Students' Attitude towards Online Learning amid COVID-19 Pandemic

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Abstract— The Coronavirus 2019 (COVID-19) outbreak has resulted in most colleges being forced to select Open Distance Learning (ODL). Many students have faced various challenges throughout their studies due to the rapid shift from conventional learning to ODL. Thus, this study aims to investigate students' attitudes and challenges towards ODL for university courses amid the COVID-19 pandemic. A questionnaire was distributed online to Electrical Engineering diploma students (N=60) based on 11 close-ended questions on student attitude towards ODL. Findings revealed that 70% of the students felt a significant disparity between traditional learning and ODL, with the benefits of traditional classroom learning outweighing ODL. 80% of the respondents stated that as opposed to online learning, traditional learning in the classroom was more inspiring. Among the critical issues students faced were lack of internet connection, technical and money-related constraints, difficulty in engaging virtual communication with the instructor, lack in reaction time, and the absence of the socialisation element as in face-to-face classroom. Improvements on the ODL method need to be carried out continuously to enhance students' attitude towards ODL.

Keywords—online distance learning, higher education, COVID-19, attitude

I. INTRODUCTION

The declaration of COVID-19 as a global public health emergency was made by the World Health Organisation (WHO) on the 30th of January, 2020, and later as a pandemic on the 11th of March, 2020 (Cucinotta & Vanelli, 2020; Adnan & Anwar, 2020). This generated responses from a majority of universities all over the world to transfer to online settings as a new education component at the end of 2019 and the beginning of 2020 (Usak et al., 2020). The first implementation of online education by means of distance courses or online assistance particularly for regular courses had happened abruptly. It also comes with an awareness that universities will never be the same again after the coronavirus crisis (Virtix et al., 2021). Regardless of whether they were prepared or not, educators were suddenly thrusted into a situation in which they were given no other choice but to begin teaching online whilst having to improvise greatly, a context that was dubbed emergency remote teaching (Virtix et al., 2021). The suspension of the entire school system and consequently the transfer of classroom practices to online mode have never happened before, regardless of whether the educators, students, and support staff were prepared in terms of pedagogy and materials to deal with such changes or not. While there are some flexibilities provided for teachers in adapting to Open Distance Learning (ODL), students have no choice but to follow their lecturers (Virtix et al., 2021). ODL refers to when teachers and students are separated physically, which has already been available in a variety of types for around two centuries at least, prior to the Internet development (Moore et al., 2011). The disparity that is most significant is that most of the interactions occurring between students and teachers used to be non-synchronous in the early phases of distance education. With the advent of the internet, synchronous work has become more diverse, ranging from chat rooms to video-conferencing systems. The asynchronous material exchanges also significantly shifted to digital settings and communication routes. Rapid internet, digitalisation of paper texts, photo and video materials, and interactive programmes for teaching and learning have contributed to the current rise in remote education. This has allowed traditional universities to relocate portions of courses, full courses, and even complete programmes to virtual environments. Advanced technology has enabled the construction of totally online higher educational institutions at the extreme end of the spectrum. The conventional face to face way of learning can exist alongside ODL or be integrated with it where the transition is smooth and sequential (Virtix et al., 2021). Unlike the established gradual methods for course planning and implementation, this transition from traditional to online learning due to COVID-19 pandemic was prompted due to external factors instead of a pedagogical will to produce courses or computed programmes to be more user-

friendly (Blumenthal, 2020). Factors that should be considered throughout the planning of ODL programmes in higher education include visions and plans, curriculum, along with staff training (Bothel, 2001; Rahman, 2001). To ensure its success, there is a need for the integration of ODL into the organisational structure and vision of the college (Bothel, 2001; Rahman, 2001). The concern that higher educational institutions has is to create such a system that undergoes constant reformation (Carr-Chellman, 2000). Over time, the existence of campuses will still be relevant. However, due to the improvements and advancements of ODL in teaching and learning and the way it satisfies what the students need, it is anticipated for organisational changes to occur (Hanna, 1999).

Many researches regarding online learning have highlighted that student happiness is important when it comes to academic success. Several prior empirical investigations have confirmed the existence of several factors in influencing the satisfaction of students. Furthermore, interactivity is becoming a hot topic in many studies looking at how online learning affects student happiness (Mandernach, 2005).

