

## **PERCEPTIONS OF LECTURERS AND STUDENTS TOWARDS THE ONLINE LEARNING PROCESS IN THE SPECIAL REGION OF YOGYAKARTA**

**Anastasia Susty Ambarriani<sup>1)</sup> MG. Fitria Harjanti<sup>2)</sup>**

Fakultas Bisnis dan Ekonomika, Universitas Atma Jaya Yogyakarta, Indonesia<sup>1</sup>

Fakultas Bisnis dan Ekonomika, Universitas Atma Jaya Yogyakarta, Indonesia<sup>2</sup>

E-mail: [susty.ambarriani@uajy.ac.id](mailto:susty.ambarriani@uajy.ac.id), [fitria.harjanti@uajy.ac.id](mailto:fitria.harjanti@uajy.ac.id)

**Abstract:** This study aims to investigate the perceptions of lecturers and students towards the online learning method. Lecturers' perceptions of the online learning process are revealed through the perspective of (1) their readiness towards the online learning process, (2) the essence of the material; (3) the students' response, and (4) online learning facilities. Meanwhile, the students' perceptions of the online learning method are depicted from their (1) adaptability; (2) lesson understanding; (3) preference for online learning, and (4) supporting facilities. The results of the study explain that lecturers and students do not experience any significant difficulties in the online learning method during the pandemic. Although they did not encounter any significant difficulties, lecturers and students still preferred face-to-face interaction compared to online learning. The difficulty of online learning faced by lecturers and students is more because of the limited communication network caused by the limited internet access

**Keywords:** *Covid-19 pandemic, the higher education learning method*

---

### **1. Introduction**

The Covid-19 Pandemic has significantly halted the human physical activity. Physical business transactions decrease sharply and are slowly evolving towards virtual transactions. Apart from the economy, education is also significantly affected by the Covid-19 pandemic. The educational process, which has been carried out face-to-face, must be performed online. This refers to the Circular of the Director-General of Higher Education No. 262 of 2020 to prevent the spread of Covid-19. It is recommended that the learning method in higher education be carried out by 'learning from home'. Online learning may not be as intensive as face-to-face learning. In online learning, lecturers can explain the materials using teaching media that can be seen directly by students. Unfortunately, in online learning, many students deactivate their videos for the sake of quota saving. Although online learning is complemented by the recorded lecture explanation that the students can replay, this could hardly replace the presence of lecturers in the face-to-face classroom. It might arise some problems in the students' systematic understanding of the lesson.

A sudden extensive online learning process has created a psychological shock for lecturers and students who have been accustomed to face-to-face learning. Are lecturers and

students ready to undergo the online learning method? How do lecturers and students perceive the fully online learning process during the Covid-19 pandemic? Are there any obstacles faced by the lecturers and students in their learning process? If any, what are they? This study aims to investigate the perception of lecturers and students on the online learning process during the Covid-19 pandemic. Besides, the research also identifies the obstacles faced by students in the online learning process. Information about the perceptions of lecturers and students towards the online learning process and their obstacles provides the basis for higher education in determining some strategies in welcoming the future learning method which requires a heavy online process.

## **2. Literature Review**

### **2.1. Online learning (E-learning)**

E-learning is a distance learning method using an electronic or computerized system so that it can support a learning process. The benefits of E-Learning range from providing flexibility, opportunities for learners to independently control their success of learning, cost efficiency for education providers in the physical facilities and infrastructure for learning, and cost efficiency for learners' transportation and accommodation.

Some of the E-Learning methods are Blended Learning, Flipped Classroom, Learning Management System, and Virtual Classroom.

### **2.2. Perception**

Perception is a process in which individuals organize and interpret their sensory impressions to give meaning to their environment. According to Leavitt, perception in a broad sense is the view, understanding, or how a person sees and interprets something. Meanwhile, perception in the narrow sense means how a person sees things. Attitudes, motivations, interests, past experiences, expectations, targets, and situations are factors affecting someone's perception.

## **3. Research Method**

This research is a descriptive study. It describes the perceptions of lecturers and students on the online teaching and learning process in state and private universities in the Special Region of Yogyakarta during the Covid-19 pandemic. The unit of analysis of this research is lecturers and students. The research variables were the perceptions of lecturers and students towards online learning. The students' perception variables were measured through the opinions of students and lecturers on the process of implementing online learning during the Covid-19 pandemic.

