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Adjusting in a pandemic: Experiences of incoming international students

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Introduction: Over 4 million students travel outside their home countries to pursue tertiary education in the world, with over 600,000 students traveling to Canada alone. Adjustment to new cultures has often been shown to be stressful. The COVID-19 pandemic has been a significant global event that has affected all aspects of life in different ways. Although there is research showing the negative impact of the COVID-19 pandemic on international students globally, the study of the experiences of incoming cohorts of international students, particularly during the process of planning, traveling, and arriving at the host country, is still evolving.

Methods: Given that international students are sometimes at higher risk for mental health concerns, this qualitative study sought to explore the experiences of six incoming international graduate students, ages 18 to 32, through a semi-structured interview, as they moved from their home country to Canada. It explored their cultural adjustment in the context of the COVID-19 pandemic using a thematic analysis, through a descriptive phenomenological paradigm.

Results: Six themes emerged: choosing graduate programs; influence of pandemic on admission acceptance, moving to Canada, university experiences, adjustment; and adjustment as a student. Overall, international students appear to experience a “double dose” of stressors - the typical stressors of student hood, COVID-19 related challenges, as well as their unique manifestations in the context of being an international student.

Discussion: Limitations and implications of the study are discussed.

KEYWORDS

international students, immigration, acculturation, cross-cultural psychology, COVID-19, pandemic

Introduction

Over 4 million students traveled outside their home countries to pursue tertiary education in the world in 2019. Since 1998, these numbers have grown more than 5.5% annually (OECD, 2021). The number of international students in Canadian postsecondary institutions has tripled, with the numbers currently at approximately 621,600 since 2008 (Statistics Canada, 2021). While international students' countries of origin, program of study, and duration of degree may vary, consistent similarities between concerns they experience have been noted. These include academic, religious, personal, financial, emotional, and social challenges. Language and communication challenges were also noted among those pursuing tertiary education outside of heritage cultures that did not speak English as their native language (Malakloulunthu and Selan, 2011, 836; Gebhard, 2012, 185; Vasilopoulos, 2016, 283). The COVID-19 pandemic emerged as a significant global event that affected all aspects of life in different ways (Adamson et al., 2020, 12; Blankenship and Jones, 2021, 2–14). Within well-being research, the construct of life satisfaction emphasizes subjective judgment of quality of life. Hence, life satisfaction is often informed by stability or changes in a person's life and is particularly influenced by major life events

(Pavot and Diener, 2008, 140). As a result, it is vital that we understand the experiences of international students immigrating to a different country, considering the impact of significant cultural differences, particularly while experiencing a highly stressful global phenomenon. This paper used well-being, a malleable and encompassing construct to better capture individuals' subjective perception of satisfaction within various life domains. Specifically, we focus on domains of cognitive well-being such as life satisfaction and domain satisfaction, in relation to mental health and coping (Tov, 2018). We first provide a brief overview of extant literature on international student mobility and adjustment patterns, followed by the impact of the COVID-19 pandemic on student wellbeing, before describing the rationale and objectives of the current study.

Student motivations for international mobility in pursuit of further education have not changed much over time and are largely impacted by push and pull factors. Push factors speak to the motivation students have to leave their home country for various reasons, while pull factors are reasons that draw students toward host countries (Kim and Sondhi, 2019, 57). Elements that may impact a students' decision to move away from their home country include university prospects, funding opportunities, and ability to adjust to the host country (Perez-Encinas and Rodriguez-Pomeda, 2019, 422–426). Canada has emerged as one of the most popular destinations for international students in tertiary education, fuelled by intentional policy changes at a governmental level seeking to streamline and improve the prospects of international students' pathways to permanent residence and citizenship (Advisory Panel on Canada's International Education Strategy, 2012; Trilokekar and el Masri, 2019, 34). The embracement of multiculturalism, sense of safety and security, as well as governmental policies that prioritize an in-flow of international students act as desirable qualities for international students to pursue university education and have Canada act as a host country (Kim and Sondhi, 2019, 62–63). Despite positive opportunities that present themselves with international mobility, moving away from one's home country can significantly negatively impact one's mental health and well-being.

