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EMPIRICAL STUDY ON FACTORS INFLUENCING ODL ACCEPTANCE AMONG UNDERGRADUATES IN MALAYSIA

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Abstract

Sustaining academic performance is one of the biggest challenges faced by higher learning institutions. As online learning is accepted as the norm in higher educational institutions, this research has taken an initiative to explore the factors influencing online learning. 171 respondents participated in this study. These respondents enrolled into various bachelor programs at the Universiti Teknologi Mara, City Campus Melaka and have had the experience in learning through online platforms. The data was analysed by using SPSS version 23.0. The outcomes revealed that factors of lecturer, student competency, access ability and university support are having a moderate association with ODL acceptance. However, content and design of the course is having a strong relationship with ODL acceptance. The implications of the study indicated that to ensure an effective online learning experience by the students, universities need to give focus on the content and design of the course. The content must be up-to-date, and reflect to the digital content and experience that the students are experiencing. Thus, the assessments must be suited with the online platform being used. Limitations of the study are also discussed.

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1. Introduction

Sustaining academic effectiveness through online platform is a challenge. This is because the face-to-face experience that has been used to deliver teaching and learning now has to turn into open distance learning (ODL) or virtual platforms. However, with the rapid development of information and communication technology has improved performance and enabled a wide range of conventional teaching operations to be carried out more quickly, precisely, and accurately, resulting in increased productivity. E-learning can assist in improving the quality of education and knowledge by utilizing information technology (Laily et al., 2013).

Information technology has been witnessed as a cost-cutting and quality-improvement alternative for institutions, including academics. The use of modern, efficient, and effective alternatives such as e-learning has produced a need to reform how university students seek education and knowledge. The notion of e-learning has been around for decades, and it is one of the most significant contemporary breakthroughs in the field of information systems (Wang, 2003). The context of education has now been transformed via virtual technology, e-book and online assessments where learning experiences are enhanced.

Recently, e-learning systems have been implemented in many schools all over the world at both university and high school levels to support learning and teaching processes. This effort needs to be initiated to ensure that the learning process can still be carried out even during the pandemic situation. To date, e-learning becomes a powerful tool for supporting online and distance programs of various schools (Pham & Tran, 2020).

The goal of open distance learning (ODL) or e-learning, like any other method of instruction, is to meet the learning objectives. Environmental, technical, student and instructor-related measures can all be used to achieve the goals. Some of the most important critical success factors in ODL are technological, such as bandwidth, device dependability, network security, and accessibility. Other than that, student participation in learning models is another ODL critical success factor. ODL can be synchronous which means in real-time, asynchronous which means at any time and from any location, or a combination of the two. Lecturers can employ a variety of methods to implement an e-learning model, including mini-lectures, electronic or traditional conversation, active or cooperative learning, and more (Selim, 2007).

But it is such a huge challenge to improve the online training programs while keeping high academic standards. It's also difficult to conduct a secure and reliable online assessment. Although today's students are believed to be technologically literate and capable of readily adapting to the usage of devices and online education, not all teachers are. Due to concerns such as attention span, multitasking, while attending sessions, poor audio and video quality, and internet troubles, teachers find it difficult to keep students engaged. Plus, there are now so many online materials available that it can be difficult for a student to keep track of them all and listen to them all. Lack of physical support from peers, an absence of books and other resources, isolation, fear, and anxiety linked with the epidemic, and new pedagogical techniques may prevent students and instructors from achieving their maximum potential (Kaup et al., 2020). Thus, to ensure academic effectiveness, it is important to explore on the ODL acceptance among undergraduates. Through this result, university is able to strategize resources to give priority on the factors that highly related to ODL acceptance from the students' perspectives. These potential factors are further discussed in the following sections.

