Students' Experience and Satisfaction Towards Online Learning During COVID-19 Pandemic

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ABSTRACT: The educational system across the world has greatly been affected due to the COVID-19 outbreak. The teaching and learning process has changed from the traditional way, face-to-face interaction and in a physical classroom, to online learning either in real-time or pre-recorded. Therefore, the main aim of this research was to investigate the level of students' satisfaction towards online learning implemented at the higher education level during the ongoing COVID-19 pandemic, and to investigate the main factors of their satisfaction. The research adopted a quantitative approach through the survey which was collected through an online questionnaire. The respondents were drawn from 121 diploma and degree students enrolled in online learning at the Universiti Kuala Lumpur Malaysian Institute of Marine Engineering Technology (UniKL MIMET). Data collected was analysed using Statistical Package for Social Science (SPSS) software and presented in the form of percentages and mean scores. The study revealed that undergraduate students were satisfied towards the use of online learning in terms of lecturer characteristics (M = 3.66), technology characteristics (M = 3.64) and learner characteristics (M = 3.17). The study revealed the students had positive perceptions towards online learning and accepted this as the new learning system. In fact, online learning has emerged as a new way of enhancing the learning process. The findings of the study will facilitate educational institutions and policy makers to take this online learning process to the next level in a better way.

KEYWORDS: COVID-19 pandemic, experience, online learning, satisfaction level

I. INTRODUCTION

The world was first hit by COVID-19 in Wuhan, China in late December 2019 (Ahmad et al., 2020) and by January 2020, it was found that COVID-19 had recorded infection outside of China. Due to this sudden arise of infection cases, the World Health Organization (WHO) declared that COVID-19 is a pandemic after it had surpassed a larger number of outbreaks of the disease in a lot of countries and territories worldwide which at that moment, there was a possibility of global spread of the virus (WHO, 2020).

An unfortunate event in late January 2020, the virus was confirmed to have reached Malaysia after it was discovered to be carried by tourists from China entering the state of Johor through Singapore (Hazlin Hassan, 2020) and it was a festive season then. Another unfortunate event was that Malaysia lightly took the infection as the cases reported initially remained relatively low and were majorly involved non-Malaysian or imported cases. However, the cases suddenly increased in March 2020 after the largest cluster, known as Tabligh Jamaat, was detected, which is a religious gathering taken place in Sri Petaling, Kuala Lumpur (Veena Babulal and Nur Zarina Othman, 2020). This had led to major escalations in local cases, as well as attendees from neighbouring countries.

Sadly, the largest total number of reported COVID-19 infections in Southeast Asia was recorded by Malaysia within a few weeks and by March 20, it was reported that 48% of the COVID-19 cases in Malaysia were affiliated with the Sri Petaling Tabligh cluster (Mamat et al., 2021). To manage the sudden outbreak of the virus, Prime Minister of Malaysia announced Movement Control Order (MCO) on mainstream media channels live nationwide on March 16 2020, at 10.00 PM, which the only intend was to curb the spread of COVID-19 virus by controlling the movement of any symptomatic or non- symptomatic citizens and non-citizens.

The MCO was said to be some sort of a partial lockdown where all types of businesses were forced to put their operational on hold, not to exclude educational institutions. The Prime Minister announced that all levels of educational institutions such as kindergartens, government, and private schools as well as public and private higher learning institutions (IPTA/S) were told to shut down. With the MCO taken place since 18 March, face to face teaching and learning process had also been put to a stop. The new 'normal' of education had urged schools and higher educational institutions to undergo online distance learning or also known as ODL (Zulaikha Khairuddin et al., 2020). Teachers and instructors had to be creative and willing to explore the new normal in teaching and at the same time, to ensure students and learners achieve the target objectives. Before MCO, the implementation of online learning used to be considered as

a solution to fulfil the increasing demand of students enrolling in higher education especially those who are unable to be full-time students (Fahmeeda and Ming, 2015).

Since the hit of the COVID-19 pandemic, all teaching and learning activities must be done online. Recent pandemic has fuelled the growth of online learning like never before among the students of all levels (Pavan Kumar, 2021). New normal is a new approach for community especially for university students. At the earlier phase, most students had problems with online learning. For common young students, studying from their bedroom, calling into class, and losing a sense of community has caused a tremendous amount of stress to be put on their shoulder (Farah Perwitasari et al., 2021). Online learning has a lot of advantages, but online learning can cause burdensome for some students. Students sometimes get frustrated due to the lack of human contact and the inability to discuss the subject with the classmates. In addition, not all students have the luxury of a good Internet connection and a decent laptop or personal computer. Farah Perwitasari et al. (2021) also agreed this is also one of the factors that caused stress for them.

