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CONTENTS

Students' Acceptance and Challenges of Online Learning During Covid-19 Pandemic in Higher Education Institution in Malaysia

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Abstract

Since March 2020, the outburst of COVID-19 has caused universities in Malaysia to close their operations. Hence, Malaysian universities have to initiate online learning. However, there are some negative effects of online learning towards students' motivation, performance and mental health. Moreover, a crucial point for lecturers is to understand the students' acceptance and challenges of online learning in order to reduce the negative effect of online learning. Thus, this study intended to investigate the acceptance and challenges of online learning among students during COVID-19 pandemic. Responses were obtained from 320 undergraduate students from one of universities in Johor, Malaysia. The findings explained that students faced challenges on social issues, such as lack of communication among them, lack of group discussion and they feel isolated during online learning which affect the learning process. Besides, most of the respondents surveyed reported moderate levels of online learning acceptance. This study recommends universities to improve on their infrastructure and talent capital to improve the online learning acceptance and reduce challenges faced by students.

Keywords: COVID-19, online learning, perception, challenges, acceptance

Introduction

Coronavirus or COVID-19 pandemic has impacted human life in so many ways. It has also impacted the education system especially in higher education. With the implementation of physical distancing, most of face-to-face classes were discontinued due to the pandemic. The COVID-19 pandemic has opened our eyes on the importance of online learning for our students (Agarwal and Kaushik, 2020).

In the normal conventional learning environment, students have the advantages of two-way communication and fast responses from lecturers or instructors (Xu and Jaggars, 2014). Even though online learning can increase the flexibility and remove geographical barriers, there are some disadvantages of online learning such as lack of social interactions, time-inefficiency of developing content materials and the need for flexible tutorial support (Alraimi, Zo and Ciganek, 2015). Moreover, students or learners in online learning may encounter frustration, isolation, confusion and lack of interest in the subject matter (Adams et al., 2013). Due to its relative lack of structure, it is reported that online learning has hindered learning such as technical faults during the conduct of sessions and time limitation of the sessions (Agarwal and Kaushik, 2020). Online learning requires flexible teaching

approach, which allows the students to study from home and save some money and time compared to face to face learning (Jena, 2020; Allam et al*.,* 2020), however, to adapt to this new mode of learning is challenging and it will affect the students' motivation and performance.

As informed by Abbasi et al. (2020), students were not well prepared for online learning and the result indicated that more than 70% of students have negative perception towards online learning. Moreover, a study conducted in Malaysia by Allam et al. (2020) determined that the respondents were not motivated towards online learning during this COVID-19 pandemic. Other than that, online learning was reported to produce low-performing students (Atchley, Wingenbach, and Akers, 2013), and this has resulted to students or learners withdrawing from their studies as a result of their poor performance. In addition, previous studies also determined that online learning during COVID-19 pandemic lead to enhance the students' stress level and mental health issues (Al Ateeq et al., 2020; Rapper and Brown, 2020). As confirmed by Al Ateeq et al. (2020), university students faced high level of stress due to online learning. Depression, anxiety, stress, fear, irritated and demotivated are some of common emotional or mental health issues faced by the students during COVID-19 pandemic. Based on the above issues, this study aims to determine how well students at higher education institutions in Malaysia accept online learning as an instructional platform. The research objectives of this study are:

● To investigate students' acceptance of online learning during COVID-19 pandemic and
● To investigate possible students' challenges of online learning during COVID-19 pandemic

Conducting this study helps to acknowledge academicians and university on the students' feeling and difficulties, thus it provides a clear picture for them to improve the ways of implementing online learning in order to reduce the negative effect, and the learning process can be delivered more effectively and efficiently.

Literature Review Acceptance of

online learning

Students' acceptance can be defined as "the demonstrable willingness within a user group to employ information technology for the tasks it is designed to support". The Government of Malaysia had announced the implementation of movement control order (MCO) in March 2020. This has affected the changing of teaching mode especially among higher education institutions. This has also resulted in universities to change the mode of teaching towards online learning (Allam et al., 2020). Even though online learning is expanding in the Malaysian higher education institutions, the question of how well students accept online learning as a learning medium has not been well-studied (Yiong, Sam and Wah, 2008). A study by Subedi et al. (2020) found that even online learning reduce time, travelling cost and risk of accident but more than half of students still prefer study at school compared to online class. Students with high level of acceptance towards online learning have indicated that the course was convenient. However, some students and learners encountered some difficulties with the online learning or web-based learning environment (Yiong et al., 2008). The students noticed that the online learning (web-based course) is a new form of learning and more guidance is needed to adapt to the learning environment. Therefore, for this study, acceptance was derived from a study by Chow, Che Mat and Ng (2006) on students' readiness in accepting online learning.