2. Literature Review

2.1. ODL acceptance

Open Distance Learning (ODL) has become a significant development in learning experience at all level of education all around the globe. According to Bozkurt (2019), ODL can be referred to any formal or informal learning activities being facilitated by information and communication technologies (ICT) as the medium to minimize and lessen distance in both physically and psychologically. This is to facilitate and enhance communication and interaction among students and teachers as well as the sources of learning. ODL also provides an opportunity for those who are incapable to obtain traditional education and do not have the luxury (especially in terms of time) and opportunity for regular education experience due to any sort of reason (Niwaz et al., 2019). There are many factors that might influence the effectiveness of ODL Amongst the factors included in this study are lecture, student competency, content and design of course, access ability and university support.

2.2. Lecturer

Lecturer and teaching staffs employed by the university play an important role in making sure the quality of education provided to the students is at the best possible condition and needed to be given the top priority by a university or any educational organization. Past studies conducted by Aziz and Yasin (2013) among 387 university students in Indonesia find that individuals that have great teaching quality influence the effectiveness of online learning.

To address challenges, students felt compelled to communicate with the instructor or lecturer. Interactions between students and their lecturers allow students to communicate when they are having difficulty completing assignments. Students might be motivated to adopt e-learning by lecturers' assistance and support; in this way, they will indirectly embrace the system. Furthermore, students are encouraged to adopt and continue to use the e-learning system due to compelling presentations, structured teaching styles, and friendly engagement. Teachers' attitudes on e-learning are crucial because they can influence students' acceptance of the initiative (Taat & Francis, 2020).

2.3. Student competency

One of the most important stakeholders in the e-learning system is students. Students have been noted to be given priority over other stakeholders, even though they are the primary beneficiaries of the e-learning system. Furthermore, students are expected to use the system to obtain assistance, and the system will be more successful and valuable if students use it correctly (Al-Fraihat et al., 2020).

The competency of a student in terms of computer ability and interactive collaboration will influence their motivation and the effectiveness of online learning towards their academic activity (Selim, 2007). Online learning success is dependent on student knowledge of computer systems as well as technical infrastructure. A better grasp of how to use e-learning will aid in improving the existing implementation and efficacy of online learning (Ibrahim et al., 2017).

2.4. Content and design of course

The content and design of courses require a collaboration of lecturers and developers, who must create a variety of learning activities to strengthen the bond between lecturers and students. They can also create useful and effective instructional exercises to encourage stakeholders to use the system properly. Audio, video, and multimedia content can be used in e-learning to pique the interest of students, teachers, and other users. Developers can create a user-friendly environment by providing simple and convenient apps such as emails, course messages, and frequently asked questions (Naveed et al., 2020).

How well the lecturers and universities manage their courses will influence the level of acceptance of e-learning (Ahmed, 2010). The majority of students felt that the flexibility of online learning systems and online resources can help them with their homework. Students' interests and fulfilment will be met by flexible systems with sufficient material and high-quality information (Taat & Francis, 2020).

2.5. Access ability

The quality of online learning and the material offered by lecturers have an impact on the usefulness and convenience of students. External difficulties such as poor internet connectivity, low signal, sign-in problems, less user-friendly interfaces, and less attractive e-learning websites should be taken into account because they can induce students not to use the platform. Other services, such as the internet and broadband, should be upgraded, as the internet is important to online learning adoption and use (Taat & Francis, 2020).

The ability to have access to the internet, aided by media such as smartphones, tablets, and other devices will have the ability to create awareness and attraction, which leads to a desire to adopt the content you have on-hand for students. Students will be able to readily learn activities and actively communicate information since they will have access to a larger e-learning environment. The higher the computer's specifications, the better the computer's ability to support students' learning activities. With the rapid growth of the internet network, more students will be using e-learning as the main platform to pursue their education (Laily et al., 2013).

2.6. University support

The last factor is university support. Technical aid and troubleshooting were not the only things related to the university's support. It also takes into account the availability of libraries and information. Students indicated that they will enroll in future e-learning-based courses, indicating that they will have a good attitude toward e-learning technology and tools with the right assistance. This includes the course website's ease of use, as well as browser performance and screen design (Laily et al., 2013).