Understanding the academic and emotional effects of the pandemic on university students is essential for several reasons. There has been a growing tendency for universities to offer online courses, no matter in whatever field or areas of expertise. However, in universities offering technical programmes, this transition is still a challenge since traditional technical studies are fundamentally based on practical application of scientific and technological principles. These types of programs usually involve workshops, laboratory, and outdoor lessons, to fulfil the subjects' requirements. The unexpected situation generated by COVID-19 has forced technical universities to go through their teaching and learning online, even for students who would not have proactively chosen to learn online. Therefore, it is an opportunity to analyse the students' online learning experience in online distance learning since technical programmes are rarely offered online, and it is imperative to understand learners' satisfaction towards online learning for effective implementation. This research aimed to investigate the domains that influence students' level of satisfactions on online learning and to identify students' satisfaction level towards their online learning experiences.

II. RESEARCH METHODOLOGY

This research applied quantitative method and utilized a set of questionnaires for the purpose of data collection. The instrument used in this research was developed based on prior literature related to online learning and students' experiences and satisfaction, especially from Sharma et al. (2020), Shaid et al. (2021), and Eom & Ashill (2016). The data for this study was collected via an anonymous online survey.

The questionnaires had 5 sections. Section A elicited respondent's demographic profile. The section obtained respondent's gender, age, programme level, current semester and Internet connection used for online class participation. The next three section focused on the three domains of online learning adopted from Sharma et al. (2020) and Shaid et al. (2021). Section B looked at the learners' dimension of online learning. This section emphasized on how the respondents perceived their online learning in terms of their characteristics, advantages and disadvantages of online learning, their time management and whether they are satisfied with their learning progress. Section C emphasized on the instructors or lecturers, and the statement focused on lecturers' characteristics, frequency of interaction, feedback, and content delivery. Section D looked at technological characteristics, which measured the effectiveness of electronic media during the content delivery. The last section had 2 items which prompted respondents' online learning overall satisfaction and their opinion on the elements which can improve their online learning experiences. Data obtained through the research instrument were analysed using descriptive statistics through the Statistical Package for the Social Sciences (SPSS) software.

The focus of this study is to identify the level of satisfaction on three domains of online learning among Universiti Kuala Lumpur students in Lumut, Perak branch campus. The branch institute in Lumut, Perak offers specifically marine technology-based programmes, at diploma and bachelor's degree level. For this research, the respondents chosen was the researcher's students who have been experiencing online learning since the first Movement Control Order (MCO) which took place in March 2020. The reason for this is because these students were active students when they had to undergo an emergency change to full online learning in the researcher's classes. This is also due to the fact that the researcher knew what they had gone through, and it was easier to elicit honest responses as they know who the researcher is. The number of respondents was 124, whom the researcher taught in January 2020 semester, July 2020 Semester, January 2021 semester, and July 2021 Semester.

III. RESULTS AND DISCUSSION

Based on the findings from the instrument used, it shows that the mean scores for all items in Learners' Dimension Domain are at intermediate level. The highest mean score recorded is item B1 which is related to the respondents being opened to learn about new knowledge through online. This suggests that in principle, learning online is not a foreign term for students and they can accept this new normal of learning.

The item which recorded the lowest mean score value related to the improvement on learning process through online learning. This shows that the students are still in doubt that by adapting online learning, they will improve their knowledge acquisition process. The average mean score for this domain is 3.17 (Intermediate).

Table 1: Mean score for items in Learners' Dimension Domain

Learners' Dimension Domain						
Rank	Item No.	Statement	Mean Score	Interpretation		
1	B1.	I am open to learn about new knowledge through online learning. 3.5 Intermediate				
2	B2.	I am able to spend significant time and energy to engage in online learning class.	Intermediate			
3	В7.	I am able to organize my time well so that work and tasks do not pile up.	3.4	Intermediate		
4	B4.	I feel online learning is comfortable. 3.2 Intermediate				
5	B9.	Online learning improves my written communication and analytical thinking skills. 3.2 Intermediate				
6	В3.	I feel that online learning enhances my soft skills. 3.1 Intermediate				
7	B8.	Online learning reduces the time I spend on unproductive activities.		Intermediate		
8	B5.	I frequently interact with other students and lecturers during online class. 3.0 Intermediate		Intermediate		
9	B10.	I am satisfied with the quality of my online learning during COVID-19 pandemic. 3.0 Intermediate		Intermediate		
10	B6.	Online learning would improve my learning process. 2.8 Intermediate				

For Lecturers' Characteristics Domain, the average mean score obtained is 3.66. The highest mean score is 3.8, obtained by item C2, where the respondents felt that their lecturers have good IT knowledge. The lowest mean score recorded is for item C5, which the respondents felt the lecturers did not provide quick response in online classes.

