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# COVID-19 Pandemic's Impact on International Students in Japan and the United States: Comparative Study From National and Institutional Context

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### ABSTRACT

This study aims to compare the COVID-19 pandemic's impact on international students in Japan and the United States based on a framework that shows the influence of government policies and university responses on international students' experiences and choices. Analysis of 494 survey responses indicates significant differences between international students in Japan and the US in

information acquisition, financial difficulty, confusion regarding visas, and perceived prejudice/discrimination, which seem to be influenced by government policies and institutional support systems in the two countries. They also reported different experiences with online classes and counseling services. Participants from low or lower-middle-income countries tend to report more financial difficulty and impact on employment than those from upper-middle-income countries. More than half of the participants predicted decreased student flow from their home countries. More concerted efforts by the government and universities will be needed to address international students' specific needs and realize attractive and sustainable international education.

**Keywords:** consultation, COVID-19, employability, international students, Japan, mobility, part-time job, USA

### INTRODUCTION

The COVID-19 pandemic has inflicted a tremendous impact on international education, which has been leading to its structural transformation across the institutions of higher education. Since international education is based on exchanges between different countries and international students are one of the main actors of international education, this study aims to compare the pandemic's impact on international students in different destination/source countries. To facilitate international comparison and to understand the impact on international students in national and institutional context, we developed a framework to show the influence of government policies and university responses on international students' experiences, which will affect future student mobility. We compared the international students in two major student destination countries: the US and Japan. The former represents an English-speaking country, while the latter was picked up as a case of a non-English-speaking country. The experiences and perceptions of international students will be compared by their home country's income level as well.

### LITERATURE REVIEW

Previous studies have illustrated various impacts of the COVID-19 on international students and international education. Coffey et al. (2020) depicted the marginalized situation of female international students engaged in hospitality work to earn their living and study costs in Australia. Mok et al. (2021) showed the decreased interest in studying abroad and change of study destination countries of Chinese students. COVID-19 Survey Series of the Institute for International

Education (IIE) (2020) reported the responses of the US universities to the situation caused by the pandemic and the prospect of international student applications. Aucejo et al. (2020) revealed significant negative impacts on student experiences, including delayed graduation, job loss, and declining earnings in the US. While some studies reported the widespread use of remote education as a measure to reduce the negative impact of COVID-19 on students' learning (Bozkurt & Sharma, 2020; Ali, 2020), Serhan (2020) reported students' negative attitudes toward the use of Zoom in the US, including declining confidence in learning, lack of classroom engagement and interaction with classmates and instructors (p.338-338), as well as instructors' lack of readiness and students' technical difficulties for the use of the new platform (p.340). Regarding the studies on international students in Japan, Nagoya University (2020) compared the experiences of local and international students during the pandemic and showed the latter faced more financial difficulty than the former. Teng and Lin (2021) depicted the anxieties of Chinese international students in Japan, mainly caused by financial difficulty due to the decrease in part-time jobs and the fear of infection.

Although a significant number of studies have been conducted worldwide on the impact of the pandemic, few studies have compared the experiences and perceptions of international students between different destination countries and/or source countries. International comparison is necessary to grasp the pandemic's impact on international education, which is based on international exchanges between various countries and institutions. We can also find few studies that explicitly discuss the influence of university responses (institutional/meso-level factors) and government policies (macro-level factors) on international student experiences and choices (micro-level outcomes) during the pandemic. Such studies are necessary to understand the national and institutional context of pandemic's impact on international education and the strategies to cope with it.

### THEORETICAL CONSTRUCT

In an earlier study, Castles and Miller (2009) asserted that migratory movement could be seen as the result of interacting macro-, meso-, and micro-structures (p.28). Later, Haas and Hadjar (2020) categorized the theoretical frameworks of 27 previous studies on student trajectory by its predictors (influencing factors) at micro-, meso-, and macro-levels. Li et al. (2021), inspired by the analysis of Haas and Hadjar, elucidated the factors that influenced the mobility choices of Chinese students in a US-China transnational education program from the macro-level (e.g., labor market and university admission policies) and meso-level (e.g., program structures) contexts. Deuel (2020) examined the internationalization of higher education at macro-, meso- and micro-

levels to better understand the operation of complex power relationships and international student subjectivity.

