

Economic Impact of Online Education during Covid 19 Process on Students: Tishk International University Case

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Abstract

The Covid-19 process has brought many problems with it. This process has many negative effects on the education sector. One of these negative effects is the economic burden on students and teachers. In addition, this process, which has brought extra economic burdens to educational institutions in general, has deeply affected everyone in the sector. In order to see how this situation affected the students we discussed it economically. A Likert scale questionnaire was applied in the study. The results obtained showed that these students also had to face economic problems.

Keywords: Covid 19 process, Online Education, Economic effects

Introduction

The Covid 19 pandemic process has negatively affected the whole world. In addition, it has caused almost every sector to be negatively affected in all countries. One of the sectors negatively affected by this process is education. With the start of the process immediately, the quarantine of the students revealed the idea of switching to online education. However, it should be noted that online education poses multifaceted problems. One of the problematic aspects of online education is the emerging economic problems.

COVID 19

COVID-19 (Coronavirus disease 2019), also known as SARS-CoV-2 (severe acute respiratory syndrome-coronavirus-2), is an infectious disease of the Coronavirus family, which is associated with MERS (middle east respiratory syndrome) and SARS (severe acute respiratory syndrome) (Acter et al., 2020). There are thoughts that this virus, which first appeared in the city of Wuhan in China towards the end of 2019, was transmitted to humans through bats (Li et al., 2020). When it first appeared, the Chinese government tried to prevent the news from being reflected to the public and condemned those who made

news in this direction. However, as a result of the fact that the issue became serious, the city of Wuhan was quarantined by announcing the existence of the epidemic to the world (Enos, 2020). This virus, which first spread to Asian countries that are neighbors of China, then spread to America and Europe. Later, it started to spread all over the world (Wittkowski, 2020).

An important reason why this disease is so dangerous is that it is contagious. In fact, the rate of transmission among humans is faster than the Spanish flu in 1918 (Zhang et al., 2020). People who come into contact with surfaces infected with this virus have contracted this disease. However, it has been determined that it is effectively transmitted through the mouth and nose. It has been observed that the disease spreads in the cough and sneeze of an infected person and even while they are talking (Stadnytskyi et al., 2021).

Economic Impact of COVID 19

After the emergence of the Covid-19 epidemic, quarantine was declared by the governments and people were obliged to lockdown. This solution, which was put forward in the first place to prevent the spread of this suddenly emerging epidemic, caused economic activities to come to a halt all over the world. The fact that people work and not produce has brought many economic problems. These problems, which emerged as a chain effect, left individuals, family budgets, societies and states in a very difficult economic situation. In fact, besides the economic effect, it also brought negative effects with many different aspects.

The fact that people did not engage in any economic activity after being quarantined resulted in their inability to produce anything economically. Likewise, this situation, which negatively affected the family budget, also negatively affected the states (Karin et al., 2020). In particular, it has caused the countries to be deprived of many incomes. For example, tourism revenues and taxes, which are an important source of income for countries, have decreased to a large extent (Green & Loualiche, 2021). In addition, the states that have to provide some services to their own people have come under some extra burdens. For example, health expenditures have become an important burden for countries in this period (Darab et al., 2021).

Countries had to take some special measures against the economic recession caused by the covid-19 conditions. While the aid made to the private sector in order not to deteriorate the financing and employment structure of them brought an extra burden to the economies, the supportive policies for meeting the basic needs of the people in quarantine became a separate burden for the states. In this period, restrictions on people's travel, the closure of shopping centers, the interruption of production in many sectors and the implementation of bans such as curfews necessitated the aforementioned policies. With these policies, on the one hand, short-term and urgent needs are met, on the other hand, it has emerged as a goal to ensure the continuation of these services together with the

financial aids made to the private sector in the medium term (Loayza & Pennings, 2020).

