

**THE INFLUENCE OF DIGITAL LITERACY ON THE USE OF ONLINE TUTORING SYSTEMS
ACCORDING TO TECHNOLOGY ACCEPTANCE MODEL (TAM)**

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ABSTRACT

The grade of education in Indonesia is still in the "Medium" category and the low level of digital literacy indicates that the learning process in the classroom is not yet optimal. One form of effort that can be made to deal with this problem is by following the online tutoring system in the hope of improving their learning abilities so that they can improve results according to expectations. The purpose of this study is to determine the factors that can influence the use of an online tutoring system based on the Technology Acceptance Model (TAM). Some researchers try to add external variables with the aim of developing TAM theory. This research adds digital literacy factors that focus on students as new research. The population of this research was 9,042 senior high school students in Surakarta and 270 students were used as samples. This study used a quantitative method. Research data was collected by spreading questionnaires online with GForm. The data collection technique used was non-probability sampling with a purposive sampling approach. Data analysis was carried out using hierarchical regression analysis and the Sobel test. The research results show that perceived usefulness, ease of use, and digital literacy have a positive influence on the use of online tutoring systems. Digital literacy has also been proven to have an influence on perceptions of usefulness and ease of use. Then perceived usefulness and ease of use were also attested to mediate the connection between digital literacy and the use of online tutoring systems.

Keywords: Digital Literacy, Online Tutoring System, TAM

ABSTRAK

Capaian kualitas pendidikan di Indonesia yang masih dalam kategori "Sedang" dan rendahnya tingkat literasi digital menggambarkan adanya proses pembelajaran di ruang kelas yang belum maksimal. Salah satu yang bisa diusahakan untuk menangani permasalahan tersebut yaitu dengan mengikuti sistem bimbingan belajar online dengan harapan dapat meng-upgrade kemampuan belajarnya sehingga dapat meningkatkan hasil yang sesuai dengan harapan. Tujuan penelitian ini yaitu guna mengetahui faktor-faktor yang dapat berpengaruh penggunaan sistem bimbingan belajar online berdasarkan model Technology Acceptance Model (TAM). Beberapa peneliti mencoba menambahkan variabel eksternal dengan tujuan pengembangan teori TAM. Penelitian ini menambahkan faktor literasi digital yang berfokus pada siswa sebagai kebaruan penelitian. Populasi yang digunakan dalam penelitian ini merupakan siswa SMA Negeri di Surakarta sejumlah 9.042 siswa dan 270

siswa dijadikan sampel. Metode yang dipilih dalam penelitian adalah metode kuantitatif. Data penelitian dikumpulkan dengan cara penyebaran kuesioner online menggunakan googleform. Teknik pengambilan data yang digunakan yaitu non probability sampling dengan purposive sampling sebagai pendekatannya. Analisis data yang digunakan yaitu analisis regresi hirarki dan uji sobel. Hasil penelitian menunjukkan bahwa persepsi kebermanfaatan, kemudahan penggunaan, dan literasi digital memiliki pengaruh positif terhadap penggunaan sistem bimbingan belajar online. Literasi digital juga terbukti memiliki pengaruh terhadap persepsi kebermanfaatan dan kemudahan penggunaan. Kemudian persepsi manfaat dan kemudahan penggunaan juga terbukti memediasi hubungan antara literasi digital terhadap penggunaan sistem bimbingan belajar online.

Kata kunci: Literasi Digital, Sistem Bimbingan Belajar Online, TAM

A. INTRODUCTION

The continued progressive of information and communication technology has opened up new avenues for human survival. Its development is also considered as a form of solution to various problems that arise. Various types of information and communication technology can make work easier and save more time. Therefore, developments in information and communication technology must be utilized in daily life. One of them is the implementation of the education system in Indonesia. This is done as an effort to face various changes full of uncertainty which require us to be able to learn quickly in all fields, including in education. However, the education report card published on the Ministry of Education and Culture's official website reports that the results of the quality of learning at all levels in 2023 are still in the "medium" category (Kemdikbud.go.id, 2023). According to the College Entrance Test Institute (2022) also reported that the national ranking of all public high schools, especially in Surakarta, was ranked below 100 in 2022. This illustrates that the learning process in classrooms is not yet optimal. Therefore, one form of effort that can be made to deal with this problem is by participating in an online tutoring system program. Online learning can be interpreted as a teaching and learning experience carried out via the internet and the delivery system related to the content of teaching materials is carried out online (Belawati, 2019). Research conducted by García Iglesias et al. (2018) also stated that students who mix conventional learning methods with online tutoring can increase their learning scores on the final exam.

