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Case Study

Short-term Virtual Mobility Program: Student's Experiences and Perceptions

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ABSTRACT

Virtual mobility programs have gained popularity in higher education institutions. It can be a viable complement to physical mobility. There is a lack of research on international mobility students' perceptions and experiences of virtual mobility programs, particularly during the transition from physical to online/virtual mobility amid the COVID-19 pandemic. This study explores students' perceptions and experiences within short-term virtual mobility programs. The participants of the short-term virtual mobility programs are from Southeast Asia. The findings of this study demonstrated that students have a positive perception of short-term virtual mobility programs' effectiveness via a descriptive analysis. Students' experiences were analyzed by thematic analysis, and positive and negative experiences toward short-term virtual mobility programs were found. This study suggests that virtual mobility programs should not be abandoned in the post-pandemic era. Higher education institutions may consider incorporating intercultural virtual mobility into academic programs to achieve the internationalization agenda.

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INTRODUCTION

In contemporary higher education, internationalization is pivotal in shaping global rankings and fostering interactions

ISSN: 0128-7702 e-ISSN: 2231-8534 among diverse cultural groups within and across nations (Fernandes et al., 2022; Spencer-Oatey & Dauber, 2019). Internationalization promotes cultural exchange to enhance the quality of education and research for students and academics. and this phenomenon encompasses not only cross-border engagements but also intercultural exchanges at regional and national levels. The pursuit of internationalization in higher education is driven by a myriad of objectives, including enhancing the quality of education and research, fostering cultural exchange, and contributing to societal advancement (De Wit, 2020; Knight, 2008).

With its profound impact on various facets of academic institutions, including teaching, research, and student experiences, internationalization is a continuous process that necessitates sustained efforts for effective implementation. Recognizing its significance, many universities, including those in Malaysia, have embraced internationalization initiatives in their research and teaching endeavors (Munusamy & Hashim, 2019; Mustapha et al., 2021). These initiatives encompass a range of activities, such as attracting international students and scholars, fostering academic collaborations, and promoting international publications, all aimed at advancing the global engagement agenda set forth by national authorities.

The internationalization agenda aims to support the nation's development and economic growth, as outlined by Malaysia's Ministry of Higher Education (2015). Many universities in Malaysia have incorporated international dimensions in their research and teaching components (Munusamy & Hashim, 2019; Mustapha et al., 2021), focusing on the number of international students, international scholars, mobility exchange abroad, co-authored international publications in high-impact academic journals, mutual agreements and memorandums of understanding to support the internationalization agenda. These efforts promote the exchange of knowledge and support international collaborations, reputation building, and branding for universities in Malaysia.

In the context of higher education rankings, the presence of international students has emerged as a significant criterion in ranking systems, such as Times Higher Education World University Rankings and QS World University Rankings, prompting universities to devise strategies to attract students from diverse cultural backgrounds (Yee et al., 2018). One such strategy involves academic mobility programs, which facilitate the exchange of students and scholars across borders. These programs contribute to students' professional development and enhance the quality of human capital, thereby bolstering national economies (Slipchuk et al., 2021).

The outbreak of the COVID-19 pandemic has posed unprecedented challenges to academic mobility programs worldwide. According to a survey by the International Association of Universities, international student mobility has been impacted by 89% (Marinoni et al., 2020). With restrictions on international travel and physical gatherings, universities have been compelled to explore alternative modes of engagement to sustain their internationalization efforts (Marinoni et al., 2020). In this context, virtual mobility programs have emerged as an effective solution, allowing students to engage in academic exchanges without physical travel. The transition towards a "new normal" is increasingly characterized by digitalization, with traditional teaching methods being transformed into online platforms (Recio & Colella, 2020).

The disruption caused by the COVID-19 pandemic has necessitated the adoption of virtual alternatives to traditional academic mobility programs. Yildirim et al. (2021) found that while students' interest in physical mobility has decreased amidst the pandemic, their interest in online mobility or participation in online international courses has risen. Short-term mobility programs have become more attractive as they allow students to continue their studies at home while participating in academic mobility programs in host countries (Slipchuk et al., 2021). Yang et al. (2022) proposed that diversifying academic mobility programs by either joint degree programs or short-term visiting projects abroad shall continue after the pandemic as a long-term development strategy to promote international mobility programs.

However, there is a dearth of understanding regarding students' experiences and perceptions of short-term virtual mobility programs, particularly in terms of the potential impact on students from Indonesia, Malaysia, and Thailand. Studies have explored students' perspectives on virtual mobility, primarily through case studies, particularly in Japan (Enkhtur et al., 2023), Europe (Baranowski & Jabkowski, 2023), Brazil (Queiroz et al., 2023), and Singapore (Cheng et al., 2023). Research on how students perceive the value of virtual mobility programs compared to traditional study abroad programs, especially in Southeast Asia, is very limited. A further understanding of the students' experiences and perceptions toward short-term virtual mobility programs is warranted. Thus, this research aims to explore students' experiences of participating in short-term virtual mobility programs and the perception of how this program could help them in future learning.

This paper mainly includes an introduction to introduce the background of studies related to international academic mobility, followed by the literature review section to discuss types of academic mobility and analyze the studies' findings. The third section is related to the method used to conduct the research. The final section is a summary of the main points and suggestions for future research on international academic mobility.

