Forced Online and Distance Learning during COVID-19 Pandemic: Students' Perceptions and Experiences

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Abstract: The emergence of COVID-19 pandemic has forced educational institutions to change and adapt to ODL. This is to avoid disruption to students' education and study plans. However, the forced actions resulted in mixed reactions from students and educators. Both parties were not ready and anticipated difficulties in executing forced ODL. Problems faced include internet connectivity, inadequate learning devices and lack of skills during the implementation of full ODL. This study was conducted to assess perceptions and experiences (i.e. challenges, advantages and disadvantages) of ODL among Diploma in Pharmacy students. Data were obtained through a cross-sectional survey through online questionnaires. Questionnaires which consisted of demographic, perspectives and experiences towards ODL were distributed using WhatsApp and email. A total of 262 respondents (209 females and 53 males) completed the questionnaires. Majority of the students (94.3%) chose to study at home and used both mobile phones (92.4%) and laptops (96.2%) for ODL. Most students preferred ODL because of convenience (83.6%) whilst reduced concentration (80.9%) and poor internet connection (76.3%) were among the challenges encountered. Most frequently used digital platforms include UFUTURE (98.9%), Microsoft Teams (94.3%) and Google Classroom (89.7%). Likewise, live video conferencing (72.1%), pre-recorded videos (67.2%) and videos from online sources (59.5%) were among the most used type of delivery modes by lecturers. Our findings may help to strengthen the understanding of current ODL implementation and teaching processes. Results from this study will assist in improving various aspects of ODL to increase its effectiveness and efficiency for students' learning.

Keywords: Challenges, COVID-19, Experiences, ODL, Perception

1.   Introduction

As of 30th January 2020, the World Health Organisation (WHO) has declared the coronavirus disease 2019 (COVID-19) as a global public health emergency of international attention. COVID-19 is a disease caused by a strain of coronavirus that generates flu-type symptoms when a person is infected by the virus. The novel coronavirus was discovered and identified in Wuhan, Hubei Province, China on

12th December 2019 (Elengoe, 2020). Since then, the spreading of this disease is still growing and the number of new cases is still rising on a global scale. Thus, on 11th March 2020, WHO declared COVID-19 as pandemic (Cucinotta & Vanelli, 2020) whilst the first case of COVID-19 recorded in Malaysia was on 25th January 2020 (Elengoe, 2020). On 18th March 2020, the Prime Minister of Malaysia declared the whole nation to be under Movement Control Order (MCO) (Elengoe, 2020) which limits the movement of people across all sectors. Gradually, some restrictions have been lifted to stabilise and regenerate the country's economy with interstate travel being the latest granted on 11th October 2021 (New Straits Times, 2021; The Star, 2021).

The MCO enforcement throughout almost the whole of 2020 also includes the higher learning institutions. The Ministry of Higher Education, Malaysia has issued an order to close all universities and higher institutions (Selvanathan et al., 2020) as a measure to contain the spreading of COVID-19 (Shahzad et al., 2021). Students were required to clear the campus and return to their homes (Berita Harian, 2020; The Star, 2020) . This has taken a toll on students and lecturers whereby the learning and teaching processes were interrupted due to the inability of lecturers and students to conduct and attend physical classes, respectively. This situation has forced the universities and other higher learning institutions to resort to online and distance learning (ODL). Online learning itself has emerged as a new method of learning (Iqbal & Ahmad, 2010) prior to COVID-19 outbreak.

There are multiple digital platforms for ODL that are being used by the educators and students. This varies depending on the user familiarity with the platforms or the features included in the platforms. Google is an excellent example of a platform for ODL because it provides a broad choice of features on the software to give the best experience for users and helps to fulfil the obligation of a sudden shift to online learning (Dhawan, 2020). Courses were offered through online portals and various online technologies such as digital video conferencing platforms like Zoom, Microsoft Teams, Webex and Google Classroom (Alqahtani, 2019) were utilised.

