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Education Technology Encounter: Multidimensional Factors Beyond Traditional TAM Perspective

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Abstract

Through the lens of the Technology Acceptance Model (TAM), this paper examines the impact of culture and intrinsic motivation on students' experiences in a digitally driven educational environment prompted by the recent Covid-19 outbreak. A qualitative method and semi-structured interviews with students revealed details about the students' motivations and experiences throughout the pandemic in an educational environment influenced by technology. Individual characteristics may also have a varying effect on students' experiences with remote online education. Findings reveal that individual differences in technological abilities, as well as perceptions, self-belief, and confidence, affected students' learning experiences. Numerous authors have considered various factors affecting students' motivation during the Covid-19 pandemic, but little attention has been paid to how these factors may influence students' learning, behaviour, and communication within the remote online education model, indicating the need for additional future research on this phenomenon.

Keywords: Remote Online Education, Technology Acceptance, Intrinsic Motivation, Cultural Diversity, Covid-19, Qualitative Analysis

1. Introduction

As of March 2021, the United Kingdom's higher education (HE) sector enrolled 2,697,380 students, making it one of the world's fastest-growing education sectors (HESA, 2021). Students enrolled in HE in the United Kingdom are a diverse group that reflects a more globalised version of HE today. Globalisation, high-quality education, and greater competition for a HE degree have all resulted in the creation of cross-cultural student settings in educational institutions worldwide (Altbach, 2015). Students from culturally varied backgrounds in the UK's HE sector saw varying degrees of impact from the Covid-19 pandemic.

High-level students must maintain motivation throughout their studies in order to focus on obtaining topic knowledge and performing well on their schoolwork (Banks, 2009), since this will pave the way for future career possibilities. Students enrolled in HE must be motivated to learn and participate in class. On the other hand, the Covid-19 outbreak had a considerable impact on the operations of HE institutions, particularly on the manner in which sessions were delivered and on the ways of participation. The Covid-19 outbreak in the UK's HE sectors sparked extraordinary change in the sector, and this paper using the technology acceptance model (TAM), explores the impact of culture and intrinsic drive on students' experiences. This revolution in the educational environment was sparked by online education provided by technology. To address the aim of this study, the following research question was answered:

> *How does Covid-19 developments impact HE students' motivation when they are part of a culturally diversified context?*

To address the research question, a qualitative method was used and semi-structured interviews with students were conducted to provide details of the students' motivation and experiences during the pandemic under a technologically influenced educational environment.

2. Theoretical Background

2.1 Cultural Diversity in Higher Education

A wide range of definitions have been used to describe culture in the literature. Hoftstede (2011) states that there are two kinds of cultures: those that are distinct from each other, and those that are not. However, there may be various subgroups of norms and behaviour within any group. From a different perspective, cultural diversity is characterised by contrasts among people from different backgrounds and races who are linked together (Banks, 2015). Literature tends to focus on managing cultural diversity in business rather than education institutions when discussing the importance of cultural diversity in organisations.

Intercultural openness necessitates an understanding of the values and beliefs of individuals and the ways in which they interact (Meer and Modood, 2012). Student

understanding of other cultures' values may improve cross-cultural interactions as a result of exposure to cultural diversity, according to Schwarzenthal et al. (2020). The Covid-19 pandemic, for example, may be tolerated differently depending on where you live due to cultural differences. Koul and Fisher (2005) found a link between students' cultural backgrounds and their perceptions of their surroundings. According to Morris et al. (2020), international students were able to enjoy their time abroad during the Covid-19 pandemic, but they were also struggling financially.

Morera (2019) believes that students' cultural backgrounds have a significant impact on their views on learning. Individuals' cultural and educational backgrounds influence their assignment preferences as well as their ability to adapt and perform. Different cultural assumptions and expectations shape the educational experience of students in international educational institutions.

2.2. Cultural Experience

This study by Alsubaie (2015) focuses on the relationship between culture and education and presents some cultural issues that may arise in the classroom, such as social communication and group activities. In dealing with students from diverse cultural backgrounds, Alsubaie's study emphasised the importance of adaptability and social support. However, it left out the role that cultural differences play in influencing student motivation. Wu et al. (2015) suggested that adapting to a new country's culture takes time and effort because the length of time is different for different individuals. The study identifies some of the difficulties college students face in adjusting to their new environments, but it neglects to consider more specific factors like students' educational and cultural backgrounds, which may have an impact on their behaviour. Depending on the student's ability to adapt and cope with the challenges of joining a new cultural environment, the transitional experiences can be quite different. Different groups have different reactions to cultural shifts, with some being typically enthusiastic while others encountering difficulties with language and boredom. Parr et al. (1992) also looked at the cultural differences between students in culturally diverse universities, and the study looked at cultural dimensions such as individualism, competitiveness, and assertiveness. Both cultural orientation and sociocultural adaptation were highlighted as the most important factors that affected students, their experiences, and their future intentions by Jamaludin (2018). External stimuli, such as Covid-19, and social restraints, which altered the educational process, play a role as well.