Adjustment to "new" or "foreign" cultures, particularly when considering host countries (i.e., countries that students migrate to), can be stressful and uncertain. Acculturative stress and relational skills have been shown to be important factors affecting international graduate students' adjustment to university (Oyeniyi et al., 2021, 119–120). Along with such cultural adjustment, international students also often need to adjust to a novel educational system. Coupled with barriers to language and social self-efficacy, such adjustment can be detrimental to their well-being (Mesidor and Sly, 2016; Wang, 2016). The COVID-19 pandemic exacerbated these stressors for international students, negatively impacting their well-being as they were now more concerned for their families in their home country and experiencing homesickness, while feeling further concerned for their own physical health (Mbous et al., 2022). Individuals who have difficulty with cultural adjustment report lower levels of life satisfaction and positive mental health (Berry and Hou, 2016, 258–260). Research has shown increased academic stress, social isolation, anxiety, and acculturation difficulties due to insufficient/inappropriate financial, health, and infrastructural support as consistent concerns among international students, unexpected return to home countries, and uncertainty about their academic futures (Womujuni, 2006, 85–90; Wu et al., 2015, 5–8; Mackolil and Mackolil, 2020, 1–2). Further, students experienced challenges to their physical, social, and psychological well-being, facing various mental health concerns such as increased alcohol use, binge-eating, and depression, during the pandemic (Antwi et al., 2022, 10–13; Buckner et al., 2022, 22–24; Kim et al., 2022, 5–6; Kivelä et al., 2022).

For most university students, the pandemic forcibly shifted the learning model, changing it from an in-person model to a temporary online/hybrid model. Although the online learning model is not a novel concept and is considered a satisfactory platform for some to learn through (Coman et al., 2020, 11–12), this model ultimately challenged students' opportunities to fully immerse themselves in courses, engage with their peers and instructors, and wholeheartedly participate in university experiences (Potra et al., 2021, 6). The forced change of university students' learning model thus negatively impacted their sense of belonging (Mooney and Becker, 2021, 617). Among first-year university students, those who felt a higher sense of belonging in university were likely to have higher study engagement, and thus less likely to drop out (Maluenda-Albornoz et al., 2022, 9–11). Therefore, international students face similar challenges to domestic students in the shift to an online learning model, but it appears that there is an emphasis of acculturation factors specific to migrating to a different country for tertiary education, during a pandemic. Ultimately, international students appear to have experienced a "double stress" during this period—the general stressors associated with mobility and cultural adjustment, as well as additional unique stressors associated with COVID-19 pandemic.

Despite these challenges, there is consistent evidence that shows the importance of social support in adjusting to a new culture (Ra and Trusty, 2017, 282–283), including interaction with members of the host cultural group, which has been shown to be important in helping navigate the process of cultural adjustment (Killick, 2008, 29–33). Universities are also able to mitigate these concerns by offering support to their international student populations (Mbous et al., 2022). The participants in the present study were socially isolated due to COVID-19 restrictions, and we sought to explore the process of their adjustment in the absence of explicit social support. Further, given the importance of understanding acculturative factors among international students, it is vital to discuss the impact of the pandemic on students' well-being, a global phenomenon that continues to be an emerging avenue for exploration.

The experiences of incoming cohorts of international students continue to be explored (Firang and Mensah, 2022, 1–18). These are students whose first experience of a new country will be filtered through the lens of social distancing, virtual learning environments, and other concepts that were previously not as widespread in higher education. Further, increased incidents of racism and discrimination against minority groups (e.g., Asian communities) might also affect their initial adjustment to the country (Wu et al., 2021, 62–63). Given that international students are sometimes at a higher risk for mental health concerns (Prieto-Welch, 2016; Alharbi and Smith, 2018; Shadowen et al., 2019, 140–142), it is doubly important to understand their experiences with adjustment to Canada, as well as understand the process through their own cultural context, to better inform ways to support them. Overall, previous literature shows evidence that international mobility and the resulting cultural adjustment that international students face when moving to their host country impact their well-being and mental health. However, there is a gap in the literature that has yet to adequately understand the experiences of international students entering tertiary education *during* their period of mobility (i.e., the process of travel, initial arrival etc.), and particularly during the COVID-19 pandemic. Our study aimed to explore the university experiences of these students as they (a) moved to their host country, (b) while accounting for cultural adjustment with the (c) additional stressor of traveling during a pandemic.

Materials and methods

Recruitment

To recruit participants for this study, the researchers AT and KG created flyers. The flyer described the study's goal (e.g., to understand the experiences of students' adjustment to Canada within the context of the COVID-19 pandemic) and offered a \$20 Amazon gift card for participation. These were emailed to student clubs of the University of British Columbia's Okanagan Campus (UBC-O) in Kelowna, Canada to share with their members. Campus organizations that work closely with international students (e.g., the International Student Office, Students' Union) also shared the flyer. Participants who self-identified as international students pursuing postsecondary education at UBC-O, and who had traveled to Canada in 2020–2021 for their studies were selected. Interested students emailed AT (the corresponding author) and were then scheduled for a video call with either AT or KG. A lottery system was used to recruit participants to reduce bias. A total of six international graduate students were recruited to participate in interviews from an initial pool of 16 students. The objective, content, and possible risks and benefits of the study were explained to the participants through the informed consent form. Verbal consent was obtained at the start of the interviews.

