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ONLINE LEARNING READINESS AMONG HIGHER INSTITUTION STUDENTS DURING COVID-19 PANDEMIC

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Abstract

Online learning has become a new norm to the education system because the traditional classes have to be postponed from early childhood to tertiary levels due to the Covid-19 pandemic. Online learning platforms are being used widely worldwide to ensure students are not left behind. This study investigates the online learning readiness among higher institution students in Selangor during the Covid-19 pandemic. The research design of this study is descriptive, which uses a quantitative method by distributing a set of 3-point Likert scale questionnaires using Google Forms. It consists of two parts: Online Learning Readiness and Relationship Between Readiness and Performance. The first part consists of six dimensions: expectations, self-direction, learning preferences, self-study habits, technology skills, and hardware/software skills, while the second part includes six questions. 120 higher institution students, which are 93 female students and 27 male students, were involved in this study as the respondents. The findings revealed that the majority of the respondents shared positive responses regarding online learning readiness and also a positive relationship between online learning readiness and performance. This shows that the respondents are ready to participate in online learning during the Covid-19 pandemic.

Keywords: Covid-19 pandemic, online learning readiness, Open Distance Learning, performance

INTRODUCTION

The whole world has been struggling after the deadly and infectious disease, which is widely known as Covid-19 and also known as CoronaVirus exists. It is a severe acute respiratory

syndrome coronavirus 2 (SARS-CoV-2) (Remuzzi & Remuzzi 2020), which at first was classified as an epidemic because of its origins in Wuhan, China (Chung et al., 2020). However, soon it was declared a pandemic as the virus spread like wildfire and affected over 100 000 people in 100 countries (Remuzzi & Remuzzi, 2020). Since then, many countries have gone through mass quarantines and stay-at-home orders since March 2020 (Mishra et al., 2020). Safety measures such as lockdown are a protocol implemented by the government to slow down the spread of Covid-19 disease by confining people's movements to a specific area from where they live. All sectors, from businesses to education, would have to halt as the word lockdown has become a common phrase worldwide.

In order to help ease the burdens of the frontliners, the Malaysian government decided to take emergency protocol to handle this pandemic outbreak. Instead of a total lockdown in Malaysia, the Malaysian government enforced a 14-day Movement Control Order (MCO) from March 18 to 31 to help flatten the curve of the Covid-19 infection (New Straits Time, 2020). According to the World Health Organisation Malaysia (WHO) (2020), the borders are closed, and only Malaysians are allowed to enter the country. Furthermore, a testing strategy for the Covid-19 disease has been developed. People who have close contact with the known clusters of cases will be traced regardless of whether they have symptoms or are asymptomatic (WHO, 2020). Every sector is affected by this global pandemic, including the education sector, from small to big businesses. In education, the first university to cancel all physical lectures for the 2020-21 academic year in the United Kingdom is The University of Cambridge due to the coronavirus pandemic (Europe News, 2020). In just days, many authorities in other countries decided that physical lectures and outdoor activities for primary, secondary, and tertiary levels should stop to reduce the spread of the Covid-19 disease, including Malaysia. This can be seen as not too long after, the Prime Minister of Malaysia also announced that all institutions of higher learning and skills training institutions nationwide would also be closed during MCO (New Straits Time, 2020).

According to New Straits Times (2020), digitisation in higher education has spiked tremendously and made a significant impact on the education landscape in Malaysia due to the impact of the Covid-19 pandemic. Teachers and students all over the globe are forced to turn to and use online learning (Lederman, 2020) as the main medium to replace physical lectures as other possibilities are not effective, so new ways need to be adapted and become the new norm in order for the world to continue after it abrupt stop due to the pandemic. The approval of conducting online teaching or e-learning for all tertiary level institutions in Malaysia had

been granted by the Higher Education Ministry (MOHE) to reduce the mass gathering of students (Malay Mail, 2020). In only 30 years after Sir Tim Berners-Lee invented the World Wide Web (WWW) in 1989 while still hired by CERN, it has gone through some major changes as the Web purpose initially was for scientists in universities and institutes around the globe to have easier access in automated information-sharing with each other. Thus, Sir Tim Berners-Lee, who was a British scientist, decided to invent the Web to meet popular demand. In just 30 years, the Web has paved the way and opened up opportunities for online learning to emerge and revolutionise further improvements with the help of the gradually increasing high-speed internet technology.

Even after the Covid-19 disease decreased and was finally under control for some time after the MCO, it slowly spiked again. "The Ministry of Higher Education announced that all public and private universities in Malaysia are to conduct teaching and learning activities via online learning until the end of December 2020" (Malaysian Ministry of Higher Education, 2020). Online Distance Learning (ODL) has become the new norm, and educators in various levels and the students need to adapt and get used to these new circumstances as soon as possible. According to Allam et al. (2020), a method where students from anywhere in the world can access and complete their studies through lectures that are being broadcast or lessons conducted by correspondence without the need to attend physical classes in a school or college is the definition of distance learning. ODL could be done when every student is able to access lectures, and all of the requirements are ready as emphasised by the government. ODL, on the other hand, adds the usage of technologies such as laptops or smartphones with the combination of high-speed internet to replace the need for students to attend classes in their university but instead can be accessed from the comfort of their home.