2.3. Students' Intrinsic Motivation

Motivation is a psychological concept that can be difficult to grasp. It has been widely recognised by DA and AR (2016) as the driving force behind goal-oriented behaviour. Hallam et al. (2011) found that students who lack motivation are less likely to succeed academically. Henning et al. (2014) define motivation to learn as a student's willingness to understand and participate in academic content and activities.

Students' motivation to learn and their engagement in class activities may be influenced by a variety of factors. Extrinsic motivation, according to Ginsberg (2005), may have a detrimental effect on performance, whereas intrinsic motivation is viewed as far more important for achieving better academic results. External factors, such as the poor quality of education and the socioeconomic conditions in their home countries, influence international students' decision to study abroad (Henning et al., 2014). Even though money and better living conditions can motivate some students, they are not always enough for others. Students' participation in class may be influenced by a variety of other factors, including their social group dynamics and their personal ethical and moral values.

Poor performance and difficulties in class activities and discussions have been linked, according to Lutfi et al. (2016), to such factors as family background, appreciation of completed studies, and gender stereotypes. A study by Hengyu (2016) speculates that an individual's lack of cultural familiarity could be another deterrent to their academic progress. Student motivation has been shown to be dependent on students' self-belief, and a link between low self-belief and poor academic performance has been established (Edgar et al., 2019).

An assessment's potential impact on students' intrinsic motivation and mood was recently discussed by Coutts et al. (2011), who also found that assessments increased students' tension and stress. Students' moods and stress levels may be improved by creating social learning and support groups. However, each student has a unique assessment preference that influences their perceptions of the course material (Van de Watering et al., 2008).

2.4. Remote Online Education During Covid-19 Developments

The Covid-19 pandemic has had a significant impact on education systems around the world, leading to the closure of a number of universities and other institutions of higher learning (Daniel, 2020). When it comes to HE, the Covid-19 pandemic had a direct impact on the learning experience. As an example, Gopal et al. (2021) suggested that the effectiveness of tutors, content of sessions, and feedback from tutors all shaped students' online delivery experiences. Academic competence during the Covid-19 pandemic's transition may be influenced by self-regulated learning, which may also have an impact on students' psychological fulfilment and emotions, according to empirical evidence provided by Holzer et al. (2021).

As a broad concept, "online learning" could be defined as the ability to access education through the use of computer and Internet technology (Moore et al., 2011). During the Covid-19 developments, Aras Bozkur et al. (2020) postulated that online learning under such circumstances is emergency remote education and this practice is completely different from planned practices like distance education. However, when it comes to online learning satisfaction, students who are more technologically savvy are more satisfied than those who lack prior experience and are more likely to encounter difficulties.

HE institutions (HEIs) have started using educational technology to avoid difficulties and strains as a result of the Covid-19 pandemic developments. In most studies on the impact of Covid-19 on HE learning environments, video-platforms like Zoom and Teams and how they were used by learners were the primary focus. According to Vandenberg and Magnuson (2021), faculty and students had different views of Zoom, with the students reporting more technological and psychological barriers and being less than satisfied. On-campus learning is faster, according to Scull et al. (2020), but online learning moves at a slower pace. Another finding from the study by De Oliveira Dias et al. (2020) was that the majority of students are not participating in online classes because of poor communication.

There was an increase in student online participation after the Covid-19 pandemic, according to Dascalu et al. (2021), who tracked the students' online behaviour. Findings from further research show that students' levels of stress are increasing significantly because they cannot afford the technology needed to fully benefit from online education (Akpnar, 2021). Akpnar's study finds that online learning is a primary cause of mental health issues even during the Covid-19 pandemic, even if it facilitates the educational system. During the Covid-19 pandemic, students were frequently interrupted by family members due to an unstable internet connection and a lack of time to study (Salman et al., 2021).

