



Self-efficacy toward student's digital literacy

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Abstract. Digital media changes in teaching and learning process by providing easy access to learning resources that will help the process of transferring information to students. This research aims to examine the influence of self-efficacy on students' digital literacy. The population of this study was students of Managerial Accounting at the Ujung Pandang State Polytechnic. The sample was calculated using Slovin's formula to obtain a sample size of 78 samples. The data used are primary data using questionnaires to collect data on self-efficacy and digital literacy. The research questionnaires consists of 25 statements which are indicators of self-efficacy and digital literacy. The research hypothesis was tested using correlation and simple linear regression analysis. The research hypothesis result shows that self-efficacy has a significant positive effect on students' digital literacy. A positive effect indicates that the higher the student's self-efficacy, the higher the student's digital literacy. The opposite also applies, namely the lower the student's level of self-efficacy, the lower the student's digital literacy level.

Keywords: digital media, self-efficacy, digital literacy.

1 Introduction

The increasingly developing information technology presents new innovations that apply to all aspects of life including the development digital media. Digital media creates changes in the teaching and learning process by providing access to information sources that will help the process of transferring information to students. When the new technology is implemented, not all people can afford and understand the new technology well [1].

The use of digital media must be accompanied by the knowledge and skills of the user. Users' knowledge and skills in utilizing digital media, such as communication tools, internet networks and so on are referred to as digital literacy [2]. Digital literacy is something that a person must have when using technology. The fairly rapid increase in the use of digital media proves that society is able to adapt to the existence of digital platforms that can be used for various purposes, one of which is as a learning media [3].

Digital literacy associated with abilities or competencies, not only including technological approaches, but also mastering and utilizing digital competencies [4]. A user who has good digital literacy skills, needs not only able to operate the tool, but also able to use the technology with full responsibility [5].

Self-efficacy is a person's belief in his or her ability to produce self-performance in a field/occupation. Self-efficacy will influence a person's decisions in making decisions and completing what they have started. Someone with a high level of self-efficacy can effectively change a situation, while someone with a low level of self-efficacy views themselves as unable to do everything around them [6]. Self-efficacy is an individual's belief related to his ability to carry out an action or make a decision in order to achieve certain results.

Students as digital native need digital literacy to support the learning process. This can increase students' knowledge that they did not obtain during the teaching and learning process in lectures. Moreover, students are a generation that is very active in using digital media in the lecture process as a learning medium by accessing journals, lecture materials and even creating research articles. Self-efficacy will motivate students in the learning process so that students with a high level of self-efficacy will believe that they can complete assignments and exams and obtain satisfactory achievements. Besides, self-efficacy will also show how much effort students put into completing what they have started and persisting when they face obstacles in the process. Based on the description above, the hypothesis of this research is that self-efficacy has a positive effect on students' digital literacy.

2 Research Methods

Population of this research are Managerial Accounting students of Ujung Pandang State Polytechnic. The sample was determined using the Slovin formula. This research uses quantitative method, that uses numbers measured by statistics as a calculation test tool [7]. The independent variable of this research is self-efficacy (X) and the dependent variable is digital literacy (Y).

This research was conducted at the accounting department involving 365 students in the academic year 2020-2022. According to the Slovin formula, sample consisted of 78 students. The variables of this research are described into statements and collected through a questionnaire.

The self-efficacy variable (X) is measured by indicators developed into 7 statements. The digital literacy variable (Y) is measured by indicators developed into 18 statements. The X and Y variables studied are used a Likert Scale, each given a score of 1 to 5.

After data collection, data tabulation will be carried out using the Microsoft Excel program then analysed using the SPSS 26 application. The data analysis was descriptive analysis, inferential analysis (including instrument tests and classical assumption tests) as well as hypothesis testing using simple linear regression and t test.

3 Results and Discussion

3.1 Descriptive Statistics

This research was conducted to obtain an overview of the influent of self-efficacy on digital literacy of Accounting students in Ujung Pandang State Polytechnic. Descriptive analysis was carried out to analyze the data by describe the data has been collected. The data was collected by the respondent's answers to the questionnaire. Table 1 shows the results of descriptive statistics from 78 data. The minimum value of self-efficacy is 21, the maximum value is 35 and the average is 27.83. Meanwhile, the minimum value for the digital literacy variable is 56, the maximum value is 80, and the average is 69.42.

Table 1. Descriptive statistic.

Variables	n	Minimum	Minimum	Mean
Self-efficacy	78	21	35	27,83
Digital Literacy	78	56	80	69,42

3.2 Validity and Reliability Test

To find out whether the measuring instrument used in the research is valid, a measurement basis is used through the significance value and the value from the r table and r count. If the significance value is smaller than 5% and r count > r table, then it can be stated that all statement items are valid. The results of validity testing for variables X and Y using the SPSS 26 application show that all research instruments have a significance value of less than 5% and r count > r table (0.223) so it can be concluded that the research instrument is valid as described in Table 2.

Table 2. Validity test.