The research variables were measured by assessing the perceptions of lecturers and students on the online learning process during the Covid-19 pandemic. The operational definition of perception in this study is the interpretation of the online learning process that is received through sight, hearing, and feelings that produce meaning for someone. The perception variable in this study was measured through the internal perception dimension and the external perception dimension. Variable measurement techniques were conducted by distributing a questionnaire through a *google form*.

The type of data used in this study is primary data which was derived from the source. The data were collected using a questionnaire. The respondents of this study were university lecturers and students. The population of this study was all lecturers and students from

universities in the Special Region of Yogyakarta. The data was collected using a simple random sampling technique.

The collected data were analyzed by descriptive statistics or through hypothesis testing. Descriptive statistics are intended to get an overview of the demographics of respondents and a general picture of the perceptions of lecturers and students about the online learning process during the Covid-19 pandemic.

This study hypothesized that lecturers and students are not mentally and psychologically prepared for online lectures during the Covid-19 pandemic. This hypothesis was tested using the population average test technique. Before testing the population's mean, the data normality test was carried out. The statistical hypothesis is expressed in the following notation:

$$H_0 : \mu = \mu$$

$$H_1 : \mu \neq \alpha$$

## **4. Results and Discussion**

### **4.1. Demographics of Respondents**

There were 169 student respondents involved in this study. They consisted of 63 male students and 106 female students. 121 respondents were private university students and 48 others were state university students. 69 respondents took exact sciences and 100 took social sciences. A total of 70 respondents domiciled outside Java island, 52 respondents domiciled in Java island, and 47 students domiciled in the Special Region of Yogyakarta. Table 4.1 shows the demographics of student respondents.

**Table 4.1**  
Demographics of student respondents

Gender		University		Field of Studies		Domicile		
Male	female	State	private	Exact	social	Outside Java	Java outside SRY	SRY
63	106	48	121	69	100	70	52	47

70 lecturer respondents were also involved in the research. They were 28 male and 48 female lecturers. These respondents were teaching both in state and private universities in which 11 respondents came from state universities and 59 respondents came from private universities. 16 respondents taught the exact field of study and 54 respondents taught in social science. 21 respondents had a doctoral degree and 49 respondents had a master's degree. In terms of their academic positions, 31 respondents were instructors, 22 respondents were assistant professors, 15 respondents were associate professors and 2 were professors. These respondents had various lengths of employment. 14 respondents had worked for 1-5 years, 11 respondents had worked for 6-10 years 3 respondents had worked for 11-15 years, 6 respondents had worked for 16-20 years, and 36 respondents had worked for over 20 years. All of the lecturer respondents lived in the Special Region of Yogyakarta. Tables 4.2 and 4.3 illustrate the demographic survey of lecturer respondents.

**Table 4.2**

Gender, Universities and Field of study of the lecturer respondents

Gender		Higher Education		Field of Studies	
Male	Female	State	private	Exact	Social
28	48	11	59	16	54

**Table 4.3**

Education, length of employment, and academic position of the Lecturer Respondents

Education		Academic Position of				Length of Employment (years)				
S2	S3	Instruct ors	Assist ant Profes sor	Associ ate Profess or	Profes sor	1-5	6-10	11-15	16-20	> 20
49	21	31	22	15	2	14	11	3	6	36

