

The Effect of Semester Level on Information Literacy Self-Efficacy by Vocational School Students of Diponegoro University During the Online Learning Period

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Abstract. The emergence of Covid-19 has had a tremendous impact on every line of life. As a form of preventing its spread, the Indonesian government has implemented an online learning system for every level of education. For the established online learning system to run smoothly, it must be supported by several aspects, one of which is the self-efficacy of students' information literacy. This study aims to see the effect of semester level on information literacy self-efficacy by Vocational School students of Diponegoro University during the application of online learning. This study uses a quantitative survey method in data collection. Questionnaires were distributed to 61 respondents from various levels of students at the Vocational School of Diponegoro University. Using the Kruskal Wallis test, the results show that H₀ was accepted and H₁ was rejected. So it can be concluded that there is no influence between the semester level on the information literacy self-efficacy Vocational School students of Diponegoro University during the online learning period.

1 Introduction

At the beginning of its appearance, many people thought that the Covid-19 pandemic did not enter Indonesia. This was based on one of the President's statements at the beginning of February 2020 which explained that the coronavirus did not enter his leadership area [1]. This statement was further strengthened by a statement from one of the ministers who explained that the weather in Indonesia made Covid-19 weaker compared to other regions [2]. Along with existing developments, conditions in the field turned out to be contradictory. Therefore, since the emergence of the first case in March 2020, the Indonesian government has taken several preventive measures to prevent the spread of Covid-19. One of the preventive measures taken by the government is to enforce physical distancing.

As a follow-up to the government's steps, the Ministry of Education and Culture on March 17, 2020, issued a Circular Letter of the Minister of Education and Culture Number

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36962/MPK.A/HK/2020 concerning Online Learning and Working from Home in the context of Preventing the Spread of Corona Virus Disease (COVID-19) [3]. In response to the circular letter, several education managers have implemented online learning processes as a solution in education management.

The implementation of online learning, at various educational institutions, certainly requires readiness, not only for education managers but also for students. This applies to all levels of education, including universities. Higher education managers, including lecturers, are required to adapt to changes from offline learning habits to online learning habits. The same is true for students. They are required to have optimal information literacy skills. Moreover, if it is associated with student information literacy self-efficacy. In a completely online era, society, including students, is entering an era where the dissemination of information is getting faster. Through good information literacy self-efficacy, students are expected to be able to choose and sort the information they get.

Problems arise when not all students have good information literacy self-efficacy. A variety of abilities, making the ability to receive information is also different. Through this article, the author tries to discuss the effect of semester level on information literacy self-efficacy by Vocational School students of Diponegoro University during the online learning period. Through this research, it is expected to be able to describe whether the length of lecture described by the semester level affects students' information literacy self-efficacy or not

2 Literature Review

Competencies possessed by individuals will not be enough to support one's success. Need other aspects that can support the competencies possessed. One of these supporting aspects is one's self-efficacy [4].

Self-efficacy is a person's confidence to organize and do something[4]. Based on this definition, a person's self-efficacy greatly determines a person's actions, especially students. Regarding information literacy, a student is required to have literacy self-efficacy to be able to follow the learning process optimally. This is because, as a student, they are required to be able to carry out an independent learning system.

Information literacy itself can be related to the concept of the ability to use ICT, find and use the information needed independently, and how to recognize the information needed [5]. Seeing this understanding, information literacy skills are important for students to have. Especially if it is supported by high self-efficacy. Someone who has high literacy self-efficacy can certainly easily determine what information they need and where they can find it. It also affects how students can use the information that has been obtained

3 Research Methods

The population in this study were Vocational School students of Diponegoro University who were active and did online learning at home. Based on the population, samples were taken using the purposive sampling technique. Based on the sampling technique, a sample of 61 students was obtained who had filled out the research questionnaire. Furthermore, the data obtained were then tested through several stages, namely normality test, homogeneity test, and Kruskal Wallis test. Conclusions are drawn by testing the proposed hypothesis, namely:

H0 = There is no significant effect between the semester level on the literacy self-efficacy by Vocational School students of Diponegoro University during the online learning period.

H1 = There is a significant effect between the semester level on the literacy self-efficacy by Vocational School students of Diponegoro University during the online learning period.