Rozana Sani (2020) stated that although people expect university students that are going through remote learning at the moment due to the Covid-19 pandemic to be comfortable and able to embrace it when Higher ED interviewed them, the students reveal that they have a few concerns about the fully online teaching and learning. She also added that a couple of students named Aisyah Raihana from Universiti Teknologi Mara Shah Alam and Shalini Magandran from Tunku Abdul Rahman University College stated that their concern was that some students would be left out if they were faced with an unstable internet connection. It will cause trouble to the students and cause problems to the other group members or classmates when they have to present their task as it would not be going smoothly and will affect the students'

performance. According to The Star (2020), Malaysians had opened their eyes to the lack of internet connectivity in some parts of the country, thanks to a student named Veveonah Mosibin from Universiti Malaysia Sabah who needed to find a place under a tree to get an Internet connection to sit for the examination. According to Rozana Sani (2020), people tend to expect that because university students nowadays have been exposed to technology since they were young, ODL that had been the new norm should be easy for them to pick up and continue to use until the end of the year.

The purpose of this study is to investigate the online learning readiness among higher institution students during the Covid-19 pandemic and the relationship between online learning readiness and students' performance during the Covid-19 pandemic.

The research questions of this study are:

1. What is the student's readiness in online learning during the Covid-19?
2. What is the relationship between online learning readiness and students' performance during the Covid-19 pandemic?

Literature Review

According to Allam et al. (2020), after the CoronaVirus outbreak attacked Malaysia in early 2020 and the government decided to implement the MCO, MOHE decided to continue the education from traditional face to face classes to ODL after its abrupt halt for two weeks as an effort to reduce the transmissions rate of the disease. At the beginning of the MCO, MOHE has allowed all tertiary level education institutions to conduct ODL to reduce the spread of the Covid-19 disease. This has resulted in the increased use of digitalisation in higher education as it accelerated in speed after the arrival of the Covid-19 pandemic in Malaysia (New Straits Time, 2020). Based on previous studies done by the other researchers, five dimensions of the conceptual framework regarding online learning readiness has been developed and validated by Hung et al. (2010) which are self-directed learning (SDL), motivation for learning, computer/Internet self-efficacy, learner control, and online communication self-efficacy.

In Hung et al.'s (2010) study, the five dimensions were adapted and developed from Garrison (1997), Guglielmino (1977), McVay (2000, 2001), and a few more previous researchers' studies. This research adopted the five dimensions to fit into the study. One of the

adopted dimensions from the study implemented in this research is SDL. Knowles stated that SDL is the initiatives taken by the individuals in understanding the learning requirements, setting their target, selecting the necessary resources for learning, using appropriate approaches, and assessing their results were defined as the process of SDL (as cited in Hung et al., 2010, p. 1081). The result disclosed low mean scores for SDL compared to the other dimensions. One of the examples of this item is "I am good at setting goals and deadlines for myself". According to Lee et al. (2009) study, SDL has three key constructs: self-control, desire to learn, self-management, and computer technology usage. It is mentioned in the findings of this research that all factors correspond positively to the usage of computers. It was also found that students' attitude towards computer and technology skills as well as their lack of it (as cited in Chung et al., 2020, p. 48). Computer and technology skills are also crucial in ODL (Hung et al., 2010) as computers and the internet lead to self-efficacy. The results found that the tertiary level students were confident with their computer and network skills. An example of the item included in the research is "I am fairly good at using a computer and online learning platforms".

Another dimension that is included in this study is learning motivation. Hung et al. (2010) mentioned that intrinsic or extrinsic motivation possessed by the students would significantly influence the students' performance. The research findings revealed that students have kept an open mind and were trying to adapt to ODL. Alam et al. (2020) mentioned that the motivation for learning was essential as it could determine the success or failure of ODL. The results found that motivation for learning was low in this study. Knowles mentioned that to strengthen or maintain the motivation level for learning, the students need to have a deep passion for learning and become active learners (as cited by Hung et al., 2010, p. 1082). The example for this item is "I am self-motivated". Next, online communication self-efficacy is also included in the research as one of the items is "I am comfortable communicating through writing". During ODL, students are limited to communications through online platforms with the lecturers and peers, where most of the students could express or ask questions only through writing. It was found in the results of Hung et al.'s (2010) study that students were comfortable and confident in online communication through writing and the self-efficacy for it was high. McVay mentioned in his study that the interaction between the students themselves and with the lecturers is through online threaded discussion, which occurs in asynchronous ways (as cited in Hung et al., 2010).