#### **4.2. Online Learning in Higher Education**

Earlier in 2020, the world was shocked by the coronavirus pandemic, which then required everyone to perform all activities at home. Higher education is one of the areas affected by the coronavirus pandemic. Suddenly the learning process had to be arranged online. Many lecturers and students were not ready for the sudden change of the learning process from conventional face-to-face method to online method. Face-to-face and online learning methods have significant differences in terms of the process, teaching media, and learning methods. The online learning method could be carried out synchronously or asynchronously. By the synchronous method, students and lecturers could see face-to-face virtually where the lecturer could deliver the material directly and the students could respond to the lecturer in real-time. The synchronous method can be executed using media such as google classroom, zoom, or Microsoft Team. In contrast, by the asynchronous learning method, there is no face-to-face virtual meeting between lecturers and students. The lecturers design and distribute lessons and assignments through course sites, email, or other message media, and the students do the assignments and submit them through the same media. The advantage of the synchronous learning process is that the students and lecturers can meet face to face, even though virtually so that the students can respond directly to what is delivered by the lecturer and vice versa. However, this method highly demands a stable internet connection and adequate quota. This method is challenging for the students who live in an area with low access to the internet connection. In fact, during the pandemic, many students decided to return to their hometowns, where some of them are far from the university or maybe in remote areas with limited access to a stable internet connection.

The notion of online learning has been predicted when the industry 4.0 era was initiated. The pandemic that occurred in early 2020 triggered universities to enroll in the industry 4.0 era more quickly. The sudden switch to an online learning process has evolved various perceptions for both students and lecturers. This is due to many factors that affect learners and teachers differently. The following explanation is the result of the research on lecturers and students' perceptions of the online learning process.

#### **4.3. The Lecturers' Perceptions on the Online Learning Process**

The lecturers' perceptions of online learning are categorized into four aspects, namely: (1) their readiness for the online learning process, (2) the essence of learning with the online method, (3) the students' responses, and (4) online learning facilities.

##### **1. The Lecturers' Readiness to the Online Learning Process**

Generally, a sudden switch to the online learning method was not difficult for the lecturers from both state and private universities. The data shows that 71% of lecturers from state and private universities did not find any difficulty in carrying out online lectures during the pandemic. However, as many as 29% of lecturers found that it was difficult in the beginning. In terms of gender, generally, both male and female lecturers did not find any difficulties. However, according to research data, more female lecturers had difficulty conducting online lectures at the beginning of the pandemic. It was shown that 31% of female lecturers had difficulties, while male lecturers were 26%. The educational background of the lecturers did not seem to affect the difficulties of lecturers in carrying out the learning process at the beginning of the pandemic period. In general, 69% of lecturers from all educational backgrounds stated that they had no significant difficulties. However, when it is specifically categorized based on the level of educational background, it was found that the lecturers with a doctoral degree found more difficulties compared to the lecturers with a master's degree. The data shows that as many as 40% of lecturers with a doctoral degree had difficulty undergoing the learning process at the beginning of the pandemic, while only 24% of lecturers with a Masters's degree experienced difficulties. This is probably because the lecturers with a master's degree are younger lecturers, who are more experienced with information technology in education.

**Table 4.4**  
The Lecturers' impressions in online learning during the pandemic

<b>Description</b>	<b>Difficult</b>	<b>Not difficult</b>
<b>Gender</b>		
Male	26%	74%
Female	31%	69%
<b>Education</b>		
Postgraduate	24%	76%
Doctoral	40%	60%
<b>Academic Position</b>		
Instructor	20%	80%
Assistant Professor	41%	59 %
Associate Professor and Professor	29%	71%
<b>Length of employment</b>		
0 - 10 years	21%	79%
10 - 20 years	22%	78%
Over 20 years	36%	64%
<b>Field of study</b>		

Exact	29%	71%
Social	29%	71%

The data shows that the assistant professors (41%) were the ones who experienced the most difficulties in carrying out the online learning process at the beginning of the pandemic, while the instructors (20%) were the group of lecturers who experienced the least difficulties. This is probably since instructors are mostly young lecturers who are more familiar with information technology in education. The associate professors and professors appeared to have less difficulty. This is presumably because the lecturers with higher academic positions are more involved in scientific projects, so they may be more familiar with information technology. The lecturers with a length of work for more than 20 years (36%) experienced difficulties in the learning process at the beginning of the pandemic. Meanwhile, only 21% of lecturers with a work period of 0-10 years experienced difficulties, and as many as 22% of lecturers with 10-20 years of work experienced difficulties. This is probably since lecturers who work for more than 20 years are less familiar with online learning technology.

In terms of the field of study, lecturers from both exact and social sciences experienced difficulties with online learning at the beginning of the pandemic. This may be because they used to teach with direct teaching media so that it seems like it is easier to deliver the materials to students.

