The Effects of the COVID-19 Pandemic on International Students

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This article was not written with the assistance of any Artificial Intelligence (AI) technology, including ChatGPT" or other support technologies.

Abstract
The purpose of this study is to examine the effects of the COVID-19 pandemic on international students. This study was conducted with the qualitative case study method, based on the experiences of an international student. The research found that with the declaration of the pandemic, some international students were besieged in their host countries; they were confronted with difficulties in returning to their homes, and their education and apprenticeships were interrupted. Students who could not return to their home country went through intense stress and anxiety in terms of accommodation, having access to food, financial resources, and medical supplies. This experience has caused international students to become more skeptical about continuing with mobility and has caused candidate international students to change their countries of preference. On the other hand, this does not appear to be the case for countries and universities that successfully managed the pandemic and did not spare their support for international students.

Introduction

Universities, which are defined as higher education institutions that play an important role in technological and economic development, advancement of individuals in science, art and professional disciplines, and scientific research, play a role both in raising highly qualified manpower for professions and in producing scientific knowledge by providing advanced education and training in hundreds of fields. Interest in universities has always been kept alive by students who want to learn and increase their knowledge (Chellaraj, 2019). This interest was not only limited to the regions of the universities, but also had an impact on students abroad as it continues today (De Wit et al., 2015). Internationalization in

higher education has become an inevitable consequence of the globalizing and knowledge-based economy of the 21st century (Altbach, 2006; Altbach & Teichler, 2001).

International education is specified as the education given in a region not being limited to the students in that region, as being open to the access of students from various regions of the world, and this form of education spreads abroad in various forms and can be named as cross-border, transnational, overseas, and unlimited education (Knight & McNamara, 2017). International education and student mobility contribute to the economic development and globalization of countries and to students' language competencies, acculturation, gaining experience and becoming world citizens (Negrusa & Horea, 2020; Restaino et al., 2020). Countries recognizing the importance of human resources with superior talent began competing to get a higher share of the international student market and to raise the number of international students (Levent & Karaevli, 2013). In this competitive market, students are involved in international student mobility in order to develop their linguistic skills, obtain income, attain foreign experience, and improve their knowledge and skills (Wiers-Jenssen & Støren, 2020; Wu, Chang & Sun, 2020).

International mobility is considered a priority issue not only by students but also by various universities and states (Levent & Karaevli, 2013). Geibel (2020) specifies the reasons why universities prefer international student mobility, such as attracting gifted students, increasing their reputation in international fields, and increasing their revenue through tuition fees. Countries, on the other hand, see international mobility as income and skilled migration and even enriching financial resources of the countries with expenses, such as education fee, accommodation, food, travel, and health, so that talented international students do not return after graduation (De Wit, 2015; Levent, 2016; Mlambo et al., 2020; Negrusa & Horea, 2020; Sun, 2017).

The particulars that cause students' interest in international mobility are generally named push-pull factors (Wells, 2014). These factors, which may arise from the country of origin or the destination country, are defined as the level of economic development, student population, quality of education, language learning opportunities, government policies, prestige of the university, tuition fees, and job opportunities (Levent & Karaevli, 2013; Sun, 2017).

The pandemic has recently constituted an important factor that affected international student mobility, which has reached serious numbers with increasing interest. The economic dimension of this effect (Codling, 2020; ICEF, 2020), current student dimension (Bilecen, 2020; Darmody et al., 2020; Gabriels & Aberg, 2020; Taşçı, 2020), prospective student dimension (BridgeU, 2020; Studyportals, 2020a; QS, 2020a) have been studied in various research. But in the literature review, it was seen that there was a limited number of studies examining the effects of the pandemic on international students. It is considered that a study examining the effects of the pandemic on international students, universities, and prospective students shall contribute to the field. In this direction, this research aims to reveal the impact of the pandemic on international students studying in Spain, based on the experiences of an international student. For this purpose, answers to the following questions are sought:

- How did the pandemic affect the views of international students in Spain about international education?
- How did the pandemic affect the opinions of international students in Spain about the universities at which they study?
- What effect did the pandemic have on the education and career plans of international students in Spain?
- How did the pandemic affect universities and countries in the context of international students in Spain?

There are some obstacles in front of international student mobility, with the increasing interest of universities, governments, and students and the benefits it offers to the parties interested in it (Falcone, 2017; Knight, 2007; Teichler, 1999). Regarding students, these obstacles are the financing they will need during their education, not having sufficient knowledge of English, the international language of education, being away from the family for a long time, and concerns about sending their talented students abroad in terms of source countries (Kehm, 2005). However, the biggest obstacle affecting international student mobility since the end of 2019 is the COVID-19 pandemic and the problems caused by the pandemic.

The pandemic has affected health systems, economies, and social life deeply, in general, all over the world (Bekirogullari, 2020; Fernandes, 2020; McKibbin & Fernando, 2020; Verma & Prakash, 2020). In this regard, the classification made by Haleem, Javaid, and Vaishya (2020) is presented in Table 1.

Table 1

Effects of the Pandemic with Respect to Health, Economics, and Social Aspects

Health	Economics	Social Aspects
Difficulty experienced in diagnosing and treating cases	Slowing down production	Disruptions in service sector
Extreme load in current health system	Slowing down of product supply chain	Cancelation of sports organization and international travels
Negligence of case patients	Economic losses in trading	Closure of accommodation, beverage, food, and entertainment venues
Overload on health personnel	Increase in unemployment	Changes in cultural and religious events
Lack of medical materials and disruption of supply system	Nearly stopping of cash flow	Stress, fear, and psychological disruptions on people
	Serious slowdown in revenue increase	Distances between peers and families
		Disruption of education

As shown in Table 1, the pandemic has many effects with regard to health, economic, and social aspects. The most striking social effect is on education. The sudden spread of the disease and the declaration of the pandemic had serious effects on education threatening students, teachers, schools, quality education, and parents. According to a report by the World Bank (2020a), the pandemic affects education in two main ways: school closures and economic recession.