For the most part, students, according to Middleton (2020), have had difficulty adjusting to online learning and the new conditions created by the pandemic. It is clear from this study that distance learning is the best option for students in the current situation, and many students agree with this. Moreover, the above literature demonstrates a recurring theme of technology acceptance in adapted education spaces, and thus students' motivation and experiences during the pandemic under a technologically influenced educational environment is analysed through the lens of the Technology Acceptance Model (TAM).

2.5 Technology Acceptance Model (TAM)

The TAM is an information technology framework that has been tested in various populations to understand how users adopt and use new technologies, particularly in the workplace. To put it another way, the theory posits that people's willingness to accept a new technology and their actual use behaviour are influenced by their perception of how beneficial and easy the technology is to use (Davis, 1989). A high-quality user experience (UX) design will increase the likelihood that a new technology will be adopted (i.e., usable, useful, desirable, and credible). According to TAM, external variables such as individual differences, system characteristics, social influences, and facilitating conditions influence how useful and easy it is to use a given technology (Al-Emran & Shaalan, 2021). TAM in the context of this paper refers to students' experiences of using online technologies during Covid-19 under an educational environment that is highly influenced by online technologies. Our empirical evidence is analysed through the lens of TAM to answer the research question.

2.6 Summary & Knowledge Gap

Students in a culturally diverse setting face a variety of challenges, as the theoretical background reveals. These include issues like social communication and adaptation. Diverse influences on students' motivation during the Covid-19 outbreak were studied by several authors, but little attention was paid to the ways in which individual differences in relevance to how people learn, behave, and communicate might mediate these influences. There is a lack of research on how Covid-19 affects students' motivation in culturally diverse universities such as those of the UK. Essentially, the there is also a recognisable paucity in research on cultural implications in relevance to how students are experiencing online learning implied by the Covid-19 restrictions within UK universities. Therefore, the impact of online learning on international students in the UK HE landscape is investigated in this paper.

3. Research Methodology

3.1 Research Context

To broaden and deepening knowledge on the topic: multidimensional factors; intrinsic motivation and cultural diversity of students studying in the Greater Manchester, this study adopted a case study approach. Thus, we selected a university within the Greater Manchester area as a case study, with its students drawn from different nationalities. Arguably, Greater Manchester area is a home to both international and EU students with diverse cultural orientation, with each having intrinsic motivation to excel in their academics. Case study becomes well appropriate in addressing "how" and "why" nature of research questions that seek to explore phenomena in context (Yin, 2009). In this study, we utilised case study strategy to develop an explanation for these research questions posed under the introduction section. Eisenhardt (1989) argued that theory developed from case study research is likely to have significant qualities such as novelty, testability, and empirical validity.

3.2 Sampling Strategy

Saunders et al. (2015) classified sampling techniques into two main types: probability and non-probability. Non-probability sampling allows the researcher to select subjectively the participants of the study rather than randomly. For this study, we adopted non-probability sampling strategy to comprise convenience sampling where selected participants were drawn from both the postgraduate and undergraduate students' cohorts of a university located in the Greater Manchester. In this study, convenience sampling as a non-probability technique enabled participants to be selected because of their convenient accessibility and proximity to the researchers (Yin, 2005). This involved students (participants) proximity to the researchers, who doubled as their lecturers. This technique enabled the researchers to answer the research questions. Also, convenience sampling supported the researchers to access diverse opinions from the participants whose academic excellence is affected by their

intrinsic motivation and cultural diversity and were all analysed through the lens of TAM.

A convenience sample of 16 students from different nationalities took part in this study. Participants were recruited via various inter-faculty social media platforms (e.g., Facebook, whatsapp) of the university. After their consent to take part in the study, participants were then interviewed.

3.3 Data Collection Method/s

Data collection took place from April until the middle of May 2021 after the UK had experienced two lock-down periods since March 2020, following earlier announcements made by both Boris Johnson and Matt Hancock, the health and social care secretary. Data were gathered through in-depth interviews. The researchers conducted 25 formal interviews with 16 different international students who come from six continents, namely, Europe, Africa, Asia, North America, Latin America and Oceania. Participants were interviewed frequently in the Greater Manchester. The in-depth interviews, which lasted between 30 and 75 minutes each, were audio recorded and eventually transcribed. We conducted some of these interviews via telephone, zoom because of geographical locations of the participants in the Greater Manchester during the lockdown. Results of the study were checked and discussed with the interviewees on several occasions.

