

THE IMPACT OF THE LOCKDOWN STATUS ON STUDENT LEARNING DURING THE COVID-19 PANDEMIC

Fiki Setiawan dan Taiman

Akademi Analisis Kesehatan (An-Nasher) Cirebon Jawa Barat, Indonesia

Email: pikipikipiki24@gmail.com dan taimantea@gmail.com

Abstract

This research aims to explain the effect of the lockdown on university students in West Java during the outbreak of COVID-19. The research approach used in this study is a descriptive research survey method. An online survey was performed to obtain data from July 1 to July 8, 2020. The systemic questionnaire method used was the 'Google form' sent to students via WhatsApp and e-mail. A total of 231 students submitted full input on the survey. Easy percentage distribution is used to determine the learning status of the participants in the sample. Approximately 70% of students enrolled in e-learning during the lockdown period. Some students use android phones to follow e-learning. Students have experienced numerous concerns relating to anxiety, depression, inadequate internet access, and a low learning atmosphere. Students from rural and impoverished regions, in particular, pose significant learning difficulties during this pandemic. This research proposes targeted initiatives to create positive environments for learning as part of community among students. In order not to compete with student skills and productivity, policies are desperately needed to create a sound education system during the pandemic.

Keywords: Covid-19; Pandemic; Connectivity

Abstrak

Penelitian ini bertujuan untuk mendeskripsikan dampak lockdown di tengah wabah COVID-19 pada Mahasiswa perguruan tinggi di Jawa Barat. Metode penelitian yang digunakan dalam penelitian ini adalah metode penelitian survei deskriptif. Untuk mengumpulkan data, survei online dilakukan dari 1 Juli hingga 8 Juli 2020. Instrumen kuesioner struktural yang digunakan adalah Google form dikirim kepada Mahasiswa melalui WhatsApp dan Email. Sebanyak 231 mahasiswa memberikan informasi lengkap terkait survei tersebut. Distribusi Persentase sederhana digunakan untuk menilai status pembelajaran peserta studi. Selama periode lockdown, sekitar 70% peserta didik terlibat dalam e-learning. Sebagian besar pelajar menggunakan ponsel android untuk mengikuti e-learning. Mahasiswa telah menghadapi berbagai masalah yang berkaitan dengan kecemasan depresi, konektivitas internet yang buruk, dan lingkungan belajar yang kurang baik di tempat tinggalnya. Mahasiswa dari daerah terpencil dan bagian yang terpinggirkan terutama menghadapi tantangan besar bagi pembelajaran selama pandemi ini. Studi ini menyarankan adanya intervensi yang ditargetkan untuk menciptakan ruang positif untuk belajar di antara mahasiswa

sebagai bagian dari masyarakat. Strategi sangat dibutuhkan untuk membangun sistem pendidikan yang baik selama masa pandemi, sehingga tidak mengintervensi keterampilan dan produktivitas mahasiswa.

Kata kunci: Covid-19; Pandemi; Konektivitas

Pendahuluan

Coronavirus disease (COVID-19) first appeared in the Chinese city of Wuhan at the end of 2019. The outbreak of COVID-19 is so swift that it caused the statement of pandemic status by the World Health Organisation (WHO in March 2020 (WHO Timeline, n.d.). Many countries around the world had initiated lockdown status before the WHO declared a pandemic to reduce the spread of this extremely infectious illness by enforcing social/physical distances, preventing face-to-face learning, and limiting immigration. About 600 million students worldwide are affected due to the closure of educational institutions (Goyal, 2020). Several newspapers and electronic media have reported that around 68 million students are affected in Indonesia, of which about 7.5 million are university students.