When international student mobility is examined within the scope of the pandemic, it is required to consider the economy of the countries primarily (Fernandes, 2020). This is because countries that have turned to austerity policy have made revisions in their budget expenditures about international students. For instance, the countries like Australia and USA have showed a decrease in revenues and an increase in expenditures. These countries have approached international students as immigrants/refugees in order to allocate their resources mainly to their own citizens, and they have implemented practices such as sending these students to their own countries and closing their borders (Raghuram & Sondhi, 2020). However, international students expected academic support, language support, psychological support, access to vital materials, and financial and accommodation support from their countries and universities during this process. This situation had a serious impact on the students' safety, legal status, quality and continuity of learning, and perspective on international education (Gabriels & Aberg, 2020).

It can be stated that student groups who could not return to their country or who managed to return to their country or who could not start their mobility during the pandemic process experienced great stress and anxiety (Darmody et al., 2020). Groups who could return to their country lived through the stress of returning, financial crisis, and anxiety about being late in relation to lessons; groups who could not return home experienced anxiety and stress of remaining alone during the crisis; and groups who could not start with mobility went through big stress and anxiety with the worry about not starting with mobility (Gabriels & Aberg, 2020). To be able to reduce these effects of the pandemic, universities implemented a three-step strategy: 1) coping, 2) continuity and improvement, and 3) acceleration. Within the scope of these strategies, practices, such as keeping in touch, providing financial support and convenience, and increasing efficiency in distance education, are covered (Word Bank, 2020b).

Due to the closure of campuses, universities focused on distance education to offer an acceptable solution to the pandemic conditions, regardless of whether the infrastructure was adequate or not (Gabriels & Aberg, 2020). In this way, universities that want to ensure the continuity of education try to offer students online courses and learning experiences. But universities that did not have enough time and experience in diversifying teaching, homework, and assessment cannot offer valid alternatives to the educational requirements and problems of international students (Schleicher, 2020). Besides, many international students who were not satisfied with the education they received expected a discount on their tuition fees or demand partial refunds (Bilecen, 2020). On the other hand, by means of online education and online mobility, universities had the opportunity to reach students in markets where they are not effective and to increase the number of

students in markets where they are effective, but still, switching to online education and online mobility requires the purchase of adequate practices (Schulmann, 2020).

The closure of universities for face-to-face education and the interruption of international education give rise to substantial economic losses (Al-Samarrai et al., 2020). For example, according to NAFSA (2020) data, there are serious concerns for the USA, which received approximately 39 million dollars from international students in the years 2019-2020. Similarly, it is anticipated that the financial loss of Australia will rise up to nearly 4.1 billion Euros, when all costs, such as wage reimbursements, accommodation, and reorganization of the academic calendar, are considered (ICEF, 2020). It is thought that the UK has lost approximately 14,000 students, especially from East Asian countries due to the pandemic and that it will have a current account deficit of 463 million pounds for the years of 2020-2021. UK government plans to provide financial support for tuition fees and fund research to minimize the economic pressure which this situation will cause to occur (Codling, 2020). Chiang (2020) mentions that Canada will also be seriously affected by this process and he states that the estimated contribution of international students to the country's GDP is around 21.6 million dollars, but that international students' interest in Canada will decrease due to various restrictions and barriers to entering into the country.

On the other hand, many difficulties cause international students to leave their university, freeze their educational programs, and return to their homes (Gabriels & Aberg, 2020). These difficulties include: the closure of campuses, elimination of job opportunities, ending of face-to-face education, the economic crisis, disruption of health systems, housing problems, and difficulties in securing food, medical products, medical support, visa, and residence permits. Travel restrictions constituted biggest challenge for international students while returning to their countries (Marinoni et al., 2020; Taşçı, 2021). Despite the pandemic, it is observed that some of the international students do not leave their country. This particular can be explained by factors such as the trust had in the country's health system, the payment of tuition or house rent in advance, and isolation due to the orientation to online education (FNAE, 2020). As a result of these effects of the pandemic, some of the international students stopped their mobility; some had to delay their graduation and internship plans; some stopped their education; and some were in uncertainty.

Methodology

Research Design

As one of the qualitative research methods, this study used the case study approach. The case study is realized to examine the individual, phenomenon, event, and social phenomena in depth and comprehensively (Yin, 2003). In case studies, the factors related to a situation are examined with a holistic approach, with a focus on how these factors affect the relevant situation and how they are affected by the relevant situation (Cohen et al., 2005). According to Yin (2003), case studies are divided into holistic single case, nested single case, holistic multiple case, and nested multiple case design. As there is only one unit of analysis and one participant, the current study used the holistic single-case design. This design was preferred to be able to analyze the research problem in detail, based on the experiences of a participant who was involved in international student mobility before the pandemic and experienced the pandemic during the mobility.

Participants

A purposive sampling method was used to determine the participant in this study. In this method, random selections are not made from the population and the sample is selected in accordance with certain features (Böke, 2009). In this study, the criterion in purposive sampling was comprised of being an international student and experiencing the pandemic during their international mobility. We worked with one participant. According to Morse (2000), the quantity of data is determined not by the large number of participants, but by the quality of the data and the number of interviews per participant. Morse (2000) also pointed out that there is an inverse relationship between the amount of available data obtained from each participant and the number of participants. In this case, a participant was hired in order to conduct more interviews with participants and obtain better quality data. In this study, the opinions of a female international student, who went to Spain for postgraduate education and returned to her country two days after the pandemic, were reviewed by means of the purposive sampling method. The reason for choosing Spain is that it is one of the countries that were affected by the pandemic the most. The particular that the research was conducted with a single participant also constitutes the limitation of the research.