One of the main reasons for the emergence of economic problems in this period was the high increase in health expenditures and an excessive burden on the health sector. During this period, hospitals worked well beyond their normal capacity. They also needed much more medical supplies than they normally would, and this caused a significant burden on the country budgets. In addition, due to the fact that the personnel working in hospitals were determined according to normal needs, the overload that emerged during the Covid-19 period required new measures to be taken (Khan et al., 2020).

In addition, many countries allocated resources for the discovery of the vaccine during this period. After the discovery of the vaccine, all countries allocated some resources to their citizens to make this vaccine (Kim et al., 2020).

One of the most striking economic problems that emerged in this period is the loss of supply-demand balance. It was observed that many sectors faced a demand shock as a result of the fact that people who were locked in their homes did not engage in economic activities. Although the demand that emerged in normal times decreased considerably, many sectors with production capacity and personnel employment far above the current demand were in a very difficult situation. It is possible to say that one of the sectors most affected by this situation is the tourism sector. Besides, we can say that many restaurants and cafes face this problem (Brinca et al., 2021).

The disruption of the supply chain in this period resulted in a major supply shock to all economies. In many sectors, extra costs such as storage have arisen as a result of the inability to complete the supply chain despite the production being made in accordance with their capacities, and this has brought unpredictable financial burdens (Peel, 2021). The disruption of the chain has caused even some necessities to be put on the market in limited amount in some places (Rahman et al., 2021).

One of the important consequences of the emerging economic recession is the rapid increase in the unemployment rate. After the supply-demand balance deteriorated, the companies, which had to fall well below their production capacity, started to lay off workers as a precaution. As a result, there has been a serious increase in the unemployment rate all over the world (Hensher, 2020).

When we consider the economic effects of the Covid-19 pandemic, it should be emphasized that it has different aspects from all other pandemics and economic crises. First of all, the crises that emerged in the world were either regional or sectoral crises. However, the economic crisis that emerged in this period affected the whole world. In addition, it affected especially developed countries more than developing countries. Considering that the production capacities of developed economies are much higher, the economic stagnation caused by this pandemic will be better understood. One of the main factors that made the economic crisis in this period much more effective is the integration of the world economy with each other. The economic crisis that arises in any part of the world affects

another region negatively due to the global conditions we are in. This crisis has emerged precisely in such a period (Fernandes, 2020).

Economic Impact of COVID 19 on Education Sector

The Covid-19 epidemic has negatively affected all sectors in local economies as well as affecting all countries in the world. One of the sectors most affected by this pandemic is the education sector. Especially the very effective role of children as carriers made it necessary to apply quarantine to children before everyone else (Adams & Todd, 2020). Celik et al. (2022a) emphasize that “childhood is the most special and sensitive period in which the foundations of a person's future life are laid. During this period, while developmental, cognitive, and behavioral changes occur rapidly in the child, the negativities experienced by the child do not only negatively affect his health for that process, but also prevent the child's healthy growth and development” (p.83). Although this epidemic did not affect children as much as adults, being carriers of children has been an important factor in the spread of the disease. Thereupon, the closure of all schools brought along new measures. In this period, the first measure that emerged in the education sector for children who were confined to their homes was to switch to online education (Ma et al., 2021).

One of the biggest effects of the extraordinary conditions that emerged during the Covid-19 period was seen in private education. The fact that the families of children whose economic situation deteriorated could not pay the school installments brought some extra precautions. At the beginning of the measures that emerged here, many teachers in the private sector were fired. In this case, first of all, teachers remained unemployed (Hoang et al., 2020).

In some places, private schools faced the risk of closure. In addition to the closure of schools due to economic problems, this had reflections on teachers' salaries due to the decline in incomes. Therefore, there was a decrease in the income of teachers, especially in the private sector (Alam & Tiwari, 2021).

One of the economic problems brought by the covid-19 conditions is the issue of meeting a number of needs that arise with the rapid transition to online education in schools. Since the insufficient technological infrastructure in some schools makes online education difficult, it has been seen that these schools had to buy the necessary technologies by going under some economic burdens. It put a separate burden on their budget, which shrunk considerably under the conditions of Covid 19 (Dhanalakshmi et al., 2021).