## **2. The essence of learning with the online method**

Indeed, an online learning process is administered with different media from face-to-face learning. The way a lecturer delivers the teaching material in online learning should be adjusted to the online condition. The question is whether the learning objectives in the online learning process can be achieved entirely as they are delivered offline. The results of the study show that more lecturers (55%) thought that the online learning process could not replace the offline learning process. It indicates that more lecturers prefer the offline learning process. However, 45% of lecturers stated that online learning could replace face-to-face learning. From these results, it is obvious that there are quite many lecturers who are starting to be ready to replace the face-to-face learning process with online learning, although for now there are still more lecturers who prefer face-to-face learning. This is supported by a finding where most lecturers argued that the online learning process did not reduce the essence of learning objectives

**Table 4.5**  
**Essence of Online Learning Material**

<b>Information</b>	<b>Does not reduce the essence</b>	<b>Reducing the essence of</b>
<b>Gender</b>		
Male	70%	30%
Female	69%	31%
<b>Education</b>		
Postgraduate	71%	29%
Doctorate	65%	35%
<b>Academic Position</b>		
Instructors	67%	33%



Assistant Professor	68%	32%
Associate professor and Professor	76%	23%
<b>Length of employment</b>		
0-10 years	79%	21%
10-20 years	33%	67%
More than 20 years	72%	28%
<b>Field of study</b>		
Exact	86%	13%
Non-Exact	65%	35%

Most of the female and male lecturers argued that the essence of learning that used to be administered face-to-face could still be achieved through online learning. However, 30% of male lecturers and 31% of female lecturers disagreed. According to the education degree, 29% of lecturers with a master's degree and 35% of lecturers with a doctoral degree declared that online learning could replace the essence of face-to-face learning. Meanwhile, based on academic positions, 33% of instructors, 32% of assistant professors, and 23% of associate professors and professors identified that online learning could reduce the essence of face-to-face learning. There is a larger percentage of lecturers who stated that online learning does not reduce the essence of the learning process, yet many lecturers believed that online learning could reduce the essence of the learning process. It indicates that for some lecturers, face-to-face learning cannot be replaced by online learning.

### **3. Student Responses to Online Learning Process**

The online learning process will be effective if there is good collaboration between lecturers and students supported by reliable teaching media. It was found that according to the lecturer, students did not experience any difficulties in the online learning process because they could quickly adapt to the learning media. However, it is assumed that the online learning process is less effective.

During the online learning, the lecturers could not confidently capture the students' reactions and responses to the lecturers' explanations. It made it difficult for the 68% of lecturers to measure their students' understanding of the explanation directly. Even though there was face-to-face interaction on the online media, some students or lecturers often turned off the video facility for several reasons. Consequently, the lecturer did not have complete information about what the students were doing during the learning process.

65% of lecturers assumed that the students could not perform their best in the online learning process. Besides, 74% of lecturers estimated that the students preferred the conventional face-to-face lectures compared to online lectures. This opinion is similar among every lecturer respondent category.

### **4. Online Learning Supporting Facilities**

The online learning process requires adequate facilities so that learning objectives can be achieved. The most required facility in the online learning process is the availability of a good internet connection for both lecturers and students. The fact that the students and

lecturer are not in the same location, Internet problems often hinder the learning process online. The students who live in areas with a poor internet connection would experience difficulties in accessing the whole explanation by the lecturers. Therefore, the learning process could not achieve the expected objectives.

Although the online learning process has a very broad meaning, online learning is often simply associated with the conventional (face-to-face) learning conducted through technology-assisted media like a video conference. The data shows that most of the lecturers (75%) thought that video conference was the most important facility in the online learning process.

**Table 4.6**  
**Facilities in the online learning process**

<b>Information</b>	<b><i>Video conferencing is necessary for online learning</i></b>	<b><i>Video conferencing is an alternative in online learning</i></b>
<b>Total</b>	75%	25%
<b>Gender</b>		
Male	70%	30%
Female	79%	21%
<b>level education</b>		
Masters	71%	29%
Doctoral	85%	15%
<b>Academic Position</b>		
Instructors	77%	23%
Assistant Professor	68%	32%
Associate Professor and professor	82%	17%
<b>Length of work</b>		
0 - 10 years	79%	21%
10 - 20 years	100%	0%
More than 20 years	67%	33%
<b>Science</b>		
exact	86%	14%
Non-Exact	73%	27%

From table 4.6 it appears that for most professors, online learning cannot be done without face-to-face interactions between lecturers and students. Hence, the lecturers stated that even if the faculty could not provide them the video conferencing facility, they would provide this facility on their own. The video conferencing ranges from *google classroom*, *zoom*, or others.