Table 2: Mean score for items in Lecturers' Characteristics Domain

Lecturers' Characteristics Domain					
Rank	Item No.	Statement	Mean Score	Interpretation	
1	C2.	I feel that my lecturers have good IT knowledge.	3.8	High	
2	C3.	I feel that my lecturers make students feel a sense of belongings in class.	High		
3	C6.	I am satisfied with the content of topic covered during online classes.	3.7	High	
4	C7.	I am satisfied with lecturers in providing clear instruction and explanation on assessment.	3.7	High	
5	C9.	I am satisfied with my lecturers' supportiveness and responsiveness towards my learning. 3.7 High			
6	C10.	I feel the lecturers' organization and preparation for online class provides comfortable learning environment. 3.7 Hig		High	
7	C4.	I feel that my lecturers made the subject as interesting as possible. 3.6		Intermediate	
8	C1.	I am satisfied with my lecturers providing clear instructions about the course prior to the classes. 3.6 Intermediate		Intermediate	
9	C8.	I am satisfied with the lecturers in reviewing the topic covered in the previous class. 3.6 Intermediate		Intermediate	
10	C5.	I feel the response from lecturers is quicker in online classes. 3.5 Intermediate		Intermediate	

The third online learning domain, Technological Characteristics Domain obtained average mean score at 3.64. The highest mean score is 4.1, which if for item D1. This item relates to the respondents agreed that they have a suitable device for online learning. The lowest mean score is 2.8 for item D10, which the respondents disagreed that online learning improves their learning better than face-to-face class.

Online class is effective to replace the face-to-face

I am able to complete my work even when there

Online learning improves my learning better than

classes during the pandemic.

were Internet distractions.

face-to-face class.

D9.

D7.

D10.

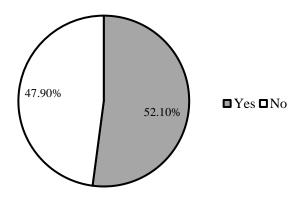
9

10

Technological Characteristics Domain					
Rank	Item No.	Statement	Mean	Interpretation	
1	D1.	I have a device that is suitable for online learning. 4.1 High			
2	D4.	I feel the course materials are easily accessible through VLE.		High	
3	D5.	Online learning saves money which I usually spend on printed references and assignments. 3.9		High	
4	D2.	I have access to a stable Internet connection. 3.8		High	
5	D3.	I enjoy using the online platform applications as required by the University (Microsoft Teams & VLE).	3.8	High	
6	D6.	I feel Internet connection strength determines our effective learning opportunity. 3.8 High		High	
7	D8.	I am satisfied with the ability to contact the University for technical assistance. 3.6 Intermed		Intermediate	

Table 3: Mean score for items in Technological Characteristics Domain

The respondents were also asked on their satisfaction on their own online learning and it was found that the number of 'Yes' responses is higher than 'No'. 63 (52.1%) respondents were satisfied with their own online learning, meanwhile 58 (47.9%) were found to be dissatisfied. Even though it differed at about only 5 responses, majority of them answered yes.



3.4

3.3

2.8

Intermediate

Intermediate

Intermediate

Figure 1: Are you satisfied with your own online learning?

The last item in the survey is an open-ended question, which was not compulsory for them to answer the question. The responses are as shown in Table 5 However, 33 respondents answered Item E2 (n=33), thus, their responses were gathered and categorized into the three domains of online learning as per asked in Section B (Learner's Dimensions), C (Lecturers' Characteristics) and D (Technology Characteristics). Out of the three domains, majority of the responses recorded were related to Lecturers' Characteristics Domain, at 15 (45.5%) responses. Next is Technology Characteristics Domain at 10 (30.3%) responses and finally, 8 (24.2%) responses for Learner's Dimension Domain.

Table 5: What element(s) do you think can improve your online learning?

