

The Effect of Digital Literacy and Motivation on Teacher's Performance

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Abstract: This research aims to know and examine: (1) The effect of digital literacy on teacher performance; (2) The effect of motivation on teacher performance; and (3) The effect of digital literacy and motivation together on teacher performance. This research is quantitative research with an ex post facto approach. This research was conducted in public and private junior high schools in Ilir Timur 1 Palembang District with a population of 240 teachers, and a random sample of 150 people was taken. The data collection technique used a questionnaire. The validity test uses construction validity and content validity, while the reliability test uses Cronbach's Alpha. The analysis requirements test uses normality test, linearity test, multicollinearity test, and heteroscedasticity test, and the data is analyzed using multiple linear regression techniques. The results showed that digital literacy, motivation, and teacher performance can still be said to be sufficient, there is a positive and significant influence between digital literacy and motivation together on teacher performance by 65.2% while 34.8% is determined by other factors not mentioned in this study.

Keywords: Digital literacy, Motivation, Teacher's Performance.

A. Introduction

Integrating digital technology, often known as information and communication technology (ICT), into instructional activities and administrative planning is one way that instructors can work to boost effectiveness. This is significant given that the technological landscape of this century is rapidly evolving, particularly in the area of information and communication technology (ICT), where traditional industry, digital technology, and internet access have come together. This technology is supported by the availability of numerous devices, including cell phones, laptops, computers, and internet connections from a variety of suppliers. (Hidayatullah et al., 2018) from Merdeka University Malang mentioned in their article that the millennial generation has several traits including being very technologically savvy, making it very appropriate to employ digital media in learning activities.

Teachers must make use of recent advancements in digital technology to inspire students and use them to boost performance. ICT-enabled gadgets, such as cell phones, laptops, or PCs (Personal Computers) with simple internet connection, are currently available to practically all teachers and students. In Indonesia, there are almost 133% more cell phones than people, and 60% of people use smartphones to access the Internet, compared to 22% who use PCs, per study results posted on the websindo.com channel. 2019 (Websindo, 2019). Teachers can make use of this chance to develop lessons, access engaging learning materials, and include text, audio, and video into the learning process to keep things interesting and motivate students to learn. Additionally, teachers can create engaging animations or movies out of their lesson plans and share them with their students so that they can access them whenever they want. It is anticipated that creating and providing engaging teaching materials with high levels of instructor creativity will boost students' interest in learning.

The development of teacher competency now includes a significant amount of the usage of digital technology. The ability to use information and communication technology/digital devices for learning purposes is one of the pedagogical competencies of teachers, according to the Minister of National Education Regulation No. 16 of 2007. This is by Law No. 14 for Teachers and Lecturers from 2005, which mandates that teachers use ICT tools to plan instructional activities for pupils. Teachers must possess digital competence to employ digital technology, which includes knowledge of how to use digital devices like laptops, PCs, and smartphones as well as the ability to use supplemental software that helps teachers be more effective in creating high-quality lessons.

Teachers may not always welcome and make use of the use of digital technologies in the classroom. According to Cholikh, (2017) Indonesia's education system still employs the outdated method, which involves having pupils sit in class and listen to the teacher's lectures. The learning process is not as effective when students are bored during this type of instruction. A less-than-ideal learning environment will undoubtedly lead to subpar instruction. There are several reasons why some teacher groups still lack knowledge about, the adoption of, and usage of technology in their classrooms. Styaningrum & Paseleng, (2016) state that the age factor, where older teachers lose interest in learning new things, is a barrier to teachers embracing digital technology. Limited study time and a lack of confidence in using digital technologies for learning are other factors.

Making high-quality learning materials is one activity that may be done to inspire teaching staff to learn digital literacy. Cholikh, (2017) asserts that strengthening the learning process is the first step to ensuring quality learning. The use of technology, media, information, and communication in the teaching and learning process is part of this growth. This necessitates that teacher adapt the traditional learning method to

a contemporary one. The use of educational television as enrichment material to support the learning process or the use of audio-visual material as a fun learning method are two ways that information technology can be used in the educational process. Other ways include designing a program that can store a database of all the information available at the school, such as assessments, curriculum, educational management, or learning materials (Cholik, 2017).

