

The Influence of Digital Literacy on University Students' Learning Motivation

Kartika Tiara Syarifuddin¹

¹ Universitas Pendidikan Muhammadiyah Sorong 1; kartikatiarasarifuddin@unimudasorong.ac.id

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ABSTRACT

This study investigates the influence of digital literacy on students' learning motivation in higher education. The rapid development of technology has changed the way students access information and participate in learning activities. The study used a quantitative survey method involving 120 university students. The findings indicate that digital literacy significantly influences students' motivation to learn. Students with strong digital skills tend to be more active, independent, and creative in accessing learning resources..

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Corresponding Author:

Kartika Tiara Syarifuddin
Affiliation 1; kartikatiarasarifuddin@unimudasorong.ac.id

1. INTRODUCTION

Digital literacy is an essential competence in the twenty-first century. Students are required to use digital technology effectively for academic purposes. The rapid development of information and communication technology has transformed the educational landscape, particularly in higher education. Learning activities are no longer limited to traditional classrooms because students can access information, communicate, and collaborate through various digital platforms. As a result, digital literacy has become one of the most important skills needed by university students to succeed academically and professionally.

Digital literacy refers not only to the ability to operate technological devices but also to the capacity to access, evaluate, analyze, and utilize information critically and responsibly. According to modern educational perspectives, students who possess strong digital literacy skills are more capable of adapting to technological changes and solving academic problems creatively. They are also able to search for reliable information sources, participate in online discussions, and use digital tools to support independent learning.

In the context of higher education, digital literacy significantly influences students' motivation to learn. Students who are familiar with digital learning environments tend to be more active and engaged in classroom activities. They can access online journals, electronic books, educational videos, and interactive learning applications that enrich their learning experiences. Furthermore, digital technology enables students to learn flexibly because they can study anytime and anywhere through internet-based platforms.

However, despite the increasing use of technology in education, many students still experience difficulties in using digital resources effectively. Some students are only able to use technology for entertainment and social media rather than for educational purposes. Others face challenges related to evaluating information credibility, managing online learning activities, and maintaining learning motivation in digital environments.

The integration of technology into education also requires educators to design innovative and engaging learning experiences. Teachers and lecturers are expected to guide students in using digital tools responsibly while encouraging critical thinking and creativity. Therefore, improving digital literacy among students has become an important priority for educational institutions.

Several previous studies have shown that digital literacy contributes positively to students' academic achievement, self-confidence, and independent learning. Students with strong digital competencies are more motivated to participate in online learning activities and demonstrate better learning performance. They are also more confident in completing assignments and collaborating with peers through digital platforms.

Based on these conditions, this study aims to investigate the influence of digital literacy on university students' learning motivation. The study is expected to provide insights into the importance of digital literacy in supporting effective learning processes in higher education..

2. METHODS

This study employed a quantitative research approach using a survey method to investigate the influence of digital literacy on university students' learning motivation. A quantitative approach was considered appropriate because the study aimed to measure the relationship between variables objectively through statistical analysis.

The research was conducted at several universities in Sorong, Papua Barat, involving undergraduate students from different academic programs. The participants of the study consisted of 120 students selected using purposive sampling techniques. The participants were chosen based on specific criteria, namely active university students who frequently used digital technology in learning activities.

The main variables in this study were digital literacy as the independent variable and learning motivation as the dependent variable. Digital literacy refers to students' ability to access, evaluate, utilize, and communicate information using digital technology effectively and responsibly. Meanwhile, learning motivation refers to students' internal and external encouragement to participate actively in learning activities and achieve academic goals.

Data collection was conducted using questionnaires distributed through online forms. The digital literacy questionnaire included indicators such as information searching skills, communication skills, critical evaluation of digital information, and the ability to use digital learning platforms. The learning motivation questionnaire consisted of indicators related to learning enthusiasm, participation in classroom activities, independent learning behavior, and persistence in completing academic tasks.

Before the questionnaires were distributed to participants, the instruments were tested for validity and reliability. Validity testing was conducted using product-moment correlation analysis, while reliability testing used Cronbach's Alpha formula. The results indicated that all questionnaire items were valid and reliable for data collection.

The collected data were analyzed using descriptive and inferential statistical techniques. Descriptive statistics were used to describe students' levels of digital literacy and learning motivation. Inferential

statistical analysis was conducted using simple linear regression to determine the influence of digital literacy on students' learning motivation.

The research procedures included several stages. First, the researcher prepared research instruments and obtained permission from the university. Second, questionnaires were distributed to participants through online platforms. Third, the collected data were processed and analyzed using statistical software. Finally, the findings were interpreted to draw conclusions regarding the relationship between digital literacy and learning motivation.

To ensure the credibility of the findings, the researcher maintained confidentiality and anonymity of participants' personal information. Participation in the study was voluntary, and students were informed about the purpose of the research before completing the questionnaires.

3. FINDINGS AND DISCUSSION

The findings of this study indicate that digital literacy has a significant positive influence on university students' learning motivation. Based on the results of the questionnaires distributed to 120 students, most participants demonstrated moderate to high levels of digital literacy. Students were generally familiar with the use of digital technology for accessing learning materials, communicating with lecturers, participating in online discussions, and completing academic assignments.

