# University Students' Perceptions on The Effectiveness of Online Teaching in Malaysia During Covid-19 Pandemic: A Case of the International Relations (IR) Programme, Universiti Malaysia Sabah (UMS), Malaysia

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## Abstract
Since the pandemic outbreak, most of the students of higher learning have to instantaneously adapt to online teaching as part of today's new norms. Malaysia is also not an exception to this situation. Since March 2020, most of the higher learning students had to undergo lectures and tutorials via online platform for the entire academic year. As a result, various feelings and opinions on the effectiveness of online teaching were ubiquitously discussed particularly on the cognitive ability of the students to comprehend online lectures. Generally, it has been agreed that, the most challenging issue is the internet coverage involving students residing in the interior areas that either have poor or no internet access. Hence, the main objective of this paper is to unravel higher learning students' perceptions on the effectiveness of online teaching and learning in Malaysia during this pandemic. To achieve this, this paper focuses on undergraduate students from the International Relations (IR) Programme at Universiti Malaysia Sabah (UMS) located in Sabah. Such a selection is due to Sabah being one of the states that is facing enormous challenges to provide internet services for academic learning. The data collection method for this study is a combination of documentary analysis and the online of survey-questionnaires distributed to 100 IR students as the main respondents. From the findings, this paper crucially identifies the students' internet problems as well as recommends remedies to increase the effectiveness of online teaching at higher learning institutions in Malaysia.
**Keywords:** Online Teaching, Higher Learning Students, International Relations Programme, Universiti Malaysia Sabah (UMS), Malaysia, Covid-19 Pandemic

## Introduction
Up to this moment, Malaysia is still hardly struggling to cope with the pandemic Covid-19 crisis as the daily cases has been increasing and surpassed the total number of cases in the last year 2020. As it stands now, the current total confirmed cases have reached 639,073,506 with 618,776,860 recovered and 6,610,928 deaths. However, the current active cases now has been declining with 13,685,626 cases, and the death rates also drop 90% since February

this year (Worldometer, 2022; Donlevy, 2022). This is a sharp increase compared with the total number of cases which recorded on December 31, 2020 with the record of 113, 010 infected, 88,941 recovered and 471 deaths since the outbreak began in February last year (Syafiqah, 2020). Based on this worrying scenario, the Malaysia higher learning institutions continue adopting online teaching as the best available mechanism to ensure the process of imparting knowledge and the continuous interactions between lecturers and student prevail during this pandemic hour.

When the Prime Minister of Malaysia, Muhyiddin Yassin announced the first stage of a two-week Movement Control Order (MCO) on 18 March 2020, the Ministry of Higher Education immediately instructed all universities to implement full online teaching as institutions of higher learning had just entered its first two weeks of the second academic session (Fauzi, 2020). The MCO or lockdown of all business activities expect those of essential services, were instructed to be closed for the duration of the two weeks. Not wanting to disrupt the ongoing semester, the ministry firmly believed on the competency of all higher learning institutions in galvanizing an open and distance learning for students, while at the same time acknowledging there were internet problems faced by some states in Malaysia including the state of Sabah. As it was estimated in 2012, for example, there were only about 70% (or exactly 66%) of Malaysians that had been online (Saodah & Shafizan, 2017). At present, however, it has been encouragingly increased to achieve 90.1% for the internet coverage access which covers almost the entire district in Malaysia (Department of Statistics Malaysia, 2019). Besides, Malaysia also upgrades its mobile and fixed broadband connectivity which is more crucial during the pandemic as more people including the students are doing their work at home. Currently, Malaysia is equipped with 4G speed and coverage and through government's National Digital Network initiative or shortly called as 'Jendela', it plans to increase the existing 92% coverage to 96% as well as the speed from 25Mbps to 35Mbps. Based on the present mobile and fixed broadband setup, Malaysia is ranked at 3rd and 7th for fixed broadband and mobile speed respectively among ASEAN countries, and it aims to deploy 5G speeds by the year 2022 or 2023 (Wong, 2021).

