

The Effect of Student Readiness on Student Understanding During ODL Sessions in UiTM Melaka

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Abstract

Since the past decade, many universities, and colleges as well as schools around the world have been implementing Open Distance Learning (ODL) in their curriculum as to meet the needs for students to be independent learners. This approach is especially crucial to be adapted in current situation because of the enforcement of the Movement Control Order (MCO) to curb the spread of Coronavirus Disease 2019 (COVID-19) epidemic, where Malaysians are urged to stay at home and segregate themselves socially. The purpose of this study is to examine the effect of student readiness on student understanding during ODL sessions in Universiti Teknologi MARA (UiTM) Melaka. 370 students from various faculties from three different campuses in UiTM Melaka were conveniently selected and responded in this study. The statistical Package for Social Science (SPSS) was used to analyse data through descriptive and correlation analysis. Based on the descriptive analysis, the results revealed that majority of the respondents were female, single, aged between 18-22 years old and currently study at degree's level. Additionally, most of the respondents were students from Faculty of Business and Management at Kampus Bandaraya Melaka. Referring to the correlation analysis, the finding discovered that there is a positive and strong relationship between student readiness and student understanding and it can be summarized that, student readiness influences the dependent variable which is student understanding in UiTM Melaka. The research findings suggest several imperative insights for the respective university about the importance of student readiness during ODL sessions and its connection with content understanding among students.

Keywords: Student Readiness, Student Understanding, Open Distance Learning (ODL), COVID-19, Movement Control Order (MCO)

Introduction

The enforcement of the Movement Control Order (MCO) to curb the spread of Coronavirus Disease 2019 (COVID-19) epidemic has been imposed in Malaysia on the 18th of March 2020, where Malaysians are urged to stay at home and segregate themselves socially. The initial outbreak commenced in late December 2019, with rising number of unknown cause of pneumonia cases linked to a seafood market in the city of Wuhan of Hubei Province (Nishiura, 2020). It was then declared a public health emergency by the World Health Organization (WHO) after being considered as a global health threat (Mahase, 2020).

The imposition of a 14-day MCO has been extended by two weeks and further extension is yet to be announced by Malaysian Prime Minister, Muhyiddin Yassin. Prolonged state of home confinement disrupts the people's daily routine and hence may have implications on their mental health. Previous studies revealed that outbreaks of infection have induced psychological issues (e.g. anxiety, panic disorder, depression) (Qiu, Shen, Zhao, Wang, Xie & Xu, 2020) and negative emotions that were intensified due to stressors like longer duration of quarantine, anxieties of infection, lack of face to face, boredom, frustration, inadequacy of personal space at home, financial loss, insufficient supplies as well as scanty information (Brooks, Webster, Smith, et al., 2020).

With the closure of both public and private educational institutions of higher learning in this challenging time, educators have been instructed to prepare the teaching and learning activities imposed via online communication as a back-up plan if the MCO were to be further stretched. Universiti Teknologi MARA (UiTM) lecturers are no exception, since guidelines have been given out in a form of circular by the Deputy Vice Chancellor, **Prof. Ts. Dr Haji Mohamad Kamal Haji Harun** for these academicians to work from home (WFH) and utilize as many online facilities for flexible mode of delivery and learning relevant to the current scenario.

Literature Review

The interest in the implementation of Open Distance Learning (ODL) has started in the 1990s as it focuses on a more feasible student-centred instruction (Hao, 2016). Since the past decade, many universities and colleges as well as schools around the world have been integrating blended learning or flipped classroom in their curriculum as to meet the needs for students to be independent learners. Nevertheless, it is crucial to impose a balance between teaching instruction, student readiness and the accessibility of technology in helping students to be successful online learners which has always been quite a challenge (Van Rooj & Zirkle, 2016). This has become a bigger challenge now that a pandemic has taken over the whole world where it obstructs the normal face-to-face teaching and learning session, hence, many learning institutions have fully adopted ODL to ensure both students and educators are not left behind (Gorka et. al, 2020). This step was also taken by the Malaysian government due to MCO imposed in March 2020 after the rising number of positive cases of Covid-19 (Awani, 2020).