The first positive case of COVID-19 was reported in Indonesia (Depok) on March 2, 2020. Currently, Indonesia is experiencing an increase in COVID-19 cases. As of August 31, 2020, Indonesia has reported 172,053 positive cases, 124,185 recovered cases, and 7,343 deaths (Health, n.d.). The Indonesian government and various other countries have initiated several strategies to control the spread of the disease. Since March 25, 2020, several regions in Indonesia have passed four phases of lockdown, for which the government has extended the emergency status of the COVID-19 disaster until May 29, 2020. The COVID-19 pandemic has challenged the existing teaching and learning practices from primary schools through to tertiary institutions in almost every country of the world (Bryson & Andres, 2020). The closure of educational institutions due to the COVID-19 outbreak has had an unprecedented impact on education. During the lockdown, teachers are instructed to teach through an online learning platform (Abidah, Hidaayatullaah, Simamora, Fehabutar, & Mutakinati, 2020). Most of the terms (online learning, open learning, web-based learning, computer-mediated learning, blended learning, m-learning, for ex.) have in common the ability to use a computer connected to a network, that offers the possibility to learn from anywhere, anytime, in any rhythm, with any means (Cojocariu, Lazar, Nedeff, & Lazar, 2014).

Rapid developments in technology have made distance education easy (McBrien, Cheng, & Jones, 2009). Innovative teaching on continuing education and addressing emotional trauma and distress during the emergency of the COVID19 crisis should be given. The COVID19 epidemic, by online seminars, teleconferencing, digital books, online examinations, and participation in a virtual environment, resulted in a digital transformation in the higher education sector. Educators have shifted their entire pedagogical approach to tackling emerging business dynamics and adjusting to changing circumstances. A significant positive

impact of COVID-19 is also reported on the efficiency of online learning strategies which help in creating a collaborative and interactive learning environment where students can give their immediate feedback, ask queries, and learn interestingly (Dhawan, 2020).

Based on (Chang et al., 2020; Iivari, Sharma, & Ventä-Olkkonen, 2020; Zhang et al., 2020) had conducted a study of digital transformation in education during coronavirus pandemic. Generally, the results of their research stated that Intelligent technology has certain benefit for the learning process of education during the pandemic. The closing of educational institutions hindered the education system and the teaching and learning process during this lockdown period. Understanding the teaching and learning process during this crisis era is very important for producing appropriate interventions for the smooth operation of teaching and learning. With this context, the purpose of this analysis is to recognize learning status, learning methods, and learning-related issues during this lockdown amid the COVID-19 pandemic.

Metode Penelitian

The research method used in this research is descriptive survey research method. The descriptive survey research method is a method that is carried out on a set of objects, which usually aims to see a description of the phenomena that occur in a specific population. This research is an online survey-based study of 231 health analyst diploma students in West Java, Indonesia. The online survey was conducted from Juli 1 to Juli 8 2020. Structural questionnaires using the Google form were sent to students via WhatsApp and E-mail. Participants give full consent before participating in online surveys. A total of 231 students provided complete information about the survey. Descriptive statistics were carried out to understand the distribution of study participants. Simple percentage distributions assess learning status, mode of study, and opinions about educational decisions and problems associated with study due to locking. All analyzes were performed using the Statistical Package for Social Science (SPSS Version: 25).

Hasil dan Pembahasan

A. Characteristics of participants

Table 1 displays the profiles of students in this study. Of the 231 students, nearly three-quarters of them were over 20 years old with an average age of 21 years. The number of male students in this study was 50 people and 181 women. The majority of them live in rural areas (85.3%), and their family income is less than Rp. 1,000,000, - (22.5%). The description of the majority of student residences is scattered in several cities and districts in West Java, as shown in table 2. The highest proportion of students comes from Cirebon (49.8%), followed by Indramayu (12.6%) and Kuningan (10.4%). Most of the students find it difficult to connect to the internet because their living quarters are like the bottom of Ciremai mountain.

The problem of the digital divide was also a big issue particularly for learners in rural areas. This is because students and teachers in rural areas often lack the needed facilities and expertise to implement remote teaching and learning (Onyema et al., 2020).

Table 1
Characteristics of study participants (n-231)

Characteristic	Frequency (n)	Percentage (%)
<i>Age of Students</i>		
20 Years and below	96	41.6
21 Years and above	135	58.4
<i>Sex</i>		
Male	51	22.1
Female	180	77.9
<i>Residential Area</i>		
Rural	197	85.3
Urban	34	14.7
<i>Monthly income of family (Rp.)</i>		
Below 1.000.000	52	22.5
1.000.000 – 1.999.999	84	36.4
2.000.000 – 2.999.999	52	22.5
3.000.000 – 3.999.999	26	11.3
Above 4.000.000	17	7.4