In addition, in cases where it is not possible to provide online education from school, it has emerged that teachers should continue their education at their own homes. However, in this case, teachers had to purchase technological devices that would meet their needs in the online education process. This brought a separate economic burden to teachers (Noor et al., 2021).

It has been noted that especially mathematics teachers need more technological tools than other teachers in order to teach their lessons effectively. The purchase of graphic tablets, which are necessary for the teaching of the mathematics course in the computer environment, has emerged as an important problem. In addition to the economic burden of this problem, a problem such as not being found in the market has also emerged (Busto et al., 2021).

We can say that the same situation has an effect on students as well. The purchase of technological devices, which emerged as an inevitable need in the online education process, has also emerged as a separate burden on student families (Celik et al., 2022b). This situation is an important source of stress especially for families who are unemployed, and families whose budgets have shrunk have also experienced the same problem (Simamora, 2020).

Methodology

Research Model

This research was designed to reveal the economic stressors of online education during Covid 19 process. A Likert-scale questionnaire was applied to the university students, and their opinions were taken about the economic problems for them that emerged during this period.

Sampling

Tishk University first- and second-year students were used in this study in Erbil city in Iraq. These students, randomly selected from different departments, are 30 people in total. 18 of these students are first-year students and 12 of them are second-year students. First year students are preparatory class students from the previous year. The reason for choosing these students is that they are 12th grade students in their high schools in the 2019-2020 school year, when pandemic and accordingly online education emerged. During this period, they had to study their lessons more seriously than all other classes, as they were preparing for university. In addition, students' motivation at that time was higher than students in other classes. The 12 students studying in the second year also coincided with the last year of high school, as they did not attend the preparatory school from the previous year. The fact that the students in this group were more motivated than all the others and had university entrance anxiety caused us to choose these students.

Data Collection

With the questionnaire given to the students in accordance with the Likert scale, the economic burden of online education during Covid 19 period was tried to be

determined. The answers given by the students to the questionnaire were evaluated by putting them into statistics.

Findings

This survey, which was applied to determine the economic problems experienced by students in online education caused by the Covid-19 process, gave the following results.

First, we asked whether the process imposes an extra economic burden on students' education in general. Considering that this survey cannot cover all the problems that have arisen in the context of economic problems, a general question was asked first.

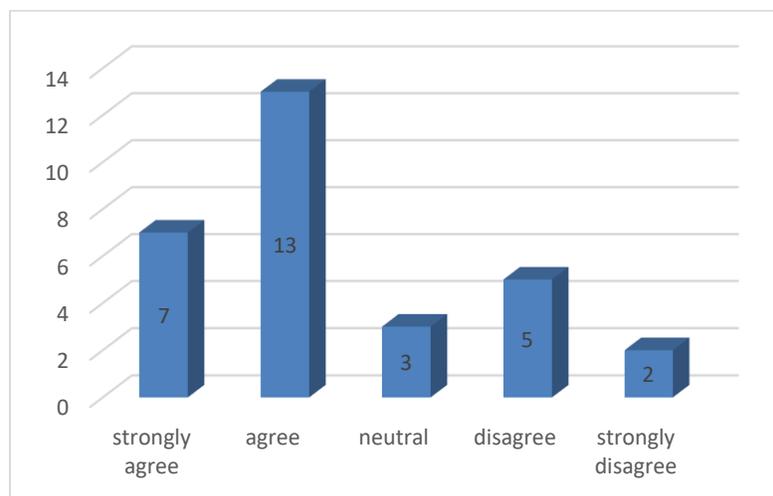


Figure 1: This process brought some extra economic burdens on my education

According to the results we obtained from this question, 20 (66%) of the students agree that online education caused by Covid 19 brings some economic burdens to students. Only 7 (23%) of the students think that this process does not impose any economic burden on their education.

One of the important problems that arose in this process and affect the education of students was the decrease in the economic income of the families. To determine how valid this situation was, we asked the students the next question.

