

# Q3 IJSE Albert et al

*by andiyan 1*

---

**Submission date:** 15-Mar-2022 02:08PM (UTC+1000)

**Submission ID:** 1784620652

**File name:** Paper\_Q3\_IJSE\_Albert\_et\_al.docx (247.28K)

**Word count:** 6364

**Character count:** 37032

# The Effects of the Covid-19 Pandemic on Student Learning, Social Interaction, and Health

Albert Wolter Aridan Tangkudung<sup>1</sup>, Emy Yunita Rahma Pratiwi<sup>2</sup>, Hefri Yodiansyah<sup>3</sup>, Iwan Setiawan<sup>4</sup>, Zulvia Trinova<sup>5</sup>, Tuti Marlina<sup>6</sup>, Andiyan Andiyan<sup>7</sup>

<sup>1</sup>Universitas Negeri Jakarta, Jakarta, Jakarta, Indonesia 13220

<sup>2</sup>Universitas Hasyim Asy'ari Tebuireng Jombang, Jombang, East Java, Indonesia 61471

<sup>3</sup>STISIP Persada Bunda, Pekanbaru, Pekanbaru, Indonesia 28116

<sup>4</sup>Institut Teknologi dan Bisnis Asia, Malang, East Java, Indonesia 65142

<sup>5</sup>UIN Imam Bonjol Padang, Padang, Indonesia 25171

<sup>6</sup>STAI Al Fithrah, Surabaya, East Java, Indonesia 60129

<sup>7</sup>Universitas Faletehan, Bandung, West Java, Indonesia 40266

Correspondent: [andiyanarch@gmail.com](mailto:andiyanarch@gmail.com)

## Abstract

The program enrolled students studying architecture and interior design at the Faculty of Architecture and Interior Design. A random sample of students from the Faculty of Architecture and Interior Architecture was used to create the sample. - formalized paraphrase data collection using an online questionnaire. Online courses alter the pandemic's impact on classroom activities since internet signals are geographically restricted. Social communication through cyberspace is expanding due to the incapacity to engage in person. Students gain a more vital awareness of sanitary behavior, often demonstrated via hand washing. The COVID-19 epidemic affects children's academic, social, and health behaviors. However, due to the constraints they confront, students show more adaptation, i.e., they see the importance of technology in promoting learning outcomes, fostering social connection through online communication, and encouraging students to embrace a healthier lifestyle. The research indicates that the outbreak has a detrimental impact. Students, in particular, struggle to acquire technical skills as a consequence of online courses. On the other hand, several positive effects enhance technology, social communication, and health practices.

**Keywords:** Students, Architecture, Interior Design, Covid-19, online

## 1. Introduction

The WHO (World Health Organization) proclaimed a worldwide pandemic on March 11, 2020, due to the massive COVID-19 outbreak. WHO has urged all nations, including Indonesia, to act swiftly and aggressively to prevent and manage COVID-19. The case was discovered for the first time in West Java on March 20, 2020, prompting West Java to upgrade its status to an emergency department, indicating that there is a gap in the ability of a population with high wealth to use technology and pursue digital education[1].

According to a survey, maintaining a generally positive attitude is necessary to follow government recommendations on health regimens, yet more than 80% of individuals worry about COVID-19. COVID-19 information is extensively disseminated through television, mass media, and online social media, ensuring that people are always concerned about COVID-19[2]. It is believed to affect an individual's mental health. The study demonstrates some of the effects of COVID-19, including 12.5 percent experiencing difficulties sleeping, 37.8 percent fearing COVID-19 infection, and 36.4 percent feeling pressured by social media. The pros and cons of the community against the health protocol rules that are applied have caused some regulations to be relaxed a little. To measure and educate public awareness in implementing health protocols, further research is needed[3].

Students have also felt the influence of COVID-19. Due to societal constraints, online lectures were selected as a substitute for traditional lecture activities that we cannot carry out. Study Regarding online learning in the Architecture and Interior Study Program, it is well established that students already possess the necessary infrastructure to engage in online learning, which promotes the development of autonomous learning and the motivation to be more active learners. Distance learning effectively reduces crowds in the context of applying health procedures aimed at limiting the spread of COVID-19[4].

However, according to other research, online lectures need modifications to the point where they impede students. According to research conducted on students enrolled in the Architecture and Interior Study Program, the challenges encountered during online lectures include limited data and signal quota packages and lecture technicalities that burden students with several tasks due on short notice[5]. When it comes to education, the COVID-19 epidemic has had a major effect, particularly on distance learning techniques that must be completed online. It also applies to Architecture and Interior Design students in the planning and design studio lecture activities, which were formerly carried out offline in the studio but are now required to be carried out online from their individual residences, as part of the online learning methodology[6].

The COVID-19 pandemic has had a broader effect than worldwide fatalities, particularly on the economic sector and other spheres such as education. Issues in education relating to access to information technology and media when there is a disparity in how a population with a high wealth may satisfy access to technology and engage in digital education[7]. Due to the COVID-19 epidemic, office, lecture, school activities, and other activities have been restricted. The University of Bandung announced that lectures would be entirely online from March 21, 2020 [8]. Preliminary surveys were done online using Google forms on May 20–25, 2020, with students from the Faculty of Science and Engineering, Architecture, and Interior Design who revealed that practically all activities were completed at home. Students who have workout routines must likewise suspend them due to the closure of the fitness facility and training center. While some opt to practice alone at home, others distract their attention by skipping exercises, assisting their parents, or working to earn additional pocket money[9].