LITERATURE REVIEW Academic Mobility Program

Academic mobility refers to a set of attitudes and willingness to move, as well as the physical movement itself, such as academic migration, for education, advanced professional training, and academic activities for both students and teaching personnel in the education and science system, as defined by Ryazantsev et al. (2019). Academic mobility, also known as mobility exchange, allows international students to study and experience life outside their home country. It immerses students in different countries' social and academic cultures. Apart from gaining academic knowledge, participation in a mobility exchange program develops students' soft skills. Mobility exchange provides the opportunity to enhance language skills, be more independent, increase confidence, and learn and improve social and communication skills. The value of mobility exchange can invariably be seen in personal and professional development, frequently by incorporating an intercultural dimension into an academic path (Blankvoort et al., 2019; Chan et al., 2021; Woldegiorgis & Doevenspeck, 2015).

Apart from gaining different perspectives of experience, mobility exchange benefits students with cultural awareness. Students who participated in mobility exchange gained a better understanding of different cultural norms and appreciated the diversity in that country. Students' cultural development increases their understanding of foreign languages, eventually adding value to their future careers (Dixon & Tahmaz, 2020; Heirweg et al., 2020; Rahim, 2021). It also helps to develop international skills, increases chances of employability, and increases the likelihood of a person working abroad later in life. The richness of a mobility exchange program stems from the combination of academic experience and social-cultural experiences gained while living in a foreign country. Indeed, the significance of out-of-classroom experiences cannot be overstated, as they have been shown to significantly contribute to the transformative learning of international students. Academic mobility benefits students and home and host institutions, communities, and society (Knight, 2012).

An academic mobility program can be interpreted as a student exchange program and is determined by the time international students spend in the host country. Mobility usually refers to students who cross borders within/outside nations to receive short-term academic training in higher education and is associated with professional development, competence development, and broadening one's horizons (Blankvoort et al., 2019; Woldegiorgis & Doevenspeck, 2015). The initiative of an academic exchange program benefits students' professional growth and improves the quality of human capital, contributing to the national economy (Slipchuk et al., 2021). Participating in academic mobility exchange programs can increase the likelihood of individuals working abroad later in life, adding value to their future careers (Heirweg et al., 2020).

Inbound Mobility vs. Outbound Mobility

The distinction between mobility exchange, such as inbound and outbound mobility, is based on the mobility flows. Inbound mobility is classified as individual and/ or groups of students (undergraduate or postgraduate) and academic staff from a foreign institution joining a local institution for educational or internship purposes in a set period, normally in a semester or up to a year (Rostovskaya et al., 2021). Outbound mobility entails individual and/or group exchanges of students (undergraduate and postgraduate) and academic staff to foreign institutions for educational and internship purposes for a set period, normally in a semester or up to a year (Rostovskaya et al., 2021).

In short, inbound mobility refers to foreign students traveling from their home country to attend a local institution for educational purposes. In contrast, outbound mobility refers to local students traveling to a foreign country to attend the academic program hosted by higher education institutions.

Credit Mobility vs. Non-credit Mobility

Students can consider participating in the academic mobility program with or without credit transfer at the end of the program. Credit mobility refers to those students who complete a semester of study at a host university and are eligible for credit transfer to the qualification they are pursuing at their home university. The credit transfer process occurs after students have completed a semester mobility exchange and received course results from the host university. The courses taken at the host university are recognized by their home university and transferable to their qualifications.

Non-credit mobility occurs when a student attends an academic mobility

program but does not transfer credit to the qualification they are pursuing. Non-credit mobility is typically brief, lasting from a few hours to a few days or weeks. Students participate in non-credit mobility mainly to learn about and appreciate different cultures, volunteer in community service in another region, and build relationships and networks with international students. International students can attend a summer camp at a local institution or vice versa for two weeks. Non-credit mobility programs are designed to provide international experience and personal development rather than credit transfer.

Virtual Mobility Program amid the Pandemic

Prior to the COVID-19 pandemic, the mobility program was conducted on-site, where mobility exchange students met in person, allowing them to gain hands-on experience. Physical mobility exchange includes international transportability and the exchange of tertiary students and university staff attending a higher education program in a location other than their home country to broaden opportunities for intercultural enrichment and knowledge creation and transfer of knowledge (Rostovskaya et al., 2021). When the COVID-19 pandemic hit the world, universities adopted technology to ensure the continuance of teaching and learning and academic mobility was not excepted from the shift from physical to online mode, namely virtual mobility. The term "virtual mobility" is a coinage of the words virtual (information and communication technology) and mobility (movement), and it refers to the ability to use ICT to replace the difficulties of movement. With the advancement of ICT, institutions can collaborate and compete more effectively, and students and academic lecturers who are unable to participate in physical exchanges can benefit from virtual mobility exchange programs.

Virtual mobility is considered a valuable alternative to physical mobility because it allows students to participate in courses at other institutions without leaving their home country and thus without incurring the risk of virus infection, financial costs, or visa application, although the time and space limitations (Cioltan-Drăghiciu & Stanciu, 2020; Yang et al., 2022). A university can provide an international experience for students and staff through virtual mobility by hosting an international webinar, an online international discussion, and a virtual international community support group. Moreover, virtual mobility exchange provides vast academic experience to the exchange students and develops their digital, linguistic, and intercultural competence (Helm, 2019; Yang et al., 2022); it also offers a new perspective for knowledge sharing.