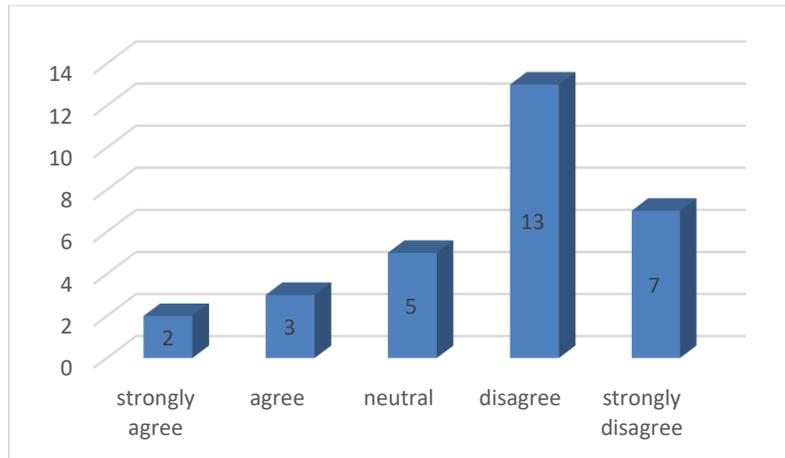


Figure 2: In this process, our family's economic income decreased

When we look at the results obtained, only 5 of the students (17%) stated that they encountered such a problem. On the other hand, 20 students (66%) stated that there was no decrease in their income.

In the next question, we asked whether the students had any problems at the point of paying the school installments. However, since not all students came from private schools, only students from private schools answered this question. In this case, 13 of the 30 students in total answered this question.

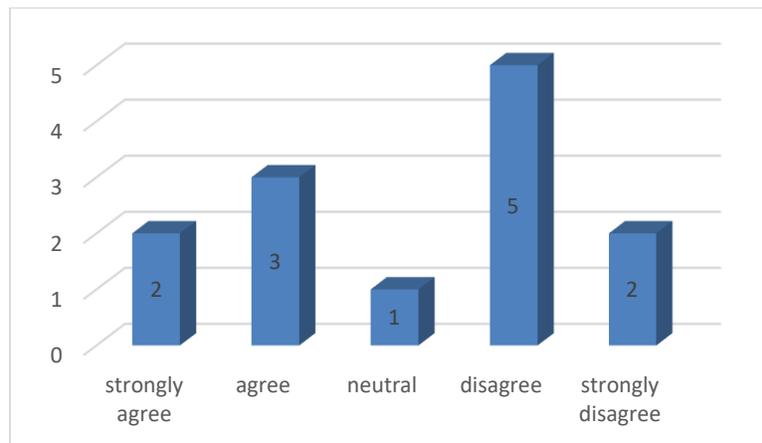


Figure 3: During this period, we had difficulties in paying the school installments

When we look at the result obtained, 5 of the 13 students (38%) stated that they had problems in this regard. Others have not had such a problem. In this question, which is in parallel with the previous question, it is seen that the majority of the students do not

have any significant problems that will affect their education in terms of economic incomes and expenses. However, some of them have faced these problems.

Online education has negatively affected the family budget of many students with different aspects. There may be some calculable expenditures as well as some unaccountable expenditures. In the next question, we asked whether online education puts a strain on students' family budgets.