Data Collection and Analysis

In this research, the interview technique was used as a data collection tool. In the interview, the main purpose is to collect private information, the researcher wants to learn what is in the mind of the participant (Patton, 2002). For this purpose, a semi-structured interview, which allows participants to freely express their thoughts on a particular subject, was used as a data collection tool (Bogdan & Biklen, 2003).

Before the interview questions were prepared, a literature review was made on the research topic. Afterward, the questions that would be used in the semi-structured interview were formed by consulting with two academics who specialized in international student mobility. Then, interviews were held with an international university student on the designated days and hours. These interviews were held in five sessions and on average for one hour. Therefore, the topic is dug deeper and more qualified data can be collected. Before starting with the interview, the participant was informed that the interview would take 45-60 minutes and her identity would be kept confidential. She was ensured that the results would only be used in scientific research. Interviews were held online through the Zoom program, taking into account the pandemic conditions.

Content analysis was used to analyze the data. Content analysis is the process of defining, coding, and categorizing data (Patton, 2002). The interview records obtained from the participant were transcribed by the researchers. Then, the obtained interview text was presented to the participant's approval to have parts that the participant wanted to add or correct. The data obtained in the research were analyzed one by one with the open coding method, categorized and analyzed by considering information obtained in the literature review.

Validity and Reliability of the Study

Within the scope of validity and reliability studies, firstly, attention was paid to the fact that the participant was a volunteer and the participant's information was kept confidential. Before the interview took place, the participant was informed about the study, her permission was taken, and the pseudonym "Sera" was used to transfer the data. Credibility, transferability, consistency, and confirmability criteria are considered important to assure the validity and reliability of the research (Guba & Lincoln, 1982).

A semi-structured interview form was used as a data collection tool for the credibility of the research. The data obtained were assessed with the content analysis method; more than one interview was made with the participant. The analysis results were assessed by the specialists, the data obtained from the participant and the data obtained by the literature review have been compared. In terms of the transferability of the research, the method and how the participant was selected were explained, and the data were transferred by using an understandable language by quoting directly. Regarding the consistency of the research, the research processes were explained in detail and the data obtained from the participant were also supported by the information obtained through the literature review. In this way, comprehensive data on the subject have been obtained, and similar and different aspects of these data have been revealed. As for the confirmability of the research, the data obtained in the research was clearly presented, the interviews with the participant were recorded, and the participant's opinions were transmitted as they were. On the other hand, to ensure the reliability of the research, the data of the research were coded by two different specialists and the agreement between the coders was calculated as .88. Based on this, the conclusion was made that the consensus among the coders was high, and the reliability of the coding was at a sufficient level (Miles & Huberman, 1994; Patton, 2002).

Findings

Based on the results of the data analysis, several codes were created under two themes—"its impact on international students and candidate students" and "its impact on country economies and universities." The themes and codes are presented in Table 2 below.

Table 2
Themes and Codes

Themes	Codes
Its impact on international students and candidate students	Beginning of the pandemic
	Approach of countries to international students
	Anxiety and fear
	Internship and income generating work
	Accommodation
	Process of returning home
Its impact on country economies and universities	Impact on education
	Economic context
	Support for students
	New approach to international student system and country preferences

Theme 1. Its Impact on International Students and Candidate Students

Beginning of the Pandemic

The opinions of the participant regarding the code of the beginning of the pandemic are as follows:

Even though pandemic technically originated in China, it affected our university and my friends a lot… Life continued as usual until the declaration of the pandemic. Even conferences continued. Then the first case in the country was determined at our school. It was detected in a student who went abroad and came back… When things did not go well in the country in the following periods, all places, including our university, have been closed. (Sera)

Approach of Countries to International Students

The participant stated the following expression about this code:

In Spain, no restrictions, pressures or practices were applied with regards to international students in political sense. There were no practices that would affect our Chinese student friends, who have not returned to their country, either socially or politically. (Sera)

Anxiety and Fear

Participant's thoughts about this code are as expressed below:

Severity of the disease, which was treated like a normal flu, was considered with the idea that it would pass away, and even mocking those who wore masks, caused great excitement and fear, especially among international students, with the increasing number of deaths and the closure of every place. To be honest, I was nervous and scared on that day too. I wanted to return to my home and my country as soon as possible. As the flights were also cancelled, it was us who had to find a solution. This situation worried me more, causing different scenarios to come to life in my head all the time… There weren't even masks in the pharmacies, I don't remember how many pharmacies I visited... I couldn't afford to stay there because even during a normal examination it is difficult to tell about your problems... How would I be treated if I was sick, considering that I was not a citizen of that place, along with the deaths experienced there during the pandemic and the health system? I could have told the doctor, I don't know… One of our friends who could not return passed away during this process, we held his funeral online. (Sera)

Internship and Income Generating Work

The participant expressed the following about this code:

Friends like me, who had internships as research assistants at the university, did not lose their jobs during this process. They continued with their apprenticeship online and their salaries were not cut. As graduate students, we were lucky in this respect, however undergraduate students working in various businesses had to leave their jobs. This was one of the reasons that made it difficult for them to stay in the country. (Sera)

Accommodation

The participant stated the following expression about accommodation:

