



## The Influence of Online Learning on Students' Awareness in Doing Assignments during Covid-19 Pandemic

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### Maison

Universitas Jambi, Jambi, Indonesia  
E-mail: [maison@unja.ac.id](mailto:maison@unja.ac.id)

### Dwi Agus Kurniawan\*)

Universitas Jambi, Jambi, Indonesia  
E-mail: [dwiagus.k@unja.ac.id](mailto:dwiagus.k@unja.ac.id)

### Lika Anggraini

Universitas Jambi, Jambi, Indonesia  
E-mail: [lika.anggraini@gmail.com](mailto:lika.anggraini@gmail.com)

**Abstract:** Learning that initially took place traditionally (face to face) has shifted to virtual learning or online learning. This study aimed to identify online learning's influence on students' awareness of doing assignments during the Covid-19 pandemic. The mixed-method research with the sequential explanatory design was used to collect and analyze data with a total sample of 305 physics education students at Jambi University. The results showed that students' perceptions and awareness in carrying out tasks online are in a good category. There is a significant effect of online learning on student awareness in doing assignments with a contribution of 72.1%. The remaining 27.9% was influenced by other variables not found in this study.

**Abstrak:** Pembelajaran yang semula berlangsung secara tradisional (tatap muka) telah bergeser ke pembelajaran virtual atau pembelajaran online. Penelitian ini bertujuan untuk mengetahui pengaruh pembelajaran online terhadap kesadaran mahasiswa dalam mengerjakan tugas selama pandemi Covid-19. Metode penelitian campuran dengan desain eksplanatori sekuensial digunakan untuk mengumpulkan dan menganalisis data dengan jumlah sampel sebanyak 305 mahasiswa Pendidikan Fisika Universitas Jambi. Hasil penelitian menunjukkan bahwa persepsi dan kesadaran mahasiswa dalam melaksanakan tugas secara online berada pada kategori baik. Ada pengaruh yang signifikan pembelajaran online terhadap kesadaran mahasiswa dalam mengerjakan tugas dengan kontribusi sebesar 72,1%. Sisanya 27,9% dipengaruhi oleh variabel lain yang tidak ditemukan dalam penelitian ini.

\*) Corresponding Author

**Keywords:** Covid-19; Perceptions; Students Awareness; Online Learning

### INTRODUCTION

Technological developments open up opportunities for everyone to be internet literate in the industrial era 4.0. The internet plays an essential role in life and has changed many aspects, such as changing communication and marketing (Balmer & Yen, 2017; Ha, Dick, & Ryu, 2003), lodging (Infante-Moro, Infante-Moro, Martínez-López, & García-Ordaz, 2016), government (Georgescu & Popescul, 2016), travel (Ivica, 2013) and doing business

(Hamid, 2008). It also changes aspects of education (Baglama, Yikmis, & Demirok, 2017). Conventional learning systems switch to digital form to simplify the teaching and learning system. Proficiency in using digital media is a special requirement for students (Yustanti & Novita, 2019). However, the lack of knowledge about digital technology still occurs in some circles, especially students from remote areas. The assignment with the digital system is an obstacle for these students.

The pandemic situation has forced things to become completely digital. All teaching and learning activities are transferred to online learning. Even though the pandemic situation is quite unsettling, students still have to get the right to study. The use of technology is a solution to a pandemic situation. Through technology, lecturers and students can collaborate in real-time (Iskandar et al., 2020). Various universities are looking for solutions to simplify the online learning process by creating many internet-based applications (both websites and applications). It also requires developing an internet-based information system application that is easy to use from day to day (Andrian & Fauzi, 2020). Some often-used applications to support online learning are zoom, google classroom, google meet, Edmodo, Whatapps groups, and telegram. Anhusadar (2020) found that students in online lectures, most like the Whatsapp group application.