ODL offers many benefits to students' learning efficiency and quality by using a device that connects to the internet connection, making it possible for learning opportunities in various situations, places and time (Cojocariu et al., 2014). Students have the leisure of choosing the place and time that suits their situation to study and work on their assignments. By implementing ODL, students are free to choose the time at which they are free and the place where the internet connection is stable. Furthermore, a lot of students will likely ask questions during a class and cause interruption of the class flow during conventional class learning. ODL solves this problem by allowing the students to search for the material while having the class concurrently fully online without disrupting the lecturer's teaching flow. Classes could also be arranged to suit the student's situations such as public holidays, religious celebrations or natural disasters affecting the students.

Furthermore, ODL allows the delivery of learning by both synchronous and asynchronous learning methods through internet connection (Dhawan, 2020). Synchronous method of learning involves instant and real-time interactions between students and lecturers whilst asynchronous learning method involves time gap interactions between them. Meanwhile, the traditional method of learning that requires the physical presence of students and lecturers only offers the synchronous learning method that lacks flexibility. Apart from its advantages, there are some drawbacks of ODL which include distraction and interference, limited interactions with educators or peers, complicated technology (Cao et al., 2020) and restricted access to laboratories (Selvanathan et al, 2020). Likewise, students encountered difficulties to stay focused for long hours of ODL, poor time management and readiness for ODL. Restricted internet accessibility (Berita Harian, 2020), unstable internet connectivity, financial burden for internet data, stress and anxiety may create negative impacts on students' perspectives of ODL (Amir et al., 2020).

Figure 1 illustrates the conceptual framework of this study. The independent variables are the modified or changed variables *i.e.* previous experience (in school or matriculation), optimal or sub optimal learning environment and the types of devices used. These changes are not necessarily implemented by choice, but rather the situational circumstances of the respondents. Whereas the dependent variables are the ones affected by the changes, *i.e.* the negative and positive perceptions of the respondents towards ODL. The main purpose of this study is to determine the perspectives, experiences, satisfactions as well as the advantages, challenges and obstacles of forced ODL encountered by students. Therefore, this study aimed to answer the following research questions:

1. What are the students' perspectives on forced ODL?
2. What are the students' experiences on forced ODL?
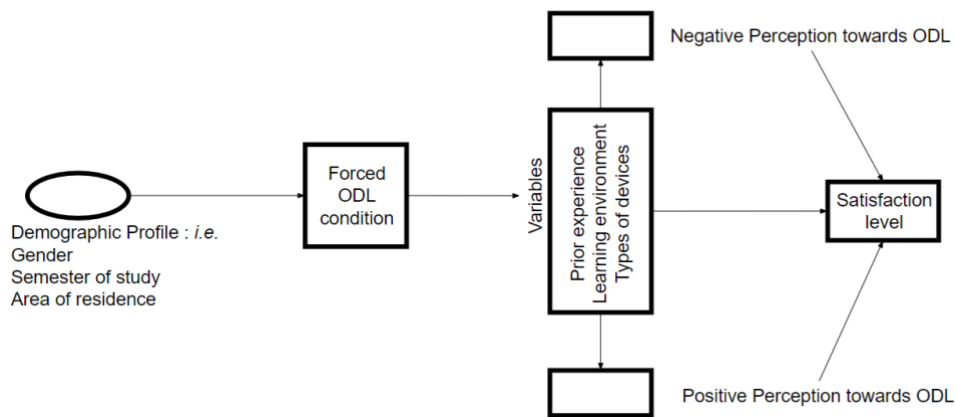3. How satisfied are the students' satisfaction with forced ODL implementation?

Fig. 1 Conceptual Framework

2.   Methodology

2.1   Research Design

A cross-sectional study design was adopted in this study. A questionnaire survey was conducted from April until May 2021 to assess the forced ODL implementation in terms of perspectives, experiences and satisfactions of the respondents.