#### **4.4. Perception of Students on the Online Learning Process**

Online learning is not a brand new approach in education that has been applied even before the pandemic. Several universities have already administered some classes online using technology-assisted learning. Some companies have also produced applications as a digital



learning platform, for instance, google classroom, issued by Google company and Microsoft team issued by Microsoft company. Even more, the open university has applied the distance learning approach in their regular teaching and learning activities. Young generation students have recently accustomed to the use of internet-based information technology. Nevertheless, before the pandemic, most of the learning process in higher learning institutions was administered by face-to-face interaction. The pandemic has urged the higher learning institutions to change the learning process drastically. The face-to-face learning activities are transformed into online learning activities. How do the students perceive the online learning activities? This study surveys the students at universities in the Special Region of Yogyakarta. The students' perceptions are observed in terms of (1) the students' adaptability, (2) the students' understanding of the material, and (3) the students' learning preference, and (4) supporting facilities on the online learning.

There were 166 student respondents from the universities in the Special Region of Yogyakarta in this survey. The demographics of the student respondents in this study are summarized in table 4.7.

**Table 4.7**  
**Demographics of Respondents Student**

<b>Gender</b>		<b>University</b>		<b>Domicile</b>			<b>Field of Study</b>	
Male	Female	State	Private	SR Y	Java	Outside Java	Exact	Social
63	103		1165	42	54	70	70	96

The students' perceptions of the online learning process are investigated based on (1) the adaptability to the new learning methods, (2) lesson understanding, (3) self-development, and (4) supporting facilities.

### **1. The students' adaptability to a new learning method**

A sudden global pandemic requires the students to adjust to the new learning method replacing the conventional face-to-face method. The new learning method surprises the students in which they do not have an opportunity to have an immediate discussion on their learning materials with the lecturers or friends. Can the students in the Special Region of Yogyakarta quickly adjust to the new learning system? The research indicated that not all students were able to adapt well to the sudden switch to the online learning process. As many as 48% of students experienced difficulties when they had to undergo an online learning process. The data shows that 48% of male students and 49% of female students experienced this difficulty.

This research was conducted on the students batch 2016, 2017, and 2018. It is assumed that these students are able to differentiate between the conventional lectures and the newly introduced lectures, i.e. online learning as they have experienced the campus life before the pandemic. Besides, they still have another year in the university, if the pandemic is expected to end within one year. The data shows that the class of 2018 students or freshmen, as many as 53%, experienced the most difficulties. Meanwhile, students of the 2016 class experienced the least difficulty (14%). At the beginning of the pandemic, the students of 2018 were in the second semester of their first year at higher education. They were still

adjusting themselves to studying at the University. Normally, the freshmen would learn a lot from their sophomores and seniors. Unfortunately, their seniors were not around and also struggling with the new learning method. The difficulties experienced by most of the students (62%) were not about their ability to use technology in the learning process, but rather in adjusting to new situations and learning methods. The students from the Special Region of Yogyakarta had less difficulty using information technology than the students from outside Yogyakarta. Table 4.8 illustrates the adaptability of students to the online learning method.

