



**MALAYSIAN UNDERGRADUATES' PERCEPTION TOWARDS THE
EFFECTIVENESS OF THE E-LEARNING APPROACH ON HIGHER EDUCATION**

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Declaration

I declare that the material contained in this paper **Malaysian Undergraduates' Perception Towards The Effectiveness Of The E-Learning Approach On Higher Education** is the end result of our own work and that due acknowledgement has been given in the bibliography and references to ALL sources be they printed, electronic or personal.

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This research paper attached hereto, entitled prepared and submitted by **Lai Pui Er, Muhammad Fadshil, Pooja Magandran, Tan Xue Lin and Yong Jie Ren** in partial fulfillment of the requirements for the Bachelor of Communication (Hons) Public Relations is hereby accepted.



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Student Declaration Form

Department of Public Relations Academic Honesty Regarding Final Year Projects

The following are examples of academic dishonesty extracted from “Student Handbook” that are more applicable to final year projects.

- plagiarism, i.e., the failure to properly acknowledge the use of another person’s work;
- submission for assessment of material that is not the student’s own work;
- collusion, i.e., obtaining assistance in doing work which is meant to be solely the student’s own work;
- use of fabricated data claimed to be obtained by experimental work, or data copied or obtained by unfair means;

It is important that the student reads the Student Handbook and understands the seriousness of academic dishonesty. The student should pay particular attention on how to avoid plagiarism.

Student Final Year Project Declaration

I have read the student handbook and I understand the meaning of academic dishonesty, in particular plagiarism and collusion. I declare that the work submitted for the final year project does not involve academic dishonesty. I give permission for my final year project work to be electronically scanned and if found to involve academic dishonesty, I am aware of the consequences as stated in the Student Handbook.

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Abstract

Web-based learning has made remarkable development in the twenty-first century. Higher education has grown as a result of the rising utilization of e among educational institutions, especially during pandemic. E-learning allows for the dissemination of content in a variety of formats, including videos, PowerPoint presentations, text documents, and PDFs. Students can attend online workshops and communicate with educators via chat and discussion boards. Concerns regarding the effects of quality assurance-driven methodologies on the organisation and effectiveness of these activities have sparked the growth of online learning in higher education. Several aspects have been identified through the E-learning approach to answer the research question regarding the effectiveness and potency of the E-learning to higher education. Priorly, the authors and researchers discovered that previous studies defined and investigated effectiveness of E-learning in multiple ways. However, the aspects regarding the compulsory need of E-learning and beneficial university policies were still deficient in previous studies. Therefore, this study aims to integrate the perception of Malaysian undergraduates about the effectiveness of their E-learning and development initiatives which consist of independent variables such as academic performance, university policies, technical challenges, self-motivation and student engagement. Technology Acceptance Model (TAM) is applied because of its suitability in depicting the researcher's expectation from the study. This study approached a qualitative methodology which presents the perception of undergraduates engaging in E-learning. The sample size is 15 undergraduates from 15 various Malaysian private and government universities to learn their experience through a semi-structured interview.

Keywords: E-learning Effectiveness, Undergraduate Perception, University Policy, Self-Motivation, Technical Challenges, Academic Performance, TAM

Chapter 1: Introduction

1.0 Introduction

This part holds the vitality of the research. Adequate background of the study assists the reader in assessing if researchers have a fundamental comprehension of the research subject under examination and improves trust in the general quality of the interpretation of the results. A problem statement is concise data explaining the problem or issue to address the need for research or further investigation. This research needs to include the research objective and research question which is a declaration of a research objective in the method of which the researcher wants to respond. While, research objective is a declaration of research intention and motive which the researcher wants to explore further (Creswell, 2014). The significance of the study referred to as the 'rationale' is significant, because it is the one spot in which the researcher tries to persuade a reader that the research has value and meaning. In the limitation of the study, the section stated the list of any problem that researchers might encounter concerning it and definition of term that referred to meaning by each term according to the study.