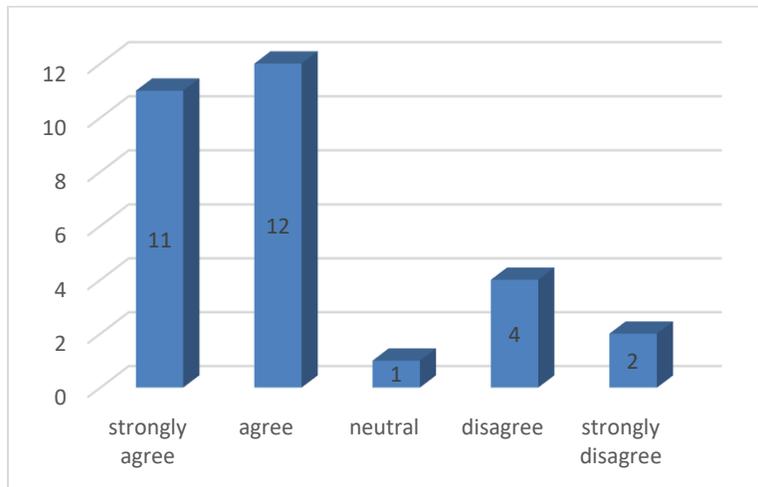


Figure 4: Online education has brought extra burdens on our family budget economically

Considering the answers given by the students, it is seen that 23 students (76%) gave a positive answer to this question. Therefore, it is seen that a number of economic problems that we can or cannot detect arise through online education.

The following questions focused on more specific issues at the point of economic problems brought by online education. At this point, students were asked whether they had to buy a new electronic device to follow online lessons during the pandemic. In this period, the need for electronic equipment is one of the most depressing issues on students' budgets. The sudden emergence of online education conditions forced students to buy new electronic devices in many places. We asked this question to determine the effect of this situation on our students.

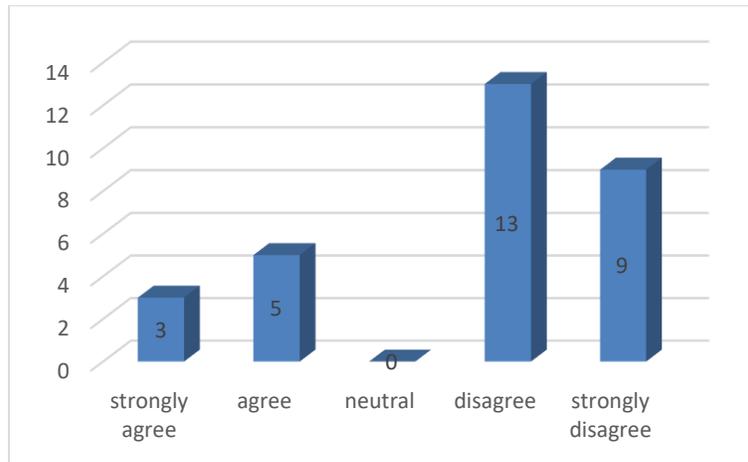


Figure 5: I had to buy a new electronic device during the pandemic process

As seen, 8 (26%) of the students were in need of buying a new electronic device. The remaining majority did not mention such a need. In fact, in the digital age we live in, it would not be right to expect that all or most of the students are in such a need. The majority of the students already had electronic devices to follow online education, even if they had not had online education requirements. However, it should be noted that 26% is also a high rate.

In this process, one of the economic issues brought by online education on students is the need for a new internet package. Due to the fact that online education is provided with higher data transfer than normal, new internet packages have been needed. This has created a separate burden on the family budget. In order to determine how effective this situation is for our students, we asked the students the next question.

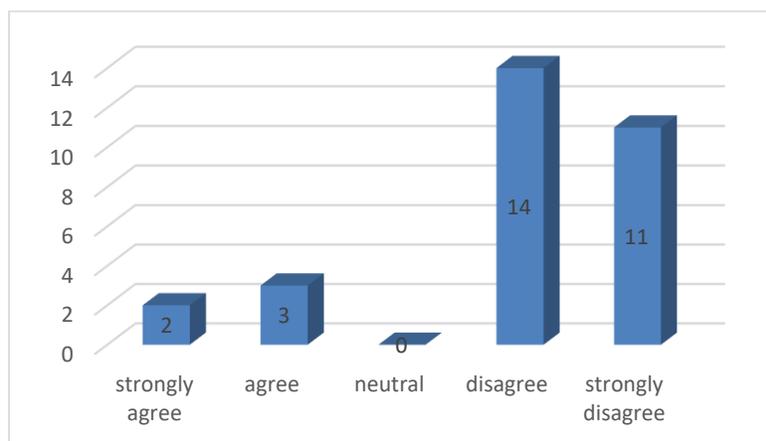


Figure 6: During this process, I had to buy a new internet package

As seen, only 5 (16%) of the students had to buy a new internet package. Others did not have such a need. This situation of students who need to buy a new internet package may be due to the inadequacy of their old packages.