**Table 4.8**  
**The students' adaptability to the new learning method**

Description	Adaptation difficulty	No adaptation difficulty
<b>Gender</b>		
Male	48%	52%
Female	49%	51%
<b>Batch</b>		
2016	14%	86%
2017	42%	58%
2018	53%	47%
<b>Place of origin</b>		
SRY	52 % %	48 %
Java	37%	63%
Outside Java	37%	63%

## **2. The students' Understanding of the Materials**

The online learning was conducted on various available communication media. The learning process was carried out either synchronously or asynchronously. The learning process where the students could not meet the lecturer face-to-face had affected the students' ability in understanding the lesson. 65% of students stated that it was more difficult to understand the learning material online, especially with the asynchronous method because it required the students' autonomy to learn on their own. This was experienced by both male (68%) and female (62%) students. According to the students' academic year, the freshmen had the most difficulty in understanding the learning material. As many as 73% of 2018 class students confirmed this. It is assumed that at the beginning of the pandemic, the freshmen had just graduated from senior high school and in their process of adjusting to higher education. The oldest batch of students (2016) had the least difficulty understanding the learning material. Only 14% of the 2016 class of students found it more difficult to understand learning materials online. It is assumed that they are more familiar with the lessons than their juniors. Exact and social science students were not much different in understanding learning material online. 69% of students from the exact science and 61% of students from the social science stated that it was more difficult to understand the material online.

**Table 4.9**  
**The students' understanding of the online learning process**

Description	Difficult	Not difficult
<b>Gender</b>		
Male	68%	32%
Female	62%	38%

Batch		
2016	14%	86%
2017	51%	49%
2018	73%	27%
Field of study		
Exact	69%	31%
Social	61%	39%

### 3. Preference to online learning processes

The online learning process during the pandemic was preferred by the senior students compared to junior students. As many as 71% of students of class 2016 stated that they preferred the online learning process since they could simultaneously do other activities while learning online. Only 36% of students from the class of 2017 and 36% of students from the class of 2018 enjoyed the online learning process. It means that more students from both academic years preferred face-to-face learning.

The students' preference for face-to-face learning is because they can be more focused on the lesson compared to online learning. This was revealed by 73% of student respondents. As many as 80% of 2018 class students stated that they were less focused if the learning process was carried out online. Senior students were less affected by online learning. 62% of students from the class of 2017 and 43% of students from the class of 2016 stated they were less focused on the lesson delivered online.

Another reason why the students preferred the offline learning process was because they feel that the lecturers were also less focused on the online learning process as stated by 54% of student respondents. The students admitted that a lot of tasks in the online learning process had burdened them. 70% of student respondents stated that they spent more time doing their tasks online. 71% of students from 2018, 75% of students from the class of 2017, and 57% of 2016 students expressed their dislike of online learning. The fact that they could not meet their lecturer to consult the lessons makes it difficult for them to survive the problem they faced through the online learning method as stated by 65% of student respondents. The need to meet lecturers in person is especially felt by the freshmen. 70% of 2018 class students said that they needed to meet the lecturers in person when they found any problems in their study. This was also experienced by 59% of students class 2017 and 29% of the students from the class of 2016. Table 4.10 summarizes the reasons why students prefer the face-to-face learning process to online learning.

**Table 4.10**  
**An overview of students' obstacles in online method**

Academic Year	Less focus	Tasks	Delay solution on study problem
2018	80%	71%	70%
2017	62%	76%	59%
2016	43%	57%	29%
Total	73%	70%	70%

### 4. Learning facilities in an Online learning

Online learning requires different facilities from face-to-face learning. Adequate facilities could be one of the influencing factors for the success of online learning. During the global pandemic, many students who went to the Special Region of Yogyakarta decided to go back to their hometown which reflects the various background of their learning conditions. Different areas would require different facilities for effective online learning. At the same time, it influences the students' understanding of the materials as well as their learning comfort. How are the students' perceptions of the facilities of online learning during this pandemic? Based on the survey, 45% of the students found that online learning results in ineffective learning when it was not supported by good facilities. This means that many students faced difficulties in understanding the lessons because of the facilities. During the pandemic, the students have different conditions from one another, for instance, the internet connection in a remote area is not as good as the internet connection in a town or city. Moreover, the decreasing economic condition of the family also challenges the students in supplying a good internet quota. Even more, the students' gadgets, like computers or laptops would influence the stability of the internet connection. Consequently, the students' backgrounds should be considered in the learning evaluation process. Before the pandemic, the evaluation could be done very objectively by assessing the students' performances, yet during the pandemic, the evaluation should also be changed. The lecturer needs to be more subjective in assessing the students to make sure that the students have received their rights in their learning evaluation.