Participants

The six participants included individuals who entered graduate programs at UBC-O in 2020–2021, four of whom identified as male and two who identified as female. They were full-time students pursuing either a research-based or course-based master's or PhD degree. They ranged in age from 23 to 32 with a mean age of 25.83 years. They immigrated from Sri Lanka, United Arab Emirates, Iran, India, and Brazil. Two participants disclosed that they were married (one with children), two were in long-distance relationships, and two did not reveal their relationship status. Pertinent demographic information regarding participants recruited is available in [Appendix A](#). For the purposes of protecting the privacy of our participants, they/them pronouns will be used to describe their experiences, and fictitious initials will be used.

Interview process/data collection

The interviews were conducted virtually in the Winter semester of 2021 due to COVID-19 restrictions. As only one researcher (either AT or KG) conducted each interview, they collaboratively created the interview questions, and discussed the objectives of the study prior, as well as discussed the process of the interview after, to ensure consistency. We used semi-structured interviews (i.e., an outline of key and probing questions was prepared), which can be found in [Appendix B](#). The questions included the participants' expectations of Canada, their experience of moving to a foreign country during the pandemic (i.e., difficulties they faced, facets of their lives that were impacted), and their general university experience. Interviews lasted approximately 30–90 min. Interviews were conducted over Zoom and were recorded and stored locally on the password-protected computers of the researchers.

Data analysis

Data analysis was done using NVivo 11. Interviews were transcribed by undergraduate research assistants who were blinded to the identity of the participants; they had access only to audio-recordings of the interviews, and did not have any identifying information (names, ages, program of study, etc.). Transcripts were verbatim, and included pauses, stutters, and changes in voice intonation (e.g., faster speech, raised voice) in order to provide additional context to the data. The transcripts were then verified for accuracy.

Research paradigm

Our study follows a phenomenological paradigm ([Ritchie and Lewis, 2003, 12](#)). The phenomenological approach seeks to emphasize immediate experience, as it believes that anything outside of lived experience cannot be affirmed as reality ([Groenewald, 2004, 4](#)). Phenomena itself thus becomes data within research. The aim of researchers then, is to describe such phenomena as accurately as possible to capture the “essence” of the experience. Phenomenology also believes that researchers cannot be detached from their own presumptions, and encourages the holding of ‘explicit beliefs,’ and the transparency of this process offers methodological rigor ([Groenewald, 2004, 6–7](#)). Focusing on the lived experiences of participants allowed the researchers to capture both the overarching experience of immigration, as well as unique individual factors, while also acknowledging the role of our own experiences with immigration and international student hood. Within the many phenomenological approaches available for research, this study uses Giorgi's descriptive phenomenology ([Giorgi, 2012](#)). Here, the objective is specifically to understand a “typical essence” of the phenomenon of adjustment among international students in Canada, within the context of the COVID-19 pandemic ([Järvinen and Mik-Meyer, 2020, 79](#)). As such, the experiences of all six participants were explored to identify patterns that emerged.

Data analysis

Thematic analysis was conducted to understand how these individuals make sense of the world around them. Thematic analysis “is a method for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a dataset.” ([Braun and Clarke, 2012, 57](#)). Through focusing on meaning across a dataset, it allows us to see and make sense of collective experiences. While numerous patterns may emerge across datasets, the focus of our study was to identify and describe the patterns that are relevant to the research question, and the process of adjustment experienced by international students. Thematic analysis usually occurs in six phases—familiarizing oneself with the data, generating initial codes, searching for themes, reviewing potential themes, defining/naming themes, and production of a report ([Kiger and Varpio, 2020, 4–7](#)). The investigators independently reviewed each transcript several times to familiarize themselves with the dataset. Following this, they collaboratively coded the data for phrases, words, and sentences and grouped them into broad categories. After the generation of these initial codes, the researchers discussed the potential themes. The themes were defined and named by KG. AT reviewed them further and refined them. At each step, the researchers consulted with one another and discussed areas of disagreement until a consensus was reached. Ultimately, about 200 open codes emerged, which were then organized into six themes.

Results

The six emergent themes are: choosing a graduate program, influence of the pandemic on admission acceptance, influence of the pandemic on moving to Canada, influence of the pandemic on university experiences, influence of the pandemic on adjustment, and adjustment as a student. Slight grammatical errors in participant responses have been corrected for clarity such as removal of filler words (i.e., “like,” “er,” “um”), clarifying tenses (e.g., “I *were* scared”), and plurals (e.g., “...made a mistakes”). For each theme, appropriate quotes from participants have been added to better contextualize findings.