2.2   Sampling and Population

The respondents were chosen among Diploma in Pharmacy students based on their availability and willingness to take part during the period of study whereby a purposive sampling was used. Total population of students at the time of study was 370 whilst 262 students participated in the study. They were three different semesters of study (1, 3 and 5) and comprised 209 females and 53 males. According to Krejcie and Morgan (1970), the sample size required is between 186 and 191 respondents. Thus, the sample size of our study is sufficient to represent the students' population.

2.3   Instrumentation

The survey questionnaire consisted of basic demographic, perspectives, experiences and satisfactions statements or questions regarding forced ODL implementation during COVID-19 outbreak. The demographic data question consisted of data about gender, age, area of residence, semester of studying, learning environment and types of digital devices. The questionnaire was designed considering the ease of responding to the questions and inclusion of important points related to online learning such as enjoyment and comfort of online learning, digital platforms and devices used, content delivery modes

used by lecturers and preferred by students, accessibility of internet, advantages and disadvantages as perceived by students. The questionnaire was made up via the Google Form and sent through email and WhatsApp to students with request letters for their responses.

2.4   Data Analysis

The collected data were analysed by frequency of common students' responses and were stated in percentages. As the questionnaire allows students to choose multiple possible responses for most questions, the total percentage of all responses may exceed one hundred percent. The obtained results were used to fulfil the research questions of this study related to students' perceptions, experiences and satisfactions towards forced ODL during COVID-19 pandemic.

3.   Results and Discussion

3.1   Respondents' Demographic

The purpose of our study was to obtain students' perceptions and experiences on forced ODL implemented during the emergence of COVID-19 pandemic. A total of 262 students consisting of 209 females (79.8%) and 53 males (20.2%) have responded to the survey with the age range between 18 to 23 years old (mean, 19.3 ± 1.0). A total of 79 students (30.2%), 81 students (30.9%) and 102 students (38.9%) represented semester 1, 3 and 5, respectively. Nearly half of the students (46.9%) live in sub-urban areas compared to 79 students (30.2%) and 60 students (22.9%) reside in urban and rural areas, respectively (Table 1).

Our data showed that the number of students with prior experience (52.7%) in online learning almost equal to those with no prior experience (47.3%). Roy and Covelli (2021) stated that the comfort of switching from classroom to ODL depended on the amount of prior experience of ODL by both students and educators. Likewise, most of the students experienced ODL from their homes (94.3%) compared to those learning from campus (9.9%) or public places (9.9%). In addition, most students used mobile phones (92.4%) and laptops (96.2%) for ODL compared to desktops (3.1%) and tablets (7.3%). In their study, Hassan and Khan (2020) discovered that 98% of students used mobile phones for their online learning followed by laptops. At present, most people including teenagers and students possess mobile or smart phones because of their high-mobility and capabilities to store data including documents and lecture notes.

Table 1. Demographic characteristics of respondents

Item	N (%)
Gender	
Male	53 (20.2)
Female	209 (79.8)
Semester of study	
1	79 (30.2)
3	81 (30.9)
5	102 (38.9)
Area of residence	
Urban	79 (30.2)
Sub-urban	123 (46.9)
Rural	60 (22.9)
Prior experience with online education	

Item	N (%)
Have prior experience	138 (52.7)
No prior experience	124 (47.3)
Learning environments*	
Home	247 (94.3)
Campus (e.g.: Residential college/ Library/ Dormitory)	26 (9.9)
Public places (e.g.: Internet cafe/ Library/ fast food joint/ others)	26 (9.9)
Types of devices used*	
Mobile phone	242 (92.4)
Desktop Computer	8 (3.1)
Laptop	252 (96.2)
Tablet	19 (7.3)

