

# The Impact of COVID-19 on Education: From Students' Perspectives

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## INTRODUCTION

The spread of the novel Coronavirus or COVID-19 has severely disrupted international peace and security and posed a serious concern to the global politics and socio-economic aspects. Escalated in Wuhan, China at the end of 2019, the New Coronavirus has been officially declared as a Pandemic by the World Health Organization (WHO) in March 2020, during which 118,000 cases were confirmed (Ducharme, 2020). The Outbreak of COVID-19 has been widespread globally, now affecting more than 200 countries, and roughly 52 million confirmed cases with approximately 1.2 million death tolls (Worldometer, 2020). The impacts of the global pandemic have become a turning point of global health security, which will put a larger strain to the recession of many sectors, one of which is the educational sector. Coherent and cooperative responses from all relevant stakeholders from sub-nationals to the international level are essential to jointly combat the virus and seek preventive measures to resist a global crisis. Education has become one of the sectors which has been affected by the global pandemic as most of the infected nations including Cambodia are forced to impose lockdowns and restrictions on all institutions, entertainment venues and workplaces. Schools and educational institutions are too being suspended.

There was no exemption for the educational sector when it came to the outbreak of COVID-19. The closure of all educational institutions amid the global pandemic had unprecedentedly shifted the learning behaviors of students in all levels from primary to higher education. In March 2020, the Ministry of Education, Youth and Sport (MoEYS) of Cambodia announced the nationwide closure of all private and public schools and universities (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020). Particularly in developing countries like Cambodia, the suspension of physical classes largely contributed a number of impacts on education during the pandemic period as there is a wide social gap and inequality in terms of social welfare for higher education, affecting millions of youth who were pursuing academic degrees (Flynn & Himel, 2020). Consequently, the impact of

COVID-19 on education has indicated both positive and negative characteristics, especially in the context of higher education.

### **RESEARCH QUESTIONS**

This study aims to identify the impact of COVID-19 on education in Cambodia. Keeping this in mind, the study intends to provide answers to the following research questions:

- What are the positive impacts of COVID-19 on education in Cambodia?
- What are the negative impacts of COVID-19 on education in Cambodia?

### **RESEARCH OBJECTIVES**

In attempts to answer the research questions, the study has taken one higher education institution in Phnom Penh, Cambodia as a case study in view of the following objectives:

- To ascertain the positive and negative impacts of COVID-19 on education in Cambodia in the context of CamEd Business School students.
- To understand the shifting of studying behaviors of students.
- To determine the academic performance of students during online education.

### **SIGNIFICANCE OF THE STUDY**

The findings of this study clearly show the positive and negative consequences of COVID-19 on education considering the case of the study institution. The greater and higher awareness of impacts of COVID-19 on education justifies the needs for more effective and efficient learning and teaching approaches during and/or the post pandemic period. Also, the prior notices of the drawbacks provide the advantages for relevant stakeholders to seek for preventive measures and corrective actions to either avoid or minimize the possible impacts. Moreover, the research aims at understanding the students' behavior of learning in the new normal where all platforms are conducted remotely which promote the awareness of whether academic students have achieved better or worse performances amid acquiring online education.

### **SCOPE AND LIMITATIONS OF THE STUDY**

Due to the presence of several physical constraints during COVID-19 as faced by the researcher, the study has been confined to certain limitations, particularly gathering the resources and evidence as well as the larger perspectives of the impact on education in Cambodia. The study focused on analyzing the key issues considering respondents

from the CamEd Business school, which is one of the leading higher educational institutions in Cambodia. Moreover, within CamEd Business School, it was unlikely to obtain results from each and every individual student, and thus, the study is not free from sampling error. However, for the purpose of this study, we determined the sample size following the statistics formula with a certain acceptable margin of error. As we collected the primary data from the sample students of the CamEd Business School, therefore, the scope of this research is limited to only CamEd students who are currently pursuing the Bachelor's program. Due to the presence of these limitations, the findings of this research may not be generalized to represent the entire educational sector in Cambodia.

