belajar, dan fasilitas belajar terhadap motivasi berprestasi dan dampaknya pada hasil belajar siswa SMP. *1–12*. https://doi.org/10.23917/jmp.v12i1.2972

Ghozali, I. (2021). *Aplikasi analisis multivariate dengan program IBM SPSS 26 edisi 10*. Badan Penerbit Universitas Diponegoro (BP-UNDIP).

Hendrawijaya. (2022). Effects of mediation of learning interest in improving student learning achievement. *International Journal of Instruction*, 15(1). https://doi.org/10.29333/iji.2022.15149a

Lastri. (2020). Analysis of factors that influence student learning achievement. *Journal of Educational Sciences*, 4(3), 679-693. https://doi.org/10.31258/jes.4.3.p.679-693

Lewy, A., Sivan, A., & Birenbaum, M. (Eds.). (2009). *Assessment and evaluation in education*. Sense Publishers.

Ningrum, M., Karsono, K., & Adi, F. P. (2023). Hubungan antara minat belajar dengan kemampuan berpikir kritis matematis peserta didik kelas V Sekolah Dasar. *Didaktika Dwija Indria*, 11(4). https://doi.org/10.20961/ddi.v11i4.77153

Novianti, W. (2023). Relationship between learning interest and cognitive ability with learning outcomes of Al-Qur'an and Hadith at MtsN Binjai. *International Journal of Cultural and Social Science*, 4(2), 121-127. https://doi.org/10.53806/ijcss.v4i2.833

Pujiningsih, S. (2007). Kecenderungan gaya belajar mahasiswa akuntansi FE-UM. *Penelitian DIPA*. Lemlit Universitas Negeri Malang.

Rahman, T. A., Moonti, U., Hafid, R., Mahmud, M., Ardiansyah, A., & Sudirman, S. (2023). Pengaruh pembelajaran kewirausahaan terhadap minat menjadi wirausahawan pada mahasiswa program studi S1 Pendidikan Ekonomi Angkatan 2018. *Journal of Economic and Business Education (JEBE)*, 1(2). https://doi.org/10.37479/jebe.v1i2.19628

Rahmayani, N. I., Nirmala, S. B., Safitri, A., Meifiani, N. I., & Qudsiyah, K. (2024). The impact of learning interest on students' critical thinking abilities and mathematics learning outcomes at SMPN 4 Pacitan. *Proceeding International Conference on Learning and Education*, Vol. 4 (2025).

Renninger, K. A., & Hidi, S. (2002). Student interest and achievement: Developmental issues raised by a case study. In J. E. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 245-267). Academic Press. https://doi.org/10.1016/B978-012750053-9/50009-7

Sheromova, T. S., Khuziakhmetov, A. N., Kazinets, V. A., Sizova, Z. M., Buslaev, S. I., & Borodianskaia, E. A. (2020). Learning styles and development of cognitive skills in mathematics learning. *EURASIA Journal of Mathematics, Science and Technology Education*, 16(11), em1895. https://doi.org/10.29333/ejmste/8538

Slameto. (2010). *Belajar dan faktor-faktor yang memengaruhinya* (Edisi Revisi). Rineka Cipta.

Santoso, F. S. (2020). Lingkungan keluarga sebagai awal pengembangan kewirausahaan Islam. *Nuansa Akademik: Jurnal Pembangunan Masyarakat*, 5(1), 13-22. https://doi.org/10.47200/jnajpm.v5i1.418

Sudarsono, B., & Sulasmi, R. (2023). Peran minat belajar dan lingkungan akademik dalam membentuk kemampuan kognitif mahasiswa. *Jurnal Pendidikan dan Pembelajaran*, 7(1), 120-135.

Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.

Sulaiman, R. P., Sagala, P. N., Tarigan, S. A., Hutapea, Y., Siregar, D. A., & Nainggolan, G. L. (2025). Hubungan gaya belajar terhadap kemampuan siswa dalam menyelesaikan soal statistika. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 09(02), 512–518. https://doi.org/10.31004/cendekia.v9i2.3977

Sumual, J. I., & Maramis, J. B. (2022). Urgensi entrepreneurship education bagi mahasiswa perguruan tinggi. *Jurnal Pembangunan Ekonomi dan Keuangan Daerah*, 23(1), 1-12.

Sutrisno, W., & Cokro, S. (2018). Analisis pengaruh edupreneurship dan mentoring terhadap peningkatan daya saing lulusan perguruan tinggi. *Research and Development Journal of Education*, 5(1), 114-124. https://doi.org/10.30998/rdje.v5i1.3392

Thi Thu Ha. (2021). Effects of learning style on students' achievement. *American Linguist Association*.

Winalda, E., & Ristiono, R. (2022). The relationship between learning styles and cognitive competencies in biology learning. *Thinking Skills and Creativity Journal*, 5(1), 12–16. https://doi.org/10.23887/tscj.v5i1.37933

Yenni, Juliana, A. Z., & Salsabila, A. F. (2025). Hubungan antara gaya belajar siswa dengan cara menyelesaikan soal matematika SMA. *Indo-MathEdu Intellectuals Journal*, 988-995.