Sato (2016, 2021) proposed the life planning model in her analysis of factors that influence student choices when choosing a study destination, workplace, and place of settlement. This model is an application of rational choice theory that assumes individuals make rational choices to maximize their self-interest (Scott, 2000) and the choices are subject to social outcomes at the macrolevel (Friedman & Hechter, 1988). In the life planning model, international students are supposed to make rational choices, and their choices would be influenced not only by micro-/individual factors such as financial constraints, language ability, family expectation, desire for better employment, but also macrolevel factors (policies, and economic and cultural factors of their home country and destination country), and institutional (meso-level) factors. There are limited cross-country studies on international students that compare the effects of macroand/or meso-level factors despite its advantage in revealing their national/local characteristics. In this paper, we apply this model to analyze the pandemic's impact on international students' lives and future choices.

Figure 1

Framework to See the Influence of Macro/Meso Level Factors on

International Students' Experiences and Choices

			Destination countries		Source countries		
			English- speaking	Non-English- speaking	Low or lower- middle- income	Upper-middle- income	
	Macro level	Social situation					
		Government policy					
	Meso level	Universities/ schools					
	Micro level	International students					
<u></u>	Future	direction of stu	ıdent mobili	ty and intern	ational educat	ion	

Figure 1 shows the research framework that we construct to analyze the influence of government policies and social situation (macro-level factors) and university/school responses (institutional/meso-level factors) on the experiences and choices of international students (individual/micro-level outcomes). We assume that the experiences of international students will affect the choices of next-generation international students, which will formulate the future direction of student mobility and international education.

The columns of destination countries and source countries are made to examine the pandemic's impact on international education not only in destination countries but also in students' home countries. In this study, destination countries are categorized by their official language (English or non-English), and source countries are divided by their income level based on the classification of the World Bank (2021).

English speaking or non-English speaking countries are compared since English-speaking countries have had a comparative advantage in attracting international students over non-English speaking countries (OECD, 2018, p.223). They face different issues in accepting and supporting international students. As the target of this research, the US and Japan were selected as a case of an English-speaking country and that of a non-English-speaking country, respectively. The US was selected since it accepts the largest number of international students in the world, and Japan was selected since it is among the major non-English speaking destination countries (OECD, 2021, p.222).

International students' home country income level was compared between those from low or lower-middle-income countries and upper-middle income countries based on the World Bank's classification in the fiscal year (FY) 2021 (World Bank, 2021) since the majority of international students are from developing countries (OECD, 2021, p.212). We had an assumption that the pandemic had a greater negative impact on international students and their financial capacity to continue their studies overseas.

### RESEARCH METHOD

We used a cross-sectional survey with an online questionnaire and two interviews. We also used secondary data to examine the responses of the governments and universities to international students' needs during the pandemic in Japan and the US. The questionnaire was constructed based on the research framework introduced in the previous section, using rational choice theory and life planning model. Questions were made to ask about individual factors and institutional and social factors that affected their situation.

The cognitive model was used in the design of the questionnaire (Sudman, et al., 1996). The questionnaire was started with a simple question (their

whereabouts in the year 2020), then proceeded to ask about their experiences and perceptions during the pandemic, and finally asked their opinions about desirable support and prediction of student mobility from their home country. The order of questions was examined to avoid the context effect and item-order effect (Schwarz, 1999). The BRUSO model (Peterson, 2000), namely, the principles of "brief," "relevant," "unambiguous," "specific," and "objective," were applied in formulating the questions.

We used a 5-point Likert scale to ask about the applicability of the statement or the level of satisfaction to facilitate the comparison of responses between different groups (Likert, 1932). Open-ended questions were also used to capture their opinions and suggestions to allow "unanticipated statements and stories to emerge" (Charmaz, 2006). The online questionnaire was used to draw more diverse participants (Gosling, et al., 2004).

