



The Effect of Digital Literacy and the Use of Educational Social Media on Economics Learning Motivation of Grade XI Students at State Senior High School 11 Jambi City

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Abstract

This study aims to analyze the influence of digital literacy and the use of educational social media on students' learning motivation at SMP Negeri 3 Kendari. The research employed a quantitative approach using a survey method. The population consisted of all students, with the sample determined using a proportional sampling technique. Data were collected through questionnaires and analyzed using multiple linear regression. The results show that digital literacy has a positive and significant effect on students' learning motivation. Meanwhile, the use of educational social media has a positive but not statistically significant effect on learning motivation. Simultaneously, digital literacy and the use of educational social media have a significant effect on students' learning motivation, with a coefficient of determination (R^2) of 0.256, indicating that 25.6% of the variation in learning motivation is explained by both variables. These findings suggest that improving students' digital literacy is essential in enhancing their learning motivation. Although the use of educational social media contributes positively, its role is not yet optimal and requires more effective integration into the learning process.

Keywords: Digital Literacy; Educational Social Media; Learning Motivation; Students.



1. Introduction

The development of information and communication technology in the era of the Industrial Revolution 4.0 has brought significant changes to various aspects of life, including education. Digital transformation has shifted the learning paradigm from conventional methods toward technology-based digital learning. A report by UNESCO (2023) noted that more than 1.6 billion students worldwide were affected by the COVID-19 pandemic, which accelerated the implementation of online learning. However, this transformation has also introduced new challenges in the learning process, one of which is the decline in students' learning motivation. In Indonesia, the Rapid Need Assessment conducted by Save the Children (2020) revealed that approximately 42% of parents reported a decrease in their children's learning motivation during home-based learning. Learning motivation is one of the key factors that determine the success of the learning process. Ryan and Deci (2020) explain that motivation is an internal drive that activates, directs, and sustains an individual's learning behavior.

Students with high learning motivation tend to be more active, persistent, and enthusiastic in participating in learning activities, whereas low motivation can lead to reduced engagement and lower academic achievement. In the context of Economics subjects at the senior high school (SMA) level, learning motivation plays a crucial role because economic materials are conceptual in nature and require analytical thinking skills as well as the ability to relate concepts to real-life economic phenomena. Without strong learning motivation, students may experience difficulties in understanding abstract economic concepts. Initial observations conducted among Grade XI students at SMA Negeri 11 Jambi City indicate that students' learning motivation is relatively good but not evenly distributed. Some students demonstrate curiosity and clear learning goals; however, interest in classroom learning activities and the desire to achieve academic success are not equally shared among all students. The results of the initial observation are presented in Figure 1.

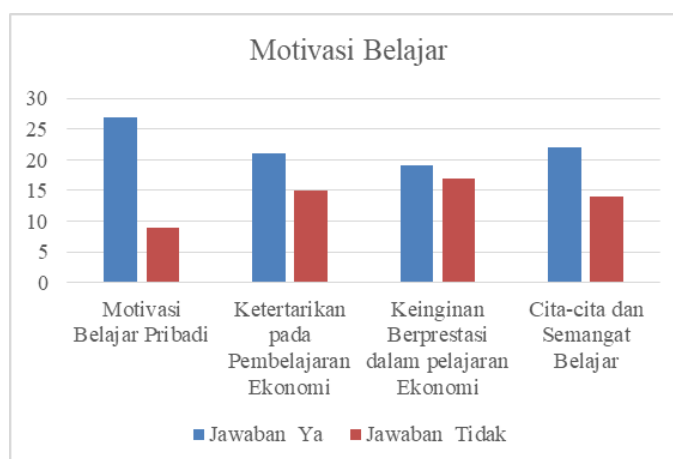


Figure 1. Initial Observation of Learning Motivation

Source: Primary Data (2025)