Theme 1: Choosing graduate programs

Before the participants had decided to move to Canada, they had the difficult task of deciding and researching which university program worldwide best fit them. They considered how studying as a graduate student in a Canadian institution would be in comparison to universities in different countries, considering ranking, funding, and the impact of the university on their lifestyle and well-being. When deciding between South Korea and Canada for graduate school, SM stated “In South Korea, it was competitive and there was too much stress, so I thought maybe moving to a Western country would be more laid back and would not be as busy as South Korea.” According to IN, financial assistance was important in deciding their university of choice “I was getting into some other universities but the package [financial assistance] was not up to mark and what I am getting here is really nice. It is helping me to pay for tuition fees and rent...We cannot even compare Canada and India [country of origin] - there is no comparison in terms of education system...It is different. Here it is more about the students’ well-being and support. I did not experience this in India.”

Most participants emphasized the warmth and acceptance they felt from Canadians which ultimately impacted their decision to select their present university. Particularly for BN and IL, prior interactions with either colleagues or supervisors from the university also influenced their decision. BN remarked “I guess Canadian people are super used to living with international people from all over the world. Honestly, something for me here that is really important and that I really love, is that I never feel that because I am from Brazil or because I am an undergrad or a master or whatever, like I am less than someone else. I never had this feeling you know?” IL said “When you know someone here, you are more confident that you will have a cleaner start. You know these people are going to help you and you do not need to start from scratch.” For UM, having friends who had been living in the city they were moving to, relieved their stress regarding logistics (e.g., housing, assistance with moving), a sentiment to which SM concurred: “Coming here, they [friends] gave us all the information on what to bring, what to prepare to come to Canada, where we should find a place and where to look for all the things, how processes take place. So yeah, it was helpful.”

Theme 2: Influence of the pandemic on admission acceptance

The pandemic had dire consequences to participants’ ability to plan ahead. For SM, travel restrictions prevented them from arriving in Canada on time to start their program. However, travel restrictions also caused additional delays that influenced some participants to defer their

program start date to the next semester. For IL, they had to defer their admission to January 2021 because the visa process for Canada took a long time. With regard to this, they expressed “...so at that time I was a little confused. Maybe I had made a mistake and should have done something else.”

Others were faced with a sense of urgency to move to Canada as quickly as possible whether it be due to financial concerns, life events, or challenges within their home country. Postponing the start date of their graduate program was perceived as the worse option. BN said “I wanted to start my master’s in September, so I had to come to Canada. Otherwise, I would not have money to pay for my tuition...Because I was already waiting one year to be here [Canada], and that was a lot. So, it was like one year I was stuck here just waiting for something.” Similarly, SM stated “Conditions in our home country were not getting better so I did not want to delay.”

Theme 3: Influence of the pandemic on moving to Canada

The stress of moving to another country was evident for participants. Before departing, they had to ensure they had the required negative COVID-19-test results and student visas processed on time, which was often out of their control. IL expressed that “In Iran you do not have a Canadian embassy. We had to go to another country [Turkey] in order to do our biometrics and also to pick up our visa. So, it had become more complicated because Turkey had closed their borders.”

All participants were required to travel across several countries with significant layovers and multiple legs on their journey to Canada. Not only did they need to be cognizant of regular travel logistics, but also needed to be mindful of international air travel during the pandemic which caused additional frustration and concerns for their own safety and the safety of their families. SM noted that during that it took them 52 h to get from Sri Lanka—their country of origin—to Canada because there were limited airlines working during the time due to the pandemic. IN informed us “...Nobody checked my reports [negative COVID-19 testing]. I was like why aren’t you guys checking...there were 400 to 500 passengers in one flight.”

During travel, participants were uncertain if they would reach Canada safely. Pandemic restrictions and the lack of support, especially with participants who were traveling without partners and families challenged them physically and emotionally. UM said, “I was afraid that something sudden might come up [during the journey] and international travel would be restricted again.” Fear was also at the forefront during BN’s early days in Canada: “I was scared about getting COVID and being unable to pay for my treatment in Canada, and I do not have support for it because I would be alone.” IN stated “So I took my COVID test and I could not just travel - what if I am asymptomatic and I give it [COVID-19] to somebody else. I could have been in guilt.”

For IN, their travel experience to Canada was especially challenging because they tested positive for COVID upon arrival. They realized they were positive for COVID-19 when they lost their sense of smell and taste on the fifth day of arriving in Canada. IN felt immense guilt and was afraid when they had to face their situation alone in a country unfamiliar to them: “I was so scared, I did not know what to do. I did not have money...I was so mad at myself, I do not know what I did, I was crying...I was blaming myself...My body was reacting to COVID not in a bad way. I was recovering but I was so weak.”