According to Ussher (2004), students feel satisfaction in online learning. Online learning makes students feel comfortable; there is no direct supervision from the lecturer. They can learn while snacking, drinking, and doing other activities. As a result, many students do not focus on learning and lack understanding of the material presented. This makes it difficult for students to do assignments. Besides, the facts show students have low awareness of doing assignments both online and offline. Some students are still working on assignments with the OSS system (overnight speeding system) and copying a friend's assignment. The task cannot be done optimally. Another impact will be similarities with other students' works or plagiarism because they don't have time to do their assignments (Arlina, A., & Pulungan, 2018; Umar, Rahayu, & Firmansyah, 2018). Such behavior is often referred to as procrastination. According to Burka & Yuen (2007), delays occur because too many piling up tasks must be completed immediately. Completing one task can cause other tasks to

be delayed, which can cause problems in completing other tasks.

To solve this problem, students need to have metacognitive awareness to control cognitive activities such as developing a learning environment, selecting strategies for solving problems, monitoring the problem-solving process, and evaluating their performance. Isnawan (2019), Anderson & Nashon (2007) also revealed that students' metacognitive abilities could increase meaningful learning capacity and help students construct understanding.

Metacognitive awareness plays a vital role in improving learning outcomes. According to Coutinho (2007), metacognitive awareness has a linear relationship. Students who have high metacognitive awareness show good academic abilities, while students with low metacognitive awareness show poor academic abilities.

A recent meta-analysis found that incorporating online learning was rated more effective than face-to-face learning (Bernard, Borokhovski, Schmid, Tamim, & Abrami, 2014; Means, Toyama, Murphy, & Baki, 2013; Oftedal, Urstad, Hvidsten, & Foss, 2015; Vo, Zhu, & Diep, 2017). However, it is important to know how students perceive online learning. According to Anhusadar's (2020) research, students have a good perception of online lectures; This is expected to help students carry out lecture activities in a pandemic situation. Good online lectures will help students increase their understanding and knowledge, such as Yuliana & Winata's (2009) research. However, there is also a negative perception in the form of difficulty understanding the lecturer's material due to the lack of interaction between lecturers and students and difficulty concentrating during online learning (Limbong & Simarmata, 2020; Mastuti et al., 2020).

Various impacts were felt when undergoing online learning during this pandemic period. Therefore, this study aims to see online learning's effect on students' awareness of doing assignments.

## METHOD

This study used a mixed research method with an explanatory design. In this design, the collection and analysis of quantitative data are prioritized. Qualitative data are collected and analyzed later and used to support quantitative results (Creswell & Clark, 2011). This study's Respondents were 305 students of physics education at Jambi University who were taken using the total sampling technique. Then interviews are conducted with ten students who are willing to conduct interviews.

Data collection was carried out using instruments consisting of questionnaires and interviews. The questionnaire was developed by researchers consisting of ten valid items for students' perceptions of online learning with Cronbach alpha of 0.783, and nine valid items for student awareness with Cronbach alpha of 0.761. Both questionnaires used a Likert scale, which consists of five answer choices. After the data collection is complete, data processing is carried out using the SPSS 21 application to find descriptive statistics to quantitatively view the data. Descriptive statistics presented data in tables, including mean, mode, median, minimum, maximum, and standard deviation (Creswell, 2012).

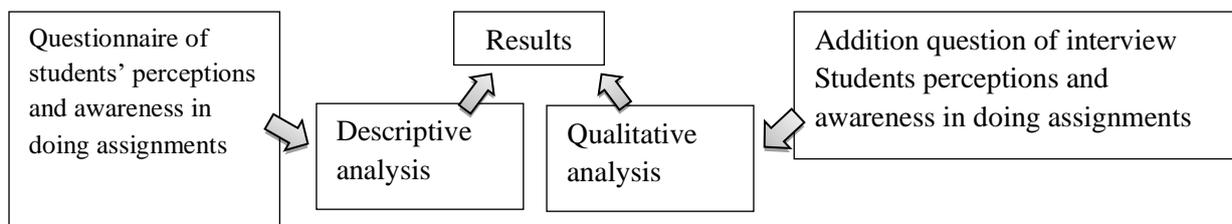
**Table 1. Categories of perception, students' awareness**