Table 2
Movement of students for study

Home Distric	Frequency (n)	Percentage (%)
Bandung	5	2.2
Banten	1	0.4
Bekasi	2	0.9
Brebes	4	1.7
Cianjur	1	0.4
Cirebon	155	49.8
Cirebon city	14	6.1
Indramayu	29	12.6
Karawang	5	2.2
Kuningan	24	10.4
Lampung	1	0.4
Majalengka	23	10
Pekanbaru	2	0.9
Subang	5	2.2

B. Knowledge and attitude about COVID-19

Table 3 shows the students' knowledge and attitudes regarding the current state of the national public health emergency disaster. From 231 samples, 79 students (34.2%) heard about this disease in December 2019. More than half of students (74.5%) got information about COVID-19 from social media such as Instagram and Twitter, which showed their awareness of various facts of the spread of the disease COVID-19. The majority of students (92.2%) reported living in their own homes during periods of a large-scale lockdown or social distancing. On the other hand, some students are living in the campus dormitories because their place of residence is far from the campus. Based on the results of observations, some students did not dare to go home because of large-scale social restrictions in the area. During the lockdown period, students faced several difficulties related to finance (94.4%), health (3.9%), and food (1.7%).

Table 3
Knowledge and attitudes

Knowledge and attitudes	Frequency (n)	Percentage (%)
<i>Time when heard about covid-19</i>		
December 2020	79	34.2
January 2020	61	26.4
February 2020	46	19.9
March 2020	45	19.5
<i>Source of information about covid-19</i>		
Newspaper	0	0
Social media	172	74.5
Television	50	21.6
Personal interaction	9	3.9
<i>Place residing during lockdown</i>		
Home	213	92.2
Dormitory	15	6.5
Relatives house	3	1.3
<i>Difficulties facing during lockdown</i>		
Financial	218	94.4
Health	9	3.9
Food	4	1.7

C. Study status and academic environment during the lockdown

Several questions were distributed to record learning status during the lockdown, including learning styles, syllabus coverage, time spent training, and study space at home (Table 4). In this lockdown period, (88.7%) students continued their studies through online e-learning, while (10.4%) students learned through lecture material independently. Because students study in a subject with a different semester credit unit load, the study period is slightly different. Only

(4.3%) students reported that more than 50% of their syllabus was achieved or the learning material was fulfilled. About two-thirds of students (66.7%) gave answers that only 30% -50% met the syllabus in the course.

On the other hand, 36.4% of students did not know the list of learning materials during the pandemic. The majority of students (72.7%) reported that they spent less time studying than everyday situations. Out of 231 students, 83 (35.9%) do not have a particular study or reading rooms during online classes. An unconducive situation at home is another problem. The unconducive condition varies, ranging from the sound made by children in the house, the noise of a neighbour carrying out welding work, the noise of rice machinery, and the sound of customers at a building materials shop. This was described by GRJ, as follows: I do have my study room, but I also have two younger siblings who are still of elementary school age. When online lectures are taking place, my siblings always shout out or make noise, watching television at a high volume, even though they have been warned not to disturb me. They run backward and forward, shouting, causing me to lose focus. So, although I study in a particular room, there is still external noise, I still cannot manage to focus.

Table 4
Learning status

Variable	Frequency (n)	Percentage (%)
<i>Mode of learning</i>		
Both textbook and e-book	2	0.9
e-learning	205	88.7
learned through lecture material independently	24	10.4
<i>Syllabus covered</i>		
<30%	67	29
30% - 50%	154	66.7
>50%	10	4.3
<i>Do you know the list of learning material</i>		
Yes	103	44.6
No	85	36.8
Don't know	43	18.6
<i>Time to studi during the lockdown</i>		
Less than normal circumstance	168	72.7
More than normal circumstance	36	15.6
Same like a normal circumstance	27	11.7
<i>Separate room for study</i>		
Yes	83	35.9
No	148	64.1