In the realm of education, literacy is a popular subject. The rapid advancement of technology has an impact on literacy growth in the educational sector. The idea of literacy has experienced numerous changes. One of these advancements led to the creation of six different types of literacy, including digital literacy, financial literacy, cultural and civic literacy, and scientific literacy. In 1990, the concept of digital literacy first emerged. One of the digital literacy speakers is (Gilster, 1997) who defines digital literacy as the ability to understand and use information from various digital sources, therefore digital literacy does not only focus on reading but also requires critical thinking when assessing data gathered through digital media.

International experts from America, Europe, Australia, Asia, and Africa have conducted a significant amount of research on digital literacy. These people are Guy Merchant, Eszter Hargittai, David Bawden, Gloria E. Jacobs, Sonia Livingstone, and Gloria E. Jacobs (Mathar, 2014). According to a study by (Mathar, 2014), who has published 843 papers and roughly 661 articles about digital literacy, the development of digital literacy is happening relatively quickly day by day. There are several of them in English. To support the research findings, several specialists also contributed to the drafting of papers. This data demonstrates that digital literacy has its appeal and that professionals frequently work together to create studies on the topic.

Based on current facts, it can be claimed that digital literacy is a subject that specialists have extensively researched to ascertain the level of literacy of particular people, groups, and communities and how they interact with current technological advancements. The amount of study on digital literacy in Indonesia is still quite small. Because digital technology is developing so quickly in 2021 and is accessible to everyone at any time, digital education is currently the type of education that the Unitary State of the Republic of Indonesia's inhabitants most need, and for this development to continue, digital literacy is required.

In Indonesia, a large number of people also engage in indirect digital literacy practices due to the activity's simplicity and frequency of occurrence. One can practice digital literacy, for instance, by watching the news on TV, and one can learn it through watching movies and playing video games. It becomes fresh knowledge and information that he did not already have if a person understands how to analyze and process the content. The world is undergoing many changes,

particularly in the area of digital technology, where the internet is one of the technologies that is growing quickly. The quickest method or location to obtain information and conduct an information search is the internet. Since the internet is a social environment, information exchange is another function of it. There are numerous web tools available at the moment for information sharing. When it comes to aiding people, the Internet has several benefits. It cannot be disputed that the internet and digital technology play a significant role in our daily lives. Indonesian society will continue to lag behind technological advancements if it is unable to keep up with the rapid changes in technology. Because technology has permeated so many areas and industries, including education, it is impossible for people who do not comprehend it to operate and live.

Teachers play a crucial influence in raising the standard of education since they are active participants in the learning process. They must be driven and able to devise teaching and learning activities that inspire inventive and active student participation, offer plenty of chances for pupils to express their creativity, and foster a fun learning atmosphere. According to research by (Landa et al., 2021), teachers' use of digital literacy had an impact on their pupils' motivation to learn. According to (Iqbal, 2020), "The Influence of Digital Literacy Skills on the Professional Competence of PAI Teachers in State Vocational Schools in Parepare City," the professional competence of PAI teachers in State Vocational Schools in Parepare City is not at all above what expected in the very high or very competent category. This is probably because of how their work is impacted by their level of digital literacy.

According to studies, a person's performance might be positively impacted by having a strong sense of motivation at work. The most recent study (Riyadi & Mulyapradana, 2017), which examined the impact of job motivation on the performance of Radhatul Atfal instructors in Pekalongan City, demonstrates this. Researchers are interested in performing additional research on "The Influence of Digital Literacy and Motivation on the Performance of Middle School Teachers in Ilir Timur 1 District" based on the phenomena and issues that are raised.

B. Methods

Public and private junior high schools in Palembang's Ilir Timur 1 District will be the sites of this study. The study will be conducted from July 2022 to August 2023 during the odd semester of the academic year 2022/2023.

Ex post facto research refers to a study that studies events that have already occurred and then, using this information evaluates the circumstances that preceded the occurrence under study or discovers potential causes (Sugiyono, 2019). This study is also regarded as correlational research, which seeks to establish the influence or connection between one variable and others. Specifically, how the

performance of junior high school teachers in the Ilir Timur 1 District is impacted by their motivation and digital literacy.