## LITERATURE REVIEW

### **The Impact of COVID-19 on the Global Educational Sector**

The COVID-19 pandemic has escalated enormous disruption to global educational sector in various forms. Since the outbreak of the virus worldwide, back in March 2020, almost each and every educational institution in the world has announced the suspension and closure of classroom teaching. Hence, the new norm of education has shifted toward the distance and online learning approach through technological means. The emergence of digital education has largely contributed a number of consequences including affirmatives and negatives as there are challenges and opportunities embedded under e-learning platforms. Genuinely, educational accessibility has been a critical challenge long before the outbreak of the novel coronavirus, as of 2018, approximately 258 million children and youth were incapable of receiving proper education (UNESCO, 2019). In addition to this, the impact of the pandemic became another burden to the existing issue in the education sector. According to the United Nations (2020), 94 percent of students in the world were heavily affected by the transmission of the virus in April 2020 in which all classrooms were conducted via online platforms. Therefore, it creates numerous challenges for students in terms of technical infrastructures and accessibility for learning, particularly in poor and developing nations. Simply, students in least-developed-countries proportionally do not have the access to the internet and possess less technological equipment for learning, making online learning an unrealistic opportunity for them. For example, in Africa, only 29 percent of the schools and institutions were able to switch from physical to online education and 24 percent of teaching has been cancelled, forsaking millions of African students to stay outside the education cycles. Moreover, based on the same report, due to the occurrence of the pandemic, about 40 million children in the world have missed out their education during their early years (Marinoni *et al.*, 2020). The current global crisis highlights the urgent needs for the effective

implementation of policies and measures to recover and reignite the growth as well as to prevent prolonged stagnation.

### **Cambodia's Strategic Responses to the Pandemic**

COVID-19 has posed numerous consequences to all sectoral aspects, and the degree of impact varies in accordance with the respective geographical and regional level which indicates the introduction of various policies and measures to tackle the issues and mitigate the impact. Cambodia, one of the developing countries in Southeast Asia, has accomplished a remarkable record in preventing the spread of the virus within the regional and international level. As of November 02, 2020, only 292 confirmed cases of COVID-19 were reported in Cambodia while 283 of who recovered with zero death rate and none of which cases were community infection (WHO, 2020). Notwithstanding that the infection was relatively low compared to other countries in the region, the negative consequences of socio-economic aspects are inevitable. In fact, the UN estimates the economic growth will shrink from 7.1 percent in 2019 to -4.1 percent in 2020 and roughly 17.6 percent of the population falls into impoverishment while the unemployment rate will increase to 4.8 percent (United Nations Office for the Coordination of Humanitarian Affairs [OCHA Service], 2020). In contemplation of mitigating of the impacts, all relevant stakeholders from sub-national to national levels devote to work collaboratively for a speedy recovery of economic slump. As a matter of fact, the Royal government of Cambodia (RGC) funded a US\$300 million social protection program, under which the cash would ultimately finance the poor and vulnerable groups of people as a result of pandemic impacts. On the top of that, the government has also implemented the long-term strategic plans for economic recovery to address the deeper issues including the necessity of diversification and sustainability investment in preventing any long-term consequences. Significantly, according to OCHA Service (2020), the Royal Government has executed a five-pillar framework to combat the issue, reflecting the social dimensions for the recovery plan such as enhancing the national COVID-19 health plan, embracing social protection, resuming the economic activities, maintaining macroeconomic balance and stability and strengthening social unity and community resilience. Furthermore, Cambodia has aligned a close tie with the international organizations to enforce national policy framework including the United Nations agencies like the World Health Organization which provide technical support and medical supplies as well as the preventive guidelines and measures to halt the spread of the virus. Lastly, in terms of education, the Ministry of Education, Youth and Sport have provided various forms of pedagogies including an e-learning approach in the form of tele-broadcasting aiming at assist the students from low-income family who are incapable of affording technological accessories to get access to education amidst these hard times. On top of that, the Ministry of Education announced the

resumption and reopening of schools and educational institutions in Cambodia in three different phases with the strict adherence to the safety guidelines of Ministry of Health and preventive measures in the Standard Operating Procedures (SOP) including the limitation of numbers of students and maintaining high hygiene standard (Khorn, 2020).