Theme 4: Influence of the pandemic on university experiences

These participants were among many who began their university experience during the pandemic. This meant that they were unable to familiarize themselves with university grounds and their laboratory spaces, or to experience activities that typify university culture. For example, IN stated that they were unable to experience studying on campus. University restrictions also further impeded participants' ability to build a stronger relationship with their supervisors, lab-mates, classmates, and to make new friends. SL admitted that they knew this was to be expected, but wished circumstances were better: "...I do not know when things will return to normal or when I will be able to visit the university on a regular basis. I do not even know what I am missing...If I was in my lab, I only have to turn around and some colleague will be there willing to assist me to clarify a quick question I have. I always have someone at hand. I miss that. Being in my room all the time - it's me and only me. I do not have someone immediately at hand to ask a quick question or get quick help..." Comparably, IL said "I do not feel part of [the university] you know? I am always at home in Zoom meetings or always in the lab doing research, like I feel isolated from [the university]."

It was difficult for some of the participants to adjust to an online learning environment, a style of learning they felt was inferior to in-person class engagement. BN noted that it was difficult to "learn things without anyone else" and struggled communicating these challenges to professors ("I don't think they understand how hard it is").

"...I believe online learning will never be a replacement for a regular style of learning. It's not an easy way to get new information from the online lecture as it is in the class. Even though the professor would say the same words in the same style he would in the class, I feel I don't know or I am missing things, like whenever new information is told online, I need to rethink it...Even though we are allowed to ask questions, still it is different when we are physically in the class...Last semester was the first time I was taking online courses and it was real struggle for me." (UM)

However, students were able to benefit from virtual learning. For IN, a screen and keyboard were sponsored by the university and their supervisor so they could work from home comfortably. UM was advised by their supervisor to attend online courses that were being offered exclusively at another campus that were directly relevant to their area of study. Nonetheless, the lack of in-person interactions and online learning environment further exacerbated the sense of social isolation they felt in their host country.

Theme 5: Adjustment as a student

The graduate participants were unsurprisingly presented with a heavy academic workload. Working 12–14 h per day was not uncommon for students such as BN and IL. Participants shared additional pressures they faced as international students. BN said "At least for this term, it's been really hard. Usually I get to [the university] at 8 or 8.30 a.m. and I go home at 10 or 10.30 p.m. I keep working because I have lots of things to do this term...It's mostly because the tuition is so high and we need to work a lot to pay tuition...Makes me feel scared to fail or do

something wrong and they can try to take my position as a masters student back which is terrible."

As international students, the need to excel academically while also paying double the tuition compared to domestic students, significantly interfered with their already limited ability to explore the culture they have only started being exposed to. Participants also faced the stress of deportation if they did not meet expectations as a student in Canada.

All participants spoke about how they have managed to find ways to cope with such academic stress by relying on their social support system. They were in close contact with their loved ones from their country of origin and were able to find solace with the friends they made in Canada. Their resilience was enhanced through self-care—participating in outdoor activities, practicing prayer, manicure appointments, therapy, putting up motivational post-it-notes etc.

Theme 6: Influence of a pandemic on adjustment

Student life was not the only area in the participants' lives that was impacted by the pandemic. Consistent with other migrant experiences, they were required to adjust to a lifestyle that was different from their own culture. For participants like SL, the adjustment to Canadian culture and language was easy and incorporated well into their own way of living. He expressed "I noticed that people are very friendly...even today I went for a cycle and all the people who passed me greeted me politely...in my home country that is rarely seen...I found the Canadian accent easy to understand..."

Other participants like IL whose first language is not English were more concerned that they would be unable to communicate effectively with Canadians. SM described experiences that signified how seemingly insignificant everyday experiences could be stressful: "One time we [their spouse and them] were going with my daughter and we used the bus. The bus driver said something and I had the baby stroller to carry my kid so he said something related to the baby stroller. But he said that again when I left the bus...It's something related to the community, the norms, the acceptable way of behavior, the language and so on - a mix of things."

Discussion

The process of adapting to a new culture impact individuals culturally but also psychologically (Berry, 2005, 698). Along with the negative effect the pandemic has had on international students (Mackolil and Mackolil, 2020, 1–2), participants faced arduous circumstances, which naturally affected their mental health and well-being (Adamson et al., 2020, 12; Blankenship and Jones, 2021, 2–14). They appeared to struggle to balance adjustment, COVID-19 related regulations, academics, and their overall mental health.

Prior to the COVID-19 pandemic, international student mobility was highly influenced by push and pull factors—reasons to leave their home country and reasons to study at a host country (Kim and Sondhi, 2019). Our participants' experience demonstrated that the COVID-19 pandemic disrupted this distinct model as it interfered with the typical process and delayed the university admission process. For SM and IL, pandemic travel restrictions forced them to defer their admission, even though push factors such as ongoing dire conditions in their countries continued to exist. It seems that in contrast to

pre-COVID-19 circumstances, the process of travel arrangements and accepting admission became less streamlined during the COVID-19 pandemic.