The population in this study were all teachers, teaching at public and private junior high schools in Ilir Timur 1 sub-district in 2021. The sample is part of the population and characteristics (Sugiyono, 2013). This is also in line with the (Hasan, 2012) opinion The sample is a portion of the population that is expected to represent the population in the research. The sample must be representative, ie. The sample must be able to represent all characteristics of the population. The sample used in this research was 150 people.

The data collection techniques used in this research are:

1. Questionnaire

Questionnaires are used in this research to collect empirical information/data about the observed variables.

2. Documentation

Documentation is a recording of events in the form of images, writing, or monumental works (Sugiyono, 2013).

C. Results and Discussion

Table 1 Results of t-test analysis

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.010	.206		4.892	.000
	Literasi Digital	.143	.039	.195	3.674	.000
	Motivasi	.668	.050	.709	13.328	.000

1. The Effect of Digital Literacy on Teacher’s Performance

Digital literacy has a big impact on how well teachers perform. These findings provide credence to the hypothesized, speculative finding that digital literacy has a major impact on teacher effectiveness. According to calculations made using the regression equation from Table 1 (coefficient), teacher performance (Y) will increase by 1,010 score units if the digital literacy value (X₁) increases by 1 score unit, provided that it stays constant. The t value in Table 1 indicates whether there is a significant relationship between digital literacy (X₁) and teacher performance (Y). If t count > t table, then H₀ is rejected and H_a is accepted, or in other words, if there is a significant relationship between the digital literacy variable (X₁) and teacher performance (Y).

The teacher performance (Y) will rise by 1,010 score units if the digital literacy value (X_1) increases by 1 score unit, given that it stays constant, according to calculations using the regression equation from Table 1 (coefficient). The t value in Table 1 shows whether there is a significant correlation between teacher effectiveness (Y) and digital literacy (X_1). If the digital literacy variable (X_1) and teacher performance (Y) have a substantial association ($t_{count} > t_{table}$), then H_0 is rejected and H_a is approved.

A teacher's proficiency with technology will be reflected in how well he performs his primary responsibilities. This is demonstrated by the regression testing results, which show that when the count value is greater than the table value, H_0 is rejected, demonstrating that teacher digital literacy has a significant impact on junior high school teachers' performance in the Ilir Timur 1 District. According to (Nahdi & Jatisunda, 2020), who came to the same conclusion, children already have the fundamentals of digital literacy, including the ability to use the internet, search for and obtain information, and successfully use it.

According to Dharma, (2022), there is a link between digital literacy and teacher effectiveness in vocational high schools. Because it plays a significant part in enhancing a teacher's performance, digital literacy is an imperative requirement for teachers. If the teacher is proficient in digital literacy, this could imply that it will help the effective application of learning, which is accomplished through the instructor's performance in accomplishing educational objectives. According to this justification, several facets of digital literacy are stressed during the implementation of the study project in junior high schools in Palembang's Ilir Timur 1 Subdistrict. Nahdi & Jatisunda, (2020) this is required to meet common expectations for teacher performance.

2. The Influence of Motivation on Teacher Performance

This study demonstrates that teacher performance is significantly impacted by motivation. These findings are consistent with the concept that teacher performance is significantly influenced by motivation. The findings of this study demonstrate that optimal teacher performance can be achieved with high motivation. The teacher's performance (Y) will increase if the motivation value (X_2) increases by 1 point, given that the motivation value (X_2) remains constant, according to the findings of solving the regression equation by the instructions in Table 4.17 (coefficient). The t-count value in Table 4.17 demonstrates the importance of motivation (X_2) in influencing teacher performance (Y). There is a significant relationship between motivation (X_2) and teacher performance (Y) since the t value of motivation is significant at 0.000 ($p > t$, rejecting H_0 and accepting H_a).

In agreement with (Ristianey et al., 2021) viewpoint underlines the significance of work motivation for all teachers who want to enhance their work output. The second alternative hypothesis (Ha2), which states that motivation has a favorable and significant impact on teacher performance at the Kertapati District Public Middle School in Palembang, is accepted based on the research findings (Marliya et al., 2020) demonstrate that there is a positive and substantial association between teacher motivation and teacher performance in state junior high schools in the West Prabumulih area, which is consistent with Aprida's findings. The result of the hypothesis test shows that the probability value of 0.000 is less than the t value of 0.05. In addition, it can be said that Ha is acceptable because the count value is higher than the table value. This indicates that at Prabumulih Regency's State Middle Schools, teacher work motivation affects performance.