3.4 Ethical Considerations

This study was approved by the Ethical Committee for the Psychological Research of the university selected in the Greater Manchester. The researchers safeguarded participants' data privacy in compliance with the General Data Protection Regulation (GDPR). Compliance was ensured by the researchers initially explaining to the participants, the purpose and objectives of the study. Also, the participants were informed of their right to opt out should they feel that the study was breaching their right to privacy or any other right. Ideally, the anonymity of participants was guaranteed by the researchers instructing respondents not to mention their names or include any form of direct identification or information during the interviews. According to Yin (2005), data validity refers to the degree a research instrument measures what it is designed to measure; whilst data reliability is the degree of consistency, an instrument measures what it is intended to measure. To ensure content validity and reliability, the research took specific measures as follows:

The researchers provided all interviews' questionnaires and conducted the interviews personally to enable consistency and eliminate data collection bias. We drafted the interviews questions, participant's research summary and consent form in simple English language to enable further understanding by respondents. Questions were categorised under the research main themes to achieve comprehensive relatedness of

questions to objectives. Preambles preceding questions were boldly stated to enable respondents to understand and accurately respond to the questions.

4. Data Analysis & Discussion

This study aims at providing understanding of students pursuing all manner of educational programmes in Universities in the Greater Manchester. The findings that emanated from the primary data are presented into four themes, which were analysed through the lens of TAM. Table 1 summarises the 16 students who participated in the interviews, while Figure 1 illustrates the coding tree of the themes coded in Nvivo.

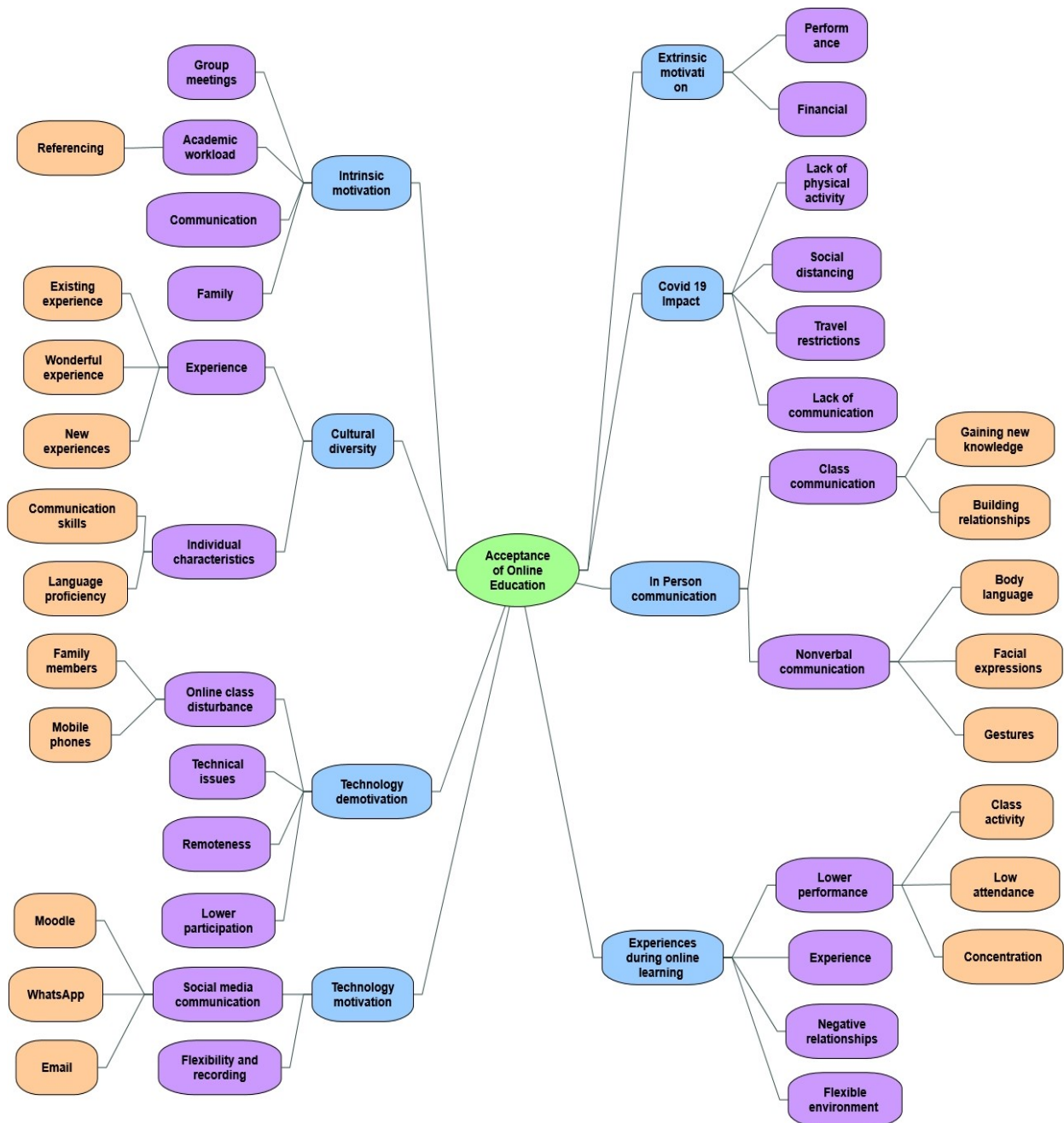| Participant Code	Nationality	Number of interviews
AF1-2	African students	4
AS1-2	Asian students	5
CS1-2	Caribbean students	3
ES1-5	European students	7
IS1	Indian student	2
LA1-2	Latin American students	2
NAS1	North American student	1
OS1	Oceanic student	2