In spite of this promising development, internet coverage in Malaysia is still asymmetrically disseminated. It is because there are obvious differences in internet connectivity and speed for Selangor, Kuala Lumpur and Johor which are more accessible and faster than Sabah, Sarawak, Kelantan and Kedah (Sofea, 2019). In the case of Sabah, it was noted that about 52% or 60% of the students were having inadequate internet connection, and only 24% of students living in urban areas had a steady internet link. On top of that, 80% of students in Sabah opted for using Whatsapp and Instagram platform, due to weaker internet coverage, to enable them participating in online teaching (Sofea, 2019; Lee, 2020). Furthermore, the story of Veveonah, as one of the students of higher learning in Sabah, who had to climb a tree to get better access for internet connection, demonstrates how poor the condition of internet connectivity is in the state, particularly in the rural areas (Stephanie Lee, 2020). The prime reason for this imbalanced internet connectivity was mainly due to the policy of telecommunication providers who built internet connectivity system based on population density and not on geographical area. The population of rural areas roughly contain 5% of the total population, so internet connectivity may not cover these areas, and this is may the case of Sabah and other states which have low internet coverage (Jacobs & Pathma, 2020).

Realizing the inadequate supply of internet connection throughout Sabah, the government of Perikatan Nasional (PN) under the leadership of Tan Sri Muhyiddin Yasin had launched 'Gerbang Sabah' in September 2020 to widen the internet coverage and to increase the capacity from its initial capability of 4Tbps (terabytes per second) to 12.8 Tbps in the next three years. Gerbang Sabah is an underwater fibre optic cable stationed in Tanjung Aru and it is part of the government's 'Jendela' initiative. With the launching of this initiative, it is hoped that Sabah's internet capacity will be on par with other states in Malaysia (Geraldine, 2020). Thus, in analysing how the students of higher learning in Sabah would be able to cope with the surmounting pressure to undergo the process of online teaching for the entire academic semester, this study would focus on the perception of the students of International Relations (IR) Programme, Faculty of Social Sciences and Humanities, Universiti Malaysia Sabah (UMS), on the effectiveness of online teaching during the covid-19 pandemic.

**Online Teaching Concept and Its Implementation in Malaysia**
Online teaching or commonly known as 'E-learning' is not a new concept in the education field. It was implemented prior to the Covid-19 pandemic. The definition of online teaching or E-learning may be varied but it can simply mean as a process of providing distance teaching and learning using digital information and computer technologies such as the internet, CDs, mobile phones or even television. In other words, technology is used to meet people's need to learn and evolve (Coman et al., 2020). There are two ways of conducting online teaching either by synchronous or asynchronous learning (Mahiswaran et al., 2020). Synchronous learning refers to the direct interactions between the students and the lecturers using digital platforms such as google meet, zoom, video conferencing and et cetera. Meanwhile, the asynchronous learning provides opportunity for the lecturers and students to interact before or after the online class through thread discussion and emails (Mahiswaran et al., 2020). The lecturers had set up a path of learning, for instance, by recording earlier some lectures and then uploaded them in the online education platforms. The students would refer to the recorded lectures according to their conducive time and would refer back to the lecturers for further discussion or arrangement for the preparation of writing assignments that must be submitted within the stipulated time (Mayadas et al., 2009).

In principle, the early forms of distance education (but not based on online digital platforms) could be traced back to the 1840s with the work of Isaac Pitman (1813-1897), an English educator, who used mail system to post his texts transcribed into shorthand on postcards and receiving transcription from his students in return for correction (Coman et al., 2000) Since then, and with the advancement of modern technology, the online education or E-learning have begun rapidly kicking off in the educational field, particularly from the mid-1990s until present (Coman et al., 2020; Nyiri, 1997). Today, online teaching is considered as part of the process of teaching and learning both at school and the higher learning institutions. It helps to facilitate the process of learning by not heavily depending on the physical interaction in the class but via online communication or non-face to face interactive classroom using digital platforms. Online teaching also can fulfil other educational needs such as giving more opportunity for those who cannot attend school or university physically due to work commitments or other constraints, and easing the burden of registering huge numbers of students as well as reducing the registration budget cost (Mayadas et al., 2009). Furthermore, online teaching may encourage the students to interact more with the lecturers

as it is a student-centred learning and completely different from a traditional classroom (Ni, 2013; Clark-Ibanez, & Scott, 2008).