I have friends who do not prefer to return to their country for reasons such as not taking the disease to their families, not having a place to stay in their own country, staying there without the opportunity to return, and having paid their rent in advance. Some of my friends in this situation continued to stay in their homes because they had paid their rent in advance. As some of my friends continued to receive their apprenticeship fees during this period, they did not have any problems with paying rent and hence, they continued to stay in the country. Some of my friends received financial support from their own countries and in this way, they could stay. (Sera)

Process of Returning Home

The participant's experience of returning home is expressed as here below:

I was scared so much when the whole country was almost at home by closure all of a sudden. I wanted to return home as soon as possible, but direct flights to my country were canceled and I had to find a solution quickly. In fact, I had tickets that I had bought for a later date and I had paid for them, but I couldn't wait that much longer. I investigated how to go and I learned that direct flights from the neighboring country still continue. I went to the neighboring country and I don't even remember what time it was. I found a ticket for a direct flight to my country in the middle of the night, and actually the plane was packed with citizens of my country, everyone was running away. I went through the necessary quarantine process as I arrived, but I was very happy to return to my country. I was staying there in a house with a very high rent. I came without getting any of my belongings. Furthermore, my lease contract expired five or six months after I arrived. Hence, I came back for a little while, and after a week of research, I moved my belongings to a small, low-rent house. I'm paying rent right now, maybe I'll never go there. I do not know. I kept the room I was holding for six months, it is not clear whether I will extend it. Moreover, the pandemic will decrease and if I have to go, the rents will increase even more. When I shall go, I don't know where I will stay until I find a house. (Sera)

Theme 2: Its Impact on Country Economies and Universities

Impact on Education

The participant's opinions on this subject are as follows:

Campuses were closed, but our university turned to online education the next day. I can state that almost no day was lost. With this success of the school, the students who took lessons did not lose anything. However, there were problems in the early stages of the transition to online education among undergraduate students. The fact that the exams are online, the interaction in the courses is limited, the course hours do not coincide with the same time in every country, continuation of the exams and conferences online made it a bit difficult for my undergraduate students. There was not much difficulty for the graduate courses as the class size consisted of single digits. Since I am at the graduate level and in the thesis period, the course events did not affect me. The fact that the conferences are online has affected me positively, I think that the conferences have become more functional because there is no difficulty in transportation and travel. In addition, the work, procedures and ceremonies of the students whose graduations were coming were not postponed. Everything continued as usual and online ceremonies were held for graduates. Currently, face-to-face training has started in some basic courses for undergraduate students. (Sera)

Economic Context

The participant stated the following about this code:

With the closure of the university, many of my international student friends tried to return to their countries. Not only health but also economic reasons were effective in this, such as paying rent for nothing. Some even terminated or did not renew their lease agreements. Therefore, I can say that the number of international students in Spain has decreased significantly. (Sera)

Support for Students

The participant's opinions on this code are as follows:

First of all, Spain provided a certain amount of aid to citizens who were unemployed in this process. I know that international students who are there on a student visa also benefit from this assistance. All graduate students like me receive scholarships… But I know that it is easier for international undergraduate students to pay their tuition fees… University kept on informing us on matters such as how we can travel to the university during this process, how those who want to return to the country should act, the current situation on the campus, how to enter the campus, with which health institutions agreements are concluded. Currently, you can take a test at a contracted health

institution to enter the campus. I should add that my university in England, where I went for my master's degree, was more effective in financial support for the student in this process. They collected money from all former graduates like me and helped international students during a certain period of the pandemic. Some universities have provided laptops to international students who cannot access online education. They continue to assist international students who are still unable to pay their tuition fees. And from the very first moment, they continued to cooperate with health institutions. Continuously informing international students and prospective students, as in these examples, and prioritizing their health status and access to education will contribute positively to both current and prospective students. (Sera)

New Approach to International Student System and Country Preferences
The participant stated the following about this code:
Everything is going online for me right now. I am doing my internship online, they did not require me to be there and we continue to receive our fee. The cases decrease and if I have to attend classes as part of the internship, I will have to go. However, if the number of cases rises again and the pandemic intensifies in Spain, I will definitely not return... Thanks to my plans to have an internship and education abroad, to obtain the right to stay there for a long time, to have an economically profitable job, and as I have no problems with the English language, I preferred mobility. I can't say that I see it the same way right now and I want to live in my own country with my family… I chose the university in Spain because it is highly reputable and because it provides the opportunity to study with scholarship… The country I am in may have managed the process poorly, but the university managed it wonderfully. Online education and service were started immediately. There was no loss of course and there was no delay in graduation. No difficulties were caused to the students who were newly enrolled in the university but could not come later and accommodation arrangement was made for them. For this reason, I hear that there are still new registrations and that new students are going to the country… If I were to start mobility again despite these processes, I would still choose the same university. (Sera)

Discussion

During the pandemic process, international education has been moved to online systems, and benefits including culture and language learning, experience abroad, and job opportunities have significantly reduced (Janebova, 2020). In this study, the participant stated that she had to leave her plans, dreams, internships, and education and return home due to the pandemic, and that she experienced great anxiety and stress during this process by having difficulties in returning home, accommodation, finance, and access to food and medical supplies. According to the findings of the studies conducted by Studyportals (2020b) and BridgeU (2020), international students feel uneasy due to travel restrictions, the decrease in the budget allocated by their families for education, financial difficulties, health problems, and being alone. In this context, with the onset of the pandemic, it is understood that international students have concerns and difficulties in matters, such as travel, accommodation, health, security, and access to food and medical supplies.