## STUDY METHODOLOGY

Following the background information, research questions and research objectives, forming study methodology is essential to carry out the research precisely in order to obtain answers to the questions. This part of the chapter focuses on the research design, data collection and data analysis.

### Research Design

Following quantitative research methodology as the method of the study, mainly referring to data collection and analysis strategies, in this research, numerical data were collected in an attempt to determine whether or not there is a relationship between two or more variables. Primary data were collected through a survey using a structured questionnaire from the sample respondents. The cross-sectional design was used to demonstrate the changes in the studying behaviors and the performance as well as the academic results of CamEd students during the online learning period. Moreover, in order to enhance a better understanding and maximize the validity of our research, we used the data that we have collected from freshman to senior CamEd students to match with the research objectives as well as to accurately apply the responses to the main research questions.

### Data Collection

Data accumulated for the purpose of the study were retrieved from both primary and secondary sources. Precisely, secondary data were retrieved from existing research articles and publications available on the websites. In this chapter we covered archival and official data reports from relevant international organizations, non-inter-governmental organizations to ensure the effectiveness and validity of the research. In addition, online surveys were conducted as a part of the primary source. The survey was mainly conducted via online Google Forms with the sample students who were enrolled in the courses. Moreover, the questionnaire consists of ordinal, multiple choices, scale and interval questions which aims to acquire the information and perspectives from respondents toward their online learning experiences during the pandemic. In order to determine sample size, this study has selected Slovin's formula (1960) as the means of measurement (Glen, 2012). Despite the following formula not being the most ideal type among researchers, it does not contain lots of

complexity in calculation. In accordance with the data from official CamEd Website (2020), during the 2019-2020 academic year, there was a total of 1942 students from year 1 to year 4 which represents the total population (N) of the research. Due to certain limitation, the confidence level of this research is only 90 percent which means that the alpha or margin of error (e) is 10 percent. As such, 96 students were the sample size for the research. Furthermore, a form of random sampling so-called Cluster sampling has been adopted as it involves selecting one definable subsection of the population as the sample that is taken to be representative. To be more precise, 24 students were selected randomly from each year to conduct the research. The following sample size formula (Slovin's formula) is used in the study:

$$n = \frac{N}{1 + N(e)^2}$$

Where,

n = Number of samples

N = Total population

e = Margin of error

### Data Analysis

For the purpose of analyzing the data, descriptive statistics has been used in this study. It is a simple tool for measurement that provides a basic indication of value of the existing variables. Instantly, quantitative data are mainly used to analyze the learning experience of sample students, and all of the data collected were converted and analyzed through Microsoft Excel by establishing tables and graphs to indicate the specific outcomes.

## FINDINGS AND DISCUSSIONS

COVID-19 pandemic has innovated new norms of education. Due to the lockdown and restrictions as well as the closure of all institutions, digital platforms have become the centered approach in the new normal. The changes have contributed a number of benefits to new learning styles for students. However, it is also quite essential not to overlook the drawbacks of online education as it would heavily affect to the future of global education. This chapter mainly aims to answer the research questions on the positive and negative impacts of COVID-19 on education.

Table 13.1 indicates the number of sample respondents along with their characteristics. As revealed, compared to male counterparts, the participation of female respondents was higher in the study. Again, compared to 21–25 years of age group students, the number of study participants in the 18–20 years age group was higher.

**Table 13.1:** Characteristics of Sample Respondents

<i>Item</i>	<i>Characteristics</i>	<i>Frequency</i>	<i>Percentage</i>
Gender	Male	42	43.75
	Female	53	55.21
	Other	1	1.04
Age	18–20	57	59.38
	21–25	39	40.63
Group of Study	A	15	15.63
	B	4	4.17
	C	1	1.04
	D	16	16.67
	E	14	14.58
	F	16	16.67
	G	3	3.13
	H	10	10.42
	I	12	12.50
	J	5	5.21

*Source:* Primary data.