An online questionnaire survey was distributed to the international students on the International Foreign Student Association (IFSA) mailing list and via the networks of the authors' universities in Japan from January to March 2021. On the IFSA mailing list, about 1100 international students were registered to receive job-hunting and life support information. The questionnaire was written in Japanese and English.

In the US, the same online questionnaire in English was distributed to 600 international students from late January to February and from May to July 2021 through the authors' networks and a Chinese student network. Since these surveys were not conducted by random sampling, sampling bias was checked by comparing the major attributes of the samples and population (the result is shown in the next section).

Interviews of two international graduates engaged in the consultation of international students in Japan were conducted via Zoom in October 2020 and May 2021, respectively.

# **Participants**

Table 1 shows the demographic characteristics of the participants of the online questionnaire surveys, categorized by the income level of their home country/region, based on the World Bank's classification in FY 2021 (World Bank, 2021). Classification in FY 2021 was used considering the timing of the survey.

We received 376 valid responses from the international students who were enrolled in Japanese universities in the year 2020. This number accounts for 0.28% of the international students enrolled in Japanese universities in 2020 (JASSO, 2021a). Compared to the population, the percentages of graduate students and STEM students are higher than the population (the percentage of graduate students is 75.2 in the sample and 39.9 in the population; that of STEM students is 37.5 in

the sample and 22.9 in the population). Therefore, these biases will be considered in interpreting the result.

Similarly, 118 valid responses from international students enrolled in American universities were collected, which account for 0.016% of the total international students enrolled in American universities in 2019/2020 (IIE, 2021). Compared to the population, the percentage of Chinese students is much higher (the percentage of Chinese students is 73.7 in the sample, 35.0 in the population).

**Table 1** *Major Demographic Characteristics of Participants by Income Level of Home Country/Region (Japan N = 376, the US N=118)* 

		Japan			USA	
Income level of home country /regrion	Low/lower- middle-income	Upper-middle- income	High-income	Low/lower- middle-income	Upper-middle- income	High-income
Number	66	248	62	22	89	7
Home	Vietnam 27, Mongolia 15, Nepal 8, India 4, Bangladesh 3, Cambodia 3, Philippines 3, Cameroon 1, Uzbekistan 1, Uganda 1	China 185, Indonesia 58, Malaysia 3, Thailand 2	Australia 3, Canada 2, Greece 2, Hong Kong 1, Italy 1, Singapore 1, South Korea 6, Taiwan 5, UK 1, US 40	3, Nepal 1, Cameroon 1, Ethiopia 1, Ghana	China 87, Iran 1, Jamaica 1	Saudi Arabia 3, Bahamas 2, Japan 1, Kuwait 1
Gender	Female 36, Male 30	Female 136, Male 106, Prefer not to say 6	Female 27, Male 32, Prefer not to say 3	Female 10, Male 12	Female 74, Male 13, Prefer not to say 2	Female 3, Male 4
Enrolled program	Undergrad 30 Master 29 Doctor 7	Undergrad 52 Master 160 Doctor 36	Undergrad 11 Master 38 Doctor 13	Undergrad 9, Master 6 Doctor 7	Undergrad 45, Master 32, Doctor 12	Undergrad 2, Master 3, Doctor 2
Major	Humanities & social sciences 37, STEM 23, Other 6	Humanities & social sciences 120, STEM 87, Other 41	Humanities & social sciences 23, STEM 31, Other 8	,	Humanities & social sciences 47, STEM 38, Other 4	Humanities & social sciences 3, STEM 3, Other 1

*Note*. Data are the number of respondents. Income level of students' home countries/region is based on World Bank's classification in FY2021.

### RESULTS

This section presents the analytical results, comparing students' destinations (Japan and the USA), their home country's income levels, and other demographic characteristics.

### **Experience of International Students During the Pandemic**

Table 2 shows the student experiences during the pandemic in 2020. As the result of t-tests, there were significant differences at the 1% level between Japan and the US in information acquisition, financial difficulty, and confusion by visa policy, and a significant difference at the 5% level for prejudice/discrimination. As for loneliness/depression and satisfaction with online classes, no significant difference was reported between the two groups.