Based on Figure 1, most students demonstrate intrinsic motivation, such as curiosity and expectations for the future. However, indicators related to interest in classroom learning activities and a strong desire to achieve are not evenly distributed among students. Along with the advancement of digital technology, improving students' learning motivation is also associated with their level of digital literacy. Digital literacy refers to an individual's ability to access, understand, evaluate, and utilize information through digital media effectively and responsibly (Gilster, 2022). Students with good digital literacy tend



to be more capable of utilizing various digital learning resources, which can enhance independent learning and learning motivation. Initial observations at SMA Negeri 11 Jambi City show that students' digital literacy is at a moderate level. Most students are able to search for information on the internet and distinguish between reliable and unreliable information. However, the use of digital technology as a consistent learning tool is still limited. The results of the initial observation are presented in Figure 2.

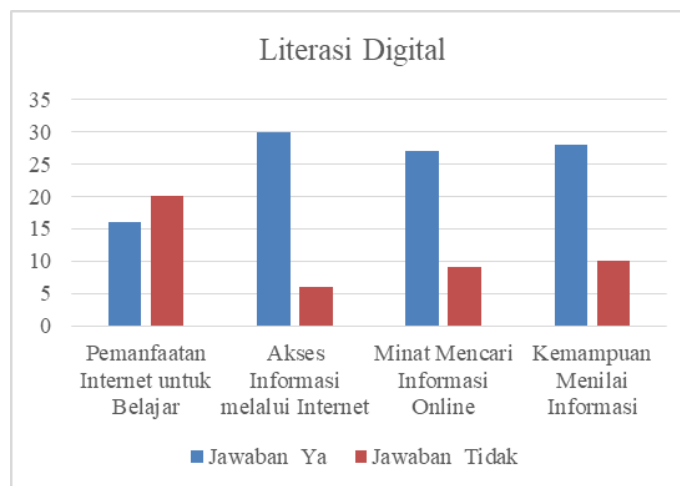


Figure 2. Initial Observation of Digital Literacy

Source: Primary Data (2025)

Figure 2 shows that students' basic digital literacy skills are relatively good, particularly in information searching and evaluation. However, the routine use of digital technology as a learning medium remains low. In addition to digital literacy, the use of social media is another factor that may influence students' learning motivation. Social media is no longer used solely for communication and entertainment but can also serve as a learning medium that supports the educational process. According to Social Cognitive Theory, social interaction and observational learning in digital environments can influence individual learning behavior (Schunk & DiBenedetto, 2020). However, without proper management, social media tends to be used more for entertainment than for educational purposes.

Initial observations at SMA Negeri 11 Jambi City show that students have high access to social media; however, its use as a learning tool is still not optimal. The results of the initial observation are presented in Figure 3.

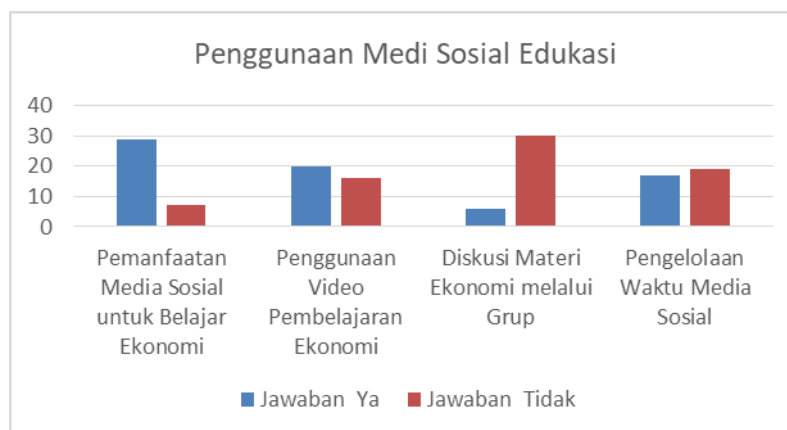


Figure 3. Initial Observation of Educational Social Media Use

Source: Primary Data (2025)