Category	Interval	
	Perception	Student awareness in doing assignments through online learning
Very Bad	10.0 – 18.0	9.0 – 16.2
Bad	18.1 – 26.0	16.3 – 23.4
Enough	26.1 – 34.0	23.5 – 30.6
Good	34.1 – 42.0	30.7 – 37.8
Very Good	42.1 – 50.0	37.9 – 45.0

Table 1 shows the categories of student perceptions and student awareness of doing assignments through online learning.

All data were obtained from perceptual and awareness questionnaires. Descriptive statistics were provided to calculate the frequency, percentage, mean, min, and max of data (Creswell, 2012). In this study, quantitative data were analyzed using parametric statistics from multiple regression to determine whether there was an effect on students' awareness of doing online assignments.

Following the research design used, the explanatory design, after the quantitative data processing is complete, then the qualitative data is collected through interviews with students. The interviews used were semi-structured, aiming to confirm the quantitative data results. Qualitative data analysis was performed using Miles & Huberman with the stages of data reduction, data presentation, and conclusion (Miles & Huberman, 1994).



**Figure 1. systematical research collecting data**

## RESULT AND DISCUSSION

### *Students' Perception of Online Learning*

Applying instruments to students who have been statistically processed using the SPSS 21 application regarding student perceptions about Covid-19 can be seen in

Table 2. Student responses classify into five categories: namely very bad, bad, enough, good, and very good.

**Table 2. The results of the students' questionnaire perception regarding covid-19**

Range	Classification				Mean	Min	Max	%
	Respond	M	F	Total				
10.0 – 18.0	Very bad	0	0	0				0.0
18.1 – 26.0	Bad	1	2	3				1.0
26.1 – 34.0	Enough	14	28	40	38.2	19	48	13.1
34.1 – 42.0	Good	31	160	190				62.3
42.1 – 50.0	Very good	13	59	72				23.6
TOTAL		59	246	305				100

Students' perceptions of Covid-19 (Table 2) were mostly good and very good, with 62.3% for 190 students and 23.6% for 72 students respectively out of a total of 305 students. The students' mean score was 38.2, the maximum score was 48, and the minimum score was 19. Based on these results, it can be said that the majority of students are active in online learning. Interview results confirm this in which students say, "I am still actively studying because I am learning remotely or online, so I am not worried about being exposed to Covid-19 while studying."

Quantitative and qualitative data show that students face the Covid-19 pandemic very well, meaning that they are not affected even though the Covid-19 pandemic is quite striking because they can adapt to new learning models. According to Martens, Bastiaens, & Kirschner (2007), students' perceptions of online learning are very important. Online learning is expected to

have good student perceptions to create the desired learning (Martin, Wang, & Sadaf, 2018). Good or positive perceptions of students towards online learning are critical in achieving successful learning. Also, with positive student perceptions, it is hoped that learning objectives can be achieved properly.

Several studies clarify students' perceptions of online learning; For example, online learning can improve students' perceptions and learning outcomes (Tsang, 2010) and provide students with positive perceptions (Donnelly, 2009). Thus, of course, students' perceptions about online learning carried out at Jambi universities during the Covid-19 pandemic will significantly impact online learning results.

#### ***Student awareness in doing assignments***

The descriptive statistic about research findings on student awareness in doing assignments through online learning can be seen in Table 3.