D. Information about online classes

Among the students surveyed who attended online classes, only 69 (29.9%) students attended online classes more than three days a week, while 68% of them attended online classes less than three days per week. Most of the respondents (93.5%) use android phones to follow e-learning, and another 6.5% of students use their laptops or computers for online teaching and learning activities. One of the reasons why most students choose to use smartphones is because they are more portable (mobility). Laptops tend to be more wasteful of their battery, so they must always be plugged into electricity. Even though the majority of students use their android phones for e-learning, many of them experience technical difficulties such as slow processing and full memory storage space. Then 79.7% of students have never attended online lectures before the pandemic (before the outbreak). In other words, students and lecturers are forced to use online platforms for teaching and learning activities. During a time of large-scale social distancing, digital initiation or learning by lecturers using different digital channels because COVID-19 indicates that even in crucial circumstances, the continuation of the teaching and learning process must continue. Some of the research participants acknowledged that learning from home was the best option during this Covid-19 pandemic. This is related to government policy, which encourages physical or social distancing in order to protect people from exposure to the coronavirus and prevent the virus from spreading further. In a situation like this, the lecturer provides information to students to participate in virtual meeting.

Table 5
Information about online classes

Variables	Frequency (n)	Percentage (%)
<i>Online classes attended</i>		
Above 3 days per week	68	29.4
Below 3 days per week	158	68.4
Daily	5	2.2
<i>Gadgets for attending online classes</i>		
Smartphone	216	93.5
Laptop or computer	15	6.5
<i>Attend online classes before outbreak of covid-19</i>		
Yes	184	79.7
No	47	20.3

E. Online classroom platform, material distribution and evaluation

In this study, it was found that students used various platforms to participate in the learning process, various learning materials (sharing material) and learning evaluation. Platforms that are often used in online classes include Audio Phone, Google Classroom, Zoom App, Youtube, Skype and Google Meet (Table 6). The results also show that most respondents (61.5%) use the Zoom application to attend online classes or e-learning, followed by Google classroom (30.3%) and

google meet (7.4%). Students also follow many other learning platforms for learning materials during periods of large-scale social distancing. Based on the results of observations, students tend to study independently with textbooks. This is due to the weak internet connectivity conditions in the residence of their respective students. The majority of respondents (41.7%) use WhatsApp Groups to get lecture material from lecturers. Then (38.7%) of the students used google classroom for learning/sharing material. However, only a few students take part in learning through live youtube. Youtube is used by students only to find references for study assignments. Lecturers use digital platforms not only to deliver material but also to evaluate the learning process very quickly using WhatsApp Groups, Google Classroom and Google Forms. Google Form is used to get student feedback on the teaching and learning process in online networks during the pandemic. The teaching and learning process was partially evaluated through WhatsApps Group (43.7%), followed by Google Classroom (34.2%), besides that, the learning status of students was also evaluated via Google Form (6.1%). The thing that needs to be underlined is, where (16%) students believe that online learning is not evaluated at all.

Table 6
Platform for online classes, material sharing, and evaluation

Various plafforms	Frequency (n)	Percentage (%)
<i>Online class platforms</i>		
Audio phone	2	0.9
Google classroom	69	29.9
Google meet	17	7.4
Skype	0	0
Youtube	0	0
Zoom app	143	61.9
<i>Platform of material sharing</i>		
WhatsApp group	79	42.2
Google classroom	88	38.3
Zoom app	45	19.6
<i>Platform of evalution sharing</i>		
WhatsApp group	102	44.2
Google classroom	78	33.8
Google form	14	6.1
Not yet evaluated	37	16

F. Opinions about academic decisions and recommendations

Teaching during a course disruption reveals a critical human connection between students and faculty (Day, 2015). Despite that, students appreciate efforts made by the institution and by faculty to maintain academic continuity (Collings, Garrill, & Johnston, 2018; Day, 2015; Monti, Tull, & Hoskin, 2011). Table 7 shows student opinions about campus decisions regarding academics and recommendations during the lockdown phase. From the research participants, 144

students agreed to the campus institution's decision to open academic activities in August 2020. More than a quarter of students (27.7%) did not know information about the academic calendar, while (72.3%) students already knew about the information on academic activities during the lockdown. Most of the research participants (58%) reported positive responses to the recommended academic calendar schedule proposed by the institution while (42%) respondents disagreed with the latest schedule of academic activities. They consider the schedule; busy teaching and learning activities. More than half of students (58%) agreed to the recommendation of campus institutions regarding the examination system, evaluation patterns, research, and field studies, while students (24.70%) did not agree with the semester examination system during this pandemic. With the transfer of face-to-face lectures to the online system, many lecturers only focus on assigning assignments to students. So that, not a few students complain about the sudden pile-up of assignments. This assignment was considered too stressful for students. The reason is that some assignments must be completed and must be submitted online according to the related lecture hours, but some assignments are given a grace period for their collection. In terms of the lack of a fixed schedule, concerning the schedule, it appears that the lecture of a particular subject for not follow the timetable issued by the study program. Lecturers change their teaching schedules without coordinating with other lecturers. As a result, timetables sometimes clash.