Various activities have been initiated using online platforms to sustain the mobility collaboration with partner universities, i.e., online/hybrid classes, webinars, online/hybrid summer camps, and cultural events. For example, students are encouraged to discover and appreciate cultural diversity through a virtual cultural program. Students can share the various cultures of their home countries virtually by using multimedia or video presentations on the online platform. There will be an online discussion to exchange knowledge, such as sharing pre and post-cultural awareness or providing feedback on cultural reflection (Yang et al., 2022).

Challenges of Virtual Mobility

Virtual mobility has been popular among university faculty and students and has become a viable complement to physical mobility (Helm, 2019; Yang et al., 2022). Nonetheless, transitioning from physical to virtual mobility poses challenges for students and academic staff, administrative officials, institutions, and higher education. Although White and Lee (2020) stated that there is less space bound for the post-mobility world, there are some critical concerns about the quality of online learning (Teräs et al., 2020). From an institutional perspective, the academic staff's competence in online teaching pedagogies, IT infrastructure in place, and blended learning regulations will all contribute to the quality of online learning and determine the success of the mobility program. In contrast, connectivity, motivation, study skills, and time zone differences will also impact individual students' virtual mobility participation.

The transition from physical to virtual mobility has compelled university officials, faculty, and staff to quickly adapt to online solutions to ensure the mobility program's continuation. Changes imposed unexpected burdens on faculty and students, requiring them to quickly adapt to new forms of teaching and learning. As this is a new practice for mobility students to become acquainted with the university's teaching practices and examination requirements, teaching and administrative staff play a critical role in assisting virtual mobility students.

Academic staff must act quickly to transition their lectures from classrooms and lecture halls to digital platforms, learn how to use digital tools to continue teaching and learning remotely, adjust both content and methodology online, find ways to incorporate critical thinking and reflection in learning and ensure student attention and participation in the online class. It will eventually cause stress for academic staff because most lecturers are digital immigrants (Prensky, 2001), which means they are not technologically savvy and are struggling to adapt to a new technology environment while refusing to abandon traditional teaching methods.

On the other hand, students thought their virtual mobility learning experience during the COVID-19 pandemic vastly differed from a typical mobility exchange. Because not all courses were designed to run synchronously (Koris et al., 2021), they are unable to perceive the physical interaction that should occur during a physical exchange. The students' adaptation to the host country's sociocultural environment is critical for an effective virtual mobility exchange program (Koris et al., 2021). Sociocultural adaptation is more difficult in the online mode of exchange because contact and interaction with the host country's culture may be limited due to synchronous and asynchronous remote class sessions. The lack of social interaction between teacher and student made the virtual sociocultural immersion program even more difficult.

Additionally, students' discontent with technical difficulties experienced during online classes on digital platforms like Microsoft Teams, Cisco Webex, or the Zoom application has led to a pessimistic outlook on virtual mobility (Sandarenu, 2021). Students were also concerned about the costs of internet connectivity and data packages, online connectivity devices, and access to online resources (Sandarenu, 2021). Furthermore, long online lectures and insufficient break time caused students to become fatigued, and as a result, distractions developed among students (Koris et al., 2021).

Incorporating game-based activities becomes crucial in maintaining their interest and enhancing their participation to cater to the short attention spans of digital-native students. These activities foster engagement and contribute to developing important cognitive skills such as critical thinking, visual-spatial abilities, observation, and inquiry skills. Prensky (2001) suggested that activities should include components for reflection and critical thinking to facilitate the effective flow of information. Additionally, providing parallel discussion sessions allows students to engage in meaningful conversations and exchange ideas. However, it is important to note that remote learning requires students to be more self-directed in their studies, as it

often entails individual work. It necessitates students to dedicate additional time and effort to their learning endeavors.

Virtual mobility benefits students by eliminating the hassle of preparing the international travel requirements to the host country. It is flexible but faces some challenges, like a lack of IT skills, infrastructure support, and online interaction. Despite the challenges of implementing virtual mobility for a semester, short-term virtual mobility, where the duration is within a few days or weeks but less than three months, is an alternative to encourage cultural exchange and international collaboration. The process of planning virtual mobility is akin to planning physical mobility in terms of required efforts, with the only distinction being the utilization of technological tools in the former, whereas the latter involves face-to-face interactions. When designing short-term virtual mobility, the central focus is fostering digital interaction. A key question to address during the planning process is, "How can participants experience social interaction that emulates the sense of engagement found in physical activities?" Social constructivism is a learning theory that emphasizes knowledge development's social interaction and collaborative nature. It posits that students build knowledge and construct their understanding through their social and cultural experiences.

Short-term virtual mobility provides students with international exposure to strengthen their professional identities and develop cultural competencies, which leads to the following questions: How do students perceive the value of virtual mobility programs? What are the experiences reported by students after participating in virtual mobility programs? This study endeavors to shed light on these questions by exploring and investigating students' perceptions and experiences in the short-term virtual mobility program where they can engage with peers from different universities and countries to exchange ideas, share perspectives, and collectively explore cultural differences. This study postulated that social interaction could lead to students' positive experiences and perceptions of short-term virtual mobility program effectiveness. Guided by the research questions, two hypotheses were proposed: (1) students exhibit overall positive perceptions toward short-term virtual mobility programs, and (2) students will experience significant positive or negative effects on their engagement and comprehension during the short-term virtual mobility program.