Some are "overseas youngsters" from other regencies or provinces, and even neighboring islands need care. Students are influenced directly or indirectly in various ways, including financial. Some students cannot attend online lectures due to insufficient funds to purchase internet quotas since their pocket money is limited or non-existent[10]. Some find it impossible to work because roads are blocked or their place of employment is inoperable; others have an indirect effect in the form of a drop-in or even stoppage of pocket money due to their parents' inability to work. Due to little pocket money, eating routines become erratic, resembling potluck. While certain social connections (in-person meetings) occurred, several road access points were restricted[11]. Buffer consists of project buffer and buffer feeding. The project buffer is the spare time that is placed at the end of the critical chain of a project. Meanwhile, buffer feeding is a buffer time that is useful as a link between non-critical chain activities and critical chain activities[12]. The extension is an active procedure requiring contact between the extension worker and the individual to establish a behavior change process[13].

Some of whom are "overseas youngsters" from other regencies or provinces and even neighboring islands need care. Students are influenced directly or indirectly in various ways, including financial. Some students cannot attend online lectures due to a lack of funds to purchase internet quotas since their pocket money is limited or non-existent. Some find it impossible to work because roads are blocked, or their place of employment is inoperable; others have an indirect effect in the form of a drop-in or even stoppage of pocket money due to their parents' inability to work[14]. Due to little pocket money, eating routines become erratic, resembling potluck. While certain social connections (in-person meetings) occurred, several road access points were restricted. Research has to be done to examine changes in learning activities, social relationships, and health behavior due to the COVID-19 pandemic[15]. The necessity in this research is that the COVID-19 pandemic is a new phenomenon. Thus it is vital to analyze the effect experienced so that measures may be created to overcome the challenges produced by the influence of Covid-19 as an attempt to adjust to new habits. The goal of the research was to assess changes in learning activities, social connections, and health behavior due to the pandemic in order to be able to prepare and do the right things in the period of adopting new habits. The epidemic still exists, but certain activities must continue not to halt production. It is anticipated that this study will help adopt new habits[16].

## 2. Research methods

The research was conducted in June 2020. The topics studied were university students' Bandung. The investigation was undertaken to utilize a quantitative technique. This sort of study is called descriptive[17]. The design employed is a cross-sectional approach. From FluencyThe questionnaire was produced by the researcher in open and closed questions. This sort of inquiry pertains to experiences, views, sentiments and is related to the senses and demographics[18]. The validity of the statistics is dependent on impartiality, considering the degree of agreement amongst numerous people. The questionnaire was evaluated by the Faculty of Science and Engineering, Architecture and Interior Design[19]. The findings obtained for 15 out of 18 questions were considered legitimate based on the correlation coefficient significance test. Invalid questions were not utilized in the research, so there were 15 questions left. The dependability coefficient value is 0.74, certified as dependable[20].

The study sample consisted of students from the Faculty of Engineering and architecture and interior design students in Bandung, with 96 students. The sampling approach is essential for random sampling. The factors to be assessed include changes in learning patterns, social behavior, and student health behavior. The data collection approach employed an online questionnaire, which analyzed closed and open questions and applied the statistical model. The questionnaire

utilizes Google Forms. The study was carried out quantitatively, specifically with univariate analysis, to determine the description of the data obtained with a frequency distribution.

### 3. Results

The survey included <sup>5</sup> students from the Faculty of Engineering, architecture, and interior design and 96 individuals representing 2.6 percent of the Faculty of Engineering's student body. Students from various academic programs and departments within the Faculty of Engineering are invited to participate. The students who participated came from various entering years, including 2019, 2018, 2017, and 2016. Most students were from West Java, with a few from other provinces in Central Java and other locations, including Sumatra and Sulawesi[21].

Most students engage in just one activity, namely studying, accounting for 71.9 percent, while others engaged in studying and work, accounting for 28.1 percent. The pupils' backgrounds are shown in Figure 1. Throughout the pandemic, lectures were conducted online, and some students returned home (following online lectures from their village homes). Of the 48 students, some stayed in Bandung boarding houses/dorms (30 people), others traveled round trip (6 people), and the remainder lived in Bandung (12 people).

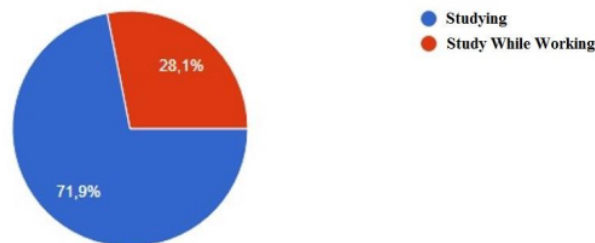


Figure 1. Student Background

Pandemics have a significant influence on several facets of daily life. While some felt the influence, they could adjust, while others suffered more significantly. 59.4 percent of participants reported direct or indirect consequences, and 40.6 percent reported being able to comprehend and respond to changing situations[22].