Table 1. Participants Summary

Figure 1. Coding Tree of Key Themes

4.1 Theme 1: Cultural diversity / or Cultural experience

The first question the students were asked related to their previous cultural experiences followed by a question considering the issues and concerns related to communication and adaptation with individuals that have different cultural backgrounds than their own.

> *"Cultural diversity is always a good experience; it is a good thing and sometimes it makes many new questions and ideas to arrive in my mind when communicating with my colleagues". (ES1)*

> *"I like talking and communicating with different people, so I have absolutely no problem when communicating with people from different backgrounds. It is very easy for me". (CS1)*

However, the appearance of the Covid-19 social restrictions has influenced their experience with international colleagues. The inter-cultural communication with colleagues and tutors has negatively changed during Covid-19 developments and negatively impacted their motivation, they were highly unsatisfied with the appearance of the virus and the application of all restrictions to higher- education. The majority of them were demotivated by missing social contacts and communication with their international colleagues and tutors. Culture knowledge and cross-cultural communication are significantly contributing to the students' performance and motivation. However, the application of the Covid-19 restrictions decreased the students' cultural knowledge and experiences.

> *"If the Covid-19 did not exist would be going to the library and do all the things together with my colleagues learning from each other". (RS1)*

> *"If Covid-19 was not there it would be different because now we are talking to my friends and tutors and all the people from a different culture but If the campus is open it will be more beneficial and for our cultural experience". (AS1)*

> *"It was good that everyone is coming from a different country but at the same time it's like I couldn't interact with them properly how it would be face to face". (ES2)*

4.2 Theme 2: Cultural and individual background

Findings from the semi-structured interviews with the students highlighted the role of individual characteristics and background as important when adapting to the culturally diverse environment in terms of Covid-19 and generally. The individual personality is important for adapting to the cultural environment during the Covid-19 developments.

> *"Well, I think whether you will be motivated or not or whether you enjoy communication with international colleagues very depends on your personality. For instance, when you are an open person in life, you will be like that everywhere no matter of the situation or people around you". (AS2)*

> *"I love to share and learn about new cultures and languages. I love new foods and always want to go to a new place. My experience has*

been mixed. Students from particular countries have been extremely welcoming as others seem to be introverted". (AF1)

Most of the students are well prepared to join the international classroom when they have had a previous cross-cultural experience before that which was useful when applying to the university. They have had previously completed a bachelor's degree in the country or have been traveling abroad, which has made an enjoyable experience for their cross-cultural communication during the postgraduate education.

4.2.1 In-person communication

In-person communication is a significant topic that appeared during the interviews and had even extended the conversations with the interviewees. For many international students, face-to-face communication is the central aspect of what makes them motivated.

> *"When I speak with peers, I feel much more motivated to learn. Now when everything is online, and I have to be individualistic while doing my academic tasks which is difficult". (LS1)*

> *"I am a conversationalist, and I am a people person, and being at the university helps me to ask a question my friends or visit the tutors' office and get my questions answered. The communication and the group working makes me motivated". (OS1)*

Body language is an important aspect of in-personal communication that expresses an important aspect from the students and tutors in personal communication. It has been mentioned that it contributes to a better understanding of the English language which is not a native language for international students.