Technology Acceptance Model (TAM)

TAM is a model formulated by Fred Davis in 1986 and is most often used to predict how users will accept or use a particular technology to support do their job (Hartono, 2007). Davis (1989) states in his theory that Perceived Usefulness and Perceived Ease to Use are two basic ingredient variables in user acceptance.

- a. Perceived Usefulness deciphered as the extent to which an individual's trust in the capability to use certain technology to increase their job more easily (Hartono, 2007:114). This construct is also a person's confidence in making decisions in using technology. If the online tutoring system can provide many uses or benefits for students in supporting learning, then students' intention to use the application will be bigger. Research that are done by Rafique et al., (2020) also represent that perceived usefulness has a positive effect on the use of a technology system. Apart from that, it has been proven that there is an increase in student academics because of the perceived benefits of e-learning which is able to provide abundant information at the right time and place (J. L. Chen, 2011).
- b. Perceived Ease to Use deciphered as the extent to which an individual believes that by using certain technology he can be free from hard work or difficulty in doing something (Hartono, 2007). Another definition of perceived ease of use proposed by Venkatesh (2000) is as an individual's trust that a technology is easy to use and easy to learn. If the online tutoring system provides facilities that are easy to use, then students will not find it difficult and think that the system can also help in supporting learning. This is consistent with research done by Kamal et al., (2020) which shows that perceived ease of use has a positive impact on the acceptance or use of technology. Even in his research, perceived ease of use was the main driving factor. Students will be encouraged and intend to use the online tutoring system continuously because it is free from difficulties.

According to Hartono (2007: 134), TAM has several advantages when compared with other models of information technology acceptance theory. Its advantages include: a) TAM is a behavioral model to explain how many information technology systems fail in their implementation. b) TAM theory has been tested by many researchers and is built on a strong theoretical foundation. As a result, many researchers have concluded that TAM is a better model compared to the TRA and TPB models. c) The most important thing is that TAM is a concise and simple model but the results are valid. Researchers continue to develop TAM theory with the adding of external variables as reinforcing factors in perceived usefulness and ease of use. For example, Hao et al. (2017) focused on adding social factors among students. Another study, Allassafi (2022) added external factors in the form of quality of knowledge, quality of information, suitability of technology, and social influence to expand the TAM model. However, there are still not many who add external variables of digital literacy as a development of the TAM model. Antonietti et al. (2022) in their research stated that digital literacy has a positive and significant affected on the use of online tutoring systems. This is different from the results of research by Nikou & Aavakare (2021) which shows that digital literacy does not have a direct effect on the use of technology. However, the effect is mediated by performance expectations and effort expectations. Therefore, it is important for researchers to know the factors that can effect the use of online tutoring systems in order to broaden their horizons better. This research

focuses on students' digital literacy levels as a novelty from previous research by Antonietti et al. (2022) which focuses on teachers' digital literacy levels. This research also contributes to seeing the importance of digital literacy in the acceptance and use of online tutoring systems in the educational context using the TAM model, which has not been studied much before.

Digital Literacy

Initially, digital literacy was only interpreted as the ability to read and write, but as time goes by and technological advances become increasingly rapid, the meaning of literacy becomes broader and leads to digital media literacy. According to Koltay (2011) digital literacy is an attitude or ability that individuals have in using digital technology to access, manage, analyze, evaluate and organize it as new knowledge. Then Chan et al., (2021) revealed that an individual who is digitally literate is considered to have digital abilities starting from identifying digital resources to synthesizing digital resources in a complex manner. Based on the explanations above, it can be summarized that the meaning of digital literacy is not only about technical skills, but can also be interpreted as the ability to use digital technology in accessing, understanding, communicating and creating information that requires cognitive and technical skills.