*Notes: *Multiple responses possible. Therefore, the total may exceed 100%.*

3.2   Students' Perspectives on Forced ODL

Learning from anywhere (69.1%), learning at own convenience (83.6%), accessible learning materials (66.0%) and saving travelling expenses (50.0%) were among the advantages of ODL agreed by at least half of the students (Table 2). However, only a small number of students (17.2%) believed they were more autonomous with learning, provided with guidance on online safety and security (14.1%) and lecturers are more friendly during online learning (7.3%). On the other hand, many students disagreed about being autonomous during ODL and this was contrary to the findings by Hassan & Khan (2020), whereby 71.6% of the respondents found that online learning was fun and enjoyable. Only nineteen students (7.3%) stated that their lecturers are more friendly during ODL compared to the normal face-to-face teaching. In terms of communications, this shows that most of them prefer learning in conventional classrooms compared to online learning (Adnan and Anwar, 2020).

Likewise, challenges of ODL depicted by the students include stressful condition due to prolonged ODL sessions (49.6%), reduced concentration (80.9%), poor internet connectivity (76.3%), poor time management (54.6%), lack of support (22.5%) and lacking interaction opportunities (14.1%). The data also indicated that 55 (21.0%) students were having problems comprehending the content of subjects being taught online whilst 35 (13.4%) students perceived ODL as one-sided or lecturer-centred. The poor comprehension result is surprising, as the end of semester's test result indicated otherwise (data not shown). Most courses offered recorded less than 5% failures (internal data), which suggests one of two scenarios; firstly, whilst the students perceived that they do not understand the topic, in actuality they do. Secondly, there might be an honesty problem underneath the high pass or scores obtained by the students. The second scenario is an ongoing battle, whereby the university and faculty employ methods i.e. pledges and proctoring to improve fairness (Azzman & Najib, 2021). Additionally, only 37 (14.1%) students thought they were being neglected or facing lack of attention by lecturers. This illustrates that most of the respondents were given proper attention by their lecturers throughout the ODL. Moreover, three quarters of the students agreed that the lecturers have sufficient knowledge (good and very good) in online learning.

Table 2. Students' perspectives on forced ODL (n = 262)

Description	N (%)
Advantages of ODL*	
I can learn anytime according to my convenience	219 (83.6)
I can learn from anywhere	181 (69.1)
I can access materials provided by instructors	173 (66.0)
I feel more autonomous while learning online.	45 (17.2)
Lecturers are more friendly online than face-to-face teaching	19 (7.3)

Proper guidance for online safety and security is given	37 (14.1)
Save travelling expenses	131 (50.0)
Challenges of ODL*	
Poor internet connection (e.g.: disconnected/poor quality of video & audio/ interruption during live session)	200 (76.3)
Poor time management	143 (54.6)
Negligence and lack of attention by lecturers	37 (14.1)
Lack of support/ No guidance is given for online platform	66 (22.5)
Reduced of concentration (e.g.: many distractions)	212 (80.9)
No opportunity for interaction	37 (14.1)
Lack of comprehensibility of the topic taught by lecturers	55 (21.0)
Learning is lecturer directed only/Learning is one-sided	35 (13.4)
Prolonged exposure to ODL content leading to stressful condition	130 (49.6)
Lecturer's knowledge in online teaching	
Very good	53 (20.2)
Good	144 (55.0)
Fair	61 (23.3)
Poor	1 (0.4)
Very poor	3 (1.1)

*Notes: *Multiple responses possible. Therefore, the total may exceed 100%*

3.3   Students' Experiences on Forced ODL

Table 3 demonstrates various e-learning digital platforms and social media applications used for ODL. Most popular platform used was the Universiti Teknologi MARA's (UiTM) home-grown, UFUTURE (98.9%). UFUTURE is a learning management system (LMS) that serves as an online learning platform. There are various features in UFUTURE that could be utilised by students in their learning activities. In addition, UFUTURE is available for UiTM (students and staffs) as well as non-UiTM users. Others include Microsoft Team (94.3%), Google Classroom (89.7%), WhatsApp (82.4%), Google Meet (82.1%), Telegram (49.2%), YouTube (36.6%), Zoom (8.0%) and Facebook (7.3%). Since the university provides multiple platforms for ODL, students were asked to choose all platforms they were using.