Fitria et al., (2020) revealed that there is a positive and significant influence between work motivation and the job performance of high school teachers in the Muara Padang area, which is consistent with Marphudok's research. However, a thorough examination was not done in this study. Researchers believe that these discrepancies result from the nature of the study's objectives and duration, as well as perhaps from sampling error. In keeping with the study findings of (Wahyuni et al., 2020) performance and motivation among teachers are significantly correlated. This indicates that the research's measure of teacher motivation complies with the eight research indicators.

According to research (Fauzyah, 2020), a relationship between work motivation and teacher effectiveness was discovered, and it is clear that this relationship affects how well teachers can teach. This indicates that raising work motivation for teachers can improve their performance. According to Robins in Munandar, low job motivation will also result in low performance. Likewise, if work motivation is high, performance will also be high. This study's findings support the idea that if teachers are motivated to work hard and alter their perspectives, attitudes, and conduct, their performance will increase. According to the study's findings, teacher performance is significantly impacted by motivation. As a result, teacher performance in junior high schools in the Ilir Timur 1 Palembang District will increase in proportion to how well and how highly motivated the teacher is, and vice versa, if motivation declines. For enhancing teacher effectiveness, motivation is a key performance metric.

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3. The Influence of Digital Literacy and Motivation on Teacher Performance

According to the research findings, digital literacy and motivation have a big impact on teachers' abilities. These findings are consistent with the proposed theory, which holds that teacher performance is significantly influenced by digital literacy and motivation. Use a 0.000 ($p > F_{table}$) threshold of significance. We can conclude that digital literacy and motivation both have an impact on teachers' performance. This demonstrates how motivation and digital literacy both have an impact on teachers' effectiveness.

The regular implementation of digital literacy practices based on the needs of educators, along with strong motivation, can enhance teachers' effectiveness. To attain the highest level of educational goals, digital literacy implementation and motivation must be strengthened. Only digital literacy and motivation are included in this study as factors affecting teachers' performance. Organizational culture, work discipline, teacher-leader relationships, work environment, and other factors that affect teacher effectiveness must also be considered.

The findings of this study are consistent with those of (Arlita et al., 2020), who found that teacher motivation significantly affects junior high school teachers' performance in the North Prabumulih District. (Srisiska et al., 2021) found that junior high school teachers' performance is significantly impacted by their job motivation in the North Wonosari Prabumulih District. The performance of BDR is significantly influenced by both teacher digital literacy and school principal motivation, according to (Slamet et al., 2021) research. The success of BDR will be achieved with motivation and digital literacy abilities.

According to the findings of this study's statistical analysis, instructor performance, and motivation fall into the "good" category. Thus, it may be claimed that great motivation is required to obtain good performance. This is demonstrated by the analysis test results based on the significance test of the motivation variable on the performance of junior high school teachers in the Ilir Timur 1 District, where the value of count is greater than t_{table} , then H_0 is rejected, indicating that motivation has a significant impact on the performance of junior high school teachers in both public and private schools across the nation District 1 of Ilir Timur. Digital literacy and teacher motivation both have a large impact on junior high school teachers' performance in the Ilir Timur 1 District. The ANOVA test results showed a F -number of 137,493 and a significance level of 0. As a result, performance will be attained if high motivation is combined with digital literacy abilities.

D. Conclusion

The following conclusions can be made based on the study of the data:

1. In junior high schools in the Ilir Timur 1 District, digital literacy partially has a significant favorable impact on teachers' performance, indicating the necessity for digital literacy skills to assist teachers' performance.
2. In junior high schools in the Ilir Timur 1 District, teacher performance is positively and significantly influenced by motivation. The performance of teachers can be enhanced with strong motivation.
3. In junior high schools across Ilir Timur District 1, digital literacy and motivation have a favorable and significant impact on teacher performance. Teacher performance would improve the stronger digital literacy is implemented and supported by strong motivation.

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