While blended learning mode has been compulsory for all courses in UiTM since 2013 (Kechil et. al, 2017), a full force ODL is still fairly new and for students to accept it in a short notice has left them bewildered and unprepared. Christensen and Knezek (2018) stated that

in order to have an effective ODL sessions, teachers must be ready to make critical modifications in their pedagogies. This paradigm shift is also an important step for students to take. Owning the latest and most updated technological tools does not guarantee ODL effectiveness (Cochrane, 2014). Senior educators and adult learners may find it challenging to engage in new computer software and mobile apps. Students from rural areas with poor Internet connection may not be able to keep track of the ODL lessons. These are some of the issues frequently associated with e-learning. However, it is undeniable that ODL is not entirely unachievable. With more affordable gadgets available these days, user friendly software tutorials as well as wider Internet coverage, both educators and students have managed ODL successfully. In a research done by van Rooj & Zirkle, 2016, they found that students have achieved a grade of over 60% for their online module quizzes. It was also found that students have higher learning motivation mean scores when engaging in ODL as compared to face-to-face classroom (Geng et. al., 2019).

According to Warner et. al. (1994), who first came forward with the concept of student readiness for online learning; stated that there were three main aspects in measuring student readiness which included students' preference in course modality, technological skills, and the ability to participate in self-directed learning. Even though ODL offers flexible schedule and less travelling, courses like drama class or biology class may not benefit most from lack of face-to-face meeting (Gagne & Shepherd, 2001). Degree programs like history of art and psychology seem to be more fitting as online courses. This is further strengthened by Gregori, Martinez and Moyano-Fernandez (2018) in their study where these two online programs had the lowest dropout rates in a Spanish university while chemistry and engineering courses had the highest dropout rates with over 64% and 61% respectively. Therefore, student readiness in ODL is affected by the courses they are enrolling in the current semester too.

Other than technological skills and course modality, the ability to be independent learners is also important in determining the effectiveness of ODL. In an extensive study done by Yilmaz (2017), he found close correlation between student's e-learning readiness and motivation in e-learning. His findings indicate that the higher motivation the students have towards e-learning, they have better self-directed learning skills and become more satisfied with the courses. In addition, encouraging online interactions between teacher and student as well as student and student has been reported to contribute well in motivating students to participate in ODL. On the other hand, lack of self-discipline may also hinder students to favour ODL, as discussed by Hao (2016) where some students were reluctant to prepare for ODL lessons and much prefer face-to-face lectures. Some other concerns included the quality of group discussion and "free-riders" in their group projects. A few others mentioned ODL was time consuming as there were too much preparations especially with multiple courses in a semester.

E-learning, blended learning, flipped classroom and ODL have long been implemented in the education sector. The COVID-19 pandemic that has caused a shutdown in learning institutions has further proven the much needed of ODL as to avoid jeopardizing students' study developments. ODL provides great flexibility and convenience in learning (Viola, Saeki & Hendricker, 2019); Shachar and Newmann (2003) believed ODL is as effective as face-to-face classrooms. However, challenges like low technology skills and acceptance, poor time management as well as the enrolled programs are ought to hamper student readiness in ODL.

Hence, this research paper is determined to investigate student readiness level and listen to their voices in order for ODL to be conducted effectively and successfully.

Methodology

Research methodology comprised of vital steps to conduct the research and it was significant to discover the most relevant technique in order to get efficient outcomes to respond to the problem statement of the research (Kothari, 2004). The purpose of this study is to investigate the effect of student readiness on student understanding during Open Distance Learning (ODL) in UiTM Melaka. The primary data were obtained through questionnaires that have been administered to the diploma and degree students from UiTM Melaka who were studied in three different campuses which include UiTM Alor Gajah, UiTM Melaka City Campus as well as UiTM Jasin. The survey has been carried out conveniently by using Google Form to acquire the responses from the respondents. The entire population for this study was 10,709 students who came from 7 different faculties that available in UiTM Melaka which include Academic of Language Studies, Faculty of Art and Design, Faculty of Computer Science and Mathematics, Faculty of Business and Management, Faculty of Communication and Media Studies, Faculty of Hotel and Tourism Management, and Faculty of Accountancy. The sample size for this study was 370 students which have been identified mainly by referring to the Krejcie and Morgan's sample size determination table. A five-point Likert-based scales was used to represent most suitable answer of the from the respondents. The description of the Likert scales used include, 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly Agree. To test the reliability of the answers of the questionnaires, reliability analysis is used in the study. The reliability analysis has been performed by referring to the rule of thumb made by Perry, Charlotte, Isabella, and Bob (2004). Both independent (student readiness) and dependent (student understanding) variables have been tested using SPSS. 24.0. Besides, the descriptive, correlational, and regression analyses also had been conducted by the researchers to obtain the results for this study.