Context of the Study

The collaboration between Malaysian universities and the universities in Indonesia and Thailand is rooted in an established partnership, fostering academic cooperation across borders. This collaboration is a shortterm virtual mobility program designed to facilitate international exchange and collaboration. Throughout the year, participating universities engage in six planned activities meticulously crafted in consultation with partner institutions. These activities are focal points for collaborative efforts, fostering meaningful interactions and knowledge exchange among students and faculty.

Central to the program's ethos is its alignment with Sustainable Development Goals (SDGs), ensuring that each series of activities tackles pressing global challenges from various angles. This thematic coherence provides a unifying framework and underscores the program's commitment to addressing real-world issues. Each student is paired with a mentor with expertise in the assigned SDG-related topic to enrich the learning experience. This mentorship ensures that participants receive guidance and support as they delve into their respective research areas, laying the groundwork for informed discussions and presentations.

During the virtual mobility program, students from diverse backgrounds and geographical locations converge in discussion groups, fostering crosscultural understanding and collaboration. Participants collectively explore solutions to complex challenges through shared dialogue and presentations, leveraging their unique perspectives and expertise. Overall, this dynamic and collaborative approach to international education enriches participants' academic experience and cultivates a global mindset, empowering them to become agents of positive change in their communities and beyond.

METHODS

This study explores students' experiences with short-term virtual mobility programs and their perceptions of how these programs

could enhance their future learning. A three-week short-term virtual mobility program was conducted using an online Zoom application platform in September 2021. The participants comprised 375 university students and staff from Indonesia, Malaysia, and Thailand. All participants were recruited as the sample of this study. An online survey questionnaire was employed to collect the data. The questionnaire comprises demographic information, nine questions adapted from training evaluation forms (Greenfield et al., 2015) to gauge students' perceptions, and an open-ended question to capture their experiences. The participants were required to answer the survey questionnaire at the end of the virtual mobility, and those who did not submit the survey were given one week to complete it. A reminder was sent three days after the events, and all responses were recorded at the end of one week.

The collected data were analyzed using descriptive statistics and thematic analysis. Thematic analysis is a useful and flexible method for qualitative research in and beyond psychology (Braun & Clarke, 2006), and it allows for a comprehensive understanding of students' experiences and perceptions within the context of virtual mobility programs.

RESULTS

Given the study's focus on students' experiences and perceptions of short-term virtual mobility, university staff were excluded from the sample. The final number of respondents for the study amounted to 361 students. The respondent's profile is presented in Table 1.

Table 1Profile of respondents

Total respondents	Total percentage (%)	
70	19.4	
291	80.6	
34	9.4	
92	25.5	
235	65.1	
196	51.5	
	51.5	
1/5	48.5	
106	29.4	
199	55.1	
51	14.1	
5	1.4	
252	69.8	
99	27.4	
10	2.8	
	respondents 70 291 34 92 235 186 175 106 199 51 5 252 99	

Source: Authors' work

The study revealed that female participation outweighed that of males, with 80.6% (291) of participants being female students and 19.4% (70) male students. Geographically, a significant proportion of respondents hailed from Thailand (65.1%, 235 students), followed by Malaysia (25.5%, 92 students), with a smaller cohort originating from Indonesia (9.4%, 34 students). Notably, most participants (51.5%) were newcomers to short-term virtual mobility programs, lacking prior experience in such initiatives, as illustrated in Table 1.

Further, about 55.1% of students recognized the international office's concerted efforts in promoting the shortterm virtual mobility program through official university channels. Alternatively, 29.4% of participants discovered this virtual mobility program via social media channels, while 15.5% of students were introduced to it through friend recommendations and other sources.

Interestingly, most students (69.8%) preferred short-term mobility programs delivered online or virtually, whereas only 27.4% (99 students) favored face-to-face mobility, and a mere 2.8% leaned towards a hybrid approach. This inclination towards virtual modalities aligns with the evolving landscape of education, particularly amidst the pandemic, which has accelerated the adoption of online learning and collaboration platforms.

Students' perceptions of short-term virtual mobility programs were analyzed using descriptive analysis across nine statements, ranging from program organization to satisfaction with program content, and presented in Table 2. The data provided represents responses from 361 participants regarding their perceptions. Each item was rated on a 5-point Likert scale, ranging from "1 = Strongly Disagree" to "5 = Strongly Agree."

Most respondents (over 90%) either agreed or strongly agreed that the program was well organized, indicating a high level

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1) This program was well organized.	1	3	24	128	205
2) The moderators facilitated the program effectively.	1	0	23	136	201
3) The keynote speaker provided information I can use to be a success.	2	1	31	144	183
4) This program has created an efficient learning environment.	4	1	27	156	173
5) The program is valuable.	1	0	30	128	202
6) This program improved my understanding of the topics.	2	4	28	147	180
7) Participating in this program increased my interest in the topics.	2	2	26	146	185
8) I can apply what I learned in this program.	3	2	30	152	174
9) I am satisfied with the program content.	1	2	25	157	176
			Te	otal respon	dents: 361

Table 2

Student's perceptions of virtual mobility program

Source: Authors' work

of satisfaction with how the program was structured and managed. Similarly, most respondents (over 90%) agreed or strongly agreed that the moderators effectively facilitated the program, suggesting that the facilitators played a crucial role in guiding the program activities. While most respondents still agreed that the keynote speaker provided useful information, there were slightly fewer strong agreements compared to the previous statements.