University technical support appears to be a critical concern, particularly with the online learning system. Because it is a new type of technology, many students will have technical issues that must be overcome. The lack of technological support will be critical in the adoption of online learning which will lead to a lower level of effectiveness on knowledge sharing (Alenezi et al., 2011).

3. Problem Statement

Universities will acquire a lot of benefits by implementing online learning systems. The systems allow the user to be flexible, quick and rich information update, easy and convenient learning progress, and also effective in terms of cost and time. However, ensuring an online system's success is a difficult challenge. High rate of failure and low level of acceptance are some of the issues arise while implementing it (Pham & Tran, 2020).

When adopting online learning, students cannot avoid experiencing challenges and barriers. Online learning which uses mediums such as Facebook, WhatsApp, Telegram, and others is deemed to be less interesting than other forms of learning, not friendly, and not sufficiently interactive to make students feel more connected to the faculty and friends through such platforms (Taat & Francis, 2020).

As the online learning system is now widely used, it is critical to investigate students' attitudes regarding it. Although there may be issues or roadblocks that hinder students' adoption of online learning, these aspects can be addressed and overcome with the help of multiple parties. Due to that, more research is needed to uncover elements that influence the success and acceptance of implementing an online learning system.

4. Research Question

The following research question is to be addressed in this study:

- Is there any relationship between lecturer, student competency, content and design of course, access ability and university support towards ODL acceptance?

5. Purpose of Study

The purpose of this study is to determine the factors that influence student acceptance of online learning at an academic institution. To establish this, the following research framework is developed and adapted based upon past literature. Based on this framework, five hypotheses as shown in Figure 1 are proposed:

H1: There is a significant relationship between lecturer and ODL acceptance

H2: There is a significant relationship between student competency and ODL acceptance

H3: There is a significant relationship between content and design of the course and ODL acceptance

H4: There is a significant relationship between access ability and ODL acceptance

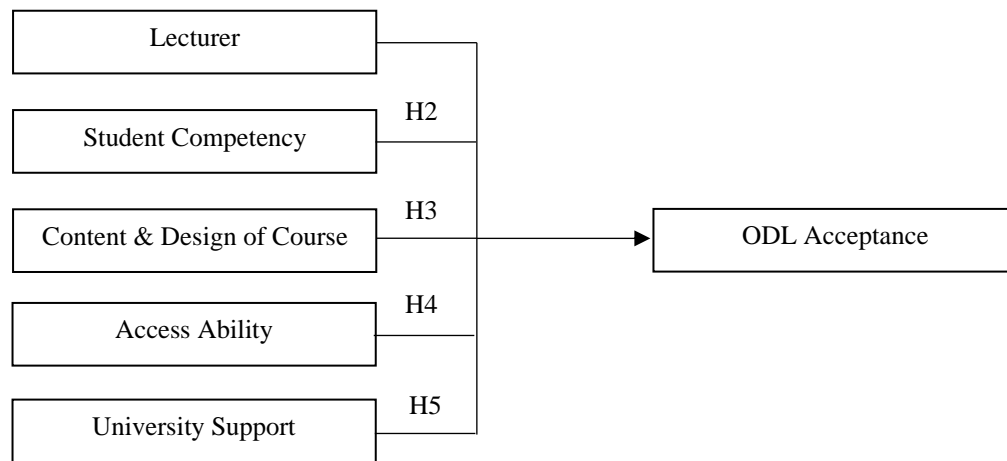H5: There is a significant relationship between university support and ODL acceptance.

H1

Figure 1. Theoretical Framework

6. Research Method

This is a quantitative research study. It is aimed towards students who are enrolled at Universiti Teknologi MARA and pursuing a strategic management course. There are approximately 500 students undertaking this course through online platform provided by the university. These students are able to provide feedback on the variables in this study because they have had at least a semester of experience studying using an online platform or e-learning. The sample approach used was a purposive sampling method.