Challenges of online learning during covid-19 pandemics

A study conducted in Ghana by Aboagye (2020), indicates that social issues, lecturer's capability and accessibility issues are three important challenges faced by the students during online learning. The result shows that accessibility is the biggest challenge among the students. Technology devices, poor internet coverage and expensive internet plan are some of challenges frequently faced by the respondents. Jena (2020) and Alam (2020) supported on the accessibility issue which explained on the limited internet coverage and the high cost to purchase high speed internet and technology devices needed for online learning. In addition, students also have lack of knowledge in using the online learning

platform and technologies which affected the learning process during Covid-19 pandemics. Moreover, most of the students mentioned that they have adequate knowledge on the teaching platform but faced more difficulties on the internet problems which disturbed the online class (Subedi et al., 2020).

Besides, Rajab et al. (2020) pointed out that communication is the most important challenge faced by the students. Compared to face-to-face, online learning leads to limit the communication among students and lack of group discussion in completing their assignments (Jena, 2020).

Due to sudden shifting to online learning, academics also play important roles to ensure the teaching delivery meets the expectation. When the lecturer is not well trained and the students not properly assisted by the lecturer, it will affect the learning process. Besides, low quality of teaching materials is also one of the challenges for the students to understand the subject (Jena, 2020).

Methodology

In this research, a quantitative cross-sectional survey was used. The survey was conducted at one of the universities in the state of Johor, Malaysia. The survey was distributed online and responded by 320 university students. Eighteen (18) items were adapted and modified from the work on COVID-19 and e-learning (Aboagye, Yawson, and Appiah, 2020) and student acceptance on e-Learning (Chow, Che Mat and Ng 2006). They were grouped into two dimensions namely (Acceptance and challenges). All items used in the questionnaire were found to be relevant in the context of Malaysia. A validity and reliability test were undertaken, and it indicated that the instrument was fit for use. In developing the questionnaire, consideration was given to the ease of use and simplicity of the questions (Zikmund, Babin, Carr, and Griffin, 2013). The instrument measured variables on a Likert-Scale of 5 points, from strongly disagree to strongly agree. The operationalization of the variables in this study lies within the scope description as shown in Table 1.

Table 1:
The Scope of Variables in This Study.

No	Variable	Description	Sources
1)	Acceptance of Online Learning	To investigate students' readiness in accepting online learning.	Chow, Che Mat and Ng (2006)
2)	Challenges of Online Learning	To explore the challenges faced by students using online learning during the COVID-19 pandemic.	Aboagye, Yawson, and Appiah (2020)

Findings

Demographics of Respondents

The summarized demographic profiles of the respondents can be found in table 2 below. The sample revealed that male respondents represented a lower percentage of the total respondents of (27.5%) or 88 respondents if compared to female respondents of (72.5%) or 232 respondents. With reference to their age group, the sample indicated that (98.1%) of the respondents belong to 17-22 years old age group and only (1.9%) belong to 23-28 age group. Interestingly, all respondents were undergraduate students (Bachelor's and Diploma students). In addition, most of the respondents were students from the Faculty of Business and Management (73.4%), followed by Faculty of Computer and Mathematical Sciences (15.6%), Faculty of Information Management (5.6%) and the rest were respondents from Faculty of Accounting (5.3%). Furthermore, the sample also showed that most of the respondents (60.6%) were from B40 category where the family income is less than RM4849, followed by M40 (33%) and the rest were respondents from T20 category, where the family income is above RM 10961.

Remarkably for current area of residence, most of the respondents were from town, followed by sub-urban (24.1%), and rural area (12.2%) respectively.

Table 2:
Demographic Statistics (N=320)

	Demographic	Frequency	Percentage
Gender	Male	88	27.50
	Female	232	72.50
Age group	17-22 years	314	98.10
	23-28 years	6	1.90
Program level	Undergraduate	320	100
Faculty	Faculty of Business and Management	235	73.40
	Faculty of Accountancy	17	5.30
	Faculty of Computer and Mathematical Sciences	50	15.60
	Faculty of Information Management	18	5.60
Family income range	B40 (< RM4849)	194	60.60
	M40 (RM4850 - RM10959)	106	33.00
	T20 (RM10961 and above)	20	6.40
Current area residence	Town	202	63.10
	Sub urban	77	24.10
	Rural area	41	12.20

Reliability Assessment

The reliability of the measurement items for all the variables are as indicated in Table 3, the measurement was assessed by an internal consistency check. The Cronbach Alpha from the test shows figures between 0.619 – 0.887, this suggested that the instrument was stable and consistent.

Table 3:
Reliability test of the acceptance and challenges towards online learning

	No of items	Cronbach's Alpha
Acceptance		
Acceptance towards online learning	8 items	0.619
Challenges		
Social issues	3 items	0.696
Lecturer capability	4 items	0.846
Accessibility	3 items	0.835
Challenges (total)	10 items	0.887

The descriptive analyses on the constructs of the study namely acceptance and challenges. Generally, the results indicated that majority of the respondents in this study rated most items in the scale at "disagree". The results in Table 4 showed that the highest mean value for this construct is the

item which denoted the respondents' concern on understanding the subject via face to face learning (It is much easier to understand the subject via face-to-face learning with lecturer with mean = 4.06) and the percentage of agreement of 72%, and followed by "I have lacked personal motivation for online learning" (mean = 3.53) and 82.2% of agreement.