In face to face classes, students can interact with one another, with their teachers/tutors, and with the course content. Similarly, in an online context, student participation is critical for student success. However, little research had looked into the impact of student participation on student satisfaction. Muzzamil et al. (2020) analysed student satisfaction and engagement effects in online learning and the result shows that student interaction has a positive impact on student engagement and vice versa.

It has been established that the engagement of students in online learning is a result of the belief that relies on how developed students' cognitive skills are and how they are able to set up information for the sake of achieving success in learning (Banna et al., 2015). In contrast, students in an online setting actually have fewer possibilities to interact with the university (Martin & Bolliger, 2018). Hence, in such situations, making way for student engagement to happen becomes a critical component of managing online learning in order to achieve student happiness. In addition, it is crucial to investigate how interaction in online learning shapes engagement.

On top of that, student attitude also contributes to the success of ODL. Several studies have been conducted to evaluate student attitudes towards ODL in various countries. It is crucial to evaluate student attitudes towards ODL, especially during this COVID-19 pandemic, to help better understand ODL delivery methods. Furthermore, it could also pave the ways to identify challenges and obstacles faced by students regarding ODL.

Thus, this study aimed:
(1) To investigate students' attitude towards ODL amid COVID-19 pandemic
(2) To highlight the challenges and obstacles with regard to online learning faced by UiTM Pulau Pinang students.

II. LITERATURE

Distance education was first introduced in the middle of the eighteenth century to fill the gap with what regular education has. It witnessed a quick progress that began from correspondence courses and tapes to the use of personal computers and multimedia programmes that are computer-based (Williams et al., 1998). Student satisfaction in remote education is further contributed by advanced technology and approaches like e-learning, new courses and educators (Ali et al., 2011; Sabir et al., 2014). Integrating technology in learning entails that learners could use hyperlinks and online questions to access text, figure, audio, and video resources, as well as interpersonal contact (Chen, 2010).

Based on a study on socialisation and the use of Facebook for academic achievement, it was found that Facebook plays a positive role towards academic success (Ainin et al., 2015). Gagne & Sherpherd, (2001) in their assessment on introductory graduate level accounting course classes discovered that the performances of students in distant courses matched the standard of students that study in regular campus.

Among the very crucial aspects with regard to self-learning is autonomy. Self-learning is particularly essential for students who learn remotely. When students take responsibility for their own learning, they are taking steps towards becoming lifelong learners. As a result, identifying distant education autonomy is crucial (Firat, 2016). E-learning success is significantly determined by the quality of learner autonomy or learner independence that learners have because they are the ones who control their own learning and are accountable for it (Zimmerman, 2002). Thus, a vital feature in online distance learning is learner autonomy (Lynch & Dembo, 2004).

The access to independent study by distance education students has been increasing in the last 20 years, thanks to technological advancement. At the same time, professionals and educators in distance learning have become interested in adult loads and responsibilities. Individuals who must study at a distance, according to Feasley (1983), are bound by responsibilities namely work and family commitments, besides the constraints such as being a handicap, or living in a remote place. The related notion of "distance education" was introduced in the 1970s and 1980s, which poses disputes for conventional independent study and elicits reexamining and reinterpreting the role of independent study in such a newly introduced global movement (Wright, 1991).

John Traxler (2018) said that formal distant education is promising in helping students to get access to higher education besides contributing towards the diversity of the student community as the availability of internet technology enables students to acquire learning from whoever, wherever and whenever. New technology does not only ease the collaboration locally, but also with worldwide partners. However, there has been an evolution of conservatism in European higher education, as well as

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the understanding that new methods of service, like free online courses, present unique issues (Clegg et al., 2003). Since open and distance learning methods have been used by colleges and universities in the attempt of competing in a more distant market, and the replacement of human pedagogy along with administrative duties by technology, the adoption of technology has been made to support such changes resulting in the creeping industrialisation of the core business of universities and colleges (Traxler & Lally, 2016). Such matter has been known since the dawn of contemporary distant learning (Peters, 1973).