This research adapted from the five dimensions developed by Hung et al. (2010), where self-directed learning, motivation for learning and technology, and internet self-efficacy are included in this research in order to find out the online learning readiness of the students and the relationship between online learning readiness with the students' performance. Suresh et al. (2018) researched to find out the effect of online learning on the academic performance of undergraduate students. The results acquired from the research were that the undergraduate students had a positive influence on the academic performance during online learning. In Cigdem and Ozturk's (2016) research, the purpose of their study was to investigate the relationship between certain factors of online learning readiness such as self-directed learning, motivation for learning and computers, and internet self-efficacy with the learners' end-of-course achievements. The findings showed that students' motivation was higher than the other factors in the descriptive results. For the inferential results, it can be seen that the relationship between the students' grades was positive with their computer and Internet self-efficacy and self-directed learning by the end of the course. The most significant predictor for the students' achievements at the end of the course was the students' self-direction for online learning. The others did not necessarily predict the students' end-of-course achievement.

According to Lee et al. (2009), many researchers stated that the results for online learning are mostly positive as it is also proven that it has a positive effect on students' achievement. Torun (2020) researched the relationship between online learning readiness and the academic performance of tertiary level students during online learning. The findings showed that self-directed learning was the most significant predictor, and motivation for learning was also a predictor of students' academic performances during online learning. It is mentioned in Cigdem and Ozturk's (2016) research, most researchers and educators found that successful students tend to have significant self-direction and high motivation during online learning. Baeten et al. stated in their study that students that are high in motivation could achieve better results during online learning as it appears to lean more towards a student-centered environment (as cited in Cigdem and Ozturk, 2016)

Warner, Christie, and Choy invented the concept of OLR in 1998, which includes three aspects: students' preferences, confidence in using electronic communication, and ability to participate in student-centered learning (Hung et al., 2010). In 2000, McVay proposed a 13-item instrument to measure online learning readiness that focuses on students' behaviour and

attitudes (Hung et al., 2010). Torun (2020) mentioned that Hung et al. added more online learning readiness research dimensions. The updated OLRS that includes the five dimensions (motivation for learning, self-directed learning, computer/internet self-efficacy, online communication self-efficacy, and learner's control) suggested by Hung et al. (2010) is being used widely by the other researchers. The diagram below shows the relations between online learning readiness and performance in this study.

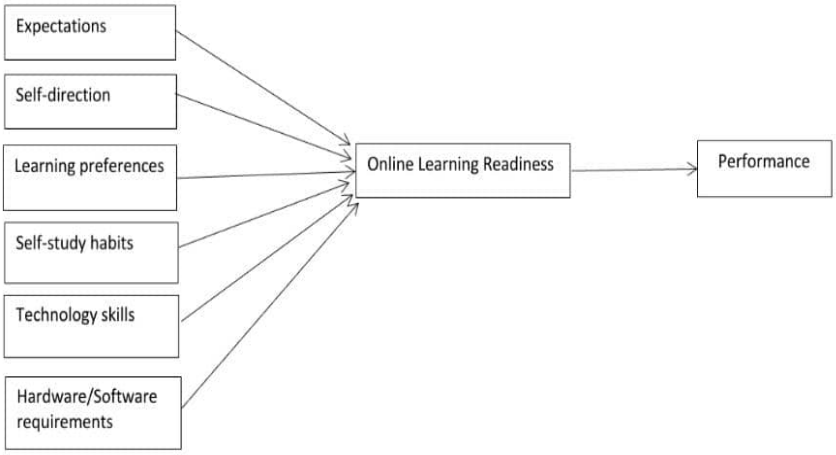

Figure 1: Adopted from Hypothesized Model of Relations between E-learning Readiness and Academic Achievement (Torun, 2020).

Linda Harasim developed a theory called Online Collaborative Learning (OCL) in 2012. OCL emphasizes Internet usage in education and provides a model that needs students to be active in learning and work together with other students and teachers (Picciano, 2017). In this theory, the teacher acts as a bridge to deliver the knowledge to the students and represent a knowledge community. OCL highlighted three stages of group discourse: Idea Generating, where the students activate their thinking and brainstorm their ideas. At the same time, the teachers facilitate the students to generate ideas and collaborate with their peers. Idea Organizing where the students discuss the new or different ideas from their friends and experience the process of agreement and disagreement before they select the most vital position and finally the Intellectual Convergence, which is the reflection of the previous stages of the knowledge or ideas that have been discussed together (Harasim, 2012).