Nevertheless, online teaching may also cause some disadvantages both for the lecturers and students. For the lecturers or even professors some are not well-versed with the current technological set up for conducting online teaching which circuitously will disrupt the learning process (Clark-Ibanez & Scott, 2008). Whereas for the students, it could be associated with their state of psychological-mental drain by unconsciously forcing into distressed and stressful emotions due to the over burden of online assignments and the feeling of loneliness, confusion and frustration as there are no lecturers or classmates that they can share with (Ni, 2013; Bergstrand & Savage, 2013). Even the students' health condition could possibly be affected for having a sense of phobia in the fear of losing internet connectivity, overuse of digital technologies and excessive screen which indirectly caused stress and lack of sleep (Pinaki, et al., 2020).

Despite these disadvantages, since the world is now facing an unprecedented pandemic of Covid-19 where schools and higher learning institutions are mostly closed, students and lecturers do not have any choices left instead of actively engaged with the online education system. Even prior to the Covid-19 pandemic, according to the UNESCO Report 2017, there were approximately 264 million children and adolescents who did not get a chance to receive education in school, and this pandemic made this situation further worst (Lokanath et al., 2020). Furthermore, the Organisation for Economic Co-operation and Development (OECD) has made an estimation that over 421 million children are affected by school closures in 39 countries during this pandemic (Chung et al., 2020). Thus, the students and the lecturers must be prepared enough to navigate these digital challenges in order to ensure the process of teaching and learning continue to be part of their academic process. This is also not an exception for the educators and the students of Malaysia higher learning institutions. Since the closure of the universities in March 2020, the process of teaching and learning has been fully conducted online until now.

Not so much different with other universities in the world, Malaysian universities also have been using the available digital platforms such as ZOOM, Cisco WebEx, Google Meet, Google Classroom, and social media applications like WhatsApp, Facebook, Twitter, Instagram to interact with the students (Mohamad, 2020; Nik et al., 2011; Muhammad et al., 2020). In fact, the Malaysian higher learning institutions had implemented online learning back in the late 1990s as it is in line with the educational developments under the Malaysian Education Blueprint 2015-2025 which officially drafted online learning as an integral component of higher education and lifelong learning (Mahiswaran et al., 2020). The online system using the Learning Management System (LMS) which is based on the Blended Learning (BL) concept combining the traditional face-to-face teaching and online communications (Chung et al., 2020).

In order to ensure the implementation of online education runs smoothly, the Malaysia government is providing many resources to higher learning institutions including, for example, encouraging universities, colleges, and polytechnics to use Massive Open Online Courses (MOOCs)' as one of the main methods to conduct online teaching (Shahzad et al., 2021). Furthermore, the Ministry of Higher Education also has collaborated with universities, various organisations and Malaysia's telecommunication giants such as Celcom, Digi, Telekom Malaysia and Maxis to launch 'Data Plan and Device Packages for Higher Education Students'

("Embracing online teaching", 2020). This was done primarily to resolve the issue of inadequate supply of internet connectivity in Malaysia. Simultaneously, the Malaysian educators were strongly advised to be more kind-hearted and tolerant in interacting with their students during online lectures. They were also expected to diversify their online methods according to their students' internet coverage and speed. For the low connectivity area, social media such as WhatsApp, Telegram and Instagram is the best option. Meanwhile, Youtube and Kahoot are suitable for the middle-speed connectivity and Zoom, Google Meet, and Microsoft Team for the much faster and wider internet coverage (Ehwan, 2021).

For Universiti Malaysia Sabah (UMS) as the case study of this article, it has its own strategic planning to inculcate online teaching culture for its lecturers and students before the Covid-19 outbreak. UMS has set up a centre for e-learning or called as 'Pusat E-Pembelajaran UMS' in 2014 which formerly functioned as a unit but later upgraded into a centre in 2017 (Pusat E-Pembelajaran UMS, 2021). As other universities in Malaysia, UMS also has learning management system which is named as SmartUMSv3 and it is now upgraded to Version 3 (Fong et al., 2020). Hence, in examining how the students perceive the effectiveness of online teaching at UMS, the study would focus on the students of the International Relations Programme. Being located in Sabah as one of the states that still have problems with inadequate internet connectivity, UMS may provide different outlook and results that instantaneously paves the way for new and fresh approaches in improving online teaching methods in Malaysia.