In some cases, it has been seen that students miss online classes because they do not have the necessary technological tools (Simamora, 2020). To see how this applies to our students, we asked the next question.

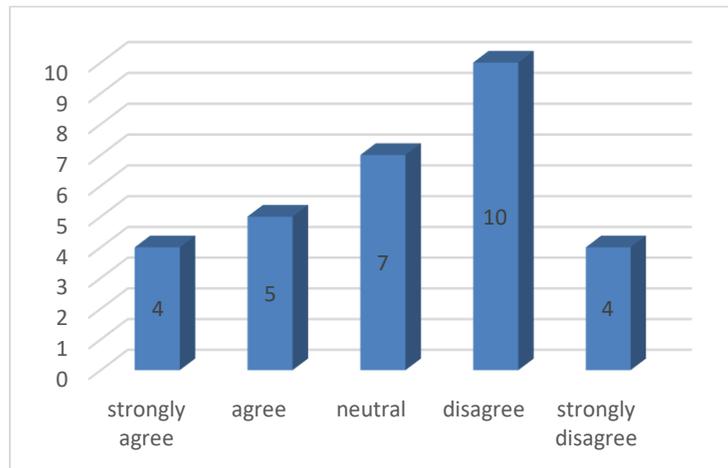


Figure 7: There were online courses I missed because I couldn't buy the necessary technological tools

When we look at the results we obtained, 9 of our students (30%) stated that they missed some online classes because they did not have the necessary technological equipment. Therefore, it is seen that some of the students were deprived of some courses due to economic inadequacies.

Discussion

As a result of the Covid-19 pandemic, the education sector had to switch to online education in many countries. Likewise, Iraq was one of the countries that switched to online education with the quarantine application. Different effects of online education have been observed on the education sector. Especially on teachers and students, many problems have emerged that can be addressed from different perspectives. Economic problems, as being one of these, were also seen in the students included in this study. There are students who say that this process brings extra economic burdens to their education life. In addition, some students stated that their economic income decreased. As a result, some students had difficulties in paying their tuition fees.

It has been stated by a significant number of students that online education brought

some extra costs to their family budgets. A number of requirements for online education related to this general economic situation of the students have emerged, and students had to purchase electronic devices to continue their online education in this process. Especially in this period when economic problems emerged, the extra burden of online education was a separate problem for families. In fact, some students had to miss some classes because they could not get the necessary technological equipment.

In general, it is seen that online education, which emerged during the covid 19 process, together with other factors, left students in a difficult situation economically.

Conclusion

The online education that emerged during the covid 19 process has affected students in many ways and has brought some problems. It has been observed that some of the economic problems discussed here occur at a high rate and some at a low rate.

In addition, it is possible to mention some limitations of this study. First of all, this study, which was carried out in the Iraqi Kurdistan Region, was applied to the students at a private university. It should be taken into account that if this is applied to a sample with a lower income level within the same region, it may yield different results. In addition, since the economic income distribution in this region is at a relatively good level, more positive results may have emerged compared to other regions.

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Appendix- The Questionnaire

	strongly agree	agree	neutral	disagree	strongly disagree
1. This process brought some extra economic burdens on my education.					
2. In this process, our family's economic income decreased.					
3. During this period, we had difficulties in paying the school installments.					
4. Online education has brought extra burdens on our family budget economically.					
5. I had to buy a new electronic device during the pandemic process.					
6. During this process, I had to buy a new internet package.					
7. There were online courses I missed because I couldn't buy the necessary technological tools.					