The questionnaire design in this study was adapted from Pham and Tran (2020). There are three sections in the questionnaire design. Sections A focuses on the demographic profile of respondents. Section B consists of questions relating to the independent variables of the study and Section C consists of questions relating to the dependent variable. A 5-point Likert Scale (1 = "Strongly Disagree" to 5 = "Strongly Agree") was utilized in this research. For the independent variables, there were seven items representing Lecturer. Sample item used was "The instructor is enthusiastic about teaching the class using e-book". There were five items used to measure student competency and sample item used was "I was comfortable with using the personal computer to read my e-book". There were six items representing the design and content of the course. Sample item used was "The learning material on e-book is sufficient and relevant to the courses". Access ability was represented by six items like "Easy off-campus access to the internet". University support was measured by four items. Sample item used was "I can get technical support from technicians". As for the dependent variable, there were four items being operationalized and the sample item includes "ODL is an effective method of learning".

Prior to the distribution of the questionnaire, this research has obtained ethical approval from the Research Ethics Committee, Universiti Teknologi MARA, Malaysia. An online platform was used to collect the data. Since all lectures were conducted via online learning platform, online distribution questionnaire is deemed to be appropriate for the data collection of this study.

For data analysis, SPSS version 23.0 was used. After data cleaning was performed, frequency analysis, reliability and correlation analysis were conducted to find answers to the hypotheses proposed earlier.

7. Findings

7.1. Response rate

The link to the questionnaire was distributed to all students who have undertaken an online course of Strategic Management at the Universiti Teknologi Mara, City Campus Melaka. Of 500 questionnaires distributed, 171 questionnaires were returned and completed. Thus, the response rate yielded 34.2%. Contended by Fan and Yan (2010), response rate for online survey was average at 11%. Thus, obtaining a response rate of 34.2% in this study is deemed sufficient.

7.2. Reliability analysis

All variables were found to possess a high level of consistency. Reportedly, Cronbach's alpha for ODL acceptance has a value of 0.767 (4 items). Between the five independent variables, content and design of courses possess the highest Cronbach's alpha value of 0.906 (6 items), followed by lecturer with a value of 0.900 (7 items), university support with a value of 0.885 (4 items). Access ability (5 items) has the same Cronbach's alpha value with student competency (6 items) of 0.882. Thus, all measurement items used to measure all variables are deemed acceptable for further analysis (Sekaran & Bougie, 2010).

7.3. Demographic analysis

The findings (Table 1) reported that the majority of respondents in this study were female with 88.9% of the sample population. The majority of them aged between 23-24 years old (77.8%), followed by 20-22 years old (17.5%) and 25-26 years old (4.7%). Based on the background of their study, majority of respondents involved in this study were students enrolled into the Bachelor in Human Resource Management with 36.8%. This is followed by 28.1% from the Bachelor in Office Systems Management, 19.9% from Bachelor in International Business and 15.2% were respondents enrolled into the Bachelor in Finance.

Table 1. Demographic profile of respondents (N=171)

Items	Demographic	Frequency	Percentage (%)
Age	20-22 years old	30	17.5
	23-24 years old	133	77.8
	25-26 years old	8	4.7
	27 years and above	0	0
Gender	Male	19	11.1
	Female	152	89.9
Program enrolled	Office System Management	26	28.1
	Human Resource Management	63	36.8
	International Business	34	19.9
	Finance	48	15.2

7.4. Correlation analysis

Table 2. Correlation results

ODL Acceptance (DV)	Lecturer	Student Competency	Content and Design of Courses	Access Ability	University Support
r,	0.590	0.627	0.751	0.635	0.678
p-value,	0.000	0.000	0.000	0.000	0.000
Magnitude	Moderate	Moderate	Strong	Moderate	Moderate
(Dancey & Reidy, 2007)					