III. METHODOLOGY

A. Sample Collection

A cross-sectional study was conducted to determine students' attitude towards ODL. The study was conducted at the end of the term of September 2020 to January 2021. The teaching and learning period was approximately fourteen weeks. Samples were collected using convenience sampling with the inclusion criteria of first-semester electrical engineering diploma students. A total of 60 (N=60) electrical engineering students from Universiti Teknologi MARA Cawangan Pulau Pinang participated in this study.

B. Survey

The online questionnaire was distributed to the respondents through the Google Form platform. The questionnaire consists of 11 close-ended questions in the following categories: demographics (3) and attitude (8). Questions on demographic include gender, parents' salary and internet access coverage. For attitude, the items were based on a 3-point Likert type scale.

C. Data Analysis

The online survey was assessed and descriptively analysed, while the result was depicted in the frequency distribution table expressed in percentages.

IV. RESULT AND DISCUSSION

A. Results

A total of 60 respondents participated in this study. A majority of the respondents were male, 73.3% (n = 44) whereas 26.7% (n = 16) were female. All respondents were of the same age at 18 years old. For parents' income, 5.6% obtained less than RM1000, 27.8% obtained between RM1000-RM2000, 29.6% obtained between RM3000-RM4000, 13% obtained between RM5000-RM7000 and 24.1% obtained RM7000 and above. The results are depicted in Figure 1.
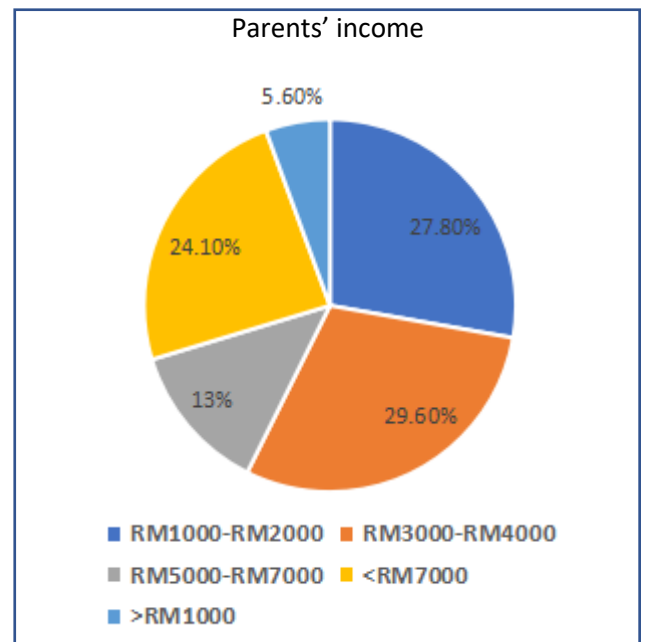

Figure 1: Parents' income

For internet access speed, 18.5% disclosed to have fast internet access while 9.3% claimed to have a weak internet access. Lastly, 72.2% stated to have moderate internet access by means of cellular phone or handheld gadgets. The results are depicted in Figure 2.
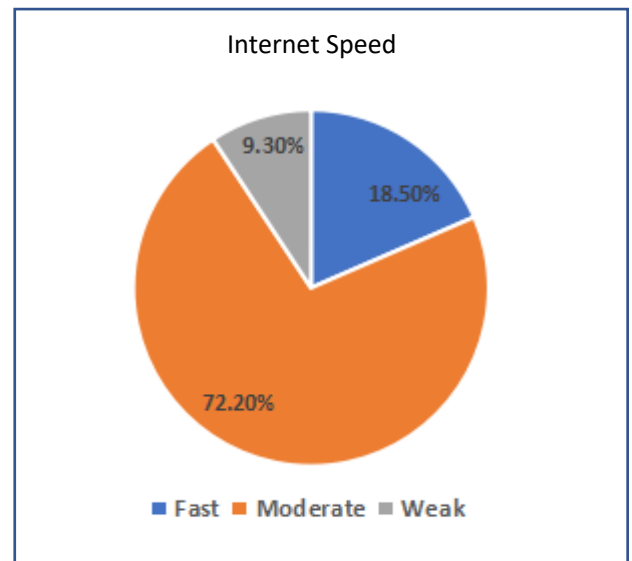

Figure 2: Respondents' internet access speed

Table 1 shows the result of students' attitude towards ODL. The results show that 58.3 % of respondents believe signal availability/strength is the main reason for limited internet access, 8.3% believe internet services are too expensive for regular online connections, and 33.3 % stated other reasons. On the students' ability to use computers or laptops, 75% of respondents admitted that they could afford to utilise computers or personal computers for online study. For electrical communication, 60% of the respondents stated that they are comfortable with digital communication, while 10% opined that communicating digitally causes problems.