Based on our findings, the top three types of delivery modes provided by lecturers were live video conferencing (88.2%), lecturer-made pre-recorded videos (85.5%) and videos from online sources (83.2%). Our results reveal that delivery modes which include videos were the most prevalent. Likewise, students' preference of similar delivery modes is listed in Table 3. The highest response was live video conferencing (72.1%), followed by lecturer-made text materials (69.5%), lecturer-made pre-recorded video (67.2%) and videos from online sources (59.5%). In order to effectively teach online, Albrahim (2020) acknowledged the abilities and specific skills needed related to pedagogy, content, design and technology. Furthermore, Table 3 shows that almost 70% of respondents had good and stable mobile network quality whilst 11.8% of respondents had excellent and stable mobile network quality. Unfortunately, 19.1% of the respondents experienced poor quality of mobile network or no internet coverage in their area.

Table 3. Students' experiences on forced ODL (n = 262)

Describe	N (%)
Digital e-learning platforms and social media used*	
UFUTURE	259 (98.9)
Microsoft Team	247 (94.3)
Zoom	21 (8.0)
Google Classroom	235 (89.7)
WhatsApp	216 (82.4)
Facebook	19 (7.3)
Telegram	129 (49.2)
YouTube	96 (36.6)
Google Meet	215 (82.1)
Delivery modes provided by lecturers*	
Lecturer-made text materials	195 (74.4)
Live video conferencing	231 (88.2)
Textbook or reference book materials	107 (40.8)
Lecturer-made pre-recorded videos	224 (85.5)
Videos from online sources	218 (83.2)
Audio from internet	43 (16.4)
Delivery modes preferred by students*	
Lecturer-made text materials	182 (69.5)
Live video conferencing	189 (72.1)
Textbook or reference book materials	121 (46.2)
Lecturer-made pre-recorded videos	176 (67.2)
Videos from online sources	156 (59.5)
Audios from internet	37 (14.1)
Quality of mobile network	
Excellent and stable	31 (11.8)
Good and stable	181 (69.1)
Poor/no network coverage	50 (19.1)

*Notes: *Multiple responses possible. Therefore, the total may exceed 100%.*

3.4   Students' Satisfactions on Forced ODL

Table 4 shows the overall respondents' level of satisfaction regarding ODL. Based on the findings, many respondents agreed that some aspects of learning gained positive impacts through ODL implementation. These include clarification sessions (71.4%), assessments (67.9%), more time to prepare materials for group discussions (61.5%), more time to study after class (70.2%) and motivation for self-directed learning. Nevertheless, there were some aspects of ODL which attained negative feedback from many respondents. These include stress (78.2%), lesser learning satisfaction compared to face-to-face classroom (79.4%), facing various problems (69.1%), difficulties to communicate with lecturers and colleagues (62.6%) and study less efficiently with ODL (71.8%).

At the time of study, many respondents (78.2%) expressed their hopes that ODL will not be continued when COVID-19 pandemic is over. Only a small percentage of students (27.1%) preferred ODL over classroom learning. Surprisingly, an overwhelming 78.2% of the students have chosen not to continue with ODL after the pandemic. The reason for this preference boils down to the nature of ODL being forced upon the students. The overall satisfaction is clearly low even though internal local data (not shared here) is contradicting or not reflecting the obtained grades.