## Positive Impact of COVID-19 on Education

### *Student's Adaptability Toward New Learning Behaviors*

Online education plays a key role in reinforcing the adaptable capability of students, particularly in the context of CamEd students. As a result of the survey, CamEd students tend to be adaptive to online learning as over 45 percent agree that adaptability to online learning is not the challenge. In fact, the first factor contributes to students' adaptability is due to the indication of the crucial role of Information Communication Technology (ICT) in higher education, especially during the pandemic. ICT becomes the new principle of pedagogy due to its utilization of distance education solutions including online platforms such as Zoom, Google Meet, Microsoft Teams and other social media. In addition to this, ICT highly promotes the accessibility to education as well as facilitate and mediate the learning process for both teachers and students (Sarik, 2020). Moreover, a complementary factor was due to readiness of the institution. Instantly, 81.25 percent of the sample collectively agreed and strongly agreed that CamEd Business School was well-prepared for online education. Therefore, the participation proportion of a respected educational

institution is necessary for students to quickly adapt with the shift of exiting paradigm. Furthermore, online learning fosters students' independent studying habits and enhance their flexibility in learning. Unlike physical classes where students could consult with their lecturers with face-to-face communication, online classes had disrupted the connection. Therefore, students become more independent and self-reliant for their own academic performance as well as increasing their flexibility for studying because the more independent students get, the more responsibilities they have to encounter. Based on the result of the survey as perceived by the respondents, their adaptability level is shown in Table 13.2.

**Table 13.2:** Sample Respondents' Adaptability to Online Learning

<i>Respondents' Adaptability</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
I find it easy to adapt to online learning	19 (19.80)	44 (45.83)	27 (28.12)	6 (6.25)	0 (0.00)
Using technology for learning is not my difficulty	23 (23.96)	51 (53.13)	17 (17.71)	5 (5.20)	0 (0.00)
CamEd is technically well-prepared for online learning	29 (30.21)	49 (51.04)	16 (16.67)	2 (2.08)	0 (0.00)
I can access well to the internet connection	8 (8.33)	41 (42.71)	38 (39.58)	8 (8.33)	1 (1.04)
I am able to access to more online source via technology	15 (15.62)	59 (61.46)	19 (19.79)	3 (3.13)	0 (0.00)
Online classes enhances my technological skills	16 (16.67)	58 (60.42)	19 (19.79)	3 (3.13)	0 (0.00)
It gives me more flexibility in online learning	19 (19.79)	52 (54.17)	23 (23.96)	2 (2.08)	0 (0.00)
It fosters independence learning habit	13 (13.54)	57 (59.38)	22 (22.92)	4 (4.17)	0 (0.00)
I feel more comfortable for online learning	15 (15.63)	46 (47.92)	23 (23.96)	11 (11.46)	1 (1.04)

*Note:* Figures in the parentheses represent percentage to total sample respondents.