#### The COVID-19 Pandemic's Effect on Learning Behavior

The lectures are delivered online by the General Guidelines for Education Implementation <sup>8</sup> During the COVID-19 Pandemic Period. The recommendations are by the Minister of Education and Culture's circular and take into account the governor of Central Kalimantan's circular on the Status Protocol Emergency Response to the COVID-19 Pandemic Disaster in West Java's Educational Environment. Complete online lectures are a novel concept for some students. Technology usage is also novel and needs adaption, and specific locations face network limits[23]. The findings indicated that beach visitors' perceptions of parking problems did not match the actual parking availability. Additionally, parking perceptions were not shown to be highly correlated with visitor patterns[24].

Online learning methodologies provide a variety of settings; some students struggle to grasp the information and have learning challenges. The findings indicated that 78.1 percent had no impediments or encountered issues that were handled, while the remaining 21.9 percent encountered difficulties taking online courses. Table 1 summarizes the conditions that apply during online lectures.

**Table 1.** Conditions during Online Lectures during a Pandemic

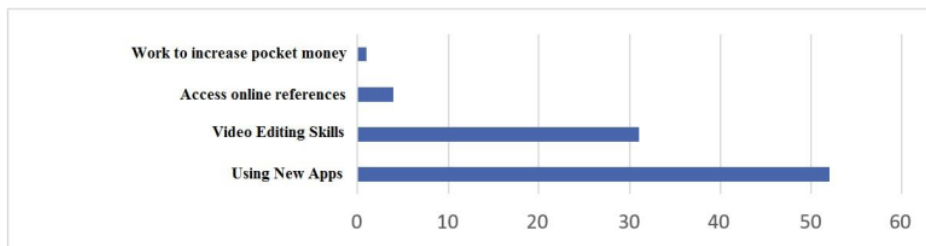
Conditions during Online Lectures	Amount (t)	Percentage(%)
No problems or there is a problem, but it has been resolved	75	78.1
Having trouble	21	21.9

According to several pupils, the subject was more difficult to comprehend and more comfortable in person. All classes are offered online, promoting independent study and giving students the impression that they have more work to do and more effort to put in front of a laptop or mobile phone, which causes their eyes too weary. The cost of the internet package needed is higher, but it is necessary for attending lectures and completing and submitting assignments. Meanwhile, economically disadvantaged individuals must assist their parents to free up time for their studies.

Because lectures are offered online, the lecture schedule is more flexible, to the point that they are occasionally performed outside of the lecture schedule. Online education limits practical learning since it cannot be conducted directly in the field. Additionally, people who usually provide presentations in front of the class are prohibited, and question and answer sessions are prohibited.

Students who believe there are no hurdles have conquered them (78.1 percent), and up to 8% believe they are studying harder. Online lectures provide face-to-face interactions with lecturers and classmates, which adds a feeling of enjoyment and aids in comprehending the lecture topic. Another advantage is that they are more technologically savvy; they are more familiar with apps that facilitate online education.

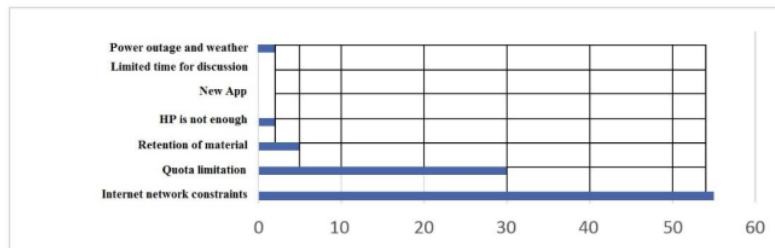
As shown in Figure 2, the new abilities developed throughout the epidemic are connected to the topics taught, such as basketball skills, injury treatment, and others, and bring them closer to technology. Lectures are delivered in various ways, depending on the lecture contract. The majority of students, up to 52%, said that they were downloading and using new programs during lectures and other educational activities. Several platforms are being utilized, including Google Classroom, Zoom, Google Meet, and the platform used by the local teachers, which includes WhatsApp and Telegram.



**Figure 2.** New Skills during Online Classes

Helpful content is given by offering advice and then allowing students to experience it, which results in students often reporting on practical activities through video. 32% of students said that they wanted to improve their abilities in video editing using a variety of software. Students gain proficiency in Microsoft Office (word, excel, and PowerPoint) and with Canva and Blender. Another way to improve learning is to read journals or online books more often and read from the Indonesian Wikipedia site and free reading tools like ipusnas, Duolingo, and quora. Additionally, you can study from the YouTube video that offers general facts and knowledge. Children gain

new experiences, such as working to supplement their pocket money, along with educational activities. 78.1 percent of students had difficulties during online lectures, whereas the remaining 21.9 percent were highly adaptable. The hurdles encountered are shown in Figure 3, notably an insufficient network, a limited quota, and more difficult-to-understand information. Online lectures using direct contacts, such as Zoom or Google Meet, are confined by the network; often, the voice is unclear and needs more capacity. As discussed, the approach of indirect engagement has limits.