4 Results and Discussion

4.1 Respondent Identity

The results showed that the respondents came from various semester levels. There are 14 respondents who come from second semester students (22.95%). While the respondents from the fourth semester were 17 people (27.87%). While the respondents from the sixth semester were 159 people (25.9%), and the rest came from the eighth semester students as many as 30 people (49.18%).

4.2 Normality Test Results

Normality test is used to determine whether the data obtained has a normal distribution or not. Normality test is a prerequisite test in conducting parametric tests. If the value of sig < then the data is not normally distributed. However, if the value of sig > then the data is normally distributed. The results of the normality test obtained the following data.

Test of Normality^c

	Semester	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Efikasi	Semester 2	.183	13	.200*	.877	13	.064
	Semester 4	.185	17	.124	.904	17	.079
	Semester 6	.143	30	.121	.958	30	.270

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

c. Efficacy is constant when Semester = Semester 8. It has been omitted.

From the results of the normality test above, it can be seen that the sig value is (0.064) > (0.05). Based on these results, it can be concluded that the research data has a normal distribution.

4.3 Homogeneity Test Results

After conducting the normality test, the next prerequisite test that must be carried out before the parametric test is the homogeneity test. Homogeneity test is used to determine whether the data obtained are homogeneous or not. If the value of sig < then the data is not homogeneous. However, if the value of sig > then the data is homogeneous. The results of the homogeneity test obtained the following data.

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Efikasi	Based on Mean	5.214	2	57	.008
	Based on Median	3.461	2	57	.038
	Based on Median and with adjusted df	3.461	2	29.502	.045
	Based on trimmed mean	4.264	2	57	.019

From the results of the homogeneity test above, it can be seen that the sig value is $(0.008) > (0.05)$. Based on these results, it can be concluded that the research data is not homogeneous. Because the data is not homogeneous, parametric statistical tests cannot be performed. Therefore, the next step is to perform a non-parametric statistical test to determine the effect of the independent variable on the dependent variable through the Kruskal Wallis test.

4.4 Kruskal Wallis Test Results

After the prerequisite test has been carried out, the next step is to perform the Kruskal Wallis test. As already mentioned in the research methods section that there are two hypotheses tested, namely:

H0 = There is no significant effect between the semester level on the literacy self-efficacy by Vocational School students of Diponegoro University during the online learning period.

H1 = There is a significant effect between the semester level on the literacy self-efficacy by Vocational School students of Diponegoro University during the online learning period.

If the value of *asyp. sig* < then H0 is rejected. However, if the value of *asyp. sig* > then H0 is accepted. The results of the Kruskal Wallis test obtained the following data.

Test of Statistics^{a,b}

Efikasi	
Kruskal-Wallis H	.063
Df	3
Asymp. Sig.	.996

a. Kruskal Wallis Test

b. Grouping Variable: Semester

From the results of the Kruskal Wallis test above, it can be seen that the *asyp* value is obtained. *sig* $(0.996) > (0.05)$. Based on these results, H0 is accepted and H1 is rejected. So the conclusion drawn is that there is no significant effect between the semester level on the literacy self-efficacy by Vocational School students of Diponegoro University during the online learning period.

This is in accordance with several previous studies. Hutchison, et al. conducted research on factors that influence self-efficacy. Based on the results of the study, factors such as motivation, ability to understand the material presented, and computer mastery are things

that affect student self-efficacy [6]. Kumar and Priyadarshini state the same opinion. The results of their study show that life satisfaction and self-esteem have a quite strong influence on the self-efficacy of generation Y and generation Z [7]. Other factors that influence self-efficacy are kinship support [8], teacher support [9], and peer support [10]. Based on several results of the studies, it can be understood that self-efficacy is not influenced by the semester level of students.

5 Conclusion

Based on the results of the research above, it can be seen that based on the Kruskal Wallis test, the results obtained that the asymp value. sig of (0.996). The value is greater than 0.05 so that H₀ is accepted and H₁ is rejected. The conclusion that can be drawn is that there is no significant effect between the semester level on the literacy self-efficacy by Vocational School students of Diponegoro University during the online learning period.

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