Students reported more difficulty in the acquisition of information related to the COVID-19 in Japan, which can be explained by a higher level of language barriers experienced by international students. In an open-ended response, a student reported, "Since the English language is not preferable in most services in Japanese society, individuals will face difficulty in communication and information (acquisition)." Since the participants in Japan include more STEM and more graduate students than the population, who are often enrolled in Englishtaught programs, the result may have reflected their tendency more strongly.

**Table 2** *Experiences of International Students During the Pandemic* 

	Japan		USA	-
	M	SD	M	SD $p$
1) I could obtain necessary information related with COVID-19 in my study destination	3.83	1.03	4.20	0.96
2) I felt loneliness or depression during the pandemic	3.38	1.25	3.32	1.41
3) I faced prejudice/discrimination as an international student	2.46	1.23	2.78	1.35 *
4) I experienced financial difficulty	3.43	1.29	2.91	1.48 **
5) I was confused by the change of visa policy	2.93	1.46	3.66	1.22 **
6) How was your satisfaction with online or remote classes?	3.35	1.01	3.28	1.15

*Note* 1. M = Mean, SD = Standard Deviation.

*Note* 2. \*\* p<0.01, \* p<0.05

Note 3. Likert scale from "1. does not apply at all" to "5. apply very much" was used for 1)∼5) and Likert scale from "1. I am very dissatisfied" to "5. I am very satisficed" was used for 6).

Regarding loneliness or depression, 20.1% of participants in Japan replied "very applicable," and 35.7% said "applicable," while the figures were 24.8% and

35.7% in the US. The result reveals their isolated situation away from their families and close friends in their home countries.

As for the encounter with prejudice or discrimination, 12.0% of US participants reported "very applicable," and 23.9% said "applicable," while the figures were 5.9% and 17.4% in Japan. Since the US group included more Chinese students than the population, a higher incidence of discrimination may have reflected their experiences, who had a difficult time with the accusation that the pandemic originated in their home country.

23.9% of students in Japan reported financial difficulty as "very applicable," and 31.9% said "applicable," while the figure was 18.8% and 25.6% in the US. When asked the reason for financial difficulty, 51.9% of participants in Japan listed "loss or decrease of part-time jobs," while the figure was 29.7% in the US. It indicates that the higher reliance on part-time jobs as the primary income source led to more financial difficulty in Japan. When the responses of those from low or lower-middle-income countries were compared to those from upper-middle-income countries, the former reported more financial difficulty than the latter with a significant difference at the 1% level in both Japan and the US. This result implies that their home country's income level is related to their financial situation.

Higher confusion regarding visas in the USA can be attributed to the student visa policy under the Trump administration, which tried to restrict student visa issuance to those who mainly take online courses (American Council on Education, 2020).

Although most of the participants reported satisfaction with online or remote classes in both countries, insufficient interaction between instructor and students and/or among students and unstable internet connection were listed as major issues when asked about the aspects of their satisfaction/dissatisfaction. In an open-ended response, an international student in the US said, "For bigger lectures [classes], there's really not much difference between remote and in-class teaching. On the other hand, lab courses, field research, and hands-on practice are the ones better taught in person; otherwise, the quality of the course might be severely undermined." From a comparative aspect, international students in the US appeared to focus more on the functional merit and demerit of online offerings, while international students in Japan seemed concerned about the "personal" elements of learning culture. Although a few students in Japan mentioned the merits of online learning in terms of safety, flexibility, and savings in commuting time, the majority of them reported that they were unhappy because they were unable to meet their teachers and classmates in person. For instance, one international student mentioned her experience of taking an online class in her open-ended response, "... at his [online] course, because we did not meet him (the instructor) in person, we do not know each other. And that's the gap that can't be filled." In this study, many participants in Japan reported having technical issues with ICT/course portals than the participants from the US. Some students in Japan noticed occasional or frequent losses in internet access and professors' lack of proficiency in online teaching. These technical issues may be related to a lack of online course offerings of the instructors or limited training at the institutions prior to the pandemic.