When asked about the efficient learning environment, a substantial number of respondents (over 80%) agreed or strongly agreed that the program created an efficient learning environment, indicating that the format and delivery of the program online were conducive. Few students did not agree that the virtual mobility program created an efficient learning environment, probably because some students might have experienced technical difficulties or limitations during the virtual sessions, such as poor internet connectivity, audio/video issues, or platform usability issues. These technical challenges can disrupt the learning process and diminish the overall efficiency of the virtual environment.

A significant majority of respondents (over 90%) agreed or strongly agreed that the program was valuable, and over 80% of respondents agreed or strongly agreed that the program improved their understanding of the topics covered, suggesting that they perceived the importance of the program, and the content was impactful. Notably, a significant majority of respondents (over 80%) agreed or strongly agreed that participating in the program increased their interest in the topics discussed, indicating that the program successfully engaged participants and stimulated their curiosity.

While still a majority, slightly fewer respondents (around 75%) agreed or strongly agreed that they could apply what they learned in the program, suggesting that there may be some room for improvement in terms of practical application. Even if students recognize the relevance of the content, they may feel that there are limited opportunities to apply what they learned in their current academic or professional contexts. Without clear guidance on transferring the knowledge into action, students may doubt their ability to apply what they learned.

Most respondents (over 80%) agreed or strongly agreed that they were satisfied with the program content, indicating overall positive perceptions among participants regarding various aspects of the short-term virtual mobility program.

Students' experiences with shortterm virtual mobility were analyzed using thematic analysis. Thematic analysis is a powerful method for understanding experiences and thoughts across a data set (Braun & Clarke, 2006). This study allows participants to share their experiences in their own words in the open-ended question. About 334 students were provided written responses to record their positive or negative experiences with this short-term virtual mobility program.

The recorded responses were then transformed into a thematic network following the steps. Firstly, the responses are coded by breaking the text into digestible and coherent segments. The second step is to identify themes. In this step, organizing themes were formulated from the coded segment and categorized into two global themes. i.e., positive and negative experiences. The organizing themes were then subdivided into two global themes based on related conceptual content. Lastly, the thematic network was interpreted and presented in Table 3.

The findings from Table 3 highlight both the positive and negative experiences reported by students participating in the virtual mobility program. Many students expressed enjoyment and excitement in the learning process. They found the program to be engaging and stimulating, with activities that they found enjoyable. It showed that this virtual mobility program effectively captured students' interest and motivated them to participate actively. Further, students reported that they like to apply the knowledge gained from the program in real-life situations. It suggests that the content of the virtual mobility program was relevant and practical, which enabled students to transfer their learning to their daily lives. Nevertheless, students appreciated the opportunity to interact with peers from different countries and gain insights from international perspectives, meaning the students value the cultural exchange aspect of the program.

On the other hand, some students faced difficulties understanding English, which hindered their participation and comprehension of the program. In addition, technical issues, such as internet connectivity, were frustrating for some students. Poor internet connection disrupted

Organizing Theme	Description	Representative quote			
Global Theme: Positive Experiences					
Fun Learning	Students described enjoyment and excitement in the learning process.	"I want to have this program again because it's so much fun. I like it." "I like everything because it is so exciting, and fun, and gives me more knowledge." "I like it when there is a dance to the song. It's fun."			
Knowledge application	Students apply the knowledge they have learned in real life.	"I like everything about this program. It is an educational activity about improving mental health. I am able to apply the knowledge gained in my daily life and make my daily life happy." "I extremely like the content of this presentation because I can apply what I learned from it to use in real life."			
International networking and knowledge	Students appreciate new friendships and knowledge from international perspectives.	"Interaction and sharing between students from various countries." "The things I like is that we can have new experiences and friends from another university." "This program makes me know what happened in my neighboring country during the COVID-19 pandemic."			
Global Theme: Negative Experiences					
Language Barrier	Students described difficulty in understanding English.	"I wish there were more languages spoken because some people might not understand the language." "What I don't like is that I don't understand English." "Some words or sentences I do not understand because I am not very good at English."			
Internet Connection problem	Students expressed frustration with the internet connection issue.	"As a digital tool, sometimes the connection is not good enough to hear what is being said." "I dislike the problem of the internet."			

Table 3Global themes for student's experiences toward virtual mobility

Source: Authors' work

their ability to fully engage in the program and affected their learning experience. Overall, while the virtual mobility program provided many positive experiences, there were also challenges related to language barriers and technical issues that need to be addressed to enhance such programs' overall effectiveness and inclusivity.

DISCUSSION

The findings of this study shed light on the student's perceptions and experiences of short-term virtual mobility programs, revealing valuable insights for both academic institutions and policymakers. Firstly, students' awareness of short-term virtual mobility programs, primarily through the university's official channels, indicates the importance of proactive promotion by university officers to promote such programs, whether long-term or short-term, physical or virtual. Given that the pandemic has accelerated the adoption of online academic mobility, students have reported a positive experience with short-term virtual mobility and intend to participate in the future. Hence, a virtual mobility or hybrid program initiative needs to be sustained beyond COVID-19 (Yang et al., 2022).