The item that exhibited the lowest mean value is "I do not prefer classroom discussion (face to face discussion)" (mean = 2.12 and 9.1%) and followed by "I can understand written instruction online without any help from the lecturer" (mean = 2.27) with the percentage of agreement of 8.8%. Table 4 revealed the result of descriptive statistics of acceptance.

Table 4:
Result of Descriptive Statistics – Acceptance

N=320

Items	Percentage of Agreement (%)	Mean
Online learning is easy to use everywhere	39	3.22
Online learning is an enjoyable method of teaching delivery	29.4	2.99
It is much easier to understand the subject via face to face learning with lecturer	72	4.06
I do not prefer face to face teaching	14.7	2.31
I do not prefer group study after class	16	2.49
I can understand written instruction online without any help from the lecturer	8.8	2.27
I do not prefer classroom discussion (face to face discussion)	9.1	2.12
I have lacked personal motivation for online learning	82.2	3.53

Table 5 highlighted that the students' perception on the challenges towards online learning. Based on the results, the main challenge faced by the respondents is on the social issues (Mean, 3.60) followed by accessibility (Mean, 3.58) and lecturer's capability (Mean, 3.38). The total mean score explained that all challenges received moderate level of acceptance. However, descriptive analysis by items showed that respondents agreed on *lack of communication among students during online learning (66.9%)* and *cost of internet data is too high* (58.4%) as the important challenges faced by them. These two items scored the high level of acceptance, mean score 3.92 and 3.68 respectively. This indicated that the students faced most on both challenges during online learning in covid-19 pandemics era. Meanwhile, *lecturers are not well trained to teach online* recorded as the least challenging for the students. The result indicated that less than half of the respondents (33.8%) agreed on that statement.

Table 5:
Result of Descriptive Statistics – Challenges

Items	Percentage of agreement (%)	Mean
Lack of communication among students during online learning	66.90	3.92
Lack of group discussion in completing online assignments	45.00	3.22
Online learning makes students feel isolated	51.00	3.66
Social issues (total mean)		3.60
Lecturers are not well trained to teach online	33.80	3.19
Lack of clear learning expectations from lecturer	52.80	3.60
Lower quality materials of online learning	41.90	3.35
Lack of assistance by lecturers in lesson deliveries	42.80	3.36
Lecturer capability (total mean)		3.38
Some devices are not compatible (telephone or laptop)	49.70	3.46
Lack of internet access	55.90	3.60
Cost of internet data is too high	58.40	3.68
Accessibility (total mean)		3.58

Discussion and Conclusion

The general attitude of people will influence their behaviour (Ajzen, 2008). During the online learning, there are great opportunities for flexibility being offered to both the students and the lecturers. Flexibility offered in terms of the ways of conducting the class and flexibility to the student on their self-learning. All these flexibilities will be hindered if the students and lecturers have difficulties with the technology, human talent, and the student attitude. One of the most important components in providing quality learning in education in this country is the infrastructure and the talent capital that need to be effective and efficient.

Most students have also agreed that online learning is not enjoyable, and they prefer face-to-face learning. In addition, students do not understand written instruction online without help from the lecturers. This revealed that communication is another issue that needs to be solved. It is not surprising that most students lack personal motivation for online learning.

In general, student engagement in the era of COVID-19 pandemic is good to keep the students active and focus on their studies as the Malaysian Higher Education Ministry had announced that all teaching and learning in universities will continue online until 31 December 2020. This research concluded that there are three main challenges of online learning. First, on the social issues, challenges on communication, lack of group discussions and feeling isolated were among issues and challenges highlighted. Hence, to address these issues, lecturers need to ensure students' participations during lessons and group discussions were enforced. Second is the lecturer's capability. The length of teaching content and quantity should match with the academic readiness and the online learning behaviour of students (Bao, 2020). Moreover, lecturers must provide students with proper and timely feedback, and this includes email or WhatsApp guidance after class and online videos. The final challenge is the challenges on accessibility issues of online learning. It is important to make proper plans to address possible problems such as internet data and the compatibility of devices. Therefore, challenges and issues highlighted need to be solved and addressed accordingly.

As a conclusion, it is likely that the findings of this study could help higher education institutions particularly in Malaysia to improve the quality of online learning and it is hoped to encourage further research in the area of acceptance and challenges of online learning. Moreover, it is interesting if future studies examine the students' satisfaction or the effectiveness of online learning for the pre and post

COVID-19 pandemic. Moreover, a study on the impact of online learning to be the catalyst towards creating a new and more effective method of educating students also can be further studied.

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