When asked about the similarity between online and conventional learning, 70% agreed that there is a significant disparity between the two, while 10 % said there is no difference. Only 10% of students believe that online learning is motivating as opposed to conventional learning, while most students (80%) disagree with the idea. About the possibility of completing whole university courses on the internet without difficulty, 51% of higher education students said it is not possible, while 18% said it is possible to be done by means of distance learning. 42% said they had difficulty conducting group projects or assignments while completing distance education, while 35 % said it is possible to conduct projects and assignments in groups digitally. When asked about the importance of face-to-face connection, 80% believe the necessity of having a direct contact with the instructor for learning and distance learning to occur.

Table 1: Students' Attitudes with Regard to Online Learning
(n=number of respondents)

Attitudes	N	%
Main reasons of limited internet access		
Cost/Too Expensive	5	8.3
Signal availability/strength problems	35	58.3
Don't know how to use it	0	0
Others	20	33.3
I feel qualified to use a computer/laptop		
Agree	45	75
Somewhat Agree	25	25
Disagree	0	0
I am comfortable communicating electronically		
Agree	36	60
Somewhat Agree	18	30
Disagree	6	10
No difference between online and conventional learning		
Agree	6	10
Somewhat Agree	12	20
Disagree	42	70
Online learning is more motivating than conventional learning		
Agree	9	10
Somewhat Agree	9	10
Disagree	42	80
Complete university courses can be completed effectively through internet		
Agree	11	18
Somewhat Agree	19	31
Disagree	30	51
It is easy to complete group projects/assignments digitally		
Agree	21	35
Somewhat Agree	14	23
Disagree	25	42
Face-to-face contact with the instructor is necessary for learning		
Agree	48	80
Somewhat Agree	7	12
Disagree	5	8

B.   Discussion

Students' attitudes towards ODL varies depending on the topic. The majority of the respondents expressed their concerns on online or digital learning. Among the critical issues they face are lack of access to internet facilities, insufficient connection, limited engagement between students and instructors, and inadequate technology. Due to the sudden transition from conventional classrooms to online learning, students have to experience a distinct way of learning. The fact that most students are unable to get access to stable or high-speed internet services contributes to the difficulty of online learning. Due to educational institutions' limited resources, there is only a limited number of educational institutions that managed to make online class a success particularly at the beginning of COVID-19. It was also discovered from the study that students had to encounter other problems like the lack of campus interaction, group study issues, and instructor's response time. The respondents also opined that the benefits of traditional classroom learning outweighs online learning. Therefore, it could be deduced from the ineffectiveness of online learning runs parallel to the nation's development, as many students have problems accessing the internet as a result of financial and technical constraints. The important role that motivation has in online learning is usually neglected in terms of online education. Students who learn in a traditional classroom tend to engage more actively in learning, as they are able to interact face to face with their instructor and classmates. 80% stated that as opposed to online learning, traditional learning in the classroom is more inspiring. Some students who could have efficient management on online study time and assignment completion time could not deal with full online courses as a whole. In making sure that the online programme is compelling and productive, students have to deal with ways of coping with online classes that are fast paced besides the necessity of having sound equipment and skills related to technology in learning from online classes. Some students were able to have good time management for study and were not struggling with that, however, they had to encounter difficulties with group tasks as face to face conversation is not possible with their classmates, as reported by 42% of respondents.

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V. CONCLUSION

There is no boundary on the likelihood of distance education in the future. It is apparent that programmes and courses of distance education are relevant today and will continue its growth in the future; however there are still clearly many unanswered questions that have to be

highlighted. Despite the proven effectiveness of distance learning as opposed to traditional classroom learning in particular contexts, it has not been established that e-learning itself could be a substitute for conventional classroom learning.

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