The rapid digitalization of online tutoring products such as Coursera (United States), Byju's (India), and VIPKid (China), Indonesia has also contributed to the growth of similar platforms such as Harukaedu, Ruangguru, Cakap by Squire, and Educa Studio which provide e-content. independent learning, interactive online services that can help with assignments and exam preparation, to mixed learning experiences such as game-based and interactive storybooks. Despite progress, Indonesia is still lagging behind in terms of student learning. Based on the 2018 PISA scores, only 30% of students meet the most basic literacy proficiency level standards (Pusat Penilaian Pendidikan Balitbang Kemendikbud, 2019). Indonesia's digital literacy level in 2022 was also recorded as still being in the "medium" category with a score of 3.54 (Kemenkominfo, 2022). Whereas Middleton et al. (2018) has highlighted the critical role of digital literacy in carrying out tasks to achieve goals and general performance success. Digital literacy can also have implications for how young people are prepared to participate in today's society (Jacobsson & Bergek, 2006). Scientific debates on educational technology find that the achievements promised by service providers are usually not achieved (Mertala, 2020). For beginner online tutoring system designers, the experience of failure is considered an accident, lowers self-confidence, and can even destroy intentions (Jackson et al., 2022). Therefore, it is important for designers of online tutoring systems to understand what would be the cause can influence the use of technology to be effective on target.

Sugiyono (2018) explains that a hypothesis is a temporary answer to a problem formulation. So, the hypothesis in this research is:

- H1 : There is an influence between perceived usefulness and ease of use of online tutoring systems

- H2 : There is an influence between digital literacy and the use of online tutoring systems
- H3 : There is an influence between digital literacy and perceived usefulness and ease of use
- H4 : perceived usefulness and ease of use mediate the connection between digital literacy and the use of online tutoring systems

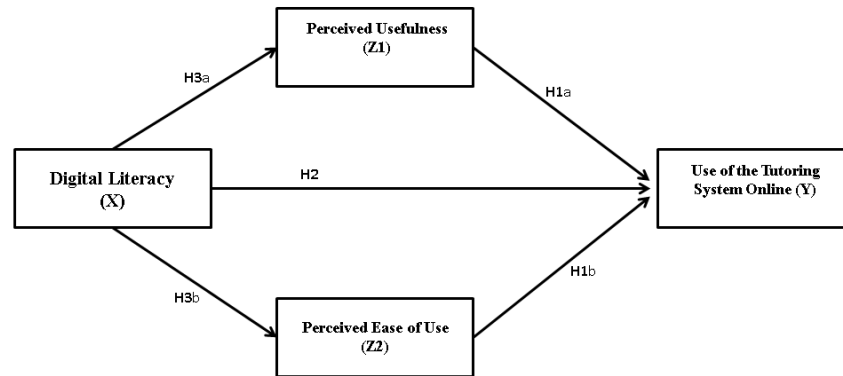


Figure 1. Framework of thinking

B. RESEARCH METHOD

Quantitative research was chosen as the type of research in this study. The selected population was SMA N students in Surakarta. A total of 270 students were selected as samples obtained based on the sampling formula infinite population. This number can be said to be representative in accordance with the opinion expressed by Crocker & Algina (2008) which stated that to maintain stability, a minimum of 200 samples are needed. Instrument validity testing was carried out using Confirmatory Factor Analysis (CFA). Distribution of questionnaires for data collection was carried out online to students who took part in online tutoring using gform. The data collection technique used was non-probability sampling with a purposive sampling approach. And the analysis techniques used are hierarchical regression and the sobel test. This research produced 8 models with the following hierarchical regression equations:

1. Model estimated to answer hypothesis 3

$$Z1 : \alpha + \beta X + e$$

$$Z1 : \alpha + \beta X + Ck + e$$

$$Z2 : \alpha + \beta X + e$$

$$Z2 : \alpha + \beta X + Ck + e$$

2. Model estimated to answer hypothesis 2

$$Y : \alpha + \beta X + e$$

$$Y : \alpha + \beta X + Ck + e$$

3. Estimated model to answer hypothesis 1

$$Y : \alpha + \beta X + 2Z1 + e$$

$$Y : \alpha + \beta X + 2Z1 + 3Z2 + Ck + e$$

Keterangan:

- Y : Use of the Online Tutoring System
Z1 : Perceived usefulness
Z2 : Perceived ease of use
 βX : Digital Literacy
 α : Constant
Ck : Control
e : Error

The sobel test is carried out to answer the mediation hypothesis, namely hypothesis

4. The aim is to test how strong the relationship is through the mediating variable as a mediator from the independent variable to the dependent.