> *"Personally, for me because of the body language it is easier to learn through communication with because if you do not understand what your colleagues say, they can also read your body language such as gestures you make with your hands, your facial expressions and whatever. There is a bigger window for communication". (AF2)*

4.2.2 Technology

The usage of technology has been a vital topic during the semi-structured interviews, and it has its positives and negative sides that have been discussed. Some students mentioned that Moodle and Zoom are not considered as a motivator, and it does not keep the cross-cultural communication between them.

> *"Moodle helped me to learn and was an excellent distinct learning tool however it does not help to keep my cultural communication better. It was a platform where the academic information is kept but it was not very motivational". (CS2)*

> *"We had a huge presentation through Zoom but on Moodle for example you have to go by yourself, and which is not communicational". (ES3)*

> *"Moodle and Zoom did not help me to get to know any of the students. In fact, I only talk to those students that I met in class". (NA1)*

It is identified that technology is contributing to keep the relationships between culturally diverse students. Email communication is mainly used for communicating with tutors and asking questions related to assignments. Additionally, platforms such as WhatsApp and Facebook emerged as a theme in the study as they are keeping the relationships of the international students alive which allows them to stay in touch during the home learning.

> *"Today the technology is very advanced, and it helped me to keep a good relationship with my colleagues and friends during the pandemic. Even apps such as Facebook and WhatsApp were useful to communicate with my colleagues and ask them questions if I need help". (ES3)*

The students were asked about their technical background and the majority of them are well prepared for the transformation into online learning with previous experience with working and learning through technology which has significantly improved during Covid-19 and their stay in the UK.

> *"Personally, I have a good technological experience in my country but in this country many things are different that's why technology in the UK was a very good experience for me". (AS1)*

> *"I really don't like the online lessons, everyone is muted, even the cameras are off, and it is not the same interaction which is very demotivating". (CS1)*

> *"I think that online learning dramatically decreased my learning experience, I found it very hard trying to communicate with people by Zoom and Email". (LA2)*

Additionally, technical issues are another significant factor demotivating the students. Difficulties such as getting access to Moodle and missing academic sources and updates were mentioned by the undergraduate international students, especially those who joined later than the start of the semester or during the online learning.

> *"Online learning is sometimes not very interesting and unfortunately, now I am just visiting the online library rather than on campus and there is a number of issues with online learning because there is a high number of students in the online classes. Sometimes technical issues appear, sometimes my Moodle app or my university app are not working." (AS2)*

However, the flexibility which is provided by learning through technology has been a motivator for some students during their HE studies.

"I am very grateful that we have online classes because they are flexible. It also saved me the hassle of travel. I live 90 minutes away from the campus". (AF1)

4.3 Theme 3: Intrinsic motivation

Identifying the students' motivation was at the core of the research topic and research question. At this level, the researchers explored how Covid-19 influenced the students' motivation to learn and interact by applying many interview questions to this topic.

It is identified that during the online learning some students who have been previously on campus are experiencing difficulties and dropping important parts of the material which leads to academic workload and demotivation. For instance, referencing is a demotivator causing difficulties mainly to the international students who have not had previous experience with it.

"My referencing was bad. I have lost marks for referencing in my assignments so I could have a better grade. My referencing in semester one was totally wrong because I haven't got any previous experience with it". (ES2)

Family is another aspect that influences the students' desire to learn as those who are closer to their families feel significantly better during the Covid-19. Additionally, financial and visa issues emerged during the pandemic for the students coming from abroad which has delayed their studies.

"I faced a number of difficulties as for instance my visa was approved during Covid-19, and I moved in the UK where the expenses are higher compared to my country. I also faced a number of issues with finding a house due to financial issues and that's why I am living far from the university, but I was still motivated to study". (AS2)

The theme regarding the motivation to start a degree has suddenly emerged during the interview process. The pandemic appearance contributed to the motivation of the students to start doing their postgraduate degrees.

"Covid-19 gave me the motivation to start the master's and Covid-19 is not a problem. Only the lockdown measure". (ES2)

4.4 Theme 4: Experiences during the online learning

The students' performance was negatively affected by the transformation into online learning as they have faced multiple challenges during this period. The postgraduate students are regularly attending the online and - campus however most of them are less motivated to do it online. Moreover, some students had experienced difficulty in their concentration and staying focused during the Zoom classes. However, students who have busier lives or far locations shared different opinions concerning the online learning.

> *"My concentration was less on the online lectures; I was regularly attending to the classes, but my concentration was lower compared to on-campus". (PS1)*

> *"My personal opinion about the online learning is that it is a powerful platform, but the participation is very little. Nobody participates in class; you don't hear anyone". (ES3)*

Compared to the on-campus lecture even the international students are giving their opinions (OS1).