Variables	Statement	r count	r table	Conclusion
<i>Self-efficacy</i>	Item 1	0.315	0.223	Valid
	Item 2	0.304	0.223	Valid
	Item 3	0.295	0.223	Valid
	Item 4	0.273	0.223	Valid
	Item 5	0.237	0.223	Valid
	Item 6	0.246	0.223	Valid
	Item 7	0.382	0.223	Valid
<i>Digital Literacy</i>	Item 1	0.356	0.223	Valid
	Item 2	0.431	0.223	Valid
	Item 3	0.300	0.223	Valid
	Item 4	0.237	0.223	Valid
	Item 5	0.491	0.223	Valid
	Item 6	0.281	0.223	Valid
	Item 7	0.336	0.223	Valid

Item 8	0.370	0.223	Valid
Item 9	0.513	0.223	Valid
Item 10	0.386	0.223	Valid
Item 11	0.494	0.223	Valid
Item 12	0.259	0.223	Valid
Item 13	0.334	0.223	Valid
Item 14	0.319	0.223	Valid
Item 15	0.318	0.223	Valid
Item 16	0.403	0.223	Valid
Item 17	0.425	0.223	Valid
Item 18	0.350	0.223	Valid

Next, a reliability test is carried out for valid statements. Based on the reliability test, the results of the Cronbach's Alpha value for the 25 statement items in the instrument have a Cronbach's Alpha value of 0.803 so it can be said that each statement item is reliable or consistent because the Cronbach's Alpha value is > 0.60 . A consistent or reliable instrument show that the instrument will have the same results when a test is carried out repeatedly and under the same conditions. The reliability test results are shown in Table 3.

Table 3. Reliability test.

Cronbach's Alpha	N of Items
.803	25

3.3 Normality Test

The classical assumption test is carried out with the aim of testing all classical deviations that occur in the research. The classic assumption test in this research consists of Normality Test and Hypothesis Test. The normality test was carried out using the Kolmogorov – Smirnov test. Based on Kolmogorov-Smirnov Test, if the Asymp. Sig. (2-tailed) is greater than 0.05, the data of the research is normally distributed. On the other hand, if the Asymp. Sig. (2-tailed) is lower than 0.05, the data of the research is unmorally distributed. The results of the normality test with Kolmogorov-Smirnov are shown in Table 4. Based on the results of the Kolmogorov-Smirnov normality test, it can be seen that the Asymp. Sig. (2-tailed) is 0.200. The value is greater than 0.05. This means that the residual values in the model are normally distributed.

Table 4. Kolmogorov-smirnov test.

		Unstandardized Residual
N		78
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	5.02928272

Most Extreme Differences	Absolute	.081
	Positive	.054
	Negative	-.081
Test Statistic		.081
Asymp. Sig. (2-tailed)		.200 ^{c,d}

3.4 Hypothesis Testing

Hypothesis testing in this research uses a simple regression test. From Table 5, it can be seen that the constant value (a) is 51.758 and the Digital Literacy value (b/regression coefficient) is 0.635 so the regression equation from this research is formulated as follows.

$$Y = 51.758 + 0,635 X$$

Where:

51,758 = a constant number which means that if the independent variable Self Efficay is equal to 0, then the size of the dependent variable Digital Literacy is 51,758.

0.635X = the magnitude of the regression coefficient for the independent variable Self-efficacy, which means that for every increase in the Digital Literacy variable by 1 point, Digital Literacy will increase by 0.635 and the regression coefficient is positive.

Table 5. Simple linear regression test.

Model		Unstandardized		Standardized	T	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	51.758	5.478		9.448	.000
	Self-Efficacy	.635	.196	.349	3.242	.002

a. Dependent Variable: Digital Literacy

The regression results above show that the independent variable, Self-Efficacy, has a positive effect on the dependent variable, Digital Literacy. Every increase that occurs in the independent variable will be followed by an increase in the dependent variable.

The t test was carried out to determine whether there was a partial influence of the independent variable on the dependent variable. The results of the t test can be seen in Table 4. The t test is carried out by comparing the t count value with the t table with an error rate of 0.05. If t count > t table then it can be concluded that this variable partially has a significant influence. Based on the t test results, the calculated t value for variable X is 3,242. Meanwhile the value in the 5% distribution table is 1.664, so for the variable X t count (3.242) > t table (1.664). This shows that the Self-efficacy variable has a significant effect on Digital Literacy.

3.5 Coefficient of Determination Test

The relationship between Self-efficacy (X) and Digital Literacy (Y) is shown by the value of R count in Table 6, namely 0.349. This value shows that there is a positive

relationship between Self-efficacy and Digital Literacy. From the output it is also shown that the coefficient of determination (R square) is 0.122, which means that the positive influence of Self-efficacy is 12.2% on Digital Literacy. The rest is and 87.8% of digital literacy is influenced by other variables not examined in this research.

Table 6. Coefficient of determination test result.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.349 ^a	.122	.110	5.062	1.160

Predictors: (Constant), self-efficacy

Dependent Variable: digital literacy

Based on the research result, it can be seen that there is a positive influence and significant between self-efficacy and digital literacy. The results obtained from this research show a value of 12.2%. A positive value indicates that the higher the student's self-efficacy, the higher the student's digital literacy. The opposite also applies, namely the lower the student's level of self-efficacy, the lower the student's digital literacy level. This positive influence cannot be separated from various factors not examined in this research.

The results of this research support previous research which states that the higher the level of self-efficacy, the higher a person's digital literacy will be [8]. The result is also line with previous research demonstrating that students' self-efficacy is significantly influenced by their level of digital literacy, which contributes to the need for self-regulated learning in blended and online learning environments [9]. Apart from that, self-efficacy can also strengthen digital literacy [10]. If self-efficacy is increased, literacy skills will also increase [11]. The self-efficacy possessed by students makes students able to increase their digital literacy. Hence, it can be concluded that self-efficacy has a significant positive influence on students' digital literacy.

4 Conclusion

Based on the results of data processing and hypothesis testing carried out, it can be concluded that self-efficacy has a significant influence on the digital literacy of the Managerial Accounting Students at the Ujung Pandang State Polytechnic.

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