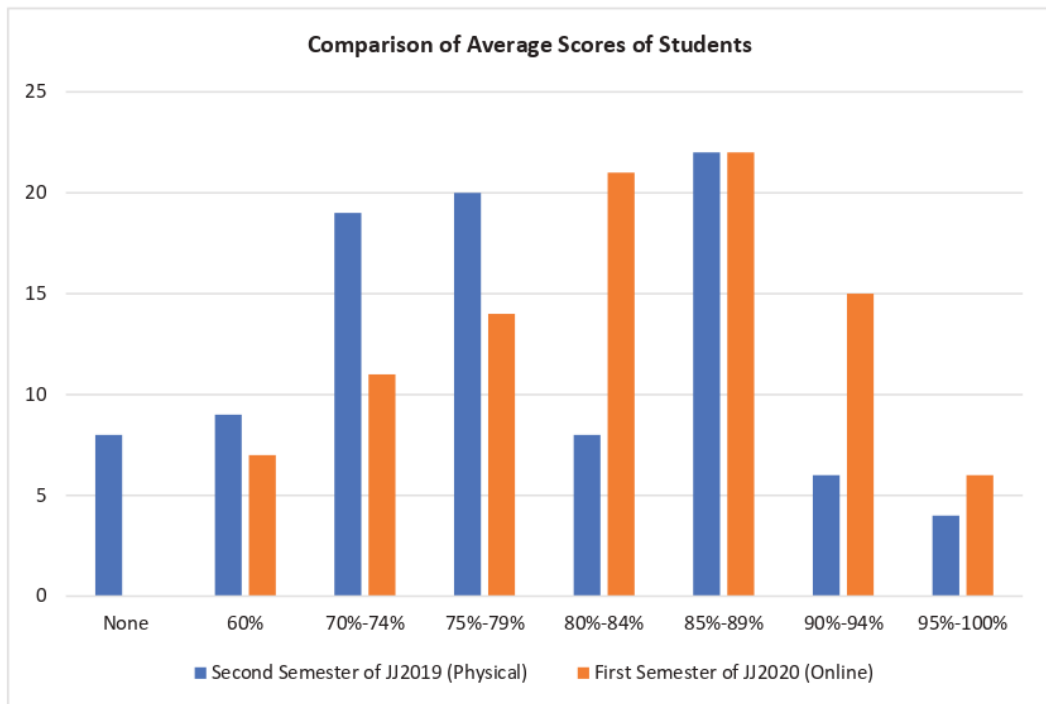
*Source:* Primary data.

### *Academic Results during Online Education*

Despite the fact that COVID-19 has severely affect to global education in various ways, one of the positive impacts of online education is the dramatic improvement of students' academic results. In the context of CamEd students, the academic results

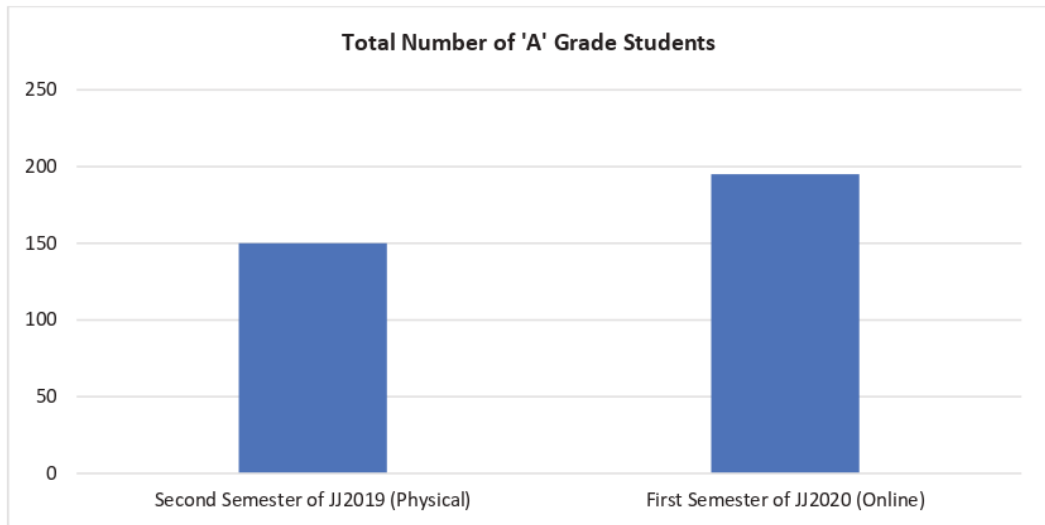


during the period of online classes tended to be higher compared to the average score they obtained before the closure of the schools. The data in the survey illustrate that during the second semester of JJ2019, during which physical classes were taken, the three highest average scores of the respondents were 70–74 percent, 75–79 percent and 80–84 percent while the three highest average scores of students during the conduction of online classes in the first semester of JJ2020 were 80–84 percent, 85–89 percent and 90–94 percent. This clearly indicates that the trend of results in physical classes is higher than online classes only from 60–79 percent of the average score range. On the other hand, it is higher for online classes from 80–100 percent of the average score range. Figure 13.1 presents the results of online classes which is higher than physical classes. Additionally, taking into account the grades, the total number of 'A' grades of the respondents before COVID-19 era was 150. However, a 30 percent increase was found when students shifted to online learning as the accumulated 'A' grades were 195 in total (Figure 13.2). The figure exhibits a better academic result of students when online or distance learning is implemented. Based on the result of the survey, the average score of students is shown in Figure 13.1.