> *"Yes, I did more online lectures than on campus. I am now more motivated to attend online lectures because they are more flexible, and they fit to my schedule". (IS1)*

Additionally, learning online is more difficult for the students due to the statement they are not enough physically active due to Covid-19 restrictions causing the closure of all entertainments which has a negative effect on their mental health and concentration.

> *"I love online learning and it is more relaxing for me. It helped me to learn because classes are recorded, and I can listen to them in a suitable time". (AF1)*

5. Discussion

There is a belief among the participants that they can learn from each other's academic work by participating in different class activities and presentations, and this has been confirmed by the semi-structured interviews. Cultural exchange and communication would be more fruitful at university if there were fewer social barriers between students and their diverse backgrounds. A significant factor in this is the restriction on cultural and academic exchange that Covid-19 imposes on universities. Students having Covid-19 have not had the opportunity to learn more about each other's cultures, despite the fact that cultural diversity is a motivating factor in HE.

A cultural difference is a difference in the values and beliefs of people from a particular ethnicity or country. With cross-cultural diversity, students are exposed to the values and ideas of other cultures, allowing them to better understand and communicate with people from different backgrounds (Stormquist and Monkman, 2014). A student's cultural background has a significant impact on their behaviour and learning because it guides their actions (Chuenjitwongsa et al., 2018). Students' perspectives on assignments and learning styles may differ depending on their cultural upbringing (van de Watering et al., 2008). The Hofstede cross-cultural model can be used to gauge the cultural diversity of students because it takes into account all five aspects of national culture (Foskett and Lumby, 2003; Dimmock and Walker, 2005; Banks, 2015; Velten and Lashley, 2018). Hofstede's cross-culture model may prove to

be helpful in comprehending and managing students' cultural differences and values within higher education.

Motivation, according to Kourova and Modianos (2010), determines an individual's willingness to pay attention to a specific task. According to Brophy (2004), the ability of a student to enjoy and comprehend academic activities and to reap the benefits of their learning outcomes constitutes the motivation to learn, and this was confirmed in the semi-structured interviews. There are two types of learning motivation: intrinsic and extrinsic (Brophy, 2004; Arpan and Santoso, 2016). For example, if a student is motivated to learn a particular subject because of an internal drive, this is known as intrinsic motivation for learning. In the case of extrinsic motivation, students are encouraged to participate in educational activities by factors such as receiving praise or receiving a reward. Stirling (2014) found that even though externally regulated motivation factors were present, some students devoted less effort and interest to their studies (Stirling, 2014).

As a result of the Covid-19 outbreak, the UK's HE system has been significantly strained, resulting in significant shifts (Fox et al., 2021) and has been affected on a global scale. Two periods of lockdown forced UK universities to move to remote online education because casual on-campus education could not be delivered. As a result of this massive transition, universities were forced to make difficult decisions (Ewing, 2021). Similarly, students in the United Kingdom's HE system faced a variety of challenges, including a lack of face-to-face interaction and uncertainty about the future of the educational system, and this was confirmed in the semi-structured interviews. Even after the Covid-19 transition, which is marked by a hybrid delivery model combining on-campus and remote online education, these kinds of issues may persist.

From the perspective of TAM, perceived usefulness received mix reviews given the different levels of technology literacy among the students. Where tech savvy students would perceive the usefulness of online tools in a technologically driven education space, less experienced students did not find such tools useful. Students coming from disadvantaged regions, such as Latin America and Africa had low perceived usefulness, while the other regions had a high perceived usefulness. Perceived ease of use of online tools exhibited similar findings where disadvantaged students had low perceived ease of use due to poor infrastructures in their respected regions. Attitude towards using online tools was indeed negative for disadvantaged students, while the more advantaged students had a positive attitude, perhaps due to having stronger technologies and infrastructures. Therefore, actual use of online tools was received less among disadvantaged students compared to the more advantageous students.