1.1 Research Background

In past decades, the widespread usage of the World Wide Web and its rapidly growing applications, therefore ICT - supported education (E-Learning) soon became a hot topic in the 1990s (Nagy, 2005). Rush to find and adopt "online learning" (E-learning), a new method of effective teaching which holds a strong influence from technology. It has revolutionized the traditional chalk-and-board mode of delivering knowledge to students. Many terms have entered the modern student learning lexicon, for example E-learning systems, training content management systems, reusable educational material, and knowledge-on-demand. It is a form

of the learner and the learning provider being separated by cyberspace in an E-learning environment (Azma, 2002). The net and network-centric computation provide a solid framework for exploring E-learning and extending conventional learning approaches into new dimension learning models using internet-based technologies. However, numerous undergraduates are accustomed to physical learning since it has been the standard style of teaching throughout primary and secondary education. When they enter colleges, individuals may confront a variety of challenges, including academic burden, financial issues, and interpersonal interactions.

These traumatic events may place children at a high possibility of having mental health problems: stress, anxiety, and depressive disorder (Moy, 2021). In earlier research conducted by Fong (2021), the COVID-19 epidemic harmed the majority of the participants' academic studies, and online learning may not be as successful as traditional education, and over half of them felt that their internet access had an impact on their e-learning. Just one said E-learning was simple to comprehend and use. During the COVID-19 breakout, 50% of them thought that E-learning had benefited their academics and allowed them to communicate with instructors and other students. Approximately two-thirds of those respondents believed that E-learning was adaptive to timeslot.

With the flexibility of low-cost E-learning alternatives for computers and the internet, learning can now be facilitated from practically anywhere using a competent E-learning application (Attwell, 2006; Tirziu & Vrabie, 2015). New technology has advanced to the point where the geographical divide may be bridged by employing tools that simulate the classroom environment. E-learning offers the provision of material in a number of formats, such as videos, PowerPoint, text documents, and PDFs. Students may also participate in workshops (live online courses) and engage with lecturers through chat and discussion boards (Pituch & Lee, 2006).

The technological transformation of educational systems throughout the world has enabled the introduction of e-learning, a new required teaching environment (Adnan, 2020). Since the COVID-19 epidemic, 1.5 billion pupils and 63 million teachers were obliged to drastically modify conventional physical educational practices whenever feasible (Jess et al., 2020). Concerns about the implications of quality assurance-driven methods on the organization and effectiveness of these activities have given rise to the development of Online in Business and Higher Education, and its marketing as a "killer app" (Nicholson, 2007). This circumstance demonstrated the capabilities and inadequacies in educational standards faced with the challenge of digitalisation.

Digital intrusion is still a normal occurrence. The COVID-19 pandemic caused damage to almost every sector of human life, including schooling. It wreaked havoc, forcing educational institutions to discontinue their routine operations (Dawadi et al, as cited in Thapa et al., 2021). The adaptability of E-learning environments was not like every student where many faced various contributing difficulties interacting with their lecturers as they felt the need for two-way interaction. Therefore, this research aims to study Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education.

Even if plans for adapting to both formal and informal strategies are provided, earlier research has lacked an obligatory requirement to adopt E-learning in conjunction with the pandemic and university policy discussions were inadequate in prior research. The previous study has concentrated on the difficulties and determinants influencing E-acceptance learning and its application in higher education as a teaching instrument.

1.2 Problem Statement

The global pandemic's emergence has dramatically reshaped the landscape of the teaching and learning experience in Malaysia for the institution under study (Mahdzir, 2021).

The need for online learning has expanded tremendously and will continue in the future (Zalat, 2021). Even though it is only a contemporary approach, less is known in terms of its effectiveness. On March 25, the former Prime Minister of Malaysia Tan Sri Muhyiddin Yassin announced the first phase of the movement control order (MCO), which lasted until the end of the month. It was extended to a second phase that lasted until April 14, followed by a third phase from April 15 to April 28 (Povera, 2020). Although the education activities were postponed for two weeks at the commencement of MCO, higher education academics were later instructed to conduct classes through online mediums (Lim, 2020).

The significant key challenge of the E-learning approach is the high reliability of technology where technical issues take place, secondly the disclosure of new university policies and self-motivation (Adnan, 2021). In addition to inadequate access to digital technologies, there are substantial variations in digital competence, with some undergraduates lacking the high internet connection demanded E-learning (Athirah, 2020). Poor network connectivity coverage has increased exponentially in recent years; yet, in local cities and villages, maintaining a constant connection at a reasonable speed is a challenge (Aiman, 2020).