The video conference replaces the conventional face-to-face interaction in distance learning. Most of the students still need a learning method where they can meet the lecturers in person. This need is facilitated by the video conference. Based on the survey, it was found that 73% of the student respondents stated that video conferencing was very helpful in online learning.

Of the three batches of student respondents, the youngest batch of students (76%), the class of 2018, was the ones who needed a video conferencing most, and then followed by 71% of the 2017 students and 14% of 2016 students. The class of 2016 was noted to be the ones who needed the virtual face-to-face least. It is believed that having a couple of years studying in college makes them accustomed to independent learning.

The need for students to meet their lecturers using video conferencing is the same for students who learn from the Special Region of Yogyakarta and from outside the Special Region of Yogyakarta. As many as 71% of students who learned from the Special Region of Yogyakarta, 70% of students who learned from outside SRY but were still in Java, and 74% of students who learned from outside Java stated that they were greatly helped in understanding the material because of using video conferencing in learning during the pandemic. Regarding the students' needs in virtual face-to-face lectures, it is concluded that online learning could not replace the conventional learning method as the students still need direct interaction with the lecturers. The confession is the same for both exact and social science students. Table 4.11 summarizes the importance of video conferencing to assist students in carrying out the distance learning process.

**Table 4.11**  
**The Importance of video conference in distance learning**

Description	Helpful	Not helpful
<b>Place of Origin</b>		
Special Region of Yogyakarta	71%	29%
Java, Outside SRY	70%	30%
Outside Java	74%	26%
<b>Academic Year</b>		
2016	14%	86%
2017	71%	29%
2018	76%	24%
Total	73%	23%

Even though most students, especially the juniors, feel the need to meet their lecturers face- to-face via video conferencing, students are also overwhelmed by the existence of the *video conference* especially because of the required internet quota to join the conference smoothly. As many as 48% of students felt that the internet quota for video conferencing was burdensome. The quota burden was handled almost equally by students from various regions. It was experienced by as many as 45% of students from the Special Region of Yogyakarta, 56% of students from Java, outside the Special Region of Yogyakarta, and 44% of students outside Java. It implies that the ability to do distance learning via the internet is similar to students in various regions. And the students are willing to pay for internet quotas because they need to meet with lecturers for a better understanding of the materials.

This research reveals that although the students and the lecturers have an opportunity to do online learning, face-to-face learning is still preferred for many reasons. Up to this time, although the development of information technology has spread broadly in all aspects of life, it could not replace the face-to-face interaction of the learning process. Teaching and learning activities do not only involve technical matters, but also interactions in human relationship.

## **5. Conclusion**

The covid-19 global pandemic has prevented the students and lecturers from arranging conventional classroom activities. The process of internet assisted learning during the pandemic is perceived as follows: both lecturers and students do not experience any significant difficulties in a sudden switch from conventional learning to online. Nevertheless, both lecturers and students still prefer the conventional face-to-face learning method. Conventional learning is more desirable because both lecturers and students become less focused and the students could not receive immediate solutions to their problems in the online learning process. The students still find some difficulties in understanding the lesson even though it is delivered through a video conference. Besides, the video conference itself could be another challenge for some students in terms of location and cost.

## **Reference**

Ali, Syaiful (2019) *Revolusi Industri 4.0 dan Dampaknya Terhadap Pendidikan Akuntansi di Indonesia*. Yogyakarta : BPFE Universitas Gadjah Mada

- Lutfiana, Ema. (2016) , “Persepsi Konsumen Terhadap Pelayanan Balqis SPA Muslimah Kediri “. STAIN Kediri
- Hayati, Nur. (2020), “ Metode Pembelajaran Daring/E-Learning yang Efektif”. Universitas Pendidikan Ganesha. Singaraja Bali.
- Universitas Binus . (2019, 2 Mei). Mengenal lebih jauh Revolusi Industri 4.0. Diakses pada 29 Mei 2019, dari [https://binus.ac.id/knowledge/2019/05/mengenal-lebih-jauh-Revolusi- Industri-4.0](https://binus.ac.id/knowledge/2019/05/mengenal-lebih-jauh-Revolusi-Industri-4.0).
- Surat Edaran Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 36962/MPK.A/HK/2020