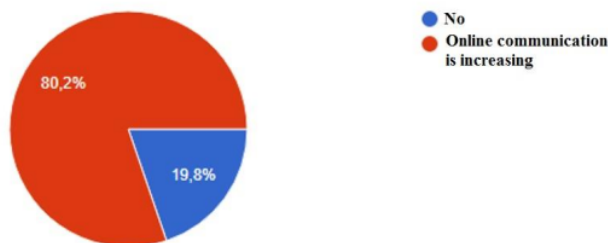


**Gambar 3.** Online Lecture Constraints

Students taking the test must adhere to the health regimen for the registration procedure and seminar examinations, which were technically limited at the time. Issues are also encountered by experienced students doing research. Prepared proposals need direct involvement or data collection in schools and other locations. Disaster response status necessitates studying from home, which creates difficulties for pupils when gathering data.

**8**  
**Impact of the Covid-19 Pandemic on Social Interaction**

Social constraints provide avenues for communication and social interaction through the internet. It is also something that respondents to this survey have encountered. Communication technology has a role in sustaining individual-to-individual and group-to-group social contact. As shown in Figure 4, 80.2 percent of respondents are increasingly using online communication. 34.4 percent said they were more connected to family through indirect face-to-face contact, 39.6 percent said they still met face-to-face with family, 16.7 percent said they did not meet with family, and the rest said they met infrequently or not at all.



**Figure 4.** Changes in Social Relations in the Virtual World

Individuals and groups engage socially during worship activities. Worship activities were also impacted since most activities took place at home, with houses of worship shuttered. To avoid becoming ill, 48.9 percent said they were more obedient to worship and prayed more frequently, but 36.5 percent said their worship behavior remained the same before the pandemic, and the rest did

not respond and attended worship less frequently or did not respond at all. Worship activities are conducted at home, with family, and online, yet certain places continue to practice worship via the implementation of health practices[25].

12

### Impact of the Covid-19 Pandemic on Health Behavior

Most people feel overprotective after learning about the epidemic. According to the study's findings in Table 3, 51% are more suspicious when someone is ill or exhibits indications of disease, and another 42.7 percent quickly seek self-medication if they feel unwell. Overprotective behavior becomes "easier to suspect" when someone else sneezes, coughs, or appears to be ill because there is a sense of fear and suspicion that someone may be ill. COVID-19 The majority of students, 77.1 percent, felt inspired to engage in social activities linked to the epidemic but did not do so directly.

**Table 2.** Over Protective Behavior during a Pandemic

Overprotective Behavior	Amount (t)	Percentage (%)
It is easier to be suspicious when someone has signs/symptoms of illness	49	51
Seek self-medication if you feel signs/symptoms of pain	31	32
Go to the doctor immediately if you feel unwell	16	17

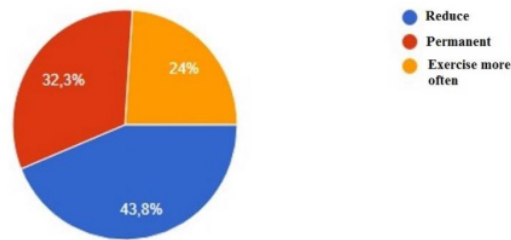
Along with the challenges provided by online courses and athletic activities, it turns out that the epidemic had a beneficial effect. Closer ties to family, more frequent contact with relatives or friends, more cost-effective living, improved understanding of technology, and more worship were all seen as promising developments. A small percentage, 3.1 percent, were unaware of the change. We are compelled to live a healthy lifestyle during this epidemic time—numerous stakeholders exchange information on health practices for preventing the spread of COVID-19. The study's findings indicate that healthy lifestyle improvements are regularly occurring. Hand washing is the most commonly practiced healthy lifestyle activity, mask usage, exercise, and good eating habits. The majority of dietary changes were reduced by up to 45.8 percent. Students said that their pocket money was decreased, while others who studied while working reported that their income was lowered, forcing them to cut down on food expenditures. Additionally, more stores closed, limiting their dining options. The information is shown in Table 2[26].

**Table 3.** Changes in Diet During a Pandemic

Dietary habit	Amount (t)	Percentage (%)
Reduce	44	45.8
Permanent	42	35.4
Pay more attention to diet	18	18.8

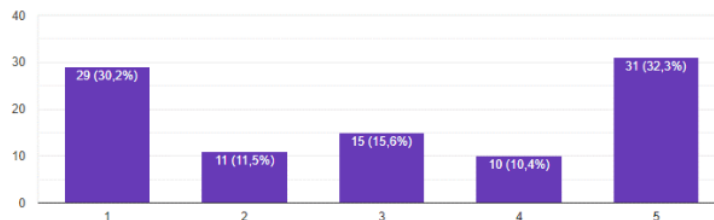
Numerous attempts have been made to improve endurance. The majority preferred to sunbathe 45.8 percent of the time, with the remaining 28 percent drinking herbs, potions, or other herbs. Other ways include exercise, vitamin and mineral supplements, eating a nutritious diet, drinking enough water, and boosting fruit and vegetable intake. Exercise patterns are also shifting. During the early period of the pandemic, all activities should be conducted at home; avoid leaving the house unless necessary. In particular, the City of Bandung enforced Large-Scale Social Restrictions (PSBB) between May 11 and 24, 2020. The findings indicated that the majority of them, 43.8 percent, decreased their physical activity. Figure 5 illustrates the findings of studies on changes in exercise routines[27].