Based on Figure 3, most students have access to social media and show interest in using it for learning. However, their actual engagement in learning activities through social media remains low, as it is more frequently used for entertainment. Previous studies have shown that digital literacy and social media use are related to students' learning motivation. However, most of these studies focus on learning outcomes or general subjects and have not specifically examined learning motivation in Economics at the senior high school level. Therefore, this study offers novelty by simultaneously examining the influence of digital literacy and the use of educational social media on students' motivation to learn Economics. Based on the above discussion, this study aims to analyze the effect of digital literacy on students' motivation to learn Economics, the effect of educational social media use on learning motivation, and the simultaneous effect of both variables on the learning motivation of Grade XI students at SMA Negeri 11 Jambi City.

2. Methodology

This study employed a quantitative approach using a survey method aimed at examining the relationships among research variables through statistical data analysis (Sugiyono, 2023). The research was conducted among Grade XI students at SMA Negeri 11 Jambi City. The data were collected through the distribution of closed-ended questionnaires using a five-point Likert scale. The variables in this study consisted of digital literacy (X1), the use of educational social media (X2), and learning motivation (Y). Digital literacy refers to students' ability to access, evaluate, and utilize digital information effectively. The use of educational social media refers to the extent to which students utilize social media platforms as learning tools, while learning motivation reflects students' internal drive to engage in learning activities.

The data analysis technique used in this study was multiple linear regression with the assistance of SPSS version 26. Hypothesis testing was conducted using the t-test to determine the partial effect of each independent variable and the F-test to determine the simultaneous effect of all independent variables on the dependent variable. In addition, the coefficient of determination (R^2) was used to measure the contribution of independent variables to the dependent variable.

3. Results and Discussion

3.1 Results

3.1.1 Descriptive Analysis of Research Variables

Table 1. Descriptive Statistics of Research Variables

Variable	Mean	TCR	Category
Digital Literacy	4.04	80.73%	Good
Educational Social Media	3.81	76.2%	Good
Learning Motivation	4.055	81.1%	Good

Source: Processed Data (2026)

The descriptive results indicate that students' digital literacy, use of educational social media, and learning motivation are all categorized as good.



3.1.2 Classical Assumption Tests

Table 2. Normality Test (Kolmogorov-Smirnov)

N	Test Statistic	Asymp. Sig. (2-tailed)
105	0.084	0.063

Source: Processed Data using IBM SPSS Statistics 26 (2026)

The significance value of 0.063 (> 0.05) indicates that the residual data are normally distributed. Thus, the regression model meets the normality assumption.

3.1.3 Linearity Test

Table 3. Linearity Test

Variable Relationship	F Linearity	Sig. Linearity	Sig. Deviation	Conclusion
Digital Literacy → Learning Motivation	28.801	0.000	0.793	Linear
Educational Social Media → Learning Motivation	3.843	0.300	0.615	Linear

Source: Processed Data (2026)

Both relationships show deviation significance values greater than 0.05, indicating linear relationships.

3.1.4 Multicollinearity Test

Table 4. Multicollinearity Test

Variable	Tolerance	VIF
Digital Literacy	0.616	1.622
Educational Social Media	0.616	1.622

Source: Processed Data (2026)

Tolerance values above 0.10 and VIF values below 10 indicate no multicollinearity.

3.1.5 Heteroscedasticity Test

Table 5. Heteroscedasticity Test

Variable	Sig.
Digital Literacy	0.780
Educational Social Media	0.134

Source: Processed Data (2026)

All significance values are greater than 0.05, indicating no heteroscedasticity.

3.1.6 Hypothesis Testing

Table 6. Partial Test Results

Variable	t-value	Sig.
Digital Literacy	4.982	0.000
Educational Social Media	-1.931	0.056

Source: Processed Data (2026)

Digital literacy has a positive and significant effect on learning motivation. Meanwhile, educational social media does not show a significant effect.