**Table 3. The results of the students 'questionnaire' awareness in doing assignments through online learning**

Range	Classification				Mean	Min	Max	%
	Respond	M	F	Total				
9.0 – 16.2	Very bad	0	0	0				0.0
16.3 – 23.4	Bad	3	1	4				1.3
23.5 – 30.6	Enough	17	18	35	35.0	18	42	11.5
30.7 – 37.8	Good	21	150	171				56.1
37.9 – 45.0	Very good	18	77	95				31.1
TOTAL		59	249	305				100

Student awareness in doing assignments through online learning (Table 3) is classified as good and very good, with a percentage of 56.1% and 31.1%, respectively, out of a total of 305 students. The students' mean score was 35.0, the maximum score was 42, and the minimum score was 18. Research findings show that assignments are well submitted, and when asked, students can answer and explain them. It shows that students do not just collect assignments, but students appreciate it.

The quantitative and qualitative findings show that students do not only work on assignments to complete a given task, but they take them seriously. Learning is the student's main task, but not all students have good learning management that can affect student achievement. Learning management problems that are often experienced by students are delays in doing assignments. The behavior of delaying academic assignments is called academic procrastination (Harriott & Ferrari, 1996).

Ferrari & Diaz-Morales (2007); Booth & Gerard (2011) states that procrastination can be seen from several certain limitations, including procrastination as a habit or behavior pattern and as a personality trait.

Previous research (Sa et al., 2019) found that students often worked on assignments the day before they were collected, worked on assignments at school before the bell rang, and chatted while working on assignments and delayed assignment collection. The influencing factors of procrastination are divided into external and internal factors. External factors are factors that exist from outside the individual, including parenting style and environmental conditions. At the same time, there are

internal factors in individuals, namely, elements of personality structure. According to Boarin, Martinez-Molina, & Juan-Ferruses (2020), the personality structures that determine each other where all things interact are self-systems that refer to cognitive structures and then guide the functions of the mechanism of perception, evaluation, and behavior regulation. So that if the function of perception and evaluation works well, the behavior that appears, especially awareness in learning, will be positive.

### Regression

Table 4 shows the effect of student perceptions of online learning on students' awareness of doing assignments.

**Table 4. Results of simple regressions**

Variable	Unstandardized Coefficients		Standardized Coefficients	t	sig.
	B	Std. Error	Beta		
<b>1 (Constant)</b>	14.239	3.321		4.347	.000
<b>Perception</b>	.148	.131	.131	2.298	.019

The regression test results (Table 4) show that the regression equation  $Y = 14.239 + 0.148X$ , where it is known that perceptions of online learning affect students' awareness ( $B = 0.131$ ,  $p < 0.025$ ). The amount of

contribution of perceptions to student awareness in online learning can be seen in Table 5.

**Table 5. Contribution from perception, on Student awareness in doing assignments through online learning**

Model	R	R square	Adjust R Square	Std. Error of the Estimate
1	.849	.721	.759	2.897

The results of a simple regression analysis show that the coefficient of determination is ( $R^2$ ) 0.721. It means that there is a contribution of perception to Student awareness in doing assignments through online learning of 72.1%. The remaining 27.9% is influenced by other variables not found in this study.

According to Gyampoh et al. (2020), mutually deterministic personality structures place all things interacting. The center is a self-system that refers to the cognitive structure and then guides the mechanisms and functions of perception, evaluation, and behavior regulation. So that if the function of perception and evaluation is useful, the behavior that appears, especially awareness in learning, will be positive. This shows that student knowledge also affects student

awareness in carrying out online assignments in given online learning, as well as perceptions. Because by having a good perception, students will feel happy when learning online, so that students do not feel the negative impact of the learning that has just been carried out (online learning) during the Covid-19 pandemic. E-learning activities are more flexible because learning resources can be accessed online, and lectures are carried out without being hindered by time and place. E-learning also provides flexibility for teachers to give students access to other references related to learning materials; This is very useful in improving learning quality (Asrial et al., 2019; Vázquez-Cano, 2014).

## CONCLUSION

The study shows that students' perception and awareness in carrying out their assignments online have a dominant category. There is a significant effect of students' perceptions of online learning on students' awareness of doing assignments. Therefore, lecturers must prepare lectures to run well and smoothly and achieve what has been planned.

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