### Most Serious Problem, Most Needed Support

Table 3 shows the most serious problems reported by the participants during the COVID-19 pandemic, which were categorized from the open-ended responses. In Japan, 23.5% of students listed "financial difficulty" and 22.6% listed "restriction on move/behavior," while 23.7% in the US listed "impact on education/research" and 19.5% listed "mental health" and "restriction on move/behavior" respectively as their most serious problems. The result coincides with the result in Table 2 that the students in Japan felt more financial difficulties than their counterparts in the US.

**Table 3** *Most Serious Problems Reported by International Students During the Pandemic* 

		Japan			USA	
Income level of home country	all	Low/lower -middle- income	Upper- middle- income	all	Low/lower -middle- income	Upper- middle- income
Impanct on employment/career	9.2%	18.6%	8.5%	5.1%	4.5%	5.6%
Financial difficulty	23.5%	35.6%	17.9%	12.7%	22.7%	7.9%
Mental health	11.5%	6.8%	13.7%	19.5%	22.7%	20.2%
Decreased interaction & actual experience	5.7%	3.4%	6.0%	4.2%	0.0%	5.6%
Impact on education/research	13.2%	8.5%	14.1%	23.7%	13.6%	25.8%
Restriction on move/behavior	22.6%	20.3%	26.1%	19.5%	13.6%	22.5%
Risk of infection, insufficient measures	5.7%	3.4%	6.0%	8.5%	4.5%	9.0%
How to keep health	2.3%	0.0%	3.0%	2.5%	4.5%	2.2%
Dissatisfaction with university	1.1%	0.0%	0.9%	2.5%	9.1%	1.1%
Other	5.2%	3.4%	3.8%	1.7%	4.5%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number of responces	349	59	234	117	22	89

*Note*. Data except for the last row show the percentage of responses in total responses in each group.

The percentage of the students who listed "financial difficulty" was higher in low/lower-middle-income countries, while the percentages of those who listed "impact on education/research," "restriction on move/behavior," and "risk of infection" were higher in upper-middle-income counties in both Japan and the US. These results indicate that students from low/lower-middle-income countries felt more financial difficulty, while their counterparts from upper-middle-income countries were more concerned with education and research, restrictions on mobility, and risk of infection.

When asked about the necessary support for the international students in an open-ended question, 50.0% of those from low or lower-middle-income countries and 40.0% of those from upper-middle-income countries listed "financial support" in Japan, while the figure was 33.3% and 16.7% in the US.

Secondly desired supports in Japan were "(comprehensive) information provision" and "individual counseling:" 14.3% of those from low/lower-middle-income countries and 23.1% from upper-middle-income countries listed "information provision," and 14.3% of those from low/lower-middle-income countries and 16.9% from upper-middle-income countries listed "individual counseling."

In the US, 33.3% of those from low/lower-middle-income countries listed "public or organizational support." Their suggestions included the following ones: "Government and state should support international students during this crisis time," "I suggest international committees and organizations should address and improve their resources on how they can help international students during such a crisis." 66.7% of those from upper-middle-income countries listed individual counseling, including visa consultation, as the necessary support.

These results show the higher need for financial support in Japan, especially among students from low/lower-middle-income countries. In the US, students from low/lower-middle-income countries seek organizational support, while those from upper-middle-income countries seek more individual counseling.

# Whom to Consult With During the Pandemic

Table 4 shows the person/organization with whom the international students consulted during the pandemic. In both Japan and the USA, "friends from the same country" were the most frequently consulted group, followed by "academic supervisor or staff of university" and "friends from other countries."

The percentages of those who consulted with "academic supervisor or staff of university" and "counselor or doctor of university" were much higher in the USA, while the percentages of those who consulted with "ethnic community," "support organization," and "no one to consult with" were higher in Japan, suggesting a need for additional counseling services for international students at Japanese universities.