**Figure 5.** Changes in Exercise Pattern

The majority of those who exercise do it at home, both indoors and outside. 64.6 percent exercise at home, 22.9 percent do not have an exercise regimen, and the remainder exercise but not frequently. Jogging, volleyball, and basketball are all sorts of sports that are practiced. Exercises are completed separately, rather than in teams as in a game. Those who are not physically active engage in activities such as walking or gardening. The study was conducted during the pandemic to examine changes in learning, social interaction, and perceived health behavior from the outbreak to data collection, as well as attitudes toward the new standard concept that has begun to be discussed, even as Bandung continues to debate whether to extend the PSBB period. Figure 7 depicts attitudes towards the new standard paradigm. Attitudes are practically evenly split between those who are unwilling to adapt (32.3 percent) and those who are willing to adapt to new habits (32.3 percent) (30.25). Numerous efforts were made to prepare for the adaptation of new habits, including increasing endurance (56.3 percent), preparing a starter kit (54.2 percent), seeking information about the adaptation process (38.5 percent), being more cautious (1 percent), and the remainder stated that no special preparation was made. Number one suggests an attitude of unpreparedness, fear, and inability to adjust, while number five indicates readiness to adapt.



**Figure 7.** Attitude in Facing the New Normal

#### 4. Discussion

According to research done in India, respondents generally have positive views, such as adhering to government recommendations about health regulations, although more than 80% of individuals are fascinated with the notion of COVID-19. This research demonstrates some of the same findings: participants have a generally positive attitude, but most of them experience anxiety, as seen by their overprotective conduct in response to the information received. Several of them said they were compelled to remain in their hometowns due to their parents' concerns about the campus's location in Bandung, a red zone. The findings indicated that most students had difficulties during their lectures, including issues with internet networks, internet quotas for participation in lecture activities and assignments, and difficulty comprehending information. This situation is consistent with Surabaya State University's Sports Science Study Program studies, which indicate several barriers to online lectures. These impediments include limited data and signal quota packages and lecture complexities that load students with several assignments due on short notice. This scenario is consistent with the disparity in the population's percentage with high

earnings that can afford technology and engage in digital education. Another impediment faced in this study is the restriction of research activities to COVID-19, but suggestions developed by students in the previous era may even necessitate physical contact and must disregard physical separation to investigate new techniques. According to the authors, the primary reasons for suboptimal internet usage in education are a lack of human resources, technical change, telecommunications infrastructure, and the regulatory framework that governs it. Additionally, there are still gaps in the infrastructure for telecommunications, multimedia, and information technology. Internet access should be increased. Students who reside in the Bandung campus area typically have no issues, while those who live in the vicinity generally have problems, to the point that some of them are forced to hunt for areas with a good signal.

It is expected that pupils feel comfortable teaching since it is accessible from anywhere and at any time, but that does not seem to be the case for students at Bandung. The majority of pupils in the village are rural, which means that many have issues with the area's internet network. Students from science and engineering faculties, architecture and interior design, and health and recreation said face-to-face instruction and direct field experience are more enjoyable than online instruction. That online education is adaptable and capable of fostering the development of autonomous learning and the desire to be more active learners. UPR students also encountered this circumstance in this research; they were required to learn independently to comprehend the subject, complete assignments, and seek additional references from online journals, books, websites, and apps. Online education is an efficient method of energizing the classroom. Because Bandung University is situated in a red zone, online teaching approaches should successfully lower the danger of transmission spreading. However, due to the network constraints in numerous places, the assessment of lecture activities in several situations could not be carried out correctly. Several remedies were implemented, including extending the period for collecting assignments and identifying and deciding on strategies for reaching out to students.

The implementation of online learning is constrained by a restricted internet quota and the instructors' and students' unfamiliarity with the technology. This circumstance necessitates a more robust, unique technique. One of the learning methodologies is project-based learning, which enables students to get a deeper understanding of subjects while also increasing their learning results. Interaction in this learning style may be beneficial when students produce or build practical and connected items to daily life. The notion of developing new habits enables face-to-face interactions in the classroom while adhering to appropriate health norms. The study space is provided with handwashing facilities, and students are encouraged to keep a safe distance from one another and wear masks. Face-to-face instruction is required for some learning goals that are more successful when conducted in person, whereas other learning objectives may be completed online. The learning paradigm is based on blended learning (PBBL). PBBL is a method of learning that integrates three distinct modes of instruction: face-to-face, offline, and online. Blended learning approaches, such as those used in the architecture and interior design study programs at the Faculty of Science and Engineering, are very successful. Blended learning-based learning enables students to maximize their learning potential and simplifies instructors' jobs. This strategy has the potential to evolve into an efficient technique for the adaptation period associated with this new habit. Specific courses, particularly suitable materials, and fundamental principles need face-to-face sessions; others may be completed entirely online or offline.

Option learning techniques are comparable to learning models in which online methods offer an alternative, but they use video apps to promote practical learning methods. The learning concept is founded on three evaluation dimensions: cognitive, emotional, and psychomotor. Students must practice independently at home before presenting their learning achievements to the professor through offline and live videos. The research took place at a time of widespread societal constraints. Along with campus activities, social and economic activities are restricted. Practical courses, such as basketball, were disclosed by respondents, and learning took place autonomously

at home, with the outcomes of the activities being reported to the lecturer. Activities must be completed in teams, collaborating with family members or other residents of the same house or neighborhood. This learning is comparable to the remote learning model's learning design as a learning opportunity for schoolchildren and a collaborative approach with the kids' parents through observation sheets of learning activities.