Findings and Discussions

Descriptive Analysis

This data was collected from 370 respondents using questionnaires. This study represented students from various faculties in UiTM Melaka. Majority of respondents were female (n=269, 72.7%), and the rest were male (n=101, 27.3%). From all of the respondents, majority were single (n= 368; 99.5%) and only 2 of them; 0.5% were married. The biggest respondents were from Faculty of Business and Management (n=147; 39.7% respectively), followed by Faculty of Science and Mathematics (n=110; 29.7%), then Centre of Language (n=81; 21.9%), Faculty of Hotel and Management (n=13; 3.5%), Faculty of Art and Design (n=11; 3%), Faculty of Accounting (n=5; 1.4%) and Faculty of Media and Communication (n=3; 0.8%). Overall, student from Kampus Bandaraya Melaka is the highest number of respondents (n=163; 44.1%), Kampus Jasin (n=114, 30.8%) and Kampus Alor Gajah (n=93; 25.1%). Further, majority of the respondents were study degree (n=241; 65.1%) and diploma (n=129; 34.9). The highest majority age were 18 to 22 years (n=307; 83%), followed by 23 to 27 years (n=61; 65%) and 28 to 32 years (n=2, 0.5%).

Reliability Analysis

The internal consistency reliability analysis of all measurement items was measured through Cronbach Alpha (α). In this study, the reliability analysis has been conducted by referring to

the rule of thumb made by Perry et. al. (2004), who indicated that Cronbach's Alpha (α) 0.90 and above shows excellent reliability, 0.70 to 0.90 shows high reliability, 0.50 to 0.70 shows moderate reliability and 0.50 and below shows low reliability. In this study, a reliability test was conducted to see the reliability of the constructs of the independent variable (student readiness) and dependent variable (student understanding).

Table 1 below shows the results of the Cronbach Alpha value of the reliability analysis and it indicates all scales used in this study are valid and acceptable.

Table 1.

Reliability Analysis Result

NO.	CONSTRUCT	CRONBACH ALPHA VALUE
1.	Student readiness (Independent Variable)	0.876
2.	Student Understanding (Dependent Variable)	0.866

Correlation Analysis

Table 2 shows the relationship between variables. In order to examine the relationship between student readiness and student understanding in this study, it was interpreted by referring to the Strength of Correlation Interpretation guidelines by Salkind (2014). Based on the result, it signifies that there is a positive and strong relationship existed between student readiness and student understanding ($r=0.743$, $p<0.01$). The p value that is lower than 0.01 represented that there is significant relationship between student readiness and student understanding. Therefore, the results implied that student readiness can positively influence student understanding about the content of learning activities that have been provided by their lecturers during ODL sessions.

Table 2.

Correlation Analysis Result

		Student Readiness	Student Understanding
Student Readiness	Pearson Correlation Sig. (2-tailed) N	1	.743**
			.000
		370	370
Student Understanding	Pearson Correlation Sig. (2-tailed) N	.743**	1
		.000	
		370	370

**. Correlation is significant at the 0.01 level (2-tailed).

Conclusion and Recommendations

The result of the study has found that there is a strong significant relationship existed between student readiness ($r=0.743$, $p<0.01$), and it can be concluded that student readiness influences the dependent variable which is student understanding. According to the result, it also indicates that student readiness provides high Pearson correlation which concludes that the students from all UiTM Melaka campuses were not fully prepared mentally and physically for ODL approach. They felt that learning through ODL was very incumbering and the teaching contents were difficult to understand especially for subjects related with calculations.

Based on the findings, the researchers believe that the student readiness is low since MCO is abruptly executed and students are required to leave their hostels within short notice. Therefore, most of them have lack of facilities such as laptop, study materials, textbooks and all the sources of learning. In addition, recurring obstacles faced by universities or lecturers include infrastructure and students' limited access to computer (Iqbal & Ahmad, 2010; Adah, 2012) that impede ODL sessions. Siritongthaworn et. al (2006) added that, student reported having limited access to computer and inconsistent Internet connection especially at home. According to Vate (2007), students also had difficulty accessing online materials due to the lack of appropriate software. The situation became worse for some students when they were at home since the areas had very limited Internet access and most of them were using outdated computer systems.

Researchers believe that another strong reason for student unreadiness is lack of preparation among the students which can be seen since majority of them did not bring home their textbooks, class notes and other learning materials. This situation happened because of declaration of MCO has been made in a short notice by our Prime Minister since the number of COVID-19 tremendously increased. Students rushed home thinking it would only be for two weeks, hence, only brought back personal belongings excluding their textbooks and notes. Whilst at home, some students had other commitments such as fulfilling house chores, interference from family members as well as lack of self-discipline which delay the ODL tasks provided by their lecturers. Poor time management and technological skills also affect their study and this situation caused students to feel pressured and stressful especially when it involved group projects and tests. There were also students who needed to share computers or laptops with their siblings who also needed to participate in ODL as every learning institution is currently bound to ODL.