Secondly, the aggregated results demonstrate overwhelmingly positive feelings regarding their short-term virtual mobility program participation. Most students, above 90%, perceived that this short-term virtual mobility program is well organized and that they benefit from it in terms of understanding the topics, increasing interest in learning, and learning in an efficient environment. They are pleased with this short-term virtual mobility program because it was valuable, and the keynote speaker provided useful information. Most students exhibit positive perceptions of the virtual mobility program, indicating high satisfaction with various aspects of the program beyond just the content.

Besides that, students also shared their experiences with this short-term virtual mobility program. The experiences were coded and aggregated into a global theme (Braun & Clarke, 2006). There are three organizing themes for good experiences and two for bad experiences. Students reported they had much fun learning new information, and some even requested that a similar program be implemented. Furthermore, students valued the knowledge gained during the program because it applies to their daily lives. Most importantly, students have the opportunity to broaden their networking to other countries, make new friends, and stay up to date on the latest information in the neighboring countries. The experiences of mobility students in short-term virtual mobility programs promote personal and professional development by strengthening their academic courses, cultural awareness, and digital literacy, which prepare them for the labor market in the future.

Notwithstanding, several students raised the possibility of a language barrier and admitted to a lack of English proficiency. The English language used throughout the program was a challenge for their understanding and communication failures. One possible solution could be to provide translators fluent in Thai and Indonesian in the future with the same mobility program when English is the primary medium of communication to avoid this negative effect. Despite technological advancements such as virtual meeting technology, the internet's stability is one factor that disrupts the program's effectiveness. Students are dissatisfied with the internet connection problem, which causes them to be 'kicked out' of the online program regularly. In other words, students with negative online learning experiences are more inclined to perceive virtual mobility programs negatively and vice versa.

The findings of this study provide empirical evidence that short-term virtual mobility programs can play a significant role, just like physical mobility. Participating in a short-term virtual mobility program can influence awareness of cultural diversity, enhance intercultural competence, encourage personal and professional development, promote diversification, build character and attitudes, as well as develop social and communication skills (Blankvoort et al., 2019; Slipchuk et al., 2021; Yang et al., 2022). It has also been demonstrated that the short-term virtual mobility program fosters an effective learning environment and has aided in acquiring new learning environments and knowledge (Helm, 2019; Koris et al., 2021). Indeed, as international students share their culture with other students, knowledge sharing has the potential to effectively support the lifelong learning process. It is also reflected as more enjoyable while providing significant benefits outside the typical classroom setting.

Short-term virtual mobility programs are a useful tool for universities to promote internationalization in higher education, as highlighted by Knight (2012), Munusamy and Hashim (2019), Mustapha et al. (2021), and Yee et al. (2018). By offering such programs, universities can attract students worldwide, regardless of their location or travel restrictions. It provides educational opportunities to a wider audience and enhances the institution's link to the global community.

One of the major advantages of shortterm virtual mobility programs is their flexibility, making them more appealing to students. With such programs, students can continue their studies while participating in academic mobility programs in host countries (Slipchuk et al., 2021). This exposure to different cultures, languages, and ways of thinking can help students become more globally aware, preparing them better for the global workforce. Moreover, students can gain valuable international experience and cultural exchange without committing to long-term physical mobility, making it an attractive option for many.

Another benefit of short-term virtual mobility programs is their use of technology to create immersive learning experiences, such as virtual reality or gamification. It can help students engage with their learning and connect with others, building networks supporting their future career opportunities. Furthermore, virtual mobility programs are more cost-effective than traditional physical mobility programs, making international experiences more accessible to a wider range of students, including those from lowincome backgrounds. Hence, it is important to note that virtual mobility programs should not be abandoned after the pandemic. In fact, Yang et al. (2022) also suggest incorporating virtual mobility with physical mobility to provide online and offline academic and cultural activities.

Implications of Findings

This study contributes to the understanding of student's experiences and perceptions of virtual mobility programs by extending the current literature and providing insight for higher education institutions when planning for the internationalization agenda. The findings serve as a blueprint for institutions globally to design impactful international mobility programs focusing on students' experiences with short-term virtual mobility. Highlighting the lack of integration between universities under a Memorandum of Understanding (MOU) underscores the necessity for well-defined international student recruitment policies. It is particularly important due to the imbalance in the number of participants from Indonesia and Malaysia compared to Thailand. Higher education institutions should invest more time in developing virtual mobility programs incorporating interactive activities and meaningful engagement to maximize student satisfaction and learning outcomes (Blankvoort et al., 2019; Koris et al., 2021). It includes investing in technological infrastructure and creating support systems to address the specific needs of students engaging in virtual mobility. It is important to ensure the opportunity for collaboration among mobility students and provide them with enriching educational experiences. Higher education institutions can also leverage these findings to promote virtual mobility programs as an alternative for students who face financial constraints or travel limitations for physical mobility.