## Methodology

The data collection method for this study is a combination of documentary analysis and the online of survey-questionnaires distributed to International Relations (IR) students as targeted respondents. A total of 159 students (n = 159) out of 270 students in the programme has responded to the survey. As the data is collected through quantitative approach, the survey was carried out through google form; whose link was shared through the WhatApps communication between the lecturers and students. Apart from online survey, documentary analysis was undertaken for the researchers to identify the prevailing issues with regards to online teaching in Sabah. This step is particularly important for the formulation of survey questionnaires. This research mainly relies on newspaper clippings, articles and press releases both printed and electronic forms transmitted via internet and computer-based.

The primary objectives of study were to
- understand the main challenges that students encounter during online learning; and
- determine if students had an adequate learning environment to allow for focus during online learning.

The manners in which data was collected were proven to be the preferred approach if one were to examine the previous research on online teaching and learning. Data collected from 159 students that represent 58.8% of the total students in the IR programme can be regarded as a reasonable pool of data collection to depict the overall scenario of the students' online learning experiences. The findings from these collected data are reliable as the data were collected across the board without targeting on any particular of students and/or areas of their residents. It should be emphasised that the survey questionnaires are shared to all students without restriction; and it was distributed at the same time with equal opportunity and time frame to response.

Recent study in Malaysia such as Mahiswaran et al (2020) employed the same data collection approach i.e. a combination of survey questionnaires and documentary analysis. However, their study gathered larger data composition as data collection covered private and public universities as well as the undergraduates together with post graduate students. Another recent local study that has undertaken the same data collection method is carried out by (Shahzad et al., 2020). There are also numerous research conducted abroad on the effect of covid-19 pandemic on e-learning that particularly employed the same method of data collection. Among the recent research were the study by (Besser et al., 2020; Ober et al., 2021).

**Analysis and Result**

A total of 159 students (58.8%), out of 270 students enrolled in International Relations Program at the Faculty of Social Sciences and Humanities, responded to the online survey. The goggle forms were distributed via whatsapp and responses were collected beginning 1 February 2021, just before the start of semester. Some of the questions and responses of the questionnaire will be shared below.

Table 1 below shows a brief profile of the respondents for this survey. One hundred fifteen of these respondents (72.3%) live in Sabah while the remainder are from West Malaysia (31 respondents; 23.3%) and Sarawak (13 respondents; 5.6%). The timing of the distribution of survey questions came a week before the second academic session was to start, and would also be the second semester in which UMS students will have to undergo a full semester online. In total the students were asked to respond to sixteen yes-no questions and fourteen short answer questions.  The findings from thus presented below.

Table 1
*Profile of Participants*

| Question | Answer | Total Responses | Percentage |
|---|---|---|---|
| Year of Enrolment | First Year | 42 | 26.4 |
| | Second Year | 46 | 28.9 |
| | Third Year | 70 | 44 |
| | Fourth Year | 1 | 0.7 |
| Hometown (district/state) | Sabah | 115 | 72.3 |
| | Sarawak | 13 | 8.2 |
| | Peninsular Malaysia | 31 | 19.5 |

This table also indicate the respondent's current year enrolled. The largest number of respondents are enrolled as third year students with 70 responses (44%). This is followed by 46 respondents (28.9%) enrolled as second years and 42 respondents (26.4%) enrolled as first years. There was only 1 student (0.6%) who was enrolled as a fourth year student.

Table 2
*Internet Connection*

| Question | Answer | Total Responses | Percentage |
|---|---|---|---|
| Do you have table internet connection? | Yes | 93 | 58.5 |
| | No | 66 | 41.5 |
| Type of Data Plan | Prepaid | 98 | 61.6 |
| | Postpaid | 26 | 16.4 |
| | Home packages | 30 | 18.9 |
| | None (On campus) | 5 | 3.1 |