During a pandemic, social contact through cyberspace intensifies. They were informed of the progress of COVID-19's development, preventative measures, and social activities relating to COVID-19. Media and information sources are constantly developing. Social media can help expedite the distribution of knowledge about COVID-19 in public health education. The evolution of static media sources in books is applied dynamically and virtually, as shown in this research using virtual learning references by sure students. Social media and other online media information must be defined and vetted. According to a study conducted in China, younger individuals are more likely to have psychological issues. Anxiety disorders, depressive symptoms, and sleep loss were all difficulties. The incidence of anxiety disorders and depressive symptoms is more significant in younger people than in older ones. This should be a worry since students are members of society as a group of younger people, and a tiny percentage of students report being stressed out by the volume of assignments and lack of comprehension of the subject presented. Understanding lecture material is similar to research conducted at the University of Dai Bandung, which found that 54.5 percent of students have difficulty understanding lecture material, 50% of students exhibit creativity, 56.5 percent of students complete difficult and slow assignments, and 41% of students are less active during lectures. Students at UPR have difficulty understanding; they are more at ease when speaking with professors face-to-face. Creativity is discovered via talents acquired outside colleges, such as learning new apps or video editing. Due to network limits and a high volume of assignments, assignment implementation is complex and sluggish. Similar to the research conducted in China during the epidemic, pupils' mental health had to be examined. Economic consequences and impacts on everyday life and delays in academic pursuits were shown to be positively connected with anxiety symptoms (P 0.001), while social support was found to be adversely associated with anxiety levels (P 0.001).

Students in this research reported experiencing the same thing. Students who live with their parents are required to assist with more family tasks, and some are required to work, which causes anxiety when they cannot attend online courses adequately. The COVID-19 pandemic has had several effects on health behavior, both directly and indirectly, via government appeals and media coverage. "social activities" refer to the motions or routines seen at village gates, public facilities, and workplaces. The findings indicated that the most commonly practiced habit was hand washing. The changes in behavior in this situation must be investigated to determine if they result from coercion, imitation (identification), or internalization. If the officer forces the officer to wash his hands, the behavior modification is ineffectual. However, if the officer washes his hands out of awareness to avoid the transfer of COVID-19, he believes it is proper and must exist in himself, making this habit more effective. Social restrictions are more tightly enforced since lectures are delivered online, avoiding crowds or student gatherings. In a study of students from the faculties of science, engineering, architecture, and interior design. Along with social limits or physical-social separation, the study's health habits included the usage of masks and the practice of handwashing. Physical distance is also a healthy activity that 55.9% of students in the Faculty of Science and Engineering, Architecture, and Interior Design engage in. Physical separation is determined by the female gender, a high level of understanding about physical distancing, and familial support. Female pupils' physical distancing conduct is preferable. However, no analysis of these drivers was conducted in this research.

Meanwhile, measures to limit the virus's spread will need considerable behavioral adjustments, not simply in response to official recommendations but also increased knowledge. Numerous

facets of the social and cultural setting affect the velocity and magnitude of behavioral change. The social environment may assist decision-makers in identifying risk factors and intervening effectively. Involving religious and community leaders in delivering health messages is regarded as beneficial. Social limitations or physical separation also aid in the prevention of COVID-19 transmission. Covid-19 is an infectious illness, and infectious diseases and a person's nutritional state are inextricably linked. The body needs more nutrition to keep up with the higher metabolism associated with illness.

On the other hand, a malnourished person increases his or her chance of contracting infectious illnesses since starvation reduces resistance, allowing germs to enter and flourish more readily. Thus, dietary requirements should be addressed in order to sustain bodily resistance. A balanced diet does not have to be costly, but students who are not used to preparing and cooking for themselves present a barrier. The study's findings indicate that students' eating behaviors typically remain stable. This contrasts with the fact that the important meals consumed were considerably greater during home isolation ( $t = 5.83$ ,  $p 0.001$ ,  $d = 0.22$ ).

Along with the variances, there are some parallels, most notably the pattern of unhealthy food intake as determined by the kind of food. Due to budgetary constraints and the closure of several shops/food sellers, students eat sparingly without regard to the notion of balanced nutrition. Respondents increased their eating frequency by 54.5 percent, food variety by 59%, and food intake by 51%. Students' frequency, variety, and number are often decreased. This is possibly due to anxieties about food shortages; the survey found that 54.5 percent of respondents were unconcerned about food shortages.

Students who had previously participated in an exercise program continued to do so at home. Some athletes have less enthusiasm due to their inability to compete. Understandably, some athletic events have been rescheduled. Sports or fitness programs may still be used to maintain a healthy physique. Exercise must be carried out carefully since it is intended to boost immunity or bodily resistance. Most attempts to boost immunity include sunbathing, followed by traditional or herbal remedies. This is consistent with the fact that up to 76% of respondents made upon-Ampon (spices) cocktails during the COVID-19 epidemic. Students have easy access to traditional foods since some return to their communities to live with their parents or relatives. Sport is another way to build endurance. Sport or physical exercise may help build endurance, improve fitness, alleviate stress, and boost self-confidence. Exercises of low to moderate intensity may help boost immunity. Physical activity includes walking quickly, climbing and descending stairs, or doing household chores.