Chinese and Asian students were the international students who felt the impact of the pandemic most strongly (ICEF, 2020; Spyrou & McDonald, 2020; Yu, 2021). In this study, the participant said, "My Chinese friends, who went to their country for the Christmas holiday, could not return because the events started there early." She stated that Chinese international students are more negatively affected by the pandemic process. It is thought that there are two reasons for this situation. First, with the onset of the pandemic, all countries suspended flights primarily China, so that students had difficulty returning to their countries and those who left early were considered lucky (ICEF, 2020). The second is that COVID-19 first emerged in China and Chinese students are exposed to psychological and verbal violence due to the exclusionary behavior and verbal and physical attacks of the host country's citizens towards them (Bilecen, 2020). The Chinese government warning of international students, who are its citizens, that they may encounter racist incidents and not returning to universities (Spyrou & MacDonald, 2020) and that East Asian students hang inscriptions stating that they are not Chinese in their bags during the most intense period of the pandemic are among the remarkable events regarding this issue.

On the other hand, according to the report published by Gabriels and Aberg (2020), 24% of Italian students and 19% of Asian students were exposed to discrimination and verbal attacks during the pandemic period. In this context, there are conflicts between students and citizens of countries close to China, where the virus first appeared, and countries that have serious health problems during the pandemic.

According to the participant in this research, international students work part-time while studying in their host country (Spain) to ease the financial burden of their families. However, the participant stated that international students had to leave their jobs and experienced financial problems during the pandemic. In his research, Bilecen (2020) drew attention to the unemployment and financial difficulties of students working in various fields, such as cafes, cafeterias, organizations, companies, due to the closure of campuses and workplaces caused by the pandemic. These closures also cause the postponement of internship for students who aim to gain work experiences (Mok et al., 2021). On the other hand, some countries generally allow international students to work part-time. It has been observed that countries such as Canada, which did not allow international students to work full-time before the pandemic, allowed these students to work full-time during the pandemic (Ing, 2020). At this point, it is seen that international students have difficulties in earning income during the pandemic and some countries that do not want to lose students provide financial aid to students in this process.

In this research, the participant used the phrase "If the number of cases in Spain rises again and the pandemic intensifies again, I will definitely not return." The most important factors that affect the plans of international students and will affect the preferences of international student candidates are the strength of the health systems against the pandemic (Taşçı, 2020), how the country manages the pandemic process (Ahlburg, 2020), and how the country approaches international students before and after the pandemic (Loo, 2020; Mackie, 2020). For example, it is thought that the USA's inadequacy in the fight against the pandemic, suspending the visas of students in the process, asking international students who study completely online to leave the country, and attempts to enact laws to prevent them from returning will affect the preferences of prospective students (Mackie, 2020; Loo, 2020). On the other hand, the participant said, "The country I am in may have managed the process poorly, but the university managed it well… If I were to start my mobility again despite these processes, I would still choose the same university." She stated that the university made positive efforts in this process. Accordingly, it can be said that universities that manage the pandemic process well and support international students will maintain their reputation in the eyes of international students and candidates.

According to the research conducted by Quacquarelli Symonds (2020b), which reached more than 19,000 international student candidates between February and June 2020, international students changed their plans due to the pandemic, did not show interest in online education, had more expectations from their universities in terms of health, and needed to have more information about the universities. In this research, the participant has stated her opinion: "Constantly informing international students and prospective students, prioritizing their health status and access to education will contribute positively to both current and prospective students." In a study conducted by Mok et al. (2021), with 2,739 students, it was revealed that 84% of students do not want to travel overseas. On the other hand, there are also studies stating that a single crisis will not completely eliminate international student mobility, and that regardless, students and families will be willing to do international student mobility (Wu, 2020). In the research conducted by the BridgeU Platform (2020) on more than 800 international student candidates from 83 countries, results supporting that the pandemic will not cause radical changes in international student mobility have been found. In the same study, the majority of the students stated that there was no change in their plans, but they changed their preferences about the countries where they wanted to study. In this research conducted in 2020, a decrease of 71% for the USA, 56% for the UK and 58% for Canada was observed, while an increase of 167% for Australia and 50% for Singapore was observed. With the change in the rankings of the countries preferred by international students, countries such as Australia, Singapore, and New Zealand came to the front in this period. The reason for this can be shown as the fact that these countries effectively manage the pandemic process (BridgeU, 2020). According to the study conducted by Studyportals, 36% of the students changed their international mobility plans due to the pandemic. It is seen that the ideas of freezing their enrollment, enrolling in online mobility programs, giving up international mobility, studying at a national university, or changing the preferred country come to the fore in the preferences of these students, respectively (Studyportals, 2020a).

Regarding the impact of the pandemic on the country's economies and universities in this research, the participant's following statement attracts attention: "I can say that the number of international students in Spain has decreased significantly." Considering the expected decline in the number of international students according to the OECD (2020) report, it is likely that there will be a decline in research and innovation in the coming years in countries that maintain their development and prestige through brain drain. On the other hand, it seems likely that countries, such as the USA and the UK, which see international students as financial inputs and owe a significant part of their resources to international students, will experience financial losses in the coming period due to the negativities in the pandemic process as well as the

deficiencies in their existing health systems. It can be said that the return of international students to their countries and their inability to pay their tuition fees will also put universities with a high number of international students in a difficult situation. However, this is the opposite for countries, such as Singapore and New Zealand, that have successfully managed the pandemic (Schulmann, 2020). In this context, it can be said that countries that are successful in pandemic management will have a great advantage in becoming a center of attraction in international education. It is expected that transoceanic countries and countries that cannot successfully manage the pandemic process will lose their place in the preference rankings (Calıkoglu & Gumuş, 2020). Accordingly, it is possible that there will be some changes in the preferred destinations for international student mobility after the pandemic, in terms of the financial inputs of the countries and the communication of universities with international students.