The data presented in Table 2 looks at the internet connection of the respondents. Sixty-six respondents (41.5%) do not have stable internet connections compared to the 93 respondents who did. The sixty-six respondents without stable internet were also living in further away from major towns or located in interior areas such as Kota Marudu, Tawau and Semporna. The tendency is also for students to use their own personal data either prepaid or postpaid, which when taken together represented 79% of the respondents. The remaining 18.9 percent were sharing home connections while the 5 respondents who did not have data plan, were using the wifi connections on campus.
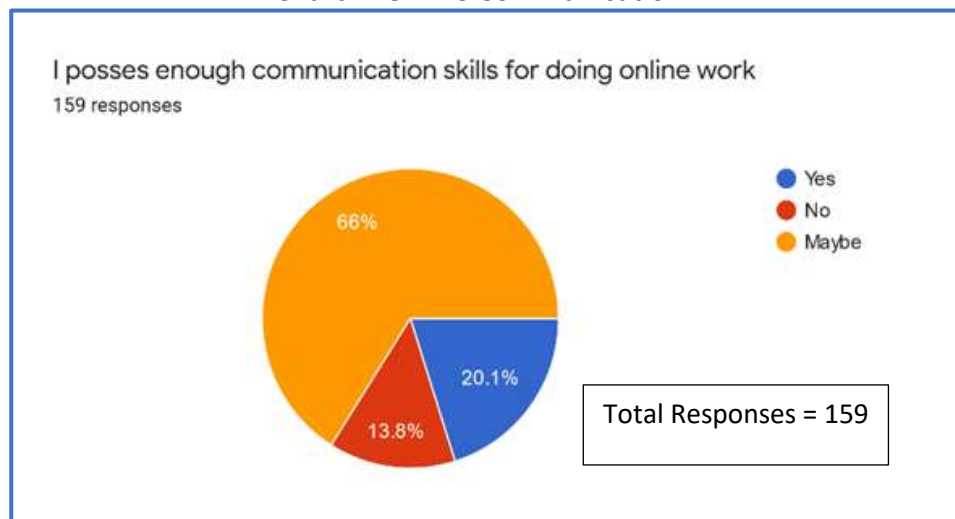
Chart 1. Online Communication



Chart 1 above looks into the confidence level of students being able to communicate online effectively. One hundred and five respondents representing 66 percent, feel they have enough communications skills to be able to communicate effectively during online learning. Only 32 respondents or 20.1 percent can confidently say they have communication skills to do online work. 22 respondents or 13.8 percent are sure they do not possess enough skills to do online work. As seen in Table 2, more than half of the respondents (83 respondents or 52.2%) did not encounter problems when communicating with other group members for their assignment.

However, when compared against the responses in Table 3, it can be seen that more than fifty percent of the respondents believe traditional in-class or fieldwork activities are the preferred environment for learning. In fact, 133 respondents (83.6%) do not agree that learning online is the same as learning in the traditional classroom setting and if given the opportunity, a little over seventy percent would prefer to return to campus for learning to resume in classrooms compared to the twenty nine percent who preferred to continue with online classes. More than eighty percent said they understood the subject matter better because of fieldwork activities, and face-to-face interactions with lecturer was equally important as well. More than 79 percent of respondents also claim that academic references and resources were more difficult to access online.

Table 3
*Student Preference for on campus or online learning*

| Question | Answer | Total Responses | Percentage |
|---|---|---|---|
| I am comfortable communicating online. | Yes | 83 | 52.2 |
| | No | 76 | 47.8 |
| Learning in the same at home and through the internet | Yes | 26 | 16.4 |
| | No | 133 | 83.6 |
| If you were given a choice, would you continue classes online or prefer to go back to campus? | Continue online | 47 | 29.6 |
| | Back to campus | 112 | 70.4 |
| I feel face to face with lecturer necessary for learning. | Yes | 144 | 90.6 |
| | No | 15 | 9.4 |
| Do you feel that field work activities helped you understand the topic/subject better? | Yes | 136 | 85.5 |
| | No | 23 | 14.5 |
| Did you experience difficulty in accessing references/academic resources for your assignments? | Yes | 127 | 79.9 |
| | No | 32 | 20.1 |