Additionally, they jot down what they plan to do after the epidemic has passed. They want to resume their everyday lives, to do the things they did before the epidemic struck. They wish to reconnect with family, friends, and relatives and provide face-to-face lectures as they did before and even compete. They appreciate that they understand and practice a healthy lifestyle, place a higher premium on health, and are closer to God. Additionally, I want to return home soon to see family and enjoy the holidays after the epidemic.

## **5. Conclusion**

Students at the University of Bandung have been affected by the epidemic's social behavior and health. The influence of learning behavior is an adjustment to technology usage since lectures are done online. However, technological limits exist, and this technique is not the best for practical learning. Social behavior affects overprotective conduct; it is accessible to distrust others ill. Changes in health behavior, such as reduced eating patterns and exercise routines, also boost immunity or body resistance by sunbathing, drinking herbs or traditional components, and sports. Recommendations for lecture activities that take into account approaches that are generally accessible. Lecture styles should be evaluated in light of approaches that emphasize learning

outcomes. The hybrid learning technique is explored since the lecture method, although not optimal, is nonetheless necessary and sometimes overlooked during online courses.

## References

- [1] N. Kapasia, "Impact of lockdown on learning status of undergraduate and postgraduate students during COVID-19 pandemic in West Bengal, India," *Child. Youth Serv. Rev.*, vol. 116, 2020, doi: 10.1016/j.chilyouth.2020.105194.
- [2] N. Hasan, "Impact of 'e-Learning crack-up' perception on psychological distress among college students during COVID-19 pandemic: A mediating role of 'fear of academic year loss,'" *Child. Youth Serv. Rev.*, vol. 118, 2020, doi: 10.1016/j.chilyouth.2020.105355.
- [3] T. Cardiah, A. Andiyan, and A. Rahma, "Implementation of Health Protocols at Mosques during the Covid-19 Pandemic in the city of Bukittinggi," *Rev. Int. Geogr. Educ.*, vol. 11, no. 5, pp. 3765–3771, 2021, doi: 10.48047/rigeo.11.05.260.
- [4] J. Demuyakor, "Coronavirus (Covid-19) and online learning in higher institutions of education: A survey of the perceptions of Ghanaian international students in China," *Online J. Commun. Media Technol.*, vol. 10, no. 3, 2020, doi: 10.29333/ojcm/8286.
- [5] S. Abbasi, "Perceptions of students regarding e-learning during covid-19 at a private medical college," *Pakistan J. Med. Sci.*, vol. 36, 2020, doi: 10.12669/pjms.36.COVID19-S4.2766.
- [6] A. Andiyan, D. Rusmana, Y. Hari, M. Sitorus, Z. Trinova, and M. Surur, "Disruption of IoT in Adapting Online Learning during the Covid-19 Pandemic.," *Int. J. Early Child. Spec. Educ.*, vol. 13, no. 2, pp. 1331–1341, 2021, doi: 10.9756/INT-JECSE/V13I2.211181.
- [7] R. Khalil, "The sudden transition to synchronized online learning during the COVID-19 pandemic in Saudi Arabia: A qualitative study exploring medical students' perspectives," *BMC Med. Educ.*, vol. 20, no. 1, 2020, doi: 10.1186/s12909-020-02208-z.
- [8] J. Kim, "Learning and Teaching Online During Covid-19: Experiences of Student Teachers in an Early Childhood Education Practicum," *Int. J. Early Child.*, vol. 52, no. 2, pp. 145–158, 2020, doi: 10.1007/s13158-020-00272-6.
- [9] A. Alsoufi, "Impact of the COVID-19 pandemic on medical education: Medical students' knowledge, attitudes, and practices regarding electronic learning," *PLoS One*, vol. 15, no. 11, 2020, doi: 10.1371/journal.pone.0242905.
- [10] S. A. Meo, "Covid-19 pandemic: Impact of quarantine on medical students' mental wellbeing and learning behaviors," *Pakistan J. Med. Sci.*, vol. 36, 2020, doi: 10.12669/pjms.36.COVID19-S4.2809.
- [11] M. Rizun, "Students' acceptance of the covid-19 impact on shifting higher education to distance learning in Poland," *Int. J. Environ. Res. Public Health*, vol. 17, no. 18, pp. 1–19, 2020, doi: 10.3390/ijerph17186468.
- [12] Andiyan Andiyan, R. M. Putra, G. D. Rembulan, and H. Tannady, "Construction Project Evaluation Using CPM-Crashing, CPM-PERT and CCPM for Minimize Project Delays," in *Journal of Physics: Conference Series*, 2021, vol. 1933, no. 1, p. 12096.
- [13] K. Sulandjari, A. Putra, S. Sulaminingsih, P. Adi Cakranegara, N. Yusroni, and A. Andiyan, "Agricultural extension in the context of the Covid-19 pandemic: Issues and challenges in the field," *Casp. J. Environ. Sci.*, vol. 20, no. 1, pp. 137–143, 2022, doi: 10.22124/cjes.2022.5408.
- [14] E. Chung, "Online learning readiness among university students in Malaysia amidst Covid-19," *Asian J. Univ. Educ.*, vol. 16, no. 2, pp. 45–58, 2020, doi: 10.24191/AJUE.V16I2.10294.
- [15] A. Shahzad, "Effects of COVID-19 in E-learning on higher education institution students: the group comparison between male and female," *Qual. Quant.*, vol. 55, no. 3, pp. 805–826, 2021, doi: 10.1007/s11135-020-01028-z.
- [16] L. R. Amir, "Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia," *BMC Med. Educ.*, vol. 20, no. 1, 2020, doi: 10.1186/s12909-020-02312-0.
- [17] Sugiyono, *Understanding Qualitative Research*. Bandung: CV. Alfabeta, 2005.
- [18] Sugiyono, *Qualitative Quantitative Research Methods and R&B*. Bandung: CV. Alfabeta, 2012.
- [19] L. J. Moleong, *Qualitative Research Methodology*. Yogyakarta: Gadjah Mada University Press, 2007.
- [20] Lexy J. Moleong, *Qualitative Research Methodology*. Bandung: PT Remaja posdakarya, 2000.