The pandemic has disrupted international students' plans to experience different cultures, access the foreign job market, network and learn languages, and have disrupted their learning experiences (Aristovnik et al., 2020). According to Gopinathan et al. (2020), universities that do not want to lose their value in the eyes of students give more importance to distance education, which makes it possible to participate in international education from home during the pandemic process. The concentration of universities on distance education has allowed students to participate in international mobility without requiring them to move. In this research, the participant pointed out that there were students who had problems accessing the courses remotely. She added that "Some universities provided laptop computers to international students who could not access online education." On the other hand, Buzatu et al. (2020) emphasize that distance education is not preferred by students and there are concerns about quality, while Zalite and Zvirbule (2020) emphasize that universities are not ready for online education as a digital infrastructure. With the transition to distance education, universities are experiencing problems with the inability to implement the online surveillance system, the limited interaction in virtual classrooms, and privacy and security (Aalst et al., 2020). If international mobility is transformed into virtual mobility through online means, it is seen that the costs are reduced and it is possible for students who cannot cross their physical limits to be included in the mobility. There exists the skepticism of students towards online mobility; the fact is that it is not possible to carry out the mobility with its full advantages and there are some disadvantages. It is thought that after the pandemic, student preferences will again be in favor of physical mobility.

Conclusion and Suggestions

When the findings obtained in this study are evaluated in general, it can be said that the pandemic has had many negative effects on international student mobility. During the pandemic, international students have been stuck in the country they are in and faced difficulties in returning to their homes. In addition, their education and internships have been interrupted and they have experienced intense stress and anxiety. Students who could not return to their country had difficulties in terms of accommodation, access to food, financial support, and medical supplies. The pandemic has caused current international students to be undecided about whether to continue their mobility, and prospective international students have changed their country preferences significantly, even if they do not give up on their mobility.

In accordance, the factors affecting international students and international student candidates to change their plans and destination preferences can be listed as: experiences lived through during the pandemic process, skills of countries to cope with the pandemic and the health system they own, approach of governments towards international students, success of universities in managing pandemic process, support and means which universities provide to international students regarding subjects such as accommodation, health, food, and financial issues, and alternative options offered with regards to lecturing. Therefore, overseas countries and universities, which were the center of international students before the pandemic, but were insufficient in the management of the pandemic, are expected to experience serious student loss and economic difficulties. In this context, universities can be advised to improve communication with students; to provide discounts on tuition fees considering the financial difficulties experienced by students and their families; to give importance to online education, international coordination and cooperation, and preventive measures; and to work on issues, such as establishing closer communication with international students. In the context of prospective international students, applications, such as ease of placement at the university, universities need to pay special attention to activities concerning registration, accommodation, nutrition, conduct studies to meet the students' health needs, and provide online interaction to address the concerns of students and parents.

In addition, developing countries, which have lost most of the talented young people, should spend this process by investing in higher education institutions and seeking ways to retain qualified human resources in their countries. On the other hand, this process offers serious opportunities to countries that want to be a center of attraction for international students. Especially countries that successfully manage the pandemic can become a safe and peaceful port for international students with their work and strong advertising campaigns. Turkey is one of these countries and it has been observed that international students' accommodation, education, health, and food needs are met during the pandemic. However, it was observed that some students went to their families. Education continued online. During the pandemic, Turkey brought its own citizens from abroad to the country by private planes. After all these situations, it has been observed that the number of international students in the country where many students have given up on going abroad has increased. As a final word, through future research, in case of a possible new closure, it would be beneficial for universities to focus on what steps should be taken and how countries can use such situations to their advantage.

References

Aalst, W., Hinz, O., & Weinhardt, C. (2020). Impact of COVID-19 on BISE research and education. *Business & Information Systems Engineering*, *62*, 463–466. https://doi.org/10.1007/s12599-020-00666-9

Ahlburg, D. A. (2020). Covid-19 and UK universities. *The Political Quarterly*, *91*(3), 649–654. https://doi.org/10.1111/1467-923X.12867

Al-Samarrai, S., Gangwar, M., & Gala, P. (2020). *The impact of the COVID-19 pandemic on education financing*. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/479041589318526060/the-impact-of-the-covid-19-pandemic-on-education-financing

Altbach, P. G. (2006). Globalization and the university: Realities in an unequal world. In J. J. F. Forest & P. G. Altbach (Eds.), *International handbook of higher education* (Vol I, pp. 121–140). Springer.

Altbach, P. G., & Teichler, U. (2001). Internationalization and exchanges in a globalized university. *Journal of Studies in International Education*, *5*(1), 5–25. https://doi.org/10.1177/102831530151002

Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*, *12*(20), 8438. https://doi.org/10.3390/su12208438

Bekirogullari, Z. (2020). Why divorces could spike after COVID-19 pandemic. ICH&HPSY 5th *International Conference on Health and Health Psychology*. https://doi.org/10.15405/eph.20101.5

Bilecen, B. (2020). Commentary: COVID-19 pandemic and higher education: International mobility and students' social protection. *International Migration, 58*(4), 263–266. https://doi.org/10.1111/imig.12749

Bogdan, R. C., & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theories and methods* (4th ed.). Pearson Education.

Böke, K. (2009). Sampling. In K. Böke (Ed.), *Research methods in social sciences.* Alfa Publishing.