Amongst the reasons provided by the respondents on the challenges of online learning were internet connectivity, home environment that was not conducive, and too many assignments or assessments. Table 4 below provides a view of the number of courses these students are registered for in the last semester, as well as the number of hours they spend online each day for lectures and tutorials. It can be observed that the largest portion of the respondents, some 84 percent, are registered for 6 to 7 courses for the semester. Generally, each online course session would be less than 3 hours.
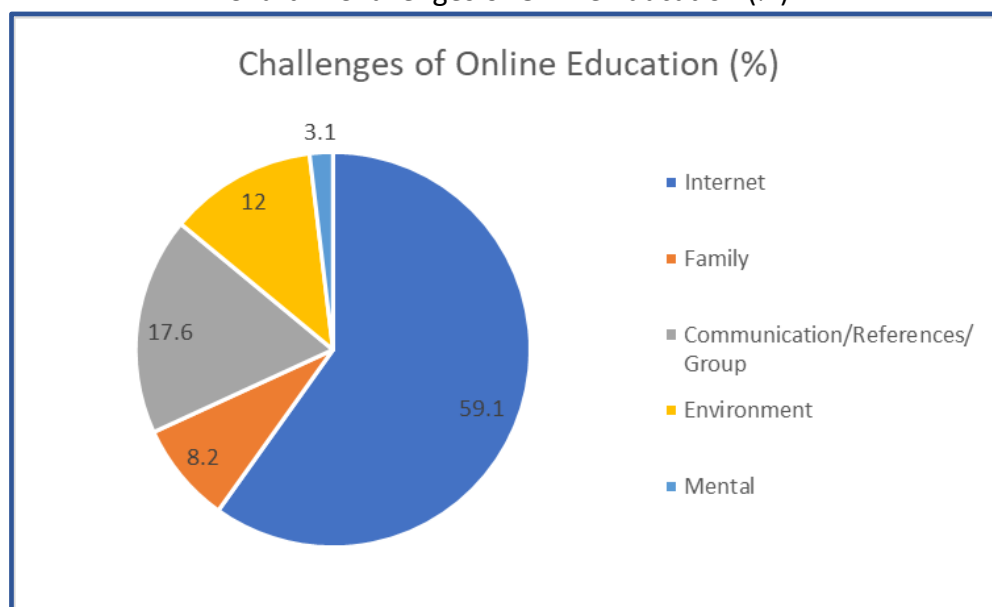
Table 4
*Number of Courses and Duration of Lectures*

| Question | Answers | Total Responses | Percentage |
|---|---|---|---|
| Number of courses registered for this semester. | 4 | 10 | 6.3 |
| | 6 | 56 | 35.2 |
| | 7 | 79 | 49.7 |
| | 8 | 14 | 8.8 |
| Duration of Online Class (per session) | Less than 3 hours | 113 | 71.1 |
| | More than 3 hours | 46 | 28.9 |

**Challenges of Online Learning**
There are generally five main issues highlighted as the main challenges by the students when it can to the challenges they faced for online learning. These issues are internet connection, communication and references, environment, family commitments, and finally mental issues. These issues are as seen on Chart 2 below. The issue with the highest respondents were internet connections with 94 respondents (59.1%), followed by 28 respondents (17.6%) who had communication problems. Another19 respondents (12%) found online learning environment unconducive; 13 respondents (8.2%) having to deal with family issues and commitment, and the remaining 5 respondents found it mentally challenging.

Chart 2. Challenges of Online Education (%)



**Internet Connection**
Based on the chart, the most common challenge for online learning for students has been internet connection (59.1%). This is especially so when it comes to having a stable and fast internet connectivity. This can also be seen in Table 2 where more than 40 percent of the respondents said they had unstable internet connections. Given that many of the students

were also using their own personal data that was either postpaid or prepaid, students also found online learning to be expensive. This is because there is restriction of data quota not just for online lessons but also for research purposes. Final years who are required to submit their final year research project paper for instance, need more internet data for academic articles and video materials. Amongst the complaints from the students are:-

> "Sometimes our connection is not good especially when heavy rain." – Third year student (Prepaid)

> "Internet slow, suara putus-putus, keluar masuk aplikasi. Kalau hujan line slow atau langsung tiada line. Cari maklumat di internet slow. Pelajar sedikit terbeban." *(Internet slow, voices are cut-off, in and out of applications. When it rains, line is slow or none at all. Finding information on the internet is slow. Students are a little burdened.)* – Third year student (Postpaid)

> "Connection problem and I need to spend more money to purchase credit to buy data." – Second year (Prepaid)

> "If no electricity, then I don't have the internet connection. If rain heavily, the stability of the internet is quite bad. Plus, if so many work given based on the online course, it will be so hard to do it because of lack of internet connection." – First year (Prepaid)

> *"Kekurangan kewangan untuk membeli plan data sehingga kan terpaksa mngehadkan penggunaan data untuk sesetengah kelas agar dapat support kelas seterusnya." (*Financial constraints to buy data plan to the point it limits our time in some classes because we need to save data for the next class.) – Third Year

**Communication**

The second issue with online learning is communication and access to resources. The 19 students who responded found some difficulty in following online classes because they do not understand the topic being taught. Their problem is understanding the topic taught is also related to constant lag in internet connectivity making it hard to keep up with classes or gather essential references to supplement online lectures. This contributes to their difficulty in understanding the topics for their assignments. The data from Table 3 on the previous page also highlight this situation where respondents believe the process of studying in a physical classroom is much more different than an online classroom. Student and lecturer interaction is more natural and less awkward in person then online. Some students also found communication with other students for group assignments also a challenge. This is highlighted in their open-ended answers as shown below.