Table 4. Students' satisfactions on forced ODL (n = 262)

Description	N (%)	
	Agree	Disagree
Clarification sessions is more suitable delivered in ODL (e.g.: Question & Answer and live lecture sessions)	187 (71.4)	75 (28.6)
Assessments are more suitable delivered in ODL	178 (67.9)	84 (32.1)
I experienced many problems during ODL	181 (69.1)	81 (30.9)
I frequently feel stressed during ODL	205 (78.2)	57 (21.8)
I have more time to prepare learning materials before group discussion with ODL	161 (61.5)	101 (38.5)
I have more time to review all of the learning materials after class with ODL	184 (70.2)	78 (29.8)
ODL give similar learning satisfaction as classroom learning	54 (20.6)	208 (79.4)
ODL should be implemented in the next semester	85 (32.4)	177 (67.6)
ODL give motivation for self-directed learning and eager to prepare learning materials before group discussion	159 (60.7)	103 (39.3)
Communication with lecturers and fellow students is easier with ODL	98 (37.4)	164 (62.6)
I like ODL than classroom learning	71 (27.1)	191 (72.9)
I study more efficiently with ODL	74 (28.2)	188 (71.8)
I prefer ODL to be implemented even after COVID-19 outbreak.	57 (21.8)	205 (78.2)

*Notes: *Multiple responses possible. Therefore, the total may exceed 100%.*

3.5 Discussion on findings

As for students' perspectives on ODL, our findings are similar to the advantages of ODL discovered by Fatoni et al. (2020) whereby students were not limited by time or space. Many respondents agreed that ODL offers more flexibility to the study process and cost saving since they can remain at home and no longer need to commute from and to campus (Sangedhi, 2019). In our settings, both synchronous and asynchronous strategies were conducted by the educators through the LMS. Synchronous learning was offered as interactive teaching or lecture whilst asynchronous components include pre-recorded lectures or videos, external links for websites and other additional online resources (Zalat et al., 2021). Likewise, many students do not feel autonomous because of distractions at home. For example, being distracted by social media for too long and having to attend family matters might be some of the reasons for the distractions. In their study, Tew et al. (2022) stated that some students might not feel comfortable studying at home compared to learning on campus by face-to-face approach. In addition, students might have no desire to study since they do not have the courage to compete with their peers during ODL. This forced ODL may compromise users' security and safety because they were more likely to spend a lot of time in an online environment (Hassan & Khan, 2020). In addition, both students and educators had difficulties adapting to the abrupt ODL as it was unprecedented and executed without proper design unlike the well-planned online learning (Fatoni et al, 2020). Thus, how the students perceived and accepted this urgently implemented ODL method varied. According to Cao et al. (2020) the drawbacks of ODL include stress, increased distractions, limited social interaction and difficulties to communicate with the educators that could jeopardise students' perspectives of ODL implementation. Likewise, Ismail et al. (2022) demonstrated that students had less influence over their online learning which might be due to larger chance of interruptions during online sessions.

Next, current findings on students' experiences on forced ODL demonstrate that they used both e-learning platforms and social media applications for their ODL which is in line with previous studies by Basilaia & Kvavadze (2020), Hassan & Khan (2020) and Henaku (2020). UiTM's own e-learning platform, UFUTURE has recorded the highest usage. This is not surprising since this e-learning platform serves as a one-stop-centre whereby students could download the learning materials and assessments were also conducted there. Live video conferencing platforms (Google Meet, Microsoft Teams, Google Classroom) also garnered high usage and this is in contrast with the findings of Hassan