- [21] D. K. Srinivasan, "Medical Students' Perceptions and an Anatomy Teacher's Personal Experience Using an e-Learning Platform for Tutorials During the Covid-19 Crisis," *Anatomical Sciences Education*, vol. 13, no. 3, pp. 318–319, 2020, doi: 10.1002/ase.1970.
- [22] M. Fawaz, "E-learning: Depression, anxiety, and stress symptomatology among Lebanese university students during COVID-19 quarantine," *Nurs. Forum*, vol. 56, no. 1, pp. 52–57, 2021, doi: 10.1111/nuf.12521.
- [23] A. Gillis, "COVID-19 Remote Learning Transition in Spring 2020: Class Structures, Student Perceptions, and Inequality in College Courses," *Teach. Sociol.*, vol. 48, no. 4, pp. 283–299, 2020, doi: 10.1177/0092055X20954263.
- [24] A. Andiyan and T. Cardiah, "Application of Contemporary Architecture in the Transfer Hub High Land Borobudur Building," *Civ. Eng. Archit.*, vol. 9, no. 7, pp. 2353–2361, 2021, doi: 10.13189/cea.2021.090722.
- [25] A. H. Elyas, "The use of e-learning learning models in improving the quality of learning," *War. Dharmawangsa*, no. 56, 2018.
- [26] E. Karwati, "Effect of electronic learning (e-learning) on the quality of student learning," *J. Penelit. Komun.*, vol. 17, no. 1, pp. 41–54, 2014.
- [27] M. D. H. Rahiem, "The emergency remote learning experience of university students in Indonesia amidst the COVID-19 crisis," *Int. J. Learn. Teach. Educ. Res.*, vol. 19, no. 6, pp. 1–26, 2020, doi: 10.26803/ijlter.19.6.1.

# Q3 IJSE Albert et al

---

## ORIGINALITY REPORT

---

8%

SIMILARITY INDEX

5%

INTERNET SOURCES

3%

PUBLICATIONS

3%

STUDENT PAPERS

---

## PRIMARY SOURCES

---

1

[www.int-jecse.net](http://www.int-jecse.net)

Internet Source

2%

2

[journals.guilan.ac.ir](http://journals.guilan.ac.ir)

Internet Source

1%

3

Submitted to Konsorsium Perguruan Tinggi Swasta Indonesia II

Student Paper

1%

4

Andiyan, Raditya Mandala Putra, Glisina Dwinoor Rembulan, Hendy Tannady.

"Construction Project Evaluation Using CPM-Crashing, CPM-PERT and CCPM for Minimize Project Delays", Journal of Physics: Conference Series, 2021

Publication

1%

5

Vo Thi Thu Thuy. "Sustainable approaches to nature in traditional architectural space, their application in the teaching of architecture and interior design", MATEC Web of Conferences, 2018

Publication

1%

6	Internet Source	1 %
7	eudl.eu Internet Source	<1 %
8	platcovid.com Internet Source	<1 %
9	Submitted to University of Oklahoma Student Paper	<1 %
10	Yeen Huang, Ning Zhao. "Chinese mental health burden during the COVID-19 pandemic", Asian Journal of Psychiatry, 2020 Publication	<1 %
11	journals.plos.org Internet Source	<1 %
12	pubcovid19.pt Internet Source	<1 %
13	www.mdpi.com Internet Source	<1 %
14	files.eric.ed.gov Internet Source	<1 %
15	pdfs.semanticscholar.org Internet Source	<1 %
16	www.jnma.com.np Internet Source	<1 %



17

Andiyan, Robi Triadi. "Eco-Architecture  
Concept Tourism Information Center  
Borobudur Highland Building", Walter de  
Gruyter GmbH, 2022

Publication

<1 %

---

Exclude quotes Off

Exclude matches Off

Exclude bibliography On

# Q3 IJSE Albert et al

---

PAGE 1

---

PAGE 2

---

PAGE 3

---

PAGE 4

---

PAGE 5

---

PAGE 6

---

PAGE 7

---

PAGE 8

---

PAGE 9

---

PAGE 10

---

PAGE 11

---

PAGE 12

---

PAGE 13

---