> "Doing group work. 70% of group works fall on me as a lot of my classmates have trouble getting online, even for a discussion. I would highly prefer it if we only have individual assignments." – Third Year

> "Having groupmates that does not do their end of the bargain." –

> "Group mates being selfish for making unstable internet connection as an excuse to not submit their part. Group mates said his/her got no laptop and yet TIDAK BERUSAHA to do something about it…I am a final year student, I should have take this time to start my thesis. But then, I still have assignment and presentation to do." – Third year

> "Misunderstood between lecturers and students." – Second year

> "So far I'm okay with online learning but I'm just not okay when it's come to group member who don't give full cooperations to group work." – First year

**Unconducive Learning Environment/Family Commitments**
Learning and studying from home is not an ideal situation for all students. About 32 respondents (20%) find the environment of online learning at home not conducive due to distractions from family members or neighbours. Due to their long hours online, with most respondents enrolled in more than 6 courses, family members often have difficulty understanding for the student to be logged to the computer or handphones for hours on end. There is too much distractions in their home surroundings as opposed to the more formal and conducive settings of a classroom. Not all homes are meant for learning. The students come from all walks of life, from all levels of the financial spectrum. Therefore, studying from home is not the same for one student from another.

> "Lack of internet access, clash dengan house chores dan hal dekat rumah, lack of motivation, its hard to focus at times." – Third year

> "*Kadang-kadang tu, pesekitaran macam di rumah kan so tanggungjawab sebagai anak lagi mahu memasak kemas rumah dalam masa yang sama kelas lagi.*" (Sometimes the environment at home, and so the responsibility as a daughter and the need to cook and clean around the house, at the same time need to attend class.") – Third year

> "I need to handle chores at home and I only have time to do my assignment at night." – Third year

> "The bad internet connection, unable to be as active as I want/needed to be, unable to participate in classes or meetings fully, distracted with home chores, lack of motivation because of the different atmosphere, just the stress of not having a good and stable internet connection overall." – Third year

**Mental Stress**
There were 5 respondents who are experiencing mental stress due to the combination of issues with online. The unstable connection added with pressures from parents only adds to the lack of focus and a sense of giving up amongst the student. Students feel frustrated and demotivated as they try to deal with unstable connections, missing a good portion of lecture because their lines are often cut-off.

Students need a lot of self-motivation and support to when completing their assessments, especially their final year projects. But online learning has drastically decreased peer support and as parents added to their stress just builds pressure for the students. These students also worry about their future prospects given as statistics show unemployment rate has risen following prolonged lockdowns. This is particularly evident amongst Third year respondents.

> "Mental capacity: sitting in front of computer all day has cause myself to experience burnout. this different from going to class where we attend it face to face, and do the assignments on the computer. It's hard to stay offline even for awhile because everything delivered through online platform. Aside from mental exhaustion, I'm experiencing physical pain-backpain, severe migraine and eyesight getting worst. The environment is different. unable to communicate effectively with groupmates since all of them have different internet capacity." – Third Year
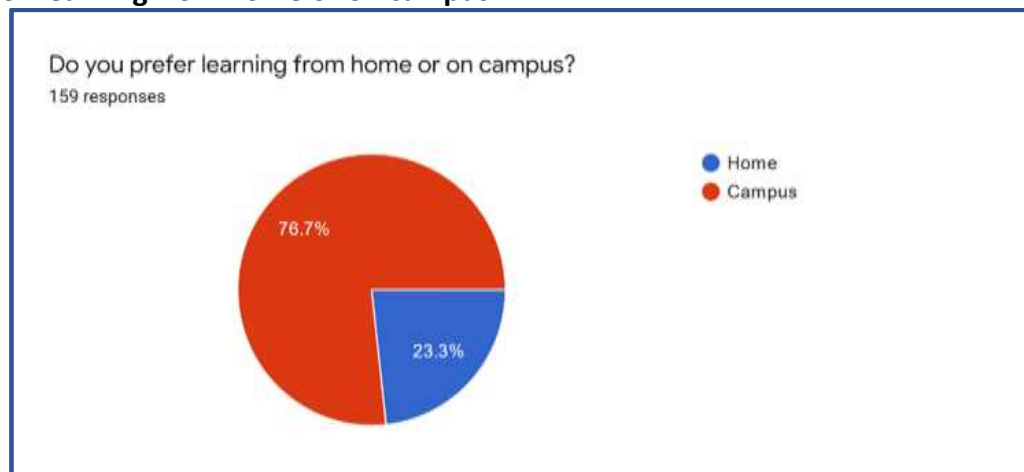
> "No motivation. Mental deteriorating" – Third year