C. RESULTS AND DISCUSSION

Analysis Result

Descriptive analysis in this study uses frequency distribution and central symptom measurements. Sujarweni (2019) stated that descriptive statistics aims to describe the characteristics of a sample through numbers or images. Table 1 shows that the sample proportion has been adjusted according to calculations, namely 270 respondents from 8 Senior High Schools (SMA) in Surakarta. The sample was 168 female students and 102 male students. There were 270 students who showed that they had online tutoring experience, starting from class X with 142 students, class XI with 51 students, and class XII with 77 students. The average daily internet usage of respondents with use of less than 2 hours was 13 students, 3-4 hours was 37 students, 5-6 hours was 69 students, 7-8 hours was 66 students, and more than 8 hours was 85 students. A total of 187 respondents who ever followed digital training and 83 respondents had never followed in digital training. The last level of education of the students' parents was 135 undergraduates, 113 senior high school graduates, 18 junior high school graduates, and 4 elementary school graduates.

Tabel 1. *Characteristics of Research Respondents*

Descriptive Statistic			
Sample Control Variables	Frequency	Percent	Valid Percent
Gender			
Male	102	37,8	37,8
Female	168	62,2	62,2
Class			
X	142	52,6	52,6
XI	51	18,9	18,9
XII	77	28,5	28,5
Taking Online Tutoring			
Yes	270	100,0	100,0
No			
Average Daily Internet Usage			
3-4 Hour	37	13,7	13,7
5-6 Hour	69	25,6	25,6
7-8 Hour	66	24,4	24,4
Less than 2 Hours	13	4,8	4,8
More than 8 Hours	85	31,5	31,5
Digital Training Experience			
Yes	187	69,3	69,3
No	83	30,7	30,7
Parents' Last Education			
Bachelor	135	50,0	50,0
Senior High School	113	41,9	41,9
Junior High School	18	6,7	6,7
Elementary School	4	1,5	1,5
No School			

(Source: Processed primary data, 2023)

Hypothesis Testing

The calculation results in this study used hierarchical regression analysis with SPSS version 23 program. Based on Table 2, models 1 and 2 are shown which show a regression model with the perceived usefulness variable as the dependent variable and the digital literacy variable as the independent variable. In model 1 the researcher only included all control variables. The outcome represent that the control variables of online tutoring experience, digital training, and parental education had a positive influence on perceived usefulness. In model 2, the researcher then included all control variables by adding the digital literacy variable. The outcome represent that the control variables of online tutoring experience, digital training, and parents' latest education had a positive effect on perceived usefulness, and the digital literacy variable also showed an effect on perceived usefulness. In model 2, it is concluded that digital literacy has a positive and significant impact on perceived usefulness because the regression coefficient (β) value obtained for the variable is 0.424 with a calculated t of 7.607 which is greater than the t table of 1.969 ($7.607 > 1.969$). Therefore, hypothesis 3a proposed by the researcher is accepted.

Tabel 2. Hierarchical Regression Analysis Test Results of Perceived Usefulness and Ease of Use

Variables	Perceived Usefulness		Perceived Ease of Use		Ket.
	Model 1	Model 2	Ket.	Model 3	Model 4
Control Variables					
Gender	-0.417 (-0.890)	-0.248 (-0.583)		-0.449 (-1.038)	-0.265 (-0.707)
Class	0.375 (1.443)	0.263 (1.114)		0.579*** (2.415)	0.457*** (2.195)
Online Tutoring Experience	5.668*** (2.624)	4.745*** (2.417)		4.521*** (2.268)	3.517*** (2.031)
Average Internet Usage	0.185 (0.971)	0.145 (0.835)		0.341 (1.933)	0.296 (1.938)
Digital Training	0.968*** (1.995)	1.012*** (2.300)		0.474 (1.058)	0.522 (1.344)
Parents' Last Education	0.693*** (2.067)	0.703*** (2.314)		0.854*** (2.761)	0.866*** (3.227)
Main Variables					
Digital Literacy (X)		0.424*** (7.607)	H3a <i>Supported</i>	0.461*** (9.374)	H3b <i>Supported</i>
Mediation Variables					
Perceived Usefulness (Z1)					
Perceived Ease of Use (Z2)					
N	207	207		207	207
R²	0.080	0.246		0.100	0.326
Adjusted R²	0.059	0.226		0.080	0.308