& Khan (2020) who did their study in India. These live video conferencing are the platforms used especially for synchronous sessions and the accessibility was provided by the university. However, at the time of study, the usage of video conferencing app i.e. Zoom was still lagging behind may be due to unfamiliarity among users. Social media platforms such as WhatsApp and Telegram also gained high usage and could be due to their flexibility, mobile friendly (Henaku, 2020) and relatively lower data usage compared to e-learning platforms. Both apps could serve as asynchronous e-learning platforms and are easily handled by students and educators alike (Hassan & Khan, 2020). Various types of digital platforms are available for ODL and learning institutions must decide the best platform for students to have the best experience in ODL (Mohamad Kamil et al., 2022). Likewise, the sudden transition from face-to-face to ODL may lead to various challenges as none of the parties had really prepared for it. Indeed, poor internet connection was one of the deterring factors during ODL. This may result in students' inability to attend live learning sessions, impacts on the quality of video or audio and incapability to complete and submit the given tasks or assignments that will affect their overall performance. A proactive measure is always the approach of the university, especially on the limitations of students' internet data. Lecturers are advised to have multiple approaches, make sensible decisions of the platforms to be used and take necessary actions to reach all students (Bakar, 2021).

Lastly, since the students were familiar with the traditional on-campus learning, transiting to forced ODL may have caused discomfort to them (Albrahim, 2020). Moreover, the primary challenge of online learning was communication related. Thus, students-educators' communication must be clear and concise whilst switching to a virtual learning environment (Rajab et al., 2020). Our data showed only a small number of students preferred ODL over classroom learning. This is in contrast with previous studies which reported higher preference towards ODL compared to face-to-face classroom (Jeganathan & Fleming, 2020; Amir et al., 2020). Likewise, our findings of students having more time to study and review study materials are in line with Amir et al. (2020) and Sangedhi (2019). One of the main highlights of this study is that, even after going through the entire semester via ODL, being acclimatised and accustomed to the new norm, students still prefer the traditional face-to-face approach.

4.   Conclusion

In a nutshell, current forced ODL implementation must be revised and improved in order to reduce negative impacts especially towards the students. Relevant stakeholders who are involved with ODL implementation must take further initiatives for the betterment of ODL in every aspect. Based on current findings, there are challenges and obstacles faced with the implementation of ODL. For instance, ODL is able to offer students the leisure of studying in various places and time as well as having study groups, discussions and classes in their own comfort. Nevertheless, there are still many of them who are unable to afford good internet connectivity in their area.
Student's focus during classes was also impacted and because of the distance and reduced surveillance on the students, it leads the students to distance themselves from attending classes and interacting between one another. Therefore, whilst many of the students are satisfied with overall implementation of ODL, most of the students still prefer the traditional face-to-face teaching and learning method. Moreover, the findings of our study suggest that a better understanding of ODL experiences of the students may provide insights to education providers in ensuring better ODL experience in future.

5.   Implication and Recommendation

In general, this study has gained important findings that will help to expand the understanding of current online learning and teaching processes. We have also discussed our findings with past studies and relevant literature relating to students' perspectives, experiences and satisfactions towards ODL implementation during the COVID-19 pandemic. Likewise, our findings will help to improve various aspects of ODL implementation for the betterment of its operation in near future.
Nevertheless, this study is not without limitation. The current study on forced ODL was conducted among a small number of students from only one program in one campus. Therefore, the findings of

this study could not be generalised to represent all ODL students from various courses and campuses. Next, this study was conducted during the COVID-19 pandemic whereby ODL was abruptly implemented. Thus, post COVID-19 implementation of ODL may provide a different viewpoint since the students and educators were more prepared and aware of its implementation. Pre and post COVID-19 implementation of ODL could be compared to gain more insight and understanding on this matter.

6.   Ethics

Prior to collecting the data reported in this study, the survey and methods were approved by Universiti Teknologi MARA's (UiTM) Research Ethics Committee (REC) reference number REC/04/2021(MR178).

7.   Co-Author Contribution

The authors declared that there is no conflict of interest in this article. Mohd Izani Othman involved in conceptualisation, prepared the literature review and managed the write-up of the whole article. Suraya Sulaiman was involved in conceptualisation, data curation, statistical analysis and wrote the research methodology. Mohd Nadzri Mohd Najib involved in interpretation of the results and reviewing the whole article. Wan Nordini Hasnor Wan Ismail involved in reviewing and editing the whole article.

8.   Acknowledgements

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