**Table 4** *Person/Organization to Consult With During the Pandemic* 

-				
	Japan		U	JSA
Academic supervisor or staff of university	113	30.1%	58	49.2%
Counselor or doctor of university	33	8.8%	17	14.4%
Friends from the same country with yours	227	60.4%	77	65.3%
Friends from other country than yours	77	20.5%	29	24.6%
Relatives living in study destinatoin	51	13.6%	22	18.6%
Ethnic community in study destination	35	9.3%	5	4.2%
Support organization in study destination	27	7.2%	5	4.2%
Other people/organization	21	5.6%	3	2.5%
No one to consult with in study destination	28	7.4%	4	3.4%
No need for consultation	35	9.3%	7	5.9%
Total respondents	376	100.0%	118	100.0%

*Note*. Multiple choice was allowed in this question.

## **Change of Future Plan**

Table 5 shows participants' responses about their original plan after graduation and how it was affected by the pandemic among those from developing countries. Before the pandemic, 66.7% of those from low/lower-middle-income countries in Japan and 81.8% of those from the same group in the US had planned to find employment in their study destination. The students from low/lower-middle-income countries showed a seemingly stronger tendency to seek employment in their study destination than their peers from upper-middle-income countries both in Japan and the US. However, 45.5 % of those in Japan and 61.1% in the US reported that their original plan was affected due to the COVID-19.

As for students from upper-middle-income countries, although 59.3% in Japan and 44.9% in the US had planned to find employment in their study

destination, more than half of them reported that their plan was affected by the COVID-19.

The percentage of those who had planned to return to their home countries was higher among the students from upper-middle-income countries than those from low/lower-middle-income countries in both Japan and the US. In Japan, their plan to return to their home country was less affected by the COVID-19 (38.0%) than their US counterparts (57.1%).

**Table 5** *Future Plan Before the Pandemic and its Impact* 

	Jaj	pan	USA		
Income level of home country	Low/lower- middle-income	Upper-middle-income	Low/lower- middle-income	Upper-middle-income	
Original plan before the pandemic					
1) To find employment in study destination	44 (66.7%)	147 (59.3%)	18 (81.8%)	40 (44.9%)	
2) To return home country to find employment	10 (15.2%)	50 (20.2%)	2 (9.1%)	14 (15.7%)	
3) To find employment in another country	2 (3.0%)	20 (8.1%)	0.0%	10 (11.2%)	
4) Other plan	10 (15.2%)	31 (12.5%)	2 (9.1%)	25 (28.1%)	
Total respondents	66 (100.0%)	248 (100.0%)	22 (100.0%)	89 (100.0%)	
Percentage of those whose original plan was affe	cted by the CO	VID-19			
Among those who chose 1)	45.5%	51.0%	61.1%	52.5%	
Among those who chose 2)	60.0%	38.0%	50.0%	57.1%	
Among those who chose 3)	100.0%	75.0%	n.a.	40.0%	
Among those who chose 4)	50.0%	54.8%	50.0%	44.0%	
Among total respondents	50.0%	50.8%	59.1%	49.4%	

Through open-ended responses, participants shared additional testimonies on how their plans were affected by the pandemic. For instance, a Bangladeshi student in Japan wrote, "Due to pandemic situation, it will be very tough to find a job." A Chinese student also stated, "It becomes more difficult to find a job in Japan. But I cannot return to join internships in China because of quarantine." In the US, participants shared similar concerns regarding the decrease in employment opportunities and post-study training. A Chinese student wrote, "Before the COVID-19, I planned to get a job abroad, but now I only want to get my degree ASAP and go back to my own country." This statement may

reflect the challenging experience of Chinese students during the pandemic and the availability of employment opportunities back in their home country.

### **Prediction of Student Flow From Their Home Countries**

Table 6 shows participants' prediction of future international student flow from their home country to their current destination by their home country's income level. In Japan, 56.1% of those from low/lower-middle-income countries and 57.3% from upper-middle-income countries predicted that the number would decrease, whereas 54.5% of those from low/lower-middle-income countries and 62.9% of those from upper-middle-income countries predicted the number would decrease in the US.