Note: *significance 1% (0.01), **significance 5% (0.05)

(\$ource: Processed primary data, 2023)

Table 2 also represent models 3 and 4 which show a regression model with the perceived ease of use variable as the dependent variable and the digital literacy variable as the independent variable. In model 3, the researchers only included all control variables, the results of which showed that only the class control variables, online tutoring experience, and parents' latest education had a positive effect on perceived ease of use. Model 4, the researcher entered all the control variables and then added the digital literacy variable, the outcome of which represent that only the class control variables, online tutoring experience, and parents' latest education had a positive effect on perceived ease of use. The digital literacy variable in model 4 also shows an influence on perceived ease of use because the regression coefficient (β) value obtained for the variable is 0.461 with a calculated t of 9.374 which is greater than the t table of 1.969 ($9.374 > 1.969$). Therefore, hypothesis 3b is accepted.

Tabel 3. Hierarchical Regression Analysis Test Results for Using the Online Tutoring System

Variables	Use of Online Tutoring Systems				Ket.
	Model 5	Model 6	Model 7	Model 8	
Control Variables					
Gender	0.151 (0.312)	0.421 (1.140)	0.529 (1.656)	0.588 (1.954)	
Class	0.468 (1.737)	0.289 (1.415)	0.175 (0.984)	0.058 (0.345)	
Online Tutoring Experience	5.036*** (2.250)	3.565*** (2.096)	1.493 (1.003)	0.839 (0.597)	
Average Internet Usage	0.091 (0.462)	0.027 (0.177)	-0.037 (-0.282)	-0.115 (-0.929)	
Digital Training	0.707 (1.406)	0.777*** (2.038)	0.335 (1.005)	0.265 (0.845)	
Parents' Last Education	0.381 (1.097)	0.398 (1.510)	0.091 (0.394)	-0.112 (-0.509)	
Main Variable					
Digital Literacy (X)		0.675*** (13.976)	0.490*** (10.607)	0.386*** (8.231)	H2 Supported
Mediation Variables					
Perceived Usefulness (Z1)			0.437*** (9.428)	0.347*** (7.515)	H1a Supported
Perceived Ease of Use (Z2)				0.306*** (5.848)	H1b Supported
N	207	207	207	207	
R ²	0.049	0.455	0.594	0.641	
Adjusted R ²	0.027	0.441	0.581	0.628	

Note: *significance 1% (0.01), **significance 5% (0.05)
(Source: Processed primary data, 2023)

Models 5 to 8 in Table 3 show a regression model with the variable use of the online tutoring system as the dependent variable. On model 5 the researcher simply included all the control variables. As a result, we can see that only the control variable online tutoring experience has a positive effect on the use of the online tutoring system. The next model, namely model 6, the researcher includes all control variables by adding the digital literacy variable. The results show that only the control variables of online tutoring experience and digital training have a positive effect on the use of the online tutoring system. The digital literacy variable in this model also shows a positive impact on the use of online tutoring systems with regression coefficient (β) values of 0.675, 0.490, 0.386 respectively with a t count of 13.976, 10.607, 8.231 which is bigger than the t table, namely 1.969 (13.976, 10.607, 8.231 > 1.969). The significance value obtained is 0.000, which is less than 0.05 (0.000 < 0.05), so it can be conclusive that digital literacy has a positive and significant effect on the use of online tutoring systems, which means hypothesis 2 is accepted.

Model 7 in Table 3 is a regression analysis by including all control variables, digital literacy variables, and then adding the perceived usefulness variable. As a

result, we can see that there are no control variables that influence the use of the online tutoring system, but the digital literacy variables and perceived usefulness show an influence on the use of the online tutoring system. In model 7, the regression coefficient (β) value of the perceived usefulness variable is also positive, respectively, 0.437, 0.347 with a calculated t of 9.428, 7.515 which is bigger than the t table of 1.969 (9.428, 7.515 > 1.969). Hence, it can be conclusion that perceived usefulness has a positive and significant effect on the use of the online tutoring system, which means hypothesis 1a is accepted.