BridgeU. (2020). *How will COVID-19 really impact international students' enrolments in 2020 & 2021? An in-depth analysis of what is affecting students' decisions in 2020 & What the future holds for 2021.* https://universities.bridge-u.com/blog/resources/covid-report/?utm_source=forbes&utm_medium=pr&utm_campaign=covid-report

Buzatu, A., Cojoc, C., Cotovici, E. Spirache, M. C., Trandafir, R., & Paun, M. (2020). Students' perception of online education in the COVID-19 pandemic framework. *Romanian Statistical Review, 3*, 3–14.

Chellaraj, G. (2019). The economics of international student and scholar mobility. *Policy Research Working Paper, World Bank Group, Paper No. 8848.* https://documents.worldbank.org/curated/en/490861557252519063/pdf/The-Economics-of-International-Student-and-Scholar-Mobility-Directions-for-Research.pdf

Chiang, C. (2020). *B.C. Schools brace for foreign-student drought.* https://biv.com/article/2020/04/bc-schools-brace-foreign-student-drought

Cohen, L., Manion, L., & Morrison, K. (2005). *Research methods in education* (5th ed.). Routledge Falmer.

Codling, L. (2020). *Loss of influence fears as foreign students stay away.* https://www.easterneye.biz/loss-of-influence-fears-as-foreign-students-stay-away/

Calıkoglu, A., & Gumuş, S. (2020). The future of higher education: COVID-19 impacts on teaching, research and internationalization. *Journal of Higher Education, 10*(3), 249–259. https://doi.org/10.2399/yod.20.005000

Darmody, M., Smyth, E., & Russell, H. (2020). The implications of the COVID-19 pandemic for policy in relation to children and young people. *ESRI Survey and Statistical Report Series, 94*. https://doi.org/10.26504/sustat94

De Wit, H. (2015). Recent trends and issues in international student mobility. *International Higher Education, 59*. https://doi.org/10.6017/ihe.2010.59.8481

De Wit, H., Hunter, F., Howard, L., & Egron-Polak, E. (2015). *Internationalisation of higher education*. EU.

Falcone, S. (2017). International student recruitment: trends and challenges. *Journal of International Students, 7*(2), 246–256.

Fernandes, N. (2020). *Economic effects of coronavirus outbreak (COVID-19) on the world economy.* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3557504

FNAE [Finnish National Agency for Education]. (2020). *Impact of COVID-19 on higher education student mobility in Finland.* https://www.oph.fi/en/news/2020/impact-covid-19-higher-education-student-mobility-finland

Gabriels, W., & Aberg, R. B. (2020). Student exchanges in times of crisis. *Research report on the impact of COVID-19 on student exchanges in Europe.* https://esn.org/covidimpact-report

Geibel, W. R. (2020). A pedagogy of student mobility: Facilitating humanistic outcomes in internationalization and student mobility. *Journal of Comparative and International Higher Education, 12*, 67–77.

Gopinathan, S., Nadiu, V., & Yeong, L. (2020). The big picture: Student mobility, internationalisation and the 'new normal'. *Higher Education in Southeast Asia and Beyond, 9*, 29–31.

Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication and Technology, 30*(4), 233–252.

Haleem, A., Javaid, M., & Vaishya, R. (2020). Effects of COVID-19 pandemic in daily life. *Current Medicine Research and Practice, 10*(2), 78–79. https://doi.org/10.1016/j.cmrp.2020.03.011

ICEF. (2020). *Coronavirus effect on student mobility.* https://monitor.icef.com/tag/coronavirus-effect-on-student-mobility/

Ing, V. (2020). International students authorized to work full-time. *South Asian Post, 3*. https://canadian-visa-lawyer.com/international-students-authorized-to-work-full-time/

Janebova, E. (2020). Internationalizing education. *Social Education, 8*(1), 6–10.

Kehm, B. M. (2005). The contribution of international student mobility to human development and global understanding. *US-China Education Review, 2*(1), 18–24.

Knight, J. (2007). Internationalization: Concepts, complexities and challenges. In J. J. F. Forest & P. G. Altbach (Eds.), *International handbook of higher education* (pp. 207–227). Springer.

Knight, J., & McNamara, J. (2017). Transnational education: A classification framework and data collection guidelines for international programme and provider mobility. *British Council and DAAD*. https://doi.org/10.1787/9789264038493-3-en

Levent, F. (2016). The economic impacts of international student mobility in the globalization process. *Journal of Human Sciences, 13*(3), 3853–3870. https://doi.org/10.14687/jhs.v13i3.3877

Levent, F., & Karaevli, Ö. (2013). Policies for the education of international students and recommendations for Turkey. *Marmara University Journal of Educational Sciences, 38*, 97-118. https://doi.org/10.15285/EBD.2013385569

Loo, B. (2020). *COVID-19 and Fall 2020: Impacts on U.S. international higher education.* https://wenr.wes.org/2020/11/covid-19-and-fall-2020-impacts-on-u-s-international-higher-education

Mackie, C. (2020). *The pandemic drives unprecedented decline in international students.* https://wenr.wes.org/2020/11/the-pandemic-drives-unprecedented-decline-in-international-students

Marinoni, G., van't Land, H., & Jensen, T. (2020). *The impact of COVID 19 on higher education around the World.* https://www.iau-aiu.net/IAU-Global-Survey-on-the-Impact-of-COVID-19-on-Higher-Education-around-the

McKibbin, W., & Fernando, R. (2020). *The global macroeconomic impacts of COVID-19: Seven scenarios.* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3547729

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded Sourcebook* (2nd ed.). Sage Publications.