**Table 6**Prediction of International Student Flow From Home Country to Current Study Destination

	Jaŗ	oan	USA		
Income level of home country	Low/lower- middle-income	Upper-middle-income	Low/lower- middle-income	Upper-middle- income	
I think it will decrease	56.1%	57.3%	54.5%	62.9%	
I do not think it will decrease	43.9%	42.7%	45.5%	37.1%	
Number of respondents	66	248	22	89	

As the reason for their negative prediction, a few students from a lower-middle-income country in Japan reported the diminishing prospect of employment opportunities. A student wrote, "I think it will take time to recover the economy and go back to normal. I have seen many Japanese people losing their jobs as well. So, I guess the Japanese government would prioritize Japanese nationality first in order to help them to get a job. After that, the Japanese government will care about international students." Another student raised the issue of decreased income of their parents and difficulty finding employment in Japan after the pandemic. Several students from upper-middle-income countries listed visa and travel restrictions as the main reason for the negative prospect. Some students from China pointed out that insufficient pandemic preventive measures in Japan will hinder the inflow of students from their home country.

In the US, an international student from a lower-middle-income country stated, "Because this pandemic has changed the way of living and learning, more students can still study abroad remotely than before," as a reason for the decline in student flow. Another student listed high tuition fees as the reason for the

decrease in future international student enrollment. A higher percentage of negative predictions by students from upper-middle-income countries seems to be influenced by the fact that the majority of them are Chinese students who faced a deterioration of diplomatic relations between their home country and the US during the pandemic. However, some Chinese students admitted the merit of studying in the US as seen in the following statements: "The US still outperforms other countries in terms of higher education," "America remains a strong attraction for its high quality of education."

### DISCUSSION

This study's findings unfold the severe impacts of the COVID-19 on international students' well-being, financial sustainability, career choices, and future inflow in the two countries. Now we would like to discuss how the students' experiences and perceptions are influenced by the government policies and response of universities based on the research framework shown in Figure 1.

In recent years, Japanese universities have increased English-taught degree programs under the government programs to internationalize their education (Nonaka & Phillips, 2019; Enkhtur, et.al, 2021). English-taught degree programs have been provided at 17.2% of the total universities at the graduate level in 2018 (MEXT, 2020, p.60). However, our study revealed that timely information provision in English may not have been sufficient for them in an emergency like the pandemic.

Under the Plan to Accept 300,000 International Students, Japanese language schools have aggressively recruited students from relatively lower-income countries in Southeast, South, and Central Asia. Their recruitment emphasized that the upper limit on part-time jobs (28 hours per week) for international students in Japan is longer than other major destination countries. As a result, the majority of students from these regions earn their living and tuition fees in Japan through part-time jobs. They tend to attain lower Japanese language proficiency levels than the students from China, South Korea, and Taiwan (Chinese character using countries/region) because of excessive part-time jobs and their disadvantage in learning Chinese characters used in written Japanese (Sato, et al., 2020). This has also increased the language barrier for international students in information acquisition during the pandemic.

The Japan Student Services Organization (JASSO) reported that 67.9% of privately-funded international students engaged in part-time jobs to sustain their living. It also shows that 40.2% of these students worked at restaurants, and 33% worked at shops (JASSO, 2021b). Since these businesses were among the most severely hit by the COVID-19, many international students lost their jobs or worked much less than before and faced financial difficulties in continuing their

studies in Japan. This may be the reason why the participants of this study reported significantly higher rates of financial difficulty in Japan than those in the US, where off-campus part-time jobs are prohibited in principle. Considering the lower percentage of those who used counseling services in Japan compared to their counterparts in the US, counseling support can be listed as another weakness of international higher education in Japan.

Participants in the US reported higher confusion regarding visas and perceived discrimination and prejudice against international students. This could be because of the then Trump administration's restrictive immigration policies, including a move to restrict student visas to those who mainly take online courses. A Chinese student in this study mentioned that President Trump's words, such as "China virus," incurred hostile feelings against Chinese people. Another Chinese student said, "I think the discrimination issue is hard for us to deal with. Sometimes it's also hard for us to find support, especially for Asian students." An African student also listed discrimination against international students as a reason for her negative prediction of student flow to the US. "America first" policy of the Trump Administration may have lowered the priority of international students in the US.