Table 7
Opinion regarding academic decisions

Academic recommendation	Frequency (n)	Percentage (%)
<i>Do you agree with the campus recommendation to carry out learning activities in early August?</i>		
Yes	144	62.3
No	66	28.6
Don't know	21	9.1
<i>Do you know information about the academic calendar?</i>		
Iya	64	72.3
No	167	27.7
<i>Do you agree with the new academic schedule?</i>		
Yes	134	58
No	97	42
<i>Do you agree with the exam system?</i>		
Yes	134	58
No	57	24.7
Don't know	40	17.3

G. Impact of the COVID-19 on economic and educational conditions

Two hundred twenty-two students reported that the pandemic of COVID-19 impacted their economic circumstances from study respondents, and Two hundred seventeen students reported that low-income households would have a negative effect on their schooling in the sense of COVID-19. Besides, 149 students thought/though that the latest pandemic might result in their education being terminated (Table 8). Based on the results of the observations, many students proposed deferral of tuition fees. On the other hand, some students complained about the cost of internet quota to take part in the online learning process. The students find it incredibly tricky is the expense of purchasing an internet package. The expenditure is more significant to buy internet credit, while sometimes students are looking for free wifi access during lectures or uploading assignments. For students with many low-income whose access to home computers and internet connectivity may be spotty, the absentee rate seems incredibly high. Some educators say that less than half of their students participate daily.

Table 8
Impact of covid-19 on economic and education

Opinions	Frequency (n)	Percentage (%)
<i>Do you think that the your family's economic conditions will be affected by covid-19 pandemic?</i>		
Yes	222	96.1
No	9	3.9
<i>Do you think low-income families would affect your education?</i>		
Yes	217	93.9
No	14	6.1
<i>Do you think the covid-19 pandemic may cause of educational discontinuation?</i>		
Yes	149	64.5
No	82	35.5

H. Study-related problems during the lockdown

It has been confirmed that most students have suffered from stress, depression, and anxiety (69.7%) during this lockout time. Students are also worried about poor internet connectivity (77.9%), motivated by a friendly home study environment (63.2%). When students are on campus, they can easily access

a high-quality internet connection because it is made available by the institution for academic purposes. However, when students follow online lectures in their own homes, the situation is very different. Students who happen to live in a rural area or mountainous areas may experience problems.

Moreover, the poor environmental conditions may be the reason for their unfavorable and lack of separate space for learning (Table 9). It should be remembered that the online learning process is also biased. For students worldwide, the transition to online learning has been challenging, and this challenge has reflected itself in students in several different ways. In online classroom instruction, students contend that lecturers seem unattractive (62.8). They have been left with a lack of inspiration by the current format for their classes that may impact their academic success during the term. This influence may have many roots, with some identifying a lack of online learning structure to their traditional classroom. Our study also found that many learners face significant e-learning barriers and that most students can not attend online classes. Because of a lack of inadequate internet access, students from rural regions and especially disadvantaged areas complained about studying online. Poverty in this time of unwanted crisis is exacerbating the issue of the digital learning process.

Table 9
The problem of the digital learning process

Various problems	Frequency (n)	Percentage (%)
<i>Feeling stress and anxieties</i>		
Yes	162	70.1
No	69	29.9
<i>Gadget has technical problems during online classes</i>		
Yes	180	77.9
No	51	22.1
<i>Do not have favorable environment to study at home</i>		
Yes	146	63.2
No	85	36.8
<i>Lecturer not interested in teaching learning process</i>		
Yes	145	62.8
No	86	37.2