Domain	No. of Responses	No.	Answers
Lecturers' Characteristics	15	1.	In my opinion, lecturers should be punctual in starting the class (other than the
	(45.5%)	1.	students) to have more productive class.
		2.	More fun activities rather than just lecturers show PowerPoint presentation only.
		3.	Video guide regarding the studies
		4.	Don't push student to answer quickly like just few seconds after lecturer gave the question and the answer must take time to solve
		5.	Make students want to learn something new
		6.	Giving more work to do
		7.	Teaching style
		8.	Teach us slowly and give more exercise
		9.	Prepare video of lecture so that student will not feel boring during classes
		10.	I think lecturer must prepare the question and solution by step. Student can refer the answer when we want to study.
			The lecturer needs to focus on how to explain to the student in a simple form or idea
			so me as an online student can easily catch up with what he or she want to explain
		11.	about during class session because we easily distracted during online class than
			face to face class.
			I don't know I just want face to face class and for the online learning maybe I just
		12.	want to learn in peace environment without interruption from the lecturers'
			children.
		13.	Courses Empowered with Videos
		14.	Lecturer frequently ask student question, so that lecturer can connect with the student and student love online learning
		15.	Make more tutorial n force us to submit it
Technology	10	1.	Make sure device in good condition for better working experiences
Characteristics	(30.3%)	2.	Maximizing the features of an application
Character istics	(30.370)	3.	Maybe if I have a good internet connection and good condition of devices
		4.	Good Internet/Wi-Fi
		5.	Better Wi-Fi connection
		6.	The amount of my internet data
		7.	Better Internet connection
		8.	Good Wi-Fi
		9.	Better Internet connection
		10.	Improve internet connection
Learner's Dimension	8	1.	Motivation and environment
	(24.2%)	2.	Need to be creative when to make discuss with your lecturer during out timetable.
		3.	With online learning, it (is) hard to understand and we can't talk smoothly with lecturer. I can't 100% focus in class.
		4.	Focus
		5.	Discipline
		6.	Concentration (I can get this on face-to-face class way better than online class at least)
		7.	Focus and understanding
		8.	No distraction place just like in class
		υ.	110 distraction place just time in class

From the data analysis conducted, it was found that the main domain that influenced students' level of satisfaction on online learning is Lecturers' Characteristics domain, with the average mean score is 3.66. This domain plays an important role in determining students' satisfaction towards online learning. When asked regarding the lecturers' IT knowledge, majority of the students agreed that their lecturers have good knowledge and know how to utilize teaching platform as required by the University which is Microsoft Teams. This has been highlighted by Wei and Chou (2020) where they found that computer literacy of an instructor is also being talked about when it comes to online learning.

Besides that, they are also satisfied with the course management and coordination as most of them agreed that the lecturers had covered the content of topics during online classes and had also provided clear instruction and explanation on assessments. It was found that the students are also satisfied that their lecturers had shown supportiveness and responsiveness towards their online learning. This is similar to Shaid et al. (2021), describing that during online learning, instructor acts as a "helper, guide, change agent, coordinator, and facilitator"; and Kisanjara (2020) labels online instructor as a moderator or a mentor. Role of instructors in online classes has become more complex as they are dealing with a group of students who are facing emergency change to online-everything when the pandemic hits. Palmer and Holt (2009) found that the students' level of comfort with technology is critical to satisfaction with online courses. This is parallel with Sharma et al. (2020)'s findings that students who are updated with the appropriate technologies are able to continue their study smoothly, with greater satisfaction.

Other than this, the students were found to be relief that they didn't have to spend a lot on printing notes and assignments, as assessments were conducted online. However, majority of them chose Neutral when asked whether online

learning had improved their learning better than face-to-face class. It shows that even though the students have been going through online learning for a year and a half (during this research was being conducted), they were still ambiguous whether the online learning process that they had gone through had really improved their learning. It seems that students are willing to take classes from their homes when they have adequate workspace, equipment, and facilities for effective learning, but yet they are not convinced whether online learning is beneficial to them.

IV. CONCLUSIONS

The emergency change form traditional face-to-face learning to online learning is seen as the best alternative to ensure teaching and learning for students at all level resumes despite the hit of the COVID-19 pandemic globally. Through this research, the objective that had been set by the researcher that is to investigate the domains that influence level of satisfactions on online learning among UniKL students in terms of their self-efficacy towards online learning, their experiences with the lecturers during online classes and their technological self-competence, have been achieved. As seen in Table 4.36, it was found that only 52.1% students were satisfied, while 47.9% stated that they were dissastified with their online learning. Even though more than half of them stated this, however, thes atisfaction rate was lower compared to other studies, such as Farah Perwitasari et al. (2021), Hassan et al. (2021) and Pavan Kumar (2021). These research have reported high students' satisfaction rates on online learning.

The COVID-19 pandemic has changed teaching and learning landscape from a physical face-to-face method to an online face-to-face method. However, the main challenge and initiative of all learning institutions now is to continue blended teaching while COVID-19 pandemic is still worrying and doesn't seem to go away in the near future. Thus, cooperation from various parties such as academicians, parents, and the support of the Ministry of Higher Education (MOHE) is needed in ensuring the success and outcomes of blended learning. Teaching with the concept of a combination of traditional and virtual element or blended teaching is becoming increasingly popular for the sake of the continuity of national education. However, it is essential to know what keeps the students' motivation going on to continue this type of learning method, and to ensure they are satisfied with their learning, and finally get the benefit out of it. This research has concluded that lecturers' characteristics as the main factor which will have an effect on the students' satisfaction on online learning.

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Students' Experience and Satisfaction Towards Online Learning During COVID-19 Pandemic

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