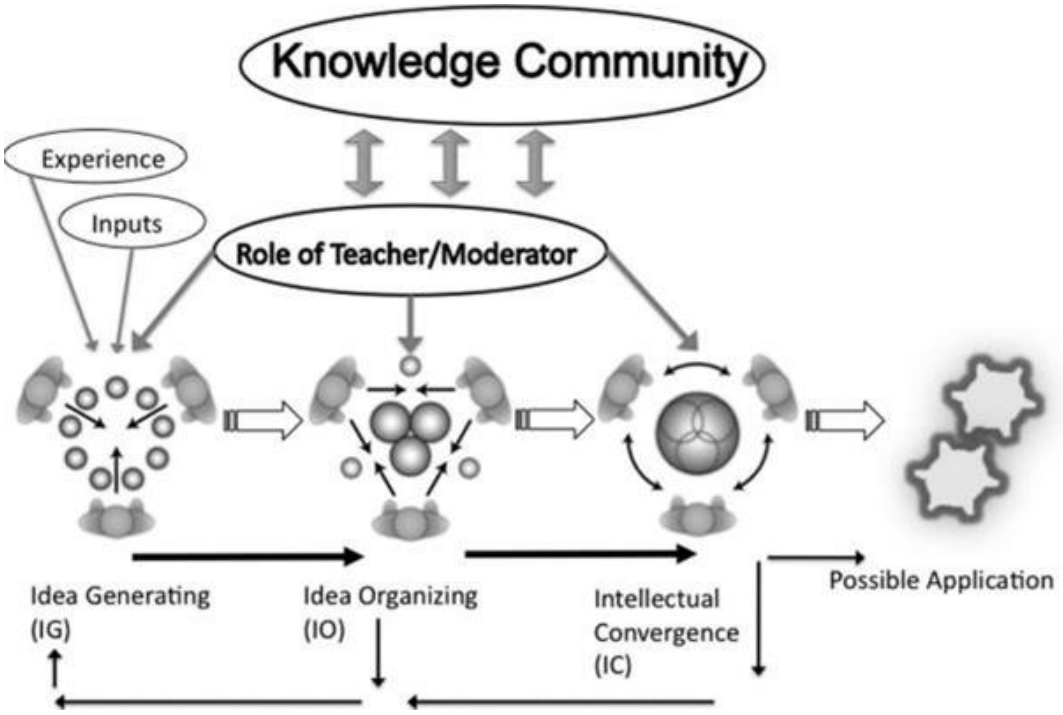

Figure 2: Harasim's pedagogy of group discussion (Pressbooks)

OCL is related to this research objective to know the students' readiness level in online learning. This theory highlighted Internet usage in online education, as Picciano (2017) mentioned. Based on the theory, it can be a benchmark to measure whether learning has taken place or not. As Suprabha et al. (2017) mentioned, students need to have basic skills and internet speed, affecting their readiness for online learning. Low interaction and collaborative exchange between students and their peers and lecturers will influence students' readiness for online learning (Allam et al., 2020).

METHODOLOGY

There were 120 higher institution students involved as the respondents for this research. 93 were female students, while the remaining 27 were male students. 98 respondents were taking Bachelor Degrees, 21 respondents were doing Diploma courses, and 1 Postgraduate student. The research design for this research is descriptive research that uses a quantitative method. A set of questionnaires was distributed to the respondents to collect the data. The questionnaire

was adapted from Hung et al. (2010) and Vicki Williams of Penn State University.

The set of questionnaires consists of 3 sections: demographic background, online learning readiness, and the relationship between readiness and performance. The demographic background consists of age, gender, level of education, and year of study. The second section, online learning readiness, consists of 6 parts which are expectations, self-direction, learning preferences, self-study habits, technology skills, and hardware/software requirements. Each part consists of four questions. The total number of questions for this section contains 24 questions. The third section in the questionnaires is the relationship between readiness and performance. There are six questions in this section. The respondents needed to answer the questionnaires by choosing one answer from the 3-point Likert scale: Agree, Not Sure, and Disagree.

In order to collect the data for this research, the questionnaire was distributed via Google Forms. The researchers approached the respondents via WhatsApp Messenger and Instagram. The respondents were given the link to Google Forms. The researchers approached the targeted respondents via personal message and spread the link to many group chats in Whatsapp Messenger. Every respondent had to complete all of the questions in the questionnaire before they submitted their response. The researchers took two days to reach 120 respondents. After the data had been collected, the data analysis was done by tabulating the data from Google Forms. The data were tabulated using percentages to see the overall responses from the respondents. Pie charts are also used in analysing the data.

FINDINGS

Online Learning Readiness

Table 1 shows the findings for online learning readiness divided into six parts: expectations, self-direction, learning preferences, and self-study habits, technology skills, and hardware/software requirements. The first part is the expectations of the respondents towards online learning. The majority of the respondents, 117 (97.5%), understood that learning is their responsibility, while only 3 (2.5%) respondents were not sure about it. They also understood

that ODL is more difficult than a normal class as 99 (82.5%) respondents agreed with it, while 12 (10%) of the respondents were not sure. The remaining 9 (7.5%) respondents shared that an online class is easier than a normal class.