**Figure 13.1:** Comparison of Average Scores of Students Between Face-to-Face and Online Learning

Source: Data compiled by author.



**Figure 13.2:** Total Number of 'A' Grade Students in Face-to-Face and Online Learning

*Source:* Data compiled by author.

## Negative Impacts of COVID-19 on Education

### *Behavioral Deficiency*

As all educational approaches are moving toward digital education amid the pandemic, students are likely to encounter with several negative consequences which possibly to some extent outweigh the benefits. Based on the survey of the sample students, it is revealed that one of the major bad impacts of online classes is the behavioral deficiency of students. The study measures students' learning behavior through the inquiries as to whether or not they used to skip online classes, reading more textbooks and fall asleep during classes. These factors audibly manifest the lack of self-discipline in learning. As a result, during online classes, 72 percent of students admit that they often fall asleep during the classes while 80.22 percent claim that they start to feel bored of online learning. Theoretically, there is a lack of motivation and willingness in online education, consequently, students tend to be less productive when they learn from home (Weele, 2020). Likewise, nearly 50 percent (46 out of 96) sample respondents disagree that they are productive in online classes. According to the result, there are several constraints behind the deficiency of learning behavior and the lack of self-discipline. Firstly, distance learning contains disruptions which lead to the loss of students' concentration. For instance, 43.75 percent of respondents confirm that they are incapable of focusing well on the lectures; therefore, it makes their performance deteriorated accordingly. Secondly, behavioral deficiency occurs due to the fact that students are incapable of setting up their own learning agendas. Based

on the responses, about 55 percent of students agree and strongly agree that they are dependent in organizing their studying schedule. Thus, loss of motivation in learning is likely to happen when students do not specify and adjust their own studying times well. Based on the result of the survey, the behavioral deficiency of sample students is shown in Table 13.3.

**Table 13.3:** Sample Respondents' Behavioral Deficiency

<i>Respondents' Behavioral Deficiency</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
I can concentrate well	7 (7.29)	18 (18.75)	29 (30.21)	38 (39.58)	4 (4.17)
I read textbooks more	5 (5.21)	15 (15.62)	21 (21.88)	47 (48.96)	8 (8.33)
I increase my participation rate during online class	9 (9.38)	21 (21.88)	32 (33.33)	27 (28.12)	7 (7.29)
I spend more time on studying than before COVID-19 era	7 (7.29)	17 (17.71)	33 (34.38)	31 (32.29)	8 (8.33)
I occasionally fall asleep during class	17 (17.71)	53 (55.21)	19 (19.79)	6 (6.25)	1 (1.04)
Sometimes, I feel bored with the online class	22 (22.92)	55 (57.29)	15 (15.63)	3 (3.12)	1 (1.04)
During online learning, I used to skip classes	17 (17.71)	38 (39.58)	21 (21.88)	17 (17.71)	3 (3.12)
The more I learn in online class, the more fun I get	4 (4.17)	18 (18.75)	48 (50.00)	21 (21.88)	5 (5.21)
I am more productive in online class	5 (5.21)	19 (19.79)	27 (28.13)	42 (43.75)	3 (3.12)
I am dependent on setting my own learning agendas	11 (11.46)	42 (43.75)	37 (38.54)	6 (6.25)	0 (0.00)
I usually rewatch videos of classes	17 (17.71)	37 (38.54)	21 (21.88)	19 (19.79)	2 (2.08)

*Note:* Figures in the parentheses represent percentage to total sample respondents.

*Source:* Primary data.