CONCLUSION

This study provides a snapshot of Southeast Asian students' perceptions and experiences of a short-term virtual mobility program in the new normal. The findings highlight the potentially beneficial role that a shortterm virtual mobility program could play in developing students' educational experiences in terms of personal and professional development and cultural awareness. Despite some difficulties, such as adjusting to the language and connection problems with the online program, some aspects could be better systematized, particularly in terms of the attractiveness of mobility programs. Policymakers are encouraged to refine international student recruitment policies and integrate intercultural learning into virtual mobility curricula, fostering engagement with diverse perspectives and strengthening educational experiences. More student-friendly online and hybrid education can be suggested in the long run. While doing so, ensuring mutual collaboration and strengthening interinstitutional relationships is critical.

Recommendation

The COVID-19 pandemic has accelerated the adoption of digital education in higher institutions, marking a shift toward a more digital post-pandemic era. The development of virtual mobility programs, catalyzed by this transition, presents a significant challenge and an opportunity for innovative educational approaches. Embracing technological advancements, universities can ensure students' connection and engagement with their institutions while promoting internationalization. Universities must sustain virtual mobility programs beyond the pandemic, incorporating them into curriculum development to attract international students and bolster their internationalization efforts. This trajectory also offers a promising avenue for future research on the interplay between physical and virtual mobility in higher education.

Limitations and Future Research

The sample size of this study may not be sufficient to draw definitive conclusions about the virtual mobility program. Future research may include a large sample size and international mobility students from the Middle East and European countries. Further, students' discontent with technical difficulties experienced during online classes on digital platforms like Microsoft Teams, Cisco Webex, or the Zoom application has led to a pessimistic outlook on virtual mobility. Future research may delve deeper into the different platforms, pedagogical approaches, training and development within virtual mobility programs and also consider the specific aspects of virtual mobility, such as the impact of virtual mobility on students' academic performance and long-term career outcomes and the impact of virtual mobility on higher education institution's rankings.

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REFERENCES

- Baranowski, M., & Jabkowski, P. (2023). On virtual mobility in three Central European universities: Similar but different? *Knowledge Cultures*, 11(3), 82-100. https://doi.org/10.22381/ kc11320235
- Blankvoort, N., Kaelin, V. C., Poerbodipoero, S., & Guidetti, S. (2019). Higher education students' experiences of a short-term international program: Exploring cultural competency and professional development. *Educational Research*, 61(3), 356-370. https://doi.org/10.10 80/00131881.2019.1632725
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research*

in Psychology, *3*, 77-101. https://doi. org/10.1191/1478088706qp063oa

- Chan, H. K., Yaakob, A. R., & Pinjaman, S. (2021). Effect of support from lecturers and host country nationals on cross-cultural adjustment among international students: Evidence from a Malaysia university. *Pertanika Journal of Social Science* & *Humanities*, 29(2), 1213-1229. https://doi. org/10.47836/pjssh.29.2.25
- Cheng, Y., Yeoh, B., & Yang, P. (2023). Virtual student mobility on Zoom: Digital platforms and differentiated experiences of international education and (im)mobilities in a time of pandemic. *Mobilities*, 18(5), 839-854. https://doi. org/10.1080/17450101.2023.2209824
- Cioltan-Drăghiciu, A., & Stanciu, D. (2020). Virtual exchange: Romania and Hungary 100 years later. In F. Helm & A. Beaven (Eds.), *Designing and implementing virtual exchange: A collection of case studies* (pp. 37-46). Research-publishing. net. https://doi.org/10.14705/rpnet.2020.45.1113
- De Wit, H. (2020). Internationalization of higher education. Journal of International Students, 10(1), i-iv. https://doi.org/10.32674/jis. v10i1.1893
- Dixon, D., & Tahmaz, O. (2020). Intercultural competence for youth workers. In F. Helm & A. Beaven (Eds.), *Designing and implementing virtual exchange: A collection of case studies* (pp. 231-240). Research-publishing.net. https:// doi.org/10.14705/rpnet.2020.45.1129
- Enkhtur, A., Li, M., & Zhang, X. (2023). Virtual student mobility from student's perspectives: Case study from Japan. *Higher Education Forum*, 20, 59-78. https://doi.org/10.15027/53851
- Fernandes, A. J., Shukla, B., & Fardoun, H. (2022). Fostering reputation of higher education institutions in international ranking by means of diversity of international collaboration. *Information Sciences Letters*, 11(4), 1137-1143. https://doi.org/10.18576/isl/110416

- Greenfield, V. A., Shelton, S. R., Balkovich, E., Davis II, J. S., & Adamson, D. M. (2015). The federal voting assistance program and the road ahead: Achieving institutional change through analysis and collaborating (Report No. RR-882-FVAP). RAND National Defense Research Institute. https://www.rand.org/pubs/research_reports/ RR882.html
- Heirweg, S., Carette, L., Ascari, A., & Hove, G. V. (2020). Study abroad programmes for all? Barriers to participation in international mobility programmes. *International Journal of Disability, Development and Education*, 1-19. https://doi.or g/10.1080/1034912X.2019.1640865
- Helm, F. (2019). Languages and international virtual exchange: Introduction to the special issue. *European Journal of Language Policy*, 11(2), 139-142. https://doi.org/10.3828/ejlp.2019.9
- Knight, J. (2008). An internationalization model: Meaning, rationales, approaches and strategies. In J. Knight (Ed.), *Higher education in turmoil: The changing world of internationalisation* (pp. 19-37). Sense Publishers. https://doi. org/10.1163/9789087905224 003
- Knight, J. (2012). Student mobility and internationalization: Trends and tribulations. *Research in Comparative and International Education*, 7(1), 20-33. https://doi.org/10.2304/ rcie.2012.7.1.20
- Koris, R., Mato-Díaz, F. J., & Hernández-Nanclares, N. (2021). From real to virtual mobility: Erasmus students' transition to online learning amid the COVID-19 crisis. *European Educational Research Journal*, 20(4), 463-478. https://doi. org/10.1177/14749041211021247
- Marinoni, G., Land, H. V., & Jensen, T. (2020). The impact of COVID-19 on higher education around the world. The International Association of Universities Publications.
- Ministry of Higher Education. (2015). Malaysia Education Blueprint 2015-2025 (Higher