Model 8 in Table 3 is a regression analysis by including all control variables, digital literacy variables, perceived usefulness variables, and then adding the perceived ease of use variable. As a result, we can see that there are no control variables that influence the use of the online tutoring system, but the digital literacy variables, perceived usefulness, and perceived ease of use show an influence on the use of the online tutoring system. In model 8, the regression coefficient (β) value obtained for the variable is 0.306 with a calculated t of 5.848 which is bigger than the t table of 1.969 (5.848 > 1.969) which can be summarized that the perception of ease of use has a positive and significant effect on the use of the online tutoring system, so that hypothesis 1b is declared accepted.

Sobel Test

Sobel test are done to test the mediation hypothesis. This testing was carried out to prove how strong the indirect effect of the independent variable is on the dependent variable using the help of calculation for sobel test. The results are as follows:

Table 4. Sobel Test Results

Variable	Test Statistic	p-value (sig)	Decision
X-Z1-Y	5,635	0,000	There is a mediation effect
X-Z2-Y	4,571	0,000	There is a mediation effect

(Source: Processed primary data, 2023)

Sobel Test results for the influence of digital literacy on system use which is mediated by perceived usefulness obtained a Sobel test statistical test value of 5.635 with $p=0.000 < 0.05$, while the influence of digital literacy on system use was mediated by perceived ease of use obtained a Sobel test value test was 4.571 with $p=0.000 < 0.05$, so H4 is accepted, meaning that perceived usefulness and ease of use mediate the connection between digital literacy and the use of online tutoring systems.

Discussion

This research found that digital literacy has an effect on the use of online tutoring systems mediated by perceived usefulness and ease of use. These results are consistent with and support previous study, by Antonietti et al. (2022) who discovered that digital literacy has a positive and significant connection with their beliefs regarding the perceived usefulness and ease of use of technology and has an effect on the use of online

tutoring systems. This research also supports the theory TAM expressed by Fred Davis in 1986 where the theory states that the perceived usefulness and perceived ease of use are two fundamental variables in the acceptance of technology use. If using the online tutoring system can provide benefits and free them from difficulties in doing something, then students will feel like continuing to use the online tutoring system to support their learning activities.

Nikou & Aavakare (2021) also stated that digital literacy can be influential the evolution of positive attitudes about the use of technology through perceptions of usefulness and ease of use. These study show that students' digital literacy can have a direct effect on their personal or organizational achievements. Consequently, greater digital literacy skills regarding the use of online tutoring systems may help better predict the use of new information sources. Therefore, digital literacy, perceived usefulness, and ease of use are very influential in the use of online tutoring systems. Thus, TAM theory can explain the effect of digital literacy, perceived usefulness and ease of use on the use of online tutoring systems.

The Influence of Perceived Usefulness and Ease of Use on the Use of Online Tutoring Systems

This study results represent that the use of the online tutoring system is impact by 59.4% by perceived usefulness. The benefit of an online tutoring system is related to the benefits it provides to students. The more useful the online tutoring system is, the more students will use it. The more real the benefits felt for students, the clearer the use or reuse of the online tutoring system. These results are consistent with previous study by Chen & Aklikokou (2020) who say that perceived usefulness have a positive and significant impact on the use of e-government services. Therefore, the higher and more positive the perception of usefulness of the online tutoring system, the more confident and confident students will be in continuing to use it to help their learning understanding process.

Apart from that, perceived ease of use was also discovered that to be a significant determining factor in the use of online tutoring systems. The outcome represent that the perception of ease of use had a 64.1% effect on the use of the online tutoring system. The direct effect of perceived ease of use on system use shows the importance of an online tutoring system that is free from complexity and easy to use. The more students see the online tutoring system as technology that is easy to use, the more motivated they will be to use this online tutoring system. Research on internet adoption conducted Shen & Chiou (2010) states that apart from skills, there is a greater desire to use online auction platforms when the verification process is relatively simple. This shows that perceived ease of use is an important variable in adopting the internet. These outcome are also consistent and support with previous study by Antonietti et al. (2022) who stated that, when the perception of usefulness and ease of use is as expected by students, their perception of using the

online tutoring system will be more positive and they will feel that they will continue to use it to help their learning process..