### *Soft Skills Deficit*

Adherence to the fact that COVID-19 has posed a great concern to the educational sector, one of the biggest concerns on education as a result of the impacts of COVID-19 on education is soft skills deficit. Genuinely, e-learning approach is implemented

with regard to social distancing measures which particularly isolate people from one another in attempts to prevent the spread of the virus. For that reason, the loss of social interaction and communication have become the new norm of living. Empirical evidence illustrates the deficit of soft skills in academic performances during periods when digital education was put into practice. According to Loveless (2020), soft skills mainly refer to non-academic skills which are complicated and hard to quantify, and typically soft skills are identified in the forms of communication, public speaking, and team-working. In terms of the educational field, online education lessens communication among the student-teacher relationship and student-student relationship. According to the survey, more than one-third respondents (35 out of 96 samples) disagree that they communicate more within their classmates. In addition to this, 37.5 percent admitted that the interaction with their lecturers were minimized during online classes. Therefore, the indication shows the sense of loss of interaction and communication skills among students. Secondly, public speaking skills is one of the components among soft skills which tend to have deteriorated. The survey shows that 39.58 percent of respondents confirm that they have encountered with less situations requiring presentation, while 35.42 percent maintained a neutral stance (Table 13.4). According to a research study, one of the main factors that lead to the lack of self-confidence in public speaking is the lack of practice (Nadiyah *et al.*, 2019). With less physical public speaking and presentations, the deficit of those skills tends to be significant as these particular skills require practice and effort in order for students to get accustomed to presenting in front of classes or groups. Although students appear to obtain better academic results, they are encountering a trade-off with the vital soft skills required for their future.

Table 13.4: Sample Respondents' Soft Skills Deficit

<i>Respondents' Soft Skills Deficit</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
During online classes, I communicate more with my classmates	9 (9.38)	11 (11.46)	33 (34.38)	35 (36.46)	8 (8.33)
I have done more presentations in online classes	6 (6.25)	18 (18.75)	34 (35.42)	32 (33.33)	6 (6.25)
I have interacted more with my lecturers in online classes	7 (7.29)	19 (19.79)	29 (30.21)	36 (37.50)	5 (5.21)
My lecturers assign more team discussions during online classes	5 (5.21)	28 (29.17)	30 (31.25)	28 (29.17)	5 (5.21)

*Note:* Figures in the parentheses represent percentage to total sample respondents.

*Source:* Primary data.

## CONCLUSION AND IMPLICATIONS

In summary, it is undeniable that COVID-19 has hit hard all aspects of global sectors including education. The world has witnessed the unprecedented shift of pedagogy in education which have rotated the learning approaches to another level. The suspension and closure of physical institutions resulted in skyrocketed growth of digital education as all educational platforms moved toward online methodology. There is no doubt that the shifts toward e-learning have massively contributed a number of positive impacts for students. On the contrary, it is also important to consider the possible negative outcomes from such platforms. In the context of CamEd Business School students, as the online education is progressing continuously, it is worth to note that there are several significant positive and negative impacts of COVID-19 on education. Seemingly, with the temporarily lockdown of schools, students have developed the adaptive behavior in response to online learning in terms of ICT skills and independence learning habits. Moreover, during online classes, the majority of students have obtained more satisfactory and better academic results compared to the result in physical classes due to the fact that they have doubled their efforts for the examination. On the other hand, there are several drawbacks on their learning process as a result of COVID-19 and lockdown measures. With the research findings, learning from home can create a behavioral deficiency for students due to the lack of self-discipline and less concentration during their studying hour. In addition, students are likely to experience soft skills deficit as the level of their communication, collaboration, and public speaking skills becomes deteriorated over the period of online classes. Therefore, it is quite crucial for seeking measures in order to prevent larger constraints caused by these potential negative impacts, in which the measures shall be taken into account at individual and institutional level. Indeed, individuals shall use the strength to modify their weakness. For instance, online learning fosters independence. Thus, students should develop their independence to conduct a good learning agenda to keep themselves on the right track. At the institutional level, relevant stakeholders, especially lecturers need to identify the weaknesses and challenges that student might implicitly encounter. Notwithstanding teaching remotely, lecturers could assign the tasks and assignments in the same way as they would do in the physical classes. These are the practices which could mitigate the potential negative impacts. Otherwise, the constraints could expand and heavily affect the future of global education and human capital, especially in terms of soft skills development.

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