The descriptive analysis revealed that students frequently used digital platforms such as learning management systems, online journals, video conferencing applications, and educational websites to support their learning activities. Most students agreed that digital technology helped them access information more quickly and efficiently. In addition, students stated that technology made learning activities more flexible because they could study anytime and anywhere.

The results of the regression analysis showed that digital literacy significantly influenced students' learning motivation. Students who possessed better digital literacy skills tended to have stronger motivation to participate in learning activities. They were more confident in using technology for academic purposes and demonstrated greater independence in completing assignments and searching for information.

3.1 Students' Digital Literacy Level

The findings showed that the majority of students had adequate abilities in operating digital devices and accessing online information. Students were able to use smartphones, laptops, and internet-based applications effectively in educational contexts. They also demonstrated the ability to communicate through digital platforms such as email, discussion forums, and online meeting applications.

However, some students still experienced difficulties in evaluating the credibility of online information sources. Several participants admitted that they often relied on information from social media without verifying its accuracy. This finding indicates that critical digital literacy skills still need to be improved among university students.

The study also found differences in digital literacy levels based on students' academic backgrounds and learning experiences. Students who frequently used technology in classroom learning activities showed higher levels of digital competence compared to students with limited exposure to digital learning environments.

3.2 The Influence of Digital Literacy on Learning Motivation

The statistical analysis demonstrated that digital literacy positively influenced students' learning motivation. Students with high digital literacy levels tended to be more enthusiastic and active in learning

activities. They showed greater curiosity in exploring learning materials and were more willing to participate in academic discussions.

Digital literacy also encouraged students to become independent learners. Students who were able to search for academic resources online developed stronger self-confidence in completing assignments and solving academic problems. Access to digital learning resources such as electronic books, online journals, and educational videos increased students' interest in learning.

Furthermore, students stated that digital technology made learning more interactive and engaging. Online learning platforms allowed students to communicate with lecturers and peers more easily. Multimedia learning materials, including videos, animations, and interactive quizzes, also helped students understand course materials more effectively

The findings support previous studies which indicate that digital literacy contributes positively to students' academic engagement and motivation. Students who are digitally literate are more prepared to adapt to modern learning environments and technological changes in education.

3.3 Challenges in Digital Learning

Although digital literacy provided many benefits, the study also identified several challenges experienced by students. One major challenge was unstable internet access, particularly for students living in remote areas. Limited internet connectivity sometimes disrupted online learning activities and reduced students' participation in virtual classes.

Another challenge involved distractions caused by digital technology. Some students admitted that they were easily distracted by social media, online games, and entertainment applications while studying. Excessive use of digital devices for non-academic purposes reduced students' concentration and learning effectiveness.

Additionally, some students experienced difficulties in managing time during online learning. Flexible learning environments sometimes caused students to procrastinate in completing assignments. Therefore, students need strong self-regulation skills to manage their learning activities effectively.

3.4 Educational Implications

The findings of this study have important implications for higher education institutions. Universities should strengthen digital literacy programs to improve students' technological competencies and critical thinking skills. Lecturers should also integrate digital learning strategies into classroom activities to encourage active and collaborative learning.

Educational institutions are encouraged to provide training programs that help students evaluate digital information critically and responsibly. In addition, universities should improve internet facilities and digital infrastructure to support effective online learning environments.

The integration of technology into education should not only focus on technical skills but also on ethical and responsible use of digital media. Students need guidance on how to use technology productively for academic and professional purposes.

Overall, the findings demonstrate that digital literacy plays an important role in enhancing students' learning motivation and supporting successful learning experiences in higher education..

Discussion: The discussion is highlighted through the title and subtitles of the section when needed

Authors should discuss the results and how they can be interpreted from the perspective of previous studies and of the working hypotheses. The findings and their implications should be discussed in the

broadest context possible. Future research directions may also be highlighted. The following components should be covered in the discussion: How do your results relate to the original question or objectives outlined in the Introduction section (what/how)? Do you provide interpretation scientifically for each of your results or findings presented (why)? Are your results consistent with what other investigators have reported (what else)? Or are there any differences?

4. CONCLUSION

This study concludes that digital literacy has a significant positive influence on university students' learning motivation. Students who possess strong digital literacy skills tend to be more active, independent, and enthusiastic in participating in learning activities. The ability to access, evaluate, and utilize digital information effectively enables students to explore learning resources more broadly and develop better academic engagement.

The findings revealed that digital technology supports flexible and interactive learning environments. Students benefited from the use of online learning platforms, digital libraries, educational videos, and communication applications that enhanced their learning experiences. In addition, digital literacy encouraged students to improve their problem-solving abilities, critical thinking skills, and self-confidence in completing academic tasks.

However, the study also identified several challenges related to digital learning, including unstable internet access, distractions from social media, and difficulties in managing learning time effectively. These challenges indicate that digital literacy should not only focus on technical abilities but also emphasize critical thinking, self-regulation, and responsible technology use.

Therefore, higher education institutions should strengthen digital literacy programs and provide adequate technological facilities to support effective learning processes. Lecturers are also encouraged to integrate innovative digital learning strategies that promote active participation and collaborative learning among students.

Future research is recommended to explore other factors influencing learning motivation in digital learning environments, such as self-efficacy, online learning readiness, and technological support systems. Further studies involving larger populations and different educational contexts may provide more comprehensive insights into the relationship between digital literacy and students' academic achievement.

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