Table 1: Online learning readiness

Online Learning Readiness	Agree	Not Sure	Disagree
EXPECTATIONS			
I understand that learning is my responsibility.	97.5% N=117	2.5% N=3	0% N=0
I understand that an online class is not easier than a traditional class.	82.5% N=99	10% N=12	7.5% N=9
I understand that I cannot complete an online course with a smartphone.	78.3% N=94	11.7% N=14	10% N=12
I am willing to have online discussions with people I may never meet in person.	64.2% N=77	23.3% N=28	12.5% N=15
SELF-DIRECTION			
I am good at setting goals and deadlines for myself.	46.7% N=56	40.8% N=49	12.5% N=15
I am self-motivated.	41.7% N=50	42.5% N=51	15.8% N=19
I can work on projects and complete them.	84.2% N=101	13.3% N=16	2.5% N=3
I can keep myself on track and meet deadlines.	73.3% N=88	18.3% N=22	8.3% N=10
LEARNING PREFERENCES			
I enjoy reading and can retain information by studying in this manner.	42.5% N=51	40.8% N=49	16.7% N=20
I can learn from auditory content, such as lectures, recordings, or podcasts.	63.3% N=76	17.5% N=21	19.2% N=23
I am comfortable communicating through writing.	55.8% N=67	24.2% N=29	20% N=24

I can learn on my own but can benefit from working in a group as well.	82.5% N=99	6.7% N=8	10.8% N=13
SELF-STUDY HABITS			
I have a dedicated study space where I can read and work on assignments without distraction.	61.7% N=74	10% N=12	28.3% N=34
I can spend 18 hours per week on online learning	20.8% N=25	30% N=36	49.2% N=59
I can organise my coursework in a computer folder for easy reference.	67.5% N=81	20% N=24	12.5% N=15
I can dedicate a specific time of day or night to work on my studies.	65.8% N=79	24.2% N=29	10% N=12
TECHNOLOGY SKILLS			
I am fairly good at using a computer and online learning platforms.	72.5% N=87	18.3% N=22	9.2% N=11
I am comfortable using web browsers and navigating the Internet.	85% N=102	11.7% N=14	3.3% N=4
I can download files and add attachments.	94.2% N=113	4.2% N=5	1.7% N=2
I can use Google Drive (Google Docs, Google Sheets, etc)	96.7% N=116	1.7% N=2	1.7% N=2
HARDWARE/SOFTWARE REQUIREMENTS			
I have a computer that runs reliably on Windows or Mac OS.	93.3% N=112	4.2% N=5	2.5% N=3
I have Internet access with a fairly fast, reliable connection.	60.8% N=73	18.3% N=22	20.8% N=25
I have a printer.	65% N=78	2.5% N=3	32.5% N=39
I have headphones or speakers and a microphone if a class has a videoconference.	84.2% N=101	2.5% N=3	13.3% N=16

There are 94 (78.3%) respondents who shared that they could not complete the online classes with a smartphone. 11 (14%) respondents were not sure, and 10% (12) of the respondents disagreed that they could not complete the online classes with a smartphone. 64.2% or 77 of the respondents were willing to discuss virtually with people they may never meet in real life, 23.3%, which equals 28 respondents, were not sure, and the remaining 12.5% (15) respondents were not willing to do it.

The second part, self-direction, revealed that 56 (46.7%) of the respondents were good at setting goals and deadlines for themselves, while 40.8% (49) were not sure, and the remaining 12.5% (15) of the respondents were not good at setting goals and deadlines for themselves. Only 50 (41.7%) respondents were self-motivated in online learning. 42.5% (51)of the respondents were not sure whether they were self-motivated or not, and 15.8% (19) of the respondents said that they were not self-motivated in online learning. Most of the respondents, 84.2% (101), can work on projects and complete them. There were 16 (13.3%) respondents not sure whether they could work on projects and complete them, while only 3 (2.5%) respondents were unable to work on projects and complete them. 73.3% (88) of the respondents can keep themselves on track and meet deadlines. 18.3% (22) of the respondents were not sure about their ability to keep themselves on track and meet deadlines, while 10 (8.3%) respondents could not keep themselves on track and meet deadlines.

Next, for learning preferences, only 42.5% (51) of the respondents enjoyed reading and can retain information by studying in online learning. 40.8% (49) of the respondents were not sure about it, and the remaining 16.7% (20) of the respondents did not enjoy reading and could not retain information by studying in online learning. 63.3% (76) of the respondents were able to learn from auditory content. 17.5% (21) of the respondents were not sure about it, while the remaining 19.2% (23) of the respondents shared that they cannot learn from auditory content. 55.8% (67) of the respondents were comfortable communicating through writing, while 24.2% (29) were not sure, and 20% (24) of the respondents were not comfortable communicating through writing. Most of the respondents, 82.5% (99), were able to learn on their own and also in a group, while 8 out of 120 respondents (6.7%) were not sure about it and the other 10.8% (13) of the respondents disagreed that they were able to learn on their own and also in a group.

There were 61.7% (74) of the respondents who had a study area where they were able to attend ODL and complete their tasks. 10% (12) of the respondents were not sure about it, and there were 28.3% (34) of the respondents who did not have a study area where they were

able to attend ODL and complete their tasks. Only 20.8% (25) of the respondents can spend 18 hours per week on online learning, while 30% (36) of the respondents were not sure of it. Near half of the respondents, 59 (49.2%), were unable to spend 18 hours per week on online learning. 67.5% (81) of the respondents can organise their assignments in the computer folder. 20% (24) of the respondents were not sure about the statement, and the remaining 12.5% (15) were unable to organise their assignments in the computer folder. 65.8% of the respondents, which equals 79 respondents, can allocate their study time, while 24.2% (29) of the respondents were unsure whether they were able to allocate their study time. Only 12 (10%) respondents were unable to perform it.