Mlambo, V. H., Ogunnubi, O., & Mlambo, D. N. (2020). Student mobility, brain drain and the internationalization of higher education in Southern Africa. *African Journal of Development Studies (AJDS), 10*(2), 59–82. https://doi.org/10.31920/2634-3649/2020/10n2a3

Mok, K. H., Xiong, W., Ke, G., & Cheung, J. O. W. (2021). Impact of COVID-19 pandemic on international higher education and student mobility: Student perspectives from mainland China and Hong Kong. *International Journal of Educational Research, 105,* 1–12. https://doi.org/10.1016/j.ijer.2020.101718

Morse, J. M. (2000). Determining sample size. *Qualitative Health Research, 10*(1), 2–5. https://doi.org/10.1177/104973200129118183

NAFSA. (2020). *Economic value statistics.* https://www.nafsa.org/policy-and-advocacy/policy-resources/nafsa-international-student-economic-value-tool-v2

Negrusa, A. L., & Horea, C. (2020). The impact of students' international mobility on global citizenship identity development - a theoretical approach. *Studia UBB Negotia, 65*(1), 7–25. https://doi.org/10.24193/subbnegotia.2020.1.01

OECD. (2020). *Education at a glance 2020.* https://www.oecd.org/education/education-at-a-glance/

Patton. M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Sage Publications.

Quacquarelli Symonds. (2020a). *How COVID-19 is impacting prospective international students across the globe.* https://www.qs.com/portfolio-items/how-covid-19-is-impacting-prospective-international-students-across-the-globe/

Quacquarelli Symonds. (2020b). *The impact of the coronavirus on global higher education.* https://info.qs.com/rs/335-VIN-535/images/The-Impact-of-the-Coronavirus-on-Global-Higher-Education.pdf

Raghuram, P., & Sondhi, G. (2020). *Stuck in the middle of a pandemic: are international students migrants?* https://www.opendemocracy.net/en/pandemic-border/stuck-middle-pandemic-are-international-students-migrants/

Restaino, M., Vitale, M. P., & Primerano, I. (2020). Analysing international student mobility flows in higher education: A comparative study on European countries. *Social Indicators Research, 149*, 947–965. https://doi.org/10.1007/s11205-020-02282-2

Schleicher, A. (2020). *The impact of COVID-19 on education insights from education at a glance 2020.* https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf?utm_source=Adestra&utm_medium=email&utm_content=CTA%3A%20Brochure&utm_campaign=eduataglances ep2020&utm_term=pac

Schulmann, P. (2020). *Perfect storm: The impact of the coronavirus crisis on international student mobility to the United States.* https://wenr.wes.org/2020/05/perfect-storm-the-impact-of-the-coronavirus-crisis-on-international-student-mobility-to-the-united-states

Spyrou, H., & MacDonald, T. (2020). An over-reliance on international students? *Advocate, 27*(2), 30–32.

Studyportals. (2020a). *The impact of COVID-19 on student plans.* https://studyportals.com/blog/the-impact-of-covid-19-on-student-plans/

Studyportals. (2020b). *The impact of COVID-19 on international students perceptions.* https://studyportals.com/blog/the-impact-of-covid-19-on-international-students-perceptions/

Sun, L. (2017). *Brain circulation: International student mobility, expatriate researchers, and international research collaboration* (Published PhD). College of Education, The Pennsylvania State University. ProQuest Number: 10666634.

Taşçı, G. (2021). The impact of COVID-19 on higher education: Rethinking internationalization behind the iceberg. *International Journal of Curriculum and Instruction, 13*(1), 522–536.

Teichler, U. (1999). Internationalization as a challenge for higher education in Europe. *Tertiary Education and Management, 5*(1), 5–23.

Verma, A. K., & Prakash, S. (2020). Impact of COVID-19 on environment and society. *Journal of Global Biosciences, 9*(5), 7352–7363.

Wells, A. (2014). International student mobility: approaches, challenges and suggestions for further research. *Procedia-Social and Behavioral Sciences, 143*, 19–24. https://doi.org/10.1016/j.sbspro.2014.07.350

Wiers-Jenssen, J., & Støren, L. A. (2020). International student mobility and the transition from higher education to work in Norway. *Higher Education*, 1–25. https://doi.org/10.1007/s10734-020-00564-9

World Bank. (2020a). *The COVID-19 pandemic: Shocks to education and policy responses.* https://openknowledge.worldbank.org/handle/10986/33696

Word Bank. (2020b). *The COVID-19 crisis response: Supporting tertiary education for continuity, adaptation, and innovation.* http://documents1.worldbank.org/curated/en/621991586463915490/The-COVID-19-Crisis-Response-Supporting-Tertiary-Education-for-Continuity-Adaptation-and-Innovation.pdf

Wu, S. J., Chang, D. F., & Sun, F. R. (2020). Exploring college student's perspectives on global mobility during the COVID-19 pandemic recovery. *Education Sciences, 10*(9), 1–18. https://doi.org/10.3390/educsci10090218

Wu, H. (2020). Higher education development and student mobility during crises: From a comparative and historical perspective. *ECNU Review of Education, 3*(2), 204–209. https://doi.org/10.1177/2096531120923662

Yin, R. K. (2003). *Case study research design and methods* (3rd Ed.). Sage Publications.

Yu, J. (2021). A critical study of Chinese international students' experiences pursuing American higher education in the age of Trump and COVID-19. *Journal of Comparative & International Higher Education, 13,* 103–107. https://doi.org/10.32674/jcihe.v13i5S.4215

Zalite, A., & Zvirbule, A. (2020). Digital readiness and competitiveness of the EU higher education institutions: The COVID-19 pandemic impact. *Emerging Science Journal, 4*(4), 297–304. https://doi.org/10.28991/esj-2020-01232

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