When exploring participants' experiences with travel, the layers of stressors were apparent. While international students typically experience anxiety associated with the logistics of the journey, such as travel time and immigration, the journey is also an emotional one. Graduate students may particularly be leaving their home countries for many years, possibly with families, and often with an intention to obtain permanent residency or citizenship in the country they intend to study in [Trujillo et al. \(2020\)](#). This experience is often associated with grief of leaving one's home country as well ([de Leon et al., 2022](#)). The COVID-19 pandemic however, added several layers of unique stressors to this experience. The typical experience of anxiety was now exacerbated by worry about health, COVID-19 testing, constantly fluctuating travel policies, quarantine requirements, traveling *via* a third country, inability/difficulties for families to accompany students, physical distancing, and mask mandates, among others. This in turn likely significantly impacted students' experience of uncertainty, taking a toll on their mental and physical health, adversely impacting well-being. There is a gap in the literature that addresses this period of transition (i.e., during travel) of international students, which we believe is highly relevant. Students' experiences during this time affects their first impressions of the new culture, which may have long-term consequences on adjustment, such as difficulties recovering from culture shock ([Heine, 2019b](#)).

International students are further challenged as they navigate their identities as university students in their host countries. As graduate students, there was a noticeable increase in participants' everyday academic workload, in addition to the pressure to perform as a non-domestic student. As students who were admitted into the university amidst the COVID-19 pandemic, they began their university experience with an online-learning model. Not only did some of them struggle with this learning model, but it also made it difficult for them to engage with their supervisors and peers and become familiarized with the university culture. The experiences of participants are well-reflected in previous literature that found evidence of students' difficulties to fully immerse themselves in the university experience (e.g., university culture and socializing with peers/instructors; [Potra et al., 2021](#)). Participants were also much less able to access their lab settings, which would have allowed them to complete more self-directed, self-paced, and hands-on work, which is imperative for completing their degree.

The process of adjustment extends beyond the classroom as well. International students in general tend to experience loneliness and isolation. While such isolation was not uncommon prior to the COVID-19 pandemic ([Sawir et al., 2008](#); [Erichsen and Bolliger, 2011](#)), it certainly appears to have both intensified the isolation experience, but also reduced opportunities for those concerns to be mitigated. For instance, quarantine and physical distancing requirements meant that students were unable to meet with and interact with members of the host culture as much as they might have otherwise, a factor that has shown to be positively associated with reducing acculturative stress ([Tseu, 2021, 21](#)). While videoconferencing interactions have shown to increase intercultural dialog ([Collins and Callaghan, 2022](#)), graduate students typically have lesser coursework and other mandated forms of virtual interaction. Working on-site in laboratories, offices, and academic

spaces, along with the largely self-paced and self-directed nature of graduate school meant that participants' experiences of loneliness and isolation was intensified in the absence of conversations with colleagues, networking, and other formal and informal micro-interactions that may happen during a typical workday. Further, language barriers and reduced opportunities to practice conversational English, potentially increased the experience of cultural loneliness, which is triggered by the absence of the preferred cultural and/or linguistic environment ([Sawir et al., 2008](#)). However, it was not just the self-isolation period that was detrimental to their mental health, it was also the global social isolation that was faced at the time by the world. SL felt frustrated that they could only "observe the beauty around them from inside a room." SM, who moved to Canada with their family, tried to encourage their spouse to meet new people but their spouse feared the impact it may have on the health of the family.

Participants nevertheless were able to identify the "bright side" of complying to the pandemic rules and regulations. Although SL was frustrated with the inability to step outside during the self-isolation period, they identified their quarantine experience as "good" and "very comfortable," using their time to conduct background readings for their research and binge-watch television shows. IL spoke about how having a self-isolation unit prepared for them by the university helped make their transition to Canada easier as they were tired after a long travel period and were able to rest.

In general, participants' adjustment experiences were alleviated by three factors—social contact, self-care, and systemic support.

Social contact

Regardless of the duration, informal positive virtual and in-person contact with others was identified as strongly positive for mental health. Regular contact with family and friends from their home countries was uniformly described as helpful and reassuring, and everyday conversations with those in Canada (e.g., small talk with food deliverers) also significantly impacted mood. Research has demonstrated that a larger perceived cultural distance between host and heritage culture is associated with less psychological and sociocultural adaptation ([Galchenko and van de Vijver, 2007, 191](#); [Heine, 2019a, 258–259](#)). The participants in the study were from cultures that likely have a larger perceived cultural distance from Canada (i.e., Brazil, India, Iran, and the United Arab Emirates). Therefore, participants appear to be in a paradoxical situation—contact with their home countries may have enhanced well-being, but also reinforced perceived cultural distance, adversely affecting their acculturation. This, in general, supports previous findings that feeling integrated (a sense of belonging with host and heritage culture) or assimilated (a sense of belonging with host culture but not heritage culture) contributes to individuals' well-being ([Berry and Hou, 2016, 258–259](#); [Tseu, 2021, 32](#)).