> "Lack of internet access, clash with house chores other issues at home, lack of motivation, it's hard to focus at times." – Third Year

> "Accessibility to internet connection and unsupportive learning situations at home (mentally)." – Third Year

With these issues above it is no wonder then 122 respondents (76.7%) were eager to return to campus to resume their studies. As can be seen from Chart 3 below, only 37 (23.3%) respondents found it agreeable to continue their online education.

**Chart 3. Learning from home or on campus**



Do you prefer learning from home or on campus?
159 responses

- Home
- Campus

76.7%
23.3%

**Conclusion**
Not all students are able to cope and sustain an enthusiasm for online learning. The many challenges that they face serve only to weaken their interest in continuing classes, thereby affecting the quality of student that is ultimately produced. The prevailing situation of slow internet connectivity and coverage throughout Sabah particularly in interior areas exacerbates the online learning challenges face by their students. As face-to-face learning interaction is entirely not possible, students find themselves entrapped in the kind of hurdles

that they have not encountered during on campus study. This paper has identified five main challenges namely internet connections, communication and references, environment at home, family commitments and mental issues.

Apart from external factors with regards to facilities and surrounding, it is also discovered that the way in which student learn and lecturer teach online also significantly affect the student's cognitive ability and academic performance as a whole. Apart from communication skills on both students and lecturers, it should be reiterated that motivation is another pertinent factor. As human beings, we are not motivated individuals at all times. Rather, our motivation level varies depending on many factors. Motivation during face-to-face learning can be challenging and thus it is within expectation to discover that lack of motivation in virtual learning is even more prevalent. The need to maintain motivation is profoundly important as it is one of the panaceas to prevent mental stress and or fatigue.

The findings of this research reaffirm two main points in relation to teaching and learning for both settings i.e., virtual and face to face learning. The first point is with regards to communication and its effects on students' ability to learn and the effectiveness on the part of the lecturers to teach. Through various research, communication skills are provenly vital in imparting and gaining knowledge during face-to-face learning environment. This research confirms that communication skills is also the key to overcome many hurdles identified in online learning. The essence is to improve virtual communication skills. On the part of the institution of higher learning, the lecturers should be given platforms and opportunities to improve virtual communication skills. Lecturer should be encouraged to diversify their communication mode with the students to enhance students' involvement and participation in class. In line with that, students are also encouraged to enrol in various free online courses on improving online communication.

The second point is with regards to individual's motivation and the focus of this research is the students' motivation to sustain their interest as well as to particate in the online learning process. Motivation is vital in both face-to-face and virtual learning However, to sustain motivation in virtual learning process has been proven to be an insurmountable task. As motivation could be the solution to address mental stress among students during online learning, serious efforts should be undertaken to that effect. In the field of education, the two main humanist scholars on the subject of motivation are Maslow and Kolb (Gawel, 1996; Akella, 2010). Motivation theory put forward by Maslow stressed on the fulfilment of the basic needs. In need case of online learning, the most critical factor is internet connection and conducive learning environment at home. Kolb on the hand emphasised on the learning styles students which in turn determine their motivation. To adjust to online learning, students must revise their learning strategies to adapt to the unprecedented changes. All of these factors need to be brought to the attention of relevant government agencies as well as parents whose children are involved in online learning.

It is most likely that all of the challenges are interconnected and thus tend to affect the overall being of a student pursuing online learning home. While there are many factors that may be beyond the students' capability to overcome online learning challenges, there also numerous aspects of improvement that are within their means. To that end, all stakeholders involved

(students, lecturers and institute of higher learnings) need to collaborate and strategize less stressful yet effective online learning environment.

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