The fifth part, technology skills while participating in online learning, shows that 72.5% (87)of the respondents were fairly good at using a computer and online learning platforms. 18.3% (22) of the respondents were unsure about it, and the remaining 11 (9.2%) respondents were not good at using a computer and online learning platforms. 85% (102) of the respondents were comfortable using web browsers and navigating the Internet. 11.7% (14) of the respondents were unsure whether they were comfortable or not in using web browsers and navigating the internet. Only 3.3% of the respondents, equals 4, confessed that they were not comfortable using web browsers and navigating the internet. The majority of the students, 113 (94.2%), can download files and add attachments. 4.2% (5) of the respondents were not sure about it, and only 2 (1.7%) respondents could not download files and add attachments. 96.7% (116) of the respondents were able to use Google Drive. 2 (1.7%) respondents were unsure about their ability to use Google Drive, and the other 2 (1.7%) respondents shared that they were unable to use Google Drive.

The final part for the online learning readiness is hardware/software requirements. 93.3% (112) of the respondents answered that they have a computer. 4.2% (5) of the respondents were unsure that they had a computer, while 3 (2.5%) respondents did not have a computer. 60.8% (73) of the respondents have fast Internet access. 18.3% (22) of them were unsure about their internet access, while 20.8% (25) of the respondents answered that their internet connection was poor and unreliable. 65% (78) of the respondents had a printer, while 32.5% (39) did not have one. 3 (2.5%) respondents were unsure about having a printer. 84.2% (101) of the respondents agreed that they have headphones or speakers for ODL, while 3 out of 120 (2.5%) respondents were unsure about it, and the remaining 13.3% (16) of the respondents did not have any headphones or speakers for ODL.

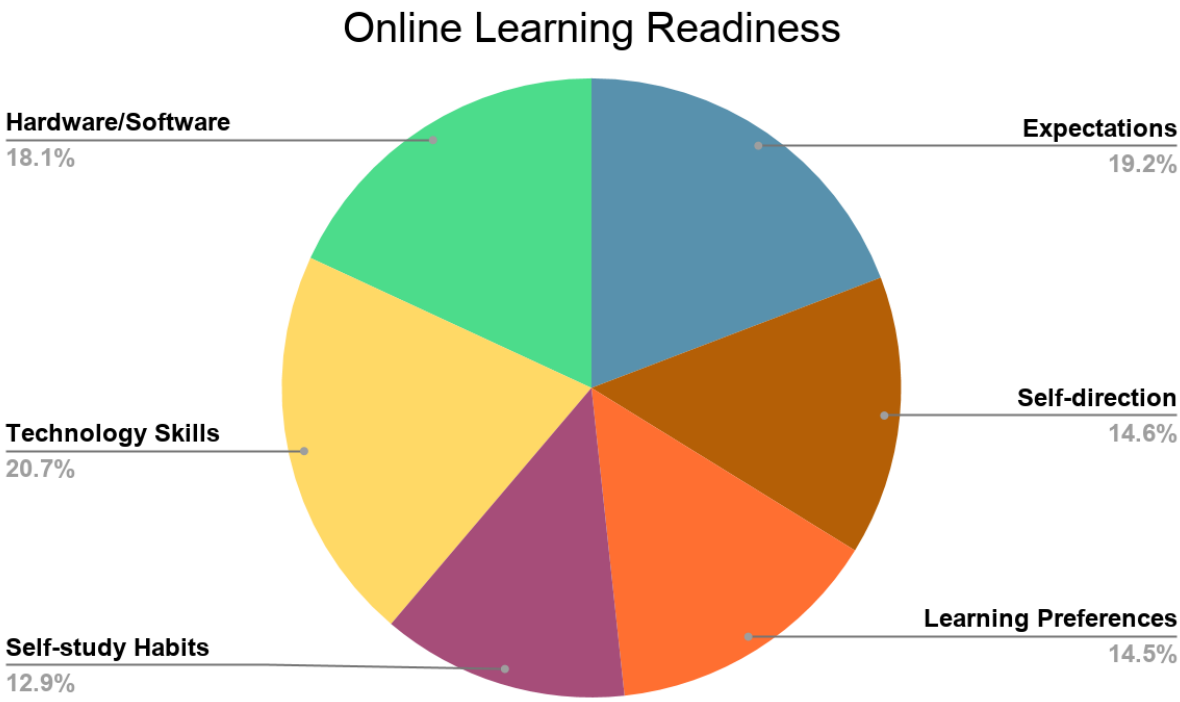

Figure 3: Online Learning Readiness

Figure 3 illustrates online learning readiness. About 20.7% of all respondents showed their readiness towards the usage of technology skills when facing ODL. The respondents were not ready regarding self-study habits (12.9%) during their participation in ODL. The other parts of their online learning readiness are learning preferences, self-direction, hardware/software skills, and expectations scored 14.5%, 14.6%, 18.1%, and 19.2%, respectively.