The Influence of Digital Literacy on the Use of Online Tutoring Systems

This study results represent that the use of the online tutoring system is impact by 45.5% by digital literacy. This illustrates that the higher and more positive the level of digital literacy, the more confident and skilled students will be in using the online tutoring system. Otherwise, students who have a low level of literacy tend not to be competent and unmotivated students (Meyers et al., 2013). Individuals with a higher level of digital literacy will find cognitive challenges easier in using technology because they are familiar or habitual with the content, interfaces, access options in new digital tools. So that students with a higher ability of digital literacy can use the online tutoring system as a learning strategy (Izuagbe et al., 2019; Rafi et al., 2019). This finding corroborates previous studies where skills were reported as the basis for a person's tendency to use the system (Alharbi & Drew, 2014). Even Nikou et al. (2022) states that developing digital literacy skills is not only as an important requirement for student success in online learning, but also one of the tools necessary to facilitate lifelong learning. Therefore, decision making based on digital skills regarding the online tutoring system will be more effective and right on target so it is hoped that it can help improve maximum results.

The Influence of Digital Literacy on Perceived Usefulness and Ease of Use

The research outcome illustrates that perceived usefulness is influenced by 24.6% by digital literacy, and perceived ease of use is affected by 32.6% by digital literacy. This shows that the higher and more positive the level of digital literacy, the higher or better the perceived usefulness and ease of use of students in using the online tutoring system for learning. Students with a high level of literacy can expend less effort in using the online tutoring system because technical aspects are no longer a primary concern. Izuagbe et al. (2019) in their research on library technology also stated that librarians would prefer simpler technology with few benefits. Furthermore, students with a higher skill of digital literacy will also be able to use and apply the online tutoring system in a more appropriate and meaningful way. In contrast, students with a low level of digital literacy tend not to be critical about the usefulness or benefits of using an online tutoring system. This will make the student learning process ineffective and improving learning outcomes will be difficult to achieve. Chung et al. (2010) also stated that the younger generation is more concerned with the perception of the usefulness of a new technology and considers it easier or more comfortable to use because they are already used to and oriented to many technologies.

Therefore, increasing digital literacy is very important to maximize the use of online tutoring systems. These results support previous study that are done by

Cetindamar et al., (2021) which stated that digital literacy has a positive and significant connection with perceived usefulness and ease of use.

Perceptions of Usefulness and Ease of Use mediate the Relationship between Digital Literacy and the Use of Online Tutoring Systems

Finally, this research also obtained results that are in line with hypothesis 4 in the research, namely that perceived usefulness and ease of use mediate the connection between digital literacy and the use of online tutoring systems. This illustrates that students' digital literacy levels influence the use of online tutoring systems through perceived usefulness and ease of use. A higher and positive literacy level will make students more skilled and critical in using it so that they can increase the use of the online tutoring system and students can apply it in a more appropriate and meaningful way. This is consistent with previous study that are done by Cetindamar et al., (2021). Students will feel more interested or willing to use the online tutoring system because they feel they have sufficient digital literacy skills, both in terms of how to use it and the benefits they will receive. The wider a person's digital literacy, the more capable the perception of usefulness and ease of use which ultimately has an impact on increasing the use of online tutoring systems. Previous research conducted by Sutanonpaiboon & Pearson (2006) have also proven that perceived usefulness and ease of use can mediate the connection between cultural dimensions and internet acceptance. Therefore, it is important to observe to the perceived usefulness and ease of use in creating an online tutoring system so that it can simplify or easier students in their learning process.

D. CONCLUSION

Based on the data analysis results obtained and the explanation of the research results that have been described, in this study it can be summarized that: (1) There is a positive and significant affected between the perception of usefulness and ease of use of the online tutoring system for Senior High School students in Surakarta. This shows that the higher and more positive the perception of usefulness and ease of use, the higher the use of the online tutoring system. (2) There is a positive and significant affected among digital literacy factors on the use of online tutoring systems among Senior High School students in Surakarta. This shows that the wider and positive ability of digital literacy, the higher the use of the online tutoring system. (3). There is a positive and significant influence between digital literacy factors on the perceived usefulness and ease of use of the online tutoring system for Senior High School students in Surakarta. This shows that if the ability of digital literacy is high and positive, the view or perception of the usefulness and ease of use of the online tutoring system will improved. (4). Perceived usefulness and ease of use are able to mediate the connection between digital literacy and the use of online tutoring systems among senior high school students in Surakarta. This shows that when the level of digital literacy is higher and positive, the perception of usefulness and ease of use will also increase, who in the end can increase the use of online tutoring system.

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