The above findings have revealed that research into how cross-cultural exposure affects the motivation of HE students has been extensive, but little is known about how these factors affect HE students when they are exposed to remote online learning as a result of the Covid-19 pandemic. we propose that the remote online learning experience of HE students in diverse educational environments is likely mediated by

cultural and intrinsic motivation factors. Future research should test the impact of both variables at a larger scale and in varied HE contexts. Figure 2 illustrates a model of the multidimensional factors affecting remote online education through the lens of TAM.
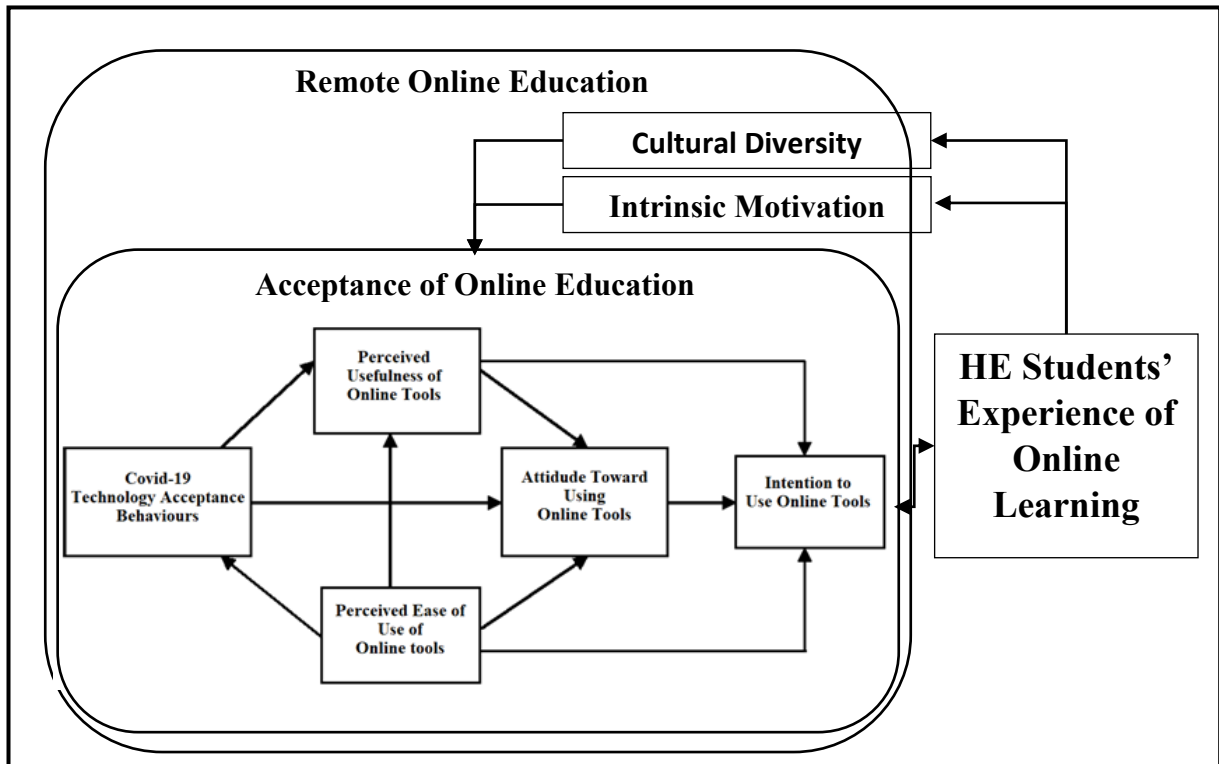

Figure 2. Multidimensional Factors Affecting Remote Online Education

6. Conclusion

Numerous studies have been conducted to ascertain students' experiences during the Covid-19 pandemic. However, these previous studies did not take a multidimensional approach to exploring the experiences of UK higher education students. When it comes to coping with remote online education, the majority of studies focus on traditional aspects of how students and educators deal with remote online learning technology but ignore the diversity of HE students and how this affects their online education experiences. For example, in a highly diverse higher education sector such as the United Kingdom, international students may react differently to the remote online education model promoted by the Covid-19 developments. Cultural differences between domestic and international higher education students have been shown to have a significant impact on students' experiences Hari (2021).

Individual factors may also have a variable effect on students' experiences with distance education via the internet. Individual differences in technological abilities (Salman et al., 2021) and perceptions, self-belief, and confidence (Chue et al., 2016) shaped students' learning experiences on an individual level. In essence, several

authors have considered various factors affecting students' motivation during the Covid-19 pandemic, but little attention has been paid to how these factors may influence students' various modes of learning, behaving, and communicating within the remote online education model.

Due to its youth, the current literature on how students experienced remote online education during and after Covid-19 takes a generic approach and does not adequately account for the impact of cultural and individual differences. We propose a synthetic approach for examining the implications of culture and intrinsic motivation factors; in our conceptual framework, depicted in Figure 2, we propose that the remote online learning experience of HE students in diverse educational environments is likely influenced by cultural and intrinsic motivation factors.

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