Kesimpulan

The lockdown amid COVID-19 has created significant disruptions during academic activities. The research assesses the learning status of undergraduate students during this pandemic. While most students use digital platforms to learn, many of them face significant challenges in online learning. This study suggests recommendations to governments, policymakers, and institutions: there should be consistent academic planning for colleges and tertiary institutions and an appropriate Education Continuity Plan (ECP) to continue the learning process during this pandemic. Facility infrastructure must be provided for educational institutions regulating the digital learning process for health in future emergencies. Adequate funds for the development of the education system; furthermore, training capacity building for university partners is required. Interventions should be initiated by a targeted approach to the development of supportive learning spaces for students. At this crucial moment, teachers' organizations should implement open-source digital learning and learning management framework to carry out online learning. Finally, a crucial multi-faceted plan is desperately needed to create a resilient state education system that will ensure the production of skills for young minds' employability and competitiveness.

BIBLIOGRAFI

- Abidah, Azmil, Hidaayatullaah, Hasan Nuurul, Simamora, Roy Martin, Fehabutar, Daliana, & Mutakinati, Lely. (2020). The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of “Merdeka Belajar.” *Studies in Philosophy of Science and Education*, 1(1), 38–49.
- Bryson, John R., & Andres, Lauren. (2020). Covid-19 and rapid adoption and improvisation of online teaching: curating resources for extensive versus intensive online learning experiences. *Journal of Geography in Higher Education*, 1–16.
- Chang, Tsai Yu, Hong, Guang, Paganelli, Corrado, Phantumvanit, Prathip, Chang, Wei Jen, Shieh, Yi Shing, & Hsu, Ming Lun. (2020). Innovation of dental education during COVID-19 pandemic. *Journal of Dental Sciences*.
- Cojocariu, Venera Mihaela, Lazar, Iulia, Nedeff, Valentin, & Lazar, Gabriel. (2014). SWOT analysis of e-learning educational services from the perspective of their beneficiaries. *Procedia-Social and Behavioral Sciences*, 116(0), 1999–2003.
- Collings, David, Garrill, Ashley, & Johnston, Lucy. (2018). Student application for special consideration for examination performance following a natural disaster. *Assessment & Evaluation in Higher Education*, 43(2), 260–271.
- Day, Terence. (2015). Academic continuity: Staying true to teaching values and objectives in the face of course interruptions. *Teaching and Learning Inquiry*, 3(1), 75–89.
- Dhawan, Shivangi. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22.
- Goyal, S. (2020). *Impact of Coronavirus on Education in India*. Retrieved March 1, 2020, from <https://www.jagranjosh.com/articles/dmrc-result-2020-released-delhimetrailcom-check-cut-off-marks-1587122899-1?itm>.
- Health, Ministry of. (n.d.). *Infeksi Emerging*. Retrieved on Agust 31, 2020, 12:15 (GMT+07:00). Retrieved from <https://infeksiemerging.kemkes.go.id/>
- Iivari, Netta, Sharma, Sumita, & Ventä-Olkkonen, Leena. (2020). Digital transformation of everyday life—How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care? *International Journal of Information Management*, 102183.
- McBrien, J. Lynn, Cheng, Rui, & Jones, Phyllis. (2009). Virtual spaces: Employing a synchronous online classroom to facilitate student engagement in online learning. *International Review of Research in Open and Distributed Learning*, 10(3).
- Monti, Antoine, Tull, Susan, & Hoskin, Alan. (2011). Engagement at the epicentre.

Changing Demands, Changing Directions. Proceedings of the 28th ASCILITE Conference, 874–879.

Onyema, Edeh Michael, Eucheria, Nwafor Chika, Obafemi, Faith Ayobamidele, Sen, Shuvro, Atonye, Fyneface Grace, Sharma, Aabha, & Alsayed, Alhuseen Omar. (2020). *Impact of Coronavirus Pandemic on Education*.

WHO Timeline. (n.d.). *COVID-19*. Retrieved from <https://www.who.int/news-room/detail/31-08-2020-who-timeline-covid-19>.

Zhang, Qing, He, Yi Jing, Zhu, Yu Hang, Dai, Min Chen, Pan, Man Man, Wu, Jia Qi, Zhang, Xian, Gu, Ying Er, Wang, Fang Fang, & Xu, Xiang Rong. (2020). The evaluation of online course of Traditional Chinese Medicine for MBBS international students during the COVID-19 epidemic period. *Integrative Medicine Research*, 100449.