Self-care

Participants also described engaging in outdoor activities, meditation etc., as efficacious coping strategies. The province of British Columbia, where the university is situated is well-known for its breadth

of outdoor activities (Hello, n.d.). As such, while participants were able to engage in physically distanced self-care activities outdoors, it is likely that this was a privilege afforded by their geographical location. Thus, participants were able to connect with nature which has been shown to be positively linked to psychological well-being (Howell et al., 2011, 168–169).

Systemic support

Participants described the positive impact of systemic support on enhancing their well-being. Assistance with the purchase of technological aids and on-campus quarantine facilities provided students with reassurance and comfort. However, participants did assert that such support was inconsistent and often insufficient. Lack of clarity on requirements, insufficient support systems to manage mental health challenges, and a lack of community-building initiatives within the context of COVID-19 played a significant detrimental role to the participants' experience of adjustment.

Conclusion

Graduate school requires a formidable and lengthy commitment of time and energy. In this study, six themes were identified in transitioning to a Canadian graduate program for international students during the COVID-19 pandemic. In general, as international students, participants were certain in their choice to pursue a graduate school in Canada, given the global perception of Canada as an egalitarian nation and the academic reputation and funding offered by the university. While the COVID-19 pandemic had far-reaching global implications, international students were faced with unique challenges—their travel processes were logistically complicated and emotionally exhausting, upon arrival, immediate quarantine procedures isolated them from society, affecting their capacity to integrate, confusing or inconsistent entry processes (e.g., testing requirements) meant that some tested positive for COVID-19, lengthening their quarantine times.

The chronological process of cultural adaptation including “culture shock”—general disorientation of moving to a new culture—has been described elsewhere (Church, 1982; Heine, 2019b). The “honeymoon” phase has been noted among international students prior to their departure to the host culture (López and Margarita, 2021, 67). Results suggest that their adjustment experience during the COVID-19 pandemic rearranged the typical cultural adaptation process that is experienced by newcomers—they were immediately faced with the stress of “culture shock” (Church, 1982, 540; Zhou et al., 2008, 73; Presbitero, 2016). However, it appears that for the participants in this study, the additional immigration and isolation requirements of the COVID-19 pandemic meant that they may have skipped this phase entirely and entered the “crisis” or “culture shock” stage upon arrival. Similar findings where Papuan students experienced “culture shock” when faced with an unprecedented online learning curve was found (Muttaqin et al., 2021). Such isolation also meant that their subsequent efforts to adjust were affected, e.g., reduced opportunities to practice English affecting subsequent communication. In addition to virtual classes, sporadic visits to campus, and lack of community-building activities, participants experienced a strong sense of loneliness and isolation,

which exacerbated other distressing emotions such as anxiety, hopelessness, and frustration. However, participants appeared to be able to rely on protective factors including social support, self-care, and systemic support.

Our study closely mirrored previous findings on international mobility, cultural adjustment, and the impact of the COVID-19 pandemic on students' university experience. The importance of coping factors including social support is accentuated in participants' experience as it combats social and cultural loneliness, aspects of acculturation and adjustment within a pandemic context. Our study highlighted the transition from international students' home country to host country, a significant part of international mobility that influenced adjustment which has not been widely acknowledged in past literature. Overall, international students appear to experience a “double dose” of stressors—the typical stressors of studenthood, COVID-19 related challenges, as well as their unique manifestations in the context of being an international student. As such, the complex and multifaceted nature of the adjustment process requires a multipronged approach to support students even before they physically enter the host country.

Implications

As the number of students seeking to continue their studies outside of their home countries increases, the need to better understand their adjustment processes must inform research in the field. While the COVID-19 pandemic created unprecedented challenges particularly concerning travel and immigration, the present study shed light on important aspects of the international student journey from their home country to Canada, speaking to the challenges at each stage, and specific features of adjustment, acculturation, learning models, and their impact on mental health and well-being.

Regarding international student mobility, extant literature speaks to global and local trends, and theories consider factors that contribute to the process. However, research exploring the lived experiences of students through the process of planning, traveling, and arriving at the host country is sparse. The present study offers impetus to further investigate this period, given the immense stress that international students experience, as well its potential long-term impact on the process of acculturation.