Table 2 represents the Pearson correlation analysis on ODL acceptance. The guideline used to interpret the result is based on Sekaran and Bougie (2010). To interpret the strength of the correlation coefficient, guideline from Dancey and Reidy (2007) is followed. From the table, it shows that the lecturer has a significant and positive relationship with ODL acceptance with r = 0.590; p = 0.000, and the strength of the relationship is moderate. Thus, H1 is accepted. The second independent variable also indicates that student competency has a significant and positive relationship with ODL acceptance with r = 0.627; p = 0.000, and the strength of the relationship is moderate. Thus, H2 is supported. The third independent variable, content, and design of courses have a significant and positive relationship with ODL acceptance with r = 0.751; p = 0.000, and the strength of the relationship is strong. Thus, H3 is supported. This is followed by access ability that also has a significant and positive relationship with ODL acceptance with r = 0.635; p = 0.000, and the strength of the relationship is moderate. Thus, H4 is accepted. The final independent variable, university support also has a significant and positive relationship with student satisfaction with r = 0.6784; p = 0.000, and the strength of the relationship is moderate. Thus, H5 is supported.

It is also important to note that, among all five independent variables, content and design of courses has the strongest correlation coefficient towards ODL acceptance. This is followed by university support, access ability, student competency and lecturer.

8. Conclusion

This was a descriptive study conducted among students of Universiti Teknologi MARA. It is focused only towards students who are enrolled and undertaking a strategic management course. These students are able to provide feedback on the variables in this study because they have had at least a semester of studying the course using an online platform or e-learning. Overall, there were 171 respondents involved in this study.

Investigation towards the association between variables indicated that all variables have a positive and moderate to strong influence on ODL acceptance (Dancey & Reidy, 2007). Previous study by Ibrahim et al. (2017) also confirmed that the competency of the students will improve and affect the acceptance of the students towards online learning and increase the level of effectiveness of the medium provided. While past study conducted by Aziz and Yasin (2013) towards university students in Indonesia found that lecturers with great teaching quality influence the effectiveness of online learning and student acceptance towards the subject. Ahmed (2010) confirmed on the significant relationship between course content & design

towards student acceptance. Laily et al. (2013), suggested that access ability and university support are important determinant towards student acceptance as these factors will reduce any hiccup towards the flow of teaching and learning process using online platform. In addition, a study from Arham et al. (2021) also stated the significant of lecturer, content and design of courses, and university support play an important role in ensuring the successful implementation and effectiveness of online learning. Thus, the outcomes suggested that both students and university play an important part in giving the utmost priority to all variables, as each of them can definitely influence the level of students' acceptance and overall effectiveness of online learning.

Sustaining academic performance is one of the biggest challenges faced by higher learning institutions. Having to operate in the pandemic situation, universities are expected to find ways creatively to ensure the quality of deliverance of knowledge to all students. Thus, the outcomes of this study provide a novel knowledge on how to sustain academic performance with online learning as the pandemic situation has been prolonged than expected and now the world is planning towards treating Covid-19 as an endemic situation.

As we are approaching into the third year with the existence of Covid-19, several implications could be highlighted based on the outcomes of this study. First, the content and design of the courses still remain as the most important factor that requires the utmost concern among all academicians. Resource person whom in-charge on the design of the course should adjust the content and assessment to suit with the online learning. Second, as the universities are allowing more students to return to campus and some have taken initiatives to start with hybrid learning (face-to-face being combined with online learning in campus facility), the support system and the access ability also have become detrimental to the effective implementation of online learning. The universities on the hand, should enforce the development of curriculum to be relevant and align with the changes that need to be implemented. As students satisfaction has always becoming top priority for university good governance (Muhsin et al., 2020), poor acceptance of the ODL experience among students will have the tendency to affect their image and reputation.

This research has a number of limitations. First, this research is limited to a single group of students from a single university. Perhaps the study's reach should be expanded to include responses from other universities, both public and private. Second, because this is a cross-sectional study, it only provides a snapshot of data collected at one point in time. Future researcher may consider longitudinal study in conducting the research in the future.

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