Education). https://jpt.mohe.gov.my/portal/ index.php/en/corporate/policy-documents/16m a l a y s i a - e d u c a t i o n - d e v e l o p m e n tplan-2015-2025

- Munusamy, M. M., & Hashim, A. (2019). Internationalisation of higher education in Malaysia: Insights from higher education administrators. *AEI Insights*, 5(1), 21-29.
- Mustapha, S. M., Abdullah, N., Devarajoo, K., Ibrahim, F., Suid, S. H., & Amirrudin, S. (2021). Embracing internationalization in gearing Malaysian higher education towards global education. Asian Journal of University Education, 17(4), 132-147. https://doi. org/10.24191/ajue.v17i4.16224
- Prensky, M. (2001). Digital natives, digital immigrants Part 1. On the Horizon, 9(5), 1-6. https://doi. org/10.1108/10748120110424816
- Queiroz, F. C. B. P., da Silva, C. L., Lima, N. C., Thomaz, S. M., Queiroz, J. V. (2023). Virtual mobility in higher education in Brazil: Factors of influence on satisfaction and continuity. *Higher Education, Skills and Workbased Learning, 13*(6), 1354-1367. https://doi. org/10.1108/HESWBL-02-2023-0039
- Rahim, N. A. (2021). Adjustment experiences of international graduate students to life in the United States. *Pertanika Journal of Social Sciences & Humanities*, 29(4), 2243-2262. https://doi.org/10.47836/pjssh.29.4.08
- Recio, S. G., & Colella, C. (2020). The world of higher education after COVID-19: How COVID-19 has affected young universities. Young European Research Universities.
- Rostovskaya, T. K., Skorobogatova, V. I., Pismennaya, E. E., & Bezverbny, V. A. (2021). Incoming and outgoing academic mobility in Russia and abroad: Main trends, administrative challenges. *International Journal of Sociology and Social Policy*, 41(1/2), 154-166. https://doi.org/10.1108/ IJSSP-03-2020-0091

- Ryazantsev, S. V., Rostovskaya, T. P., Skorobogatova, V., & Bezverbny, V. A. (2019). International academic mobility in Russia: Trends, types, state stimulation. *Ekonomika Regiona*, 2, 420-435. https://doi.org/10.17059/2019-2-9
- Sandarenu, K. (2021). University student views on the impact of COVID-19 pandemic on their university life and education in Sri Lanka. *International Journal of Research Publications*, 71(1), 18-32. https://doi.org/100711220211753
- Slipchuk, A., Yuzkiv, H., Batechko, N., Pisotska, M., & Klymenko, L. (2021). Academic mobility development among university students during COVID-19 pandemic. *International Journal* of Health Sciences, 5(3), 573-583. https://doi. org/10.53730/ijhs.v5n3.2490
- Spencer-Oatey, H., & Dauber, D. (2019). Internationalisation and student diversity: How far are the opportunity benefits being perceived and exploited? *Higher Education*, 78, 1035-1058. https://doi.org/10.1007/s10734-019-00386-4
- Teräs, M., Suoranta, J., Teräs, H., & Curcher, M. (2020). Post-Covid-19 education and education technology 'Solutionism': A seller's market. *Postdigital Science and Education*, 2, 863-878. https://doi.org/10.1108/10748120110424816

- White, B., & Lee, J. J. (2020, April 18). The future of international HE in a postmobility world. University World News. https://www.universityworldnews.com/post. php?story=20200417105255362
- Woldegiorgis, E. T., & Doevenspeck, M. (2015). Current trends, challenges and prospects of student mobility in the African higher education landscape. *International Journal of Higher Education*, 4(2),105-115. https://doi. org/10.5430/ijhe.v4n2p105
- Yang, Q., Shen, J., & Xu, Y. (2022). Changes in international student mobility amid the COVID-19 pandemic and response in the China context. Fudan Journal of the Humanities and Social Sciences, 15, 23-40. https://doi. org/10.1007/s40647-021-00333-7
- Yee, C. P., Yean, T. S., & Yi, A. K, J. (2018). Verifying international students' satisfaction framework for the development of MISSmodel in Malaysia. *Pertanika Journal of Social Sciences & Humanities*, 26(1), 1-18.
- Yildirim, S., Bostanci, S. H., Yildirim, D. G., & Erdogan, F. (2021). Rethinking mobility of international university students during COVID-19 pandemic. *Higher Education Evaluation and Development*, 15(2), 98-113. https://doi.org/10.1108/HEED-01-2021-0014