When considering acculturation, the present study contributes to a vast literature describing the intricacies of the process. While confirming previous findings, the results also strongly demonstrate that international graduate students are placed in a challenging position, with each addition to their identity bringing with it a host of unique stressors with immediate and long-term consequences on their well-being. International graduate students have layers of identities tied to them. The identity of ‘international’ creates acculturative stress and a sense of cultural loneliness (Sawir et al., 2008); the “graduate” piece brings with it a self-directed and self-paced workload that can manifest as reduced opportunities for networking and building community; to be a ‘student’ further intensifies stress as one's position in the host country often directly depends on academic performance. As described in the present study, the struggles associated with this complex lived experience was worsened by the unique features of the COVID-19 pandemic, such as physical distancing, quarantine requirements, and a pivot to a largely virtual learning model.

It is thus inevitable that international graduate students' mental health and well-being during the COVID-19 pandemic was significantly impacted by these factors. Participants' mental health and well-being were challenged at every stage of their mobility and adjustment process. Similar to past literature, participants faced already significant stressors in traveling to a foreign country and adapting to a novel university experience, beyond culturally adjusting to their host country—Canada. These stressors were further exacerbated by the pandemic, which continuously challenged and shifted cultural expectations around travel expectations, the university learning model and acculturation in a new country where typical interactions and processes were lessened due to pandemic restrictions and regulations.

To that end, we offer some recommendations for universities to better support their graduate international student population.

Supporting international students prior to arrival

Consistent interactions with members from the host culture is an important aspect of adjustment for international students (Berry and Hou, 2016, 258–259). As such, options to establish such contact before a student's arrival to the host country (e.g., a “buddy system” with a domestic student) must be explored. It may also be important for research supervisors and university faculty to be aware of potential challenges faced by international graduate students—as this study demonstrates, positive, brief, social interactions can effectively enhance their well-being. To that end, brief modules, talks, or seminars by the international student offices at the university, or from governmental bodies [e.g., Immigration, Refugees, and Citizenship Canada (IRCC)] may be appropriate referral resources.

Consistent and transparent bureaucratic processes

Universities must endeavor to make their bureaucratic processes as transparent as possible for prospective, incoming, and continuing students. Policies addressing travel, stay, and healthcare for example must be clearly articulated, with relevant forms, contact information, and requirements easy to search and access. It might also be beneficial to have them in multiple languages to facilitate comprehension.

Ensuring community-building initiatives that are inclusive and virtual if needed

COVID-19 reinforced the comfort and practicality of virtual and hybrid gatherings. Continuing to offer virtual and hybrid options for creating a sense of community among international students can be a great option to make the experience equitable by allowing students who may not have the immediate means to travel for in-person gatherings still participate, through virtual tours, virtual orientations etc. It can also allow the student experience to be more equitable for those who may have health challenges or other issues that may make in-person participation difficult.

Ultimately, our study informs and supports existing research in acculturation and immigration, showing not just that the process is similar among international students, but also the subtle yet significant

ways in which the COVID-19 pandemic may have affected this experience. Acculturation is a complex, multifaceted, and challenging process. International graduate students are typically expected to manage additional challenges, and culturally sensitive strategies that address more than university-related tasks can be helpful in ensuring a smoother journey.

Limitations

Our study was able to capture the adjustment experiences of graduate international students from diverse contexts, who moved to Canada in 2020–2021 during the COVID-19 pandemic. However, international students from over 120 countries are enrolled at the postsecondary institution in question, our participants represented only a small portion of these countries. Caution is needed when interpreting the results of our study when we further consider that the majority of our participants were graduate students from STEM programs.

Future research

Future research could focus on using quantitative research strategies to explore the relationship between the international student adjustment process, the stages of cultural adaptation, and well-being, as well as the relationship between perceived cultural distance and adjustment. Future studies could consider international students enrolled in a wider range of programs, as well across more countries to enhance our understanding of the adjustment process. Finally, efforts to compile and analyze the vast body of research regarding international student adjustment (e.g., through meta-analytic studies) will be helpful in providing a more comprehensive picture of this area of study.

Data availability statement

The datasets presented in this article are not readily available because the data generated includes transcripts of in-depth interviews conducted with participants which contain a significant amount of personal, identifiable, and sensitive information. Requests to access the datasets should be directed to anne.tseu@ubc.ca.

Ethics statement

The studies involving human participants were reviewed and approved by UBC Okanagan Behavioral Research Ethics Board. The patients/participants provided their written informed consent to participate in this study.

Author contributions

AT and KG conceived and conducted the study and wrote the manuscript. DW supervised the study and provided inputs for the final manuscript. All authors contributed to the article and approved the submitted version.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/feduc.2023.1003051/full#supplementary-material>

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