During the COVID-19 pandemic, higher education institutions in the US have offered resources including flexible learning schedules, pandemic result fund/stipend, COVID-19 testing kits/protection gears, and learning devices for both domestic and international students (Durrani, 2020; Smalley, 2021). Universities in Japan also offer resources for flexible learning systems and schedules. In terms of financial and employment-related support, the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) led policies and programs that offered services and resources to help them continue studying in Japan (MEXT 2021). However, we did not observe clear evidence that individual Japanese universities fully or at least visibly offer such services and supports geared specifically toward international students. Although the services and supports might have been taking place institutionally on the campuses, the invisibility of activities must be the reason why many international students in our survey reported that they needed more comprehensive information provision and support.

The results also showed that participants from low or lower-middle-income countries reported a higher degree of financial difficulty than those from upper-middle-income countries in Japan and the US. Getting enough money to continue their study was the most imminent issue for them. In Japan, those from low or lower-middle-income countries were also concerned about their employment/career prospects. This could be because fewer employment opportunities are available for them back in their home countries and also because the expectation to find employment in Japan has increased since the Japanese

government has promoted the employment of international students under the Plan to Accept 300,000 International Students as a means to recruit highly skilled workers (Sato, 2019). The Japanese government's "Revitalization Strategy 2016" set a goal to raise international students' employment rate in Japan from 30% to 50% (PMJC, 2016, p.160). A Nepalese graduate of a Japanese university, who has received consultations from his junior Nepalese students, pointed out that diminishing employment prospects was a serious issue since many Nepalese students invested much money and effort to get good employment in Japan.

More than half of the participants in Japan and the US predicted that the number of international students from their home country to their current study destination would decrease in the future. Besides travel and visa restrictions impacted by the COVID-19, online education and employment prospects were listed as important factors to affect future student flow. As Abdullah and Singh (2022) point out, a certain cohort of international students would opt to study online to reduce the costs of international education. The value of "real" or physical study abroad has been re-examined since the pandemic with the spread of online education that can be accessed from their home countries.

According to a survey by Hobsons (2015), the majority of international students chose to study abroad for the pursuit of better careers in destination countries (p.8). Career choices and employability are related to "soft skills" and "human networking," which are more likely to be acquired through face-to-face communication and in-person education. Indeed, participants of this study in Japan indicated a greater value in "meeting in person," "interactions in real life," and "social and cultural experience." Meeting these needs and expectations would be essential to enhance the value of "real" study abroad.

Participants in the US mentioned the need for public and organizational support for international students. The government and higher education institutions are expected to cooperate to address the above-mentioned specific needs of international students to strengthen the attractiveness of international education and future student inflow.

### LIMITATIONS

This study covers only limited samples of a large and diverse international student population. Sampling biases were reported, so we had to be careful in interpreting the results. Since international student experiences are different institutionally based on their demographic factors and available resources locally, whether they are in the US or Japan, more detailed information needs to be examined to truly understand their experiences. We should also note that the unexpected COIVD-19 pandemic might have influenced students' views about their institutions, instructors, and host countries' policies.

#### IMPLICATIONS AND CONCLUSIONS

Despite these limitations, this study still provides essential information on international students' experiences and choices during the pandemic. Participants reported social and academic issues and mental-wellbeing concerns, isolated from their familiar network and disadvantaged by their foreign nationality and local language skills. The international comparison revealed the characteristics of student experiences and influencing factors, including government policies and (deficiency of) university support, in Japan and the US. International students from low or lower-middle-income countries tend to report higher adverse effects of the COVID-19 on their life and employment.

In light of the results of this study, the government and universities need to cooperate in responding to the specific needs of international students, including financial support, visa and career counseling, opportunities for networking and interactions, and dissemination of timely information in the language understood by them in the crisis like the pandemic. Such measures will mitigate the negative effect on international students' life and career prospect, which is essential to sustain future student mobility.

We would like to continue this study by increasing the samples and diversifying the survey methods and information sources to further monitor the impact of the COVID-19 on international students and their education.

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