Relationship between Readiness and Performance

Table 2 summarises the relationship between readiness and performance. 40% (48) of the respondents agreed that online learning affects their performance positively. In comparison, 37 (30.8%) respondents were not sure about it, and the remaining of the respondents, 29.2% (35), disagreed that online learning affects their performance positively. Only 22.5% (27) of the respondents agreed that they performed better in online learning than in a normal class, while 30% (36) of the respondents were not sure about it.

Table 2: Relationship between Readiness and Performance

Relationship Between Readiness and Performance	Agree	Not Sure	Disagree
Online learning affects my performance positively.	40% N=48	30.8% N=37	29.2% N=35
I perform better in online learning than in a normal class.	22.5% N=27	30% N=36	47.5% N=57
I am doing well in online learning.	26.7% N=32	35.8% N=43	37.5% N=43
I manage to finish my work during this online course.	77.5% N=93	17.5% N=21	5% N=6
I make progress while learning for this online course.	50% N=60	31.7% N=38	18.3% N=22
I learn more during this online course.	29.2% N=35	26.7% N=32	44.2% N=53

Almost half of the respondents, 47.5% (57), disagreed that they performed better online learning than in a normal class. 26.7% (32) of the respondents agreed that they were doing well in online learning, while 35.8% (43) were not sure about it. 37.5% (43) of the respondents disagreed that they were doing well in online learning. 93 (77.5%) respondents shared that they finished their work during the online course. 17.5% (21) of the respondents were not sure about the statement, while only 6 out of 120 (5%) respondents disagreed that they managed to finish their work during the online course. Half of the respondents, 60 (50%), agreed that they made progress while learning for the online course, while 31.7% (38) of the respondents were not sure about it. 18.3% (22) of the respondents disagreed that they made progress while learning for the online course. Finally, 29.2% (35) of the respondents confessed that they learned more during the online course, while 26.7% (32) of the respondents were not sure about it and the other 44.2% (53) of the respondents disagreed that they learned more during the online course.

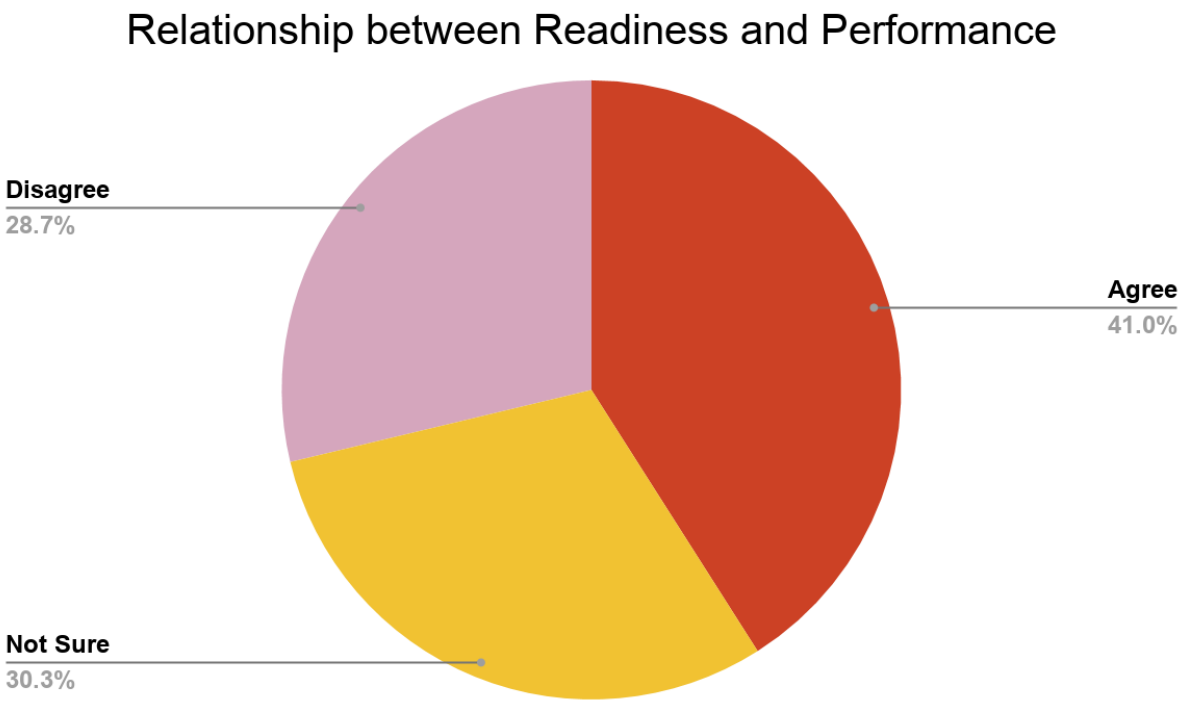

Figure 4: Relationship between Readiness and Performance

Figure 4 illustrates the relationship between readiness and performance. Most of the respondents (41.0%) agreed that online learning readiness affects their performance positively. 30.3% of the respondents were not sure about the relationship between online learning readiness and their performance. The remaining 28.7% of the respondents shared negative responses regarding the relationship between online learning readiness and performance.