3.1.7 Simultaneous Test (F-test)

Table 7. Simultaneous Test Results

F-value	Sig.	R ²
15.473	0.000	0.256

Source: Processed Data (2026)

The results indicate that digital literacy and educational social media simultaneously have a significant effect on learning motivation. The R² value of 0.256 shows that 25.6% of the variation in learning motivation is explained by both variables.

3.2 Discussion

The findings indicate that digital literacy has a positive and significant effect on students' learning motivation. This suggests that students with better digital literacy skills tend to have higher motivation in learning. Digital literacy enables students to access, understand, evaluate, and use information effectively through digital media. In the learning context, this ability helps students obtain additional learning resources such as articles, videos, and other online materials. This result is consistent with Self-Determination Theory, which states that motivation increases when individuals experience competence and autonomy in learning. Students with good digital literacy feel more capable and independent, which contributes to higher learning motivation.

In contrast, the results show that educational social media does not have a significant effect on learning motivation. This indicates that the use of social media for educational purposes has not been optimal. Although social media has the potential to support learning through interaction and information sharing, in practice, students tend to use it more for entertainment and social activities rather than academic purposes. This reduces its impact on learning motivation. In addition, social media can create distractions, such as notifications and non-educational content, which may interfere with students' focus during learning.

Furthermore, the simultaneous test results show that digital literacy and educational social media together significantly influence learning motivation. However, the coefficient of determination (R² = 0.256) indicates that a large proportion (74.4%) of learning motivation is influenced by other factors, such as teaching methods, learning environment, student interest, family support, and psychological conditions. This finding aligns with Expectancy-Value Theory, which explains that motivation is influenced by students' beliefs about their success and the value they assign to learning activities.

4. Conclusion

Based on the results of the study, it can be concluded that digital literacy has a positive and significant effect on students' learning motivation in economics among Grade XI students at SMA Negeri 11 Kota Jambi. This indicates that students' ability to access, understand, and utilize digital information contributes to increasing their enthusiasm and engagement in the learning process. Meanwhile, the use of educational social media does not have a significant effect on learning motivation, as students tend to use social media more for entertainment rather than as a learning tool.

However, simultaneously, digital literacy and educational social media have a significant effect on learning motivation, with a contribution of 25.6%, while the remaining proportion is influenced by other factors outside this study. Therefore, schools and teachers need to improve students' digital literacy and guide the use of social media in a more educational direction to support the enhancement of students' learning motivation.



References

- Al-Rahmi, W., Yahaya, N., Alturki, U., Aldraiweesh, A., & Almutairy, S. (2022). Social media use in higher education: Building a structural equation model for student satisfaction and learning outcomes. *Education and Information Technologies*, 27(3), 345–360.
- Eccles, J. S., & Wigfield, A. (2020). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 71, 1–25.
- Fitriani. (2021). The effect of digital literacy on students' learning motivation. *Jurnal Pendidikan*.
- Gilster, P. (2017). *Digital literacy*. New York: Wiley.
- Hawi, N., & Samaha, M. (2016). The relations among social media addiction, self-esteem, and academic performance. *Computers in Human Behavior*, 64, 286–293.
- Liu, D., Kirschner, P., & Karpinski, A. (2017). A meta-analysis of the relationship between academic performance and social network site use. *Computers in Human Behavior*, 71, 65–76.
- Rozgonjuk, D., Sindermann, C., Elhai, J., & Montag, C. (2020). Fear of missing out and social media use: A systematic review. *Addictive Behaviors*, 102, 106–115.
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective. *Contemporary Educational Psychology*, 61, 101860.
- Save the Children. (2020). *Rapid needs assessment: The impact of COVID-19 on children's education in Indonesia*. Jakarta: Save the Children Indonesia.
- Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60, 101832.
- Sugiyono. (2023). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.
- UNESCO. (2023). *Global education monitoring report 2023: Technology in education*. Paris: UNESCO.