Hence, it can be concluded that students are not physically and mentally ready for ODL this semester. Both lecturers and students struggle to ensure their ODL sessions to be effectively and successfully implemented. There are also students who have voiced out their dissatisfactions towards university administrators as ODL is decided without weighing in their viewpoints and readiness. Nevertheless, it is understood by the researchers that any decisions made by the university administrators are also based on the consequences on students' end as students are given the options to further continue the semester via ODL or to postpone it.

For future research, it is recommended for researchers to have a larger population of the study by involving other universities and not only focusing on one university, so that the result of the study can be generalized. Additionally, it is suggested for universities to find the best solution for the students to overcome their problems in ODL in order to ensure ODL influence students positively. Last but not least, future researchers should also investigate or examine several factors other than student readiness that affect student understanding during ODL sessions.

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References

Addah, J. (2012). Computer Literacy and E-Learning: Attitudes among First Year Students in a Ghanaian Medical School. *International Journal of Computer Applications*, 51: 22

Christensen, R., & Knezek, G. (2018). Reprint of Readiness for integrating mobile learning in the classroom: Challenges, preferences and possibilities. *Computers in Human Behavior*, 78, 379-388.

Cochrane, T. (2014). Mobile Social Media as A Catalyst for Pedagogical Change. *Proceeding of Edmedia: World Conference on Educational Media and Technology 2014*, pp. 2187-2200.

Gagne, M., & Shepherd, M. (2001). Distance learning in accounting. *The Journal (Technological Horizons in Education)*, 28(9), 58.

Geng, S., Law, K. M., & Niu, B. (2019). Investigating self-directed learning and technology readiness in blending learning environment. *International Journal of Educational Technology in Higher Education*, 16(1), 17.

Gregori, P., Martinez, V., & Moyano-Fernandez, J. J. (2018). Basic Actions to Reduce Dropout Rates in Distance Learning. *Evaluation and Program Planning*, 66, 48-52.

Hao, Y. (2016). Exploring Undergraduates' Perspectives and Flipped Learning Readiness in Their Flipped Classrooms. *Computers in Human Behavior*, 59, 82-92.

Iqbal, M. J., & Ahmad, M. (2010). Enhancing Quality of Education through E-Learning: The Case Study of Allama Iqbal Open University. *Turkish Online Journal of Distance Education*. 11, 84-97

Kechil, R., Mydin, A. M., Mohammad, W. A. W., & Libasin, Z. (2017). The Impact of Blended Learning (BL) in UiTM Cawangan Pulau Pinang. *International Academic Research Journal of Social Science*, 3(1), 239-244.

Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. 2nd Ed., New Age International Publishers.

Mahase, E. (2020). China Coronavirus: WHO Declares International Emergency as Death Toll Exceeds 200. *BMJ Clin. Res. Ed.*, 368, m408.

Perry, R. H., Charlotte, B., Isabella, M., & Bob, C. (2004). SPSS Explained.

Salkind, N. J. (2014). Exploring Research. Edinburgh Gate: A Skill Building Approach, (4th ed.), New Delhi: John Wikey & Sons.

Shachar, M., & Newmann, Y. (2003). Differences Between Traditional and Distance Education Academic Performances: A Meta-Analytic Approach. *The International Review of Research in Open and Distributed Learning*, 4(2).

Siritongthaworn, S., Krairit, D., Dimmit, N. J., & Paul, H. (2006). The Study of E-Learning technology Implementation: A Preliminary Investigation of Universities in Thailand. *Education and Information Technologies*. 11(2): 137-160.

Van Rooij, S. W., & Zirkle, K. (2016). Balancing pedagogy, student readiness and accessibility: A case study in collaborative online course development. *The Internet and Higher Education*, 28, 1-7.

Vate-U-Lan, P. (2007). Readiness of E-Learning Connectivity in Thailand (Conference Paper Presented at the Fourth International Conference on E-Learning for Knowledge-Based Society, November 18-19. Bangkok, Thailand).

Viola, S., Saeki, E., & Hendrick, E. (2019). Distance education in graduate training programs: Lessons learned from school psychology students. *Journal of Educators Online*, 16(2).

Warner, D., Christie, G., & Choy, S. (1998). Readiness of VET clients for flexible delivery including on-line learning. *Australian National Training Authority*.

Yilmaz, R. (2017). Exploring the Role Of E-Learning Readiness on Student Satisfaction and Motivation in Flipped Classroom. *Computers in Human Behavior*, 70, 251-260.