DISCUSSION

Based on the findings stated above, it can be seen that most respondents shared positive responses about their online learning readiness. Out of 24 questions asked for the online learning readiness section, only four questions received less than 50% of agreement which are "I can spend 18 hours per week on online learning" (20.8%), "I am self-motivated" (41.7%), "I enjoy reading and can retain information by studying in this manner" (42.5%), and "I am good at setting goals and deadlines for myself" (46.7%). 2 of them are under self-direction. Allam et al. (2020) mentioned that an unconducive learning environment is one factor that affects the students in online learning. Only 61.7% of the respondents had a dedicated study space based on this research. MCO requires all of the family members to stay-at-home. This

situation will affect the students, especially those with many family members living in the same house, resulting in the study space limitation.

The study conducted by Hung et al. (2010) also showed a low score of self-direction compared to the other parts. Self-direction is also ranked fourth in online learning readiness compared to the other parts. About 20.7% of the respondents showed the highest level of readiness for the part of technology skills while participating in ODL. This might happen because they were familiar with the technology skills. Even when they were learning face-to-face, they needed to use the technology skills to complete their tasks and assignments given by the lecturers. Research by Hung et al., 2010 also revealed the same finding as he reported that the university students were confident in using the computers and network skills.

Most of the respondents (41.0%) agreed that online learning readiness affected their performance positively despite only virtual communication being allowed between the students and the lecturers, such as through WhatsApp Messenger or Moodle during ODL. The same finding was also disclosed in Hung et al. (2010), where the students were comfortable communicating virtually, and they had a high self-efficacy in performing it. Suresh et al. (2018) also reported that online learning positively influenced the students' performance. Cigdem and Ozturk (2016) and Torun (2020) also found that students who were high in self-directed learning and motivation are ready for online learning and thus positively influence their academic achievement. Lee et al. (2009) reported that many researchers concluded that online learning positively affects the students' performance.

RECOMMENDATIONS

There are a few problems that can be addressed or even overcome with the recommendation from previous studies and some solutions found during this research. One of the issues affecting the students' SDL or motivation during online learning is the lack of consideration or empathy from parents at home. Some of the parents are unaware of the students' struggles with ODL. Thus, parents should not take ODL lightly as it will eventually toll the students. It is essential to have periodic engagement with parents to educate them and create awareness about their

struggles during ODL. Many forms of assistance from the government, non-governmental bodies, and the education industry will significantly help this matter (Am Mohd, 2020).

Next, to address and help the issue of internet connectivity, the government has collaborated with Telco companies to help the students issue regarding the lack of internet data by giving free 1GB internet quota daily has helped lessen the students' burden, but it is not enough. The government should consider prolonging the free 1GB internet initiative throughout the ODL period and may consider adding the internet quota. The government should collaborate with telecommunication companies to offer telecommunication packages for the students.

Universities should also provide virtual counseling sessions that use a call centre or even a hotline for the students to get help and share their problems where they do not have to provide their personal information. Many students sometimes feel embarrassed to share their problems, especially when they need to share their personal information. Being there for the students, even only virtually, can help them release their pent-up stress during this difficult time.

Furthermore, the allocated funds for the facilities in the universities or any other source that the students can only use on the campus should be channeled to help the students in need as the facilities are currently not being used by the students. The fees allocated for the bus service in the campus, library, internet access should be used to provide materials or references that the students can reach online.

For future studies, the researchers could consider researching with more respondents that combine many universities and compare the readiness between the universities. Future researchers could also consider including the relationship between readiness and performance in future research as very little research has been done on this topic, especially in Malaysia. They could also investigate the relationship between online learning readiness and other possible factors other than the students' performance.

CONCLUSION

In conclusion, the students are aware of the current situation and try their best to adapt. Poor internet connection might be the significant cause of students' anxiety and stress in involving themselves with online learning. Students who live in rural areas or regions not supported with a reliable internet connection would be left behind. Another contributing factor is the weather which can cause the internet connection to be unstable, especially during heavy rain and storms. If this problem keeps occurring, students will not be motivated to participate in online learning. Living on the campus back then allowed them to place all of their focus and attention on their studies, meeting the lecturers after classes for extra guidance and consultation, study groups with a group of friends, and more time to revise during their spare time. Students cannot do it during online learning, especially due to the MCO, where their movements are restricted to only staying at home. Only virtual communication can be done to seek any help.

Overall, the students have to work more on improving themselves, such as being more disciplined, keeping track of assignments, and setting time to revise because most of them already have the necessities and skills such as using online platforms and applications that need to be used in online learning. Students who have been participating in online learning for a few semesters might be able to adapt themselves to this new norm. Online learning is not a bad idea, especially after being implemented almost a year since the pandemic. For every party, such as the ministry, the lecturers and the students know what they need to do to help each other during this difficult time.

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