Perhaps the student will experience lack of consistency in their learning if peers or educators do not have a steady wifi connection. This is disruptive to the learning system. However, a large number of them confront difficulties that could impede their education. As a result, they are experiencing problems going live for virtual classrooms and other platforms that require a net connection. They encounter technical hurdles since they are unfamiliar with technology and computer technologies (The Star, 2020). E-learning varies in acceptance levels for every undergraduate, as some may accept E-learning methods, while others might find it difficult to comprehend. Many online learning platforms can be used, such as Google Meet and Microsoft Teams.

The difficulties may surface with technology, such as downloading, login, installation errors, and video and audio problems (Dhawan, 2020). Undergraduates from different faculties have their own approach to accessing information which is not applicable to all undergraduates. The need varies based on faculties and necessities. For instance, the School of Pharmaceutical Sciences from Universiti Sains Malaysia has postponed certain sessions because it needed mandatory lab work which requires physical attendance of students (Aiman, 2020). In addition, educators from the Engineering field of the study claimed engagement and events associated with practical training, such as lab sessions, workshops, and conferences were not superseded (Coman, 2020).

Besides, poor connectivity has been a reason to show less efficacy among students. These problems may occur due to poor internet connection, a flawed system in digital devices such as laptops, mobile phones, and computers (Jasim, 2020). The rural area undergraduates are facing difficulties in joining classes (Athirah, 2020). Even though the university management is providing possible solutions through new policies to guide the undergraduates such as collaborating with the YTL Corporation foundation to offer a free 40 GB monthly data plan and free smartphones (Shankar, 2020). YTL Corporation proffered 4G internet services to students in Malaysian public universities (Jaafar, 2021). Reliable and affordable internet access anytime to ease students' burden to learn from home especially those from the B40 families. Moreover, student laptop renting programs were conducted in certain private universities. For instance, UTAR higher education institution arranged with Fix Master to rent out laptops to students in need for four months with an affordable deposit and rental fee (SRC UTAR, 2021).

Furthermore, self-motivation has a primary relationship with academic performance and interest. Malaysian undergraduates are facing low motivation to study through the E-learning platform because of less two-way interaction and collaboration (Hazim, 2020). This platform created a sense of isolation among undergraduates (Sanrey, 2020). Rapid

changes happen in a way where Malaysian undergraduates are not familiarized with e-learning and unfortunately have no choice but to adapt and stay obligated to the institutions of higher education in conjunction with pandemic (Lim, 2020). Based on the previous study, Kim and Frick (2011) indicated that some students would perform better in the E-learning platform because they are less concerned with making social interaction.

Meanwhile, some may feel that social interaction between friends or lecturers is essential for them to motivate them to ace in the E-learning session. Recent study indicated undergraduates feel less motivated in E-learning which requires a supportive instructor to increase students' learning motivation in an E-learning environment (Harandi, 2018). For instance, interacting with undergraduates by monitoring their online presence and supplying them with continuous feedback is vital to enhancing self-motivation (Khoo, 2021). According to Sandybayev (2020), the shift from traditional learning to online learning has made the students face difficulties adapting to it. Thus, it has become one of the aspects that decreases the student's motivations (Samir, 2014). For example, undergraduates frightened, worried and nervous due to E-learning can cause anxiety which has a negative effect on their accessibility and motivation (Koh, 2021).

In short, it is critical to address Malaysian undergraduates' perception towards the effectiveness of the E-learning approach on higher education and student engagement which provides the disclosure to the aspects of E-learning. Therefore, this research is to learn the reasons behind their perception.

The research gap is a significant element which is the ability to draw a conclusion for a question is slowed by lacking or incomplete knowledge, which is referred to as a topic. The research need is identified as a gap that prohibits decision-makers from making informed decisions. The technology acceptance model (TAM) is a concept of information management that outlines how consumers learn to embrace and use technologies. This emphasizes that real

system usage is the moment at which humans use technology. It refers to whether someone considers a piece of technology to be beneficial for the task at hand. Nonetheless, it needed to find ways to address the high reliability of undergraduates on E-learning because of Covid 19 pandemic as a focal point too (Valverde, 2020).

The E-learning approach is complex and multi-dimensional whereby it doesn't determine how people's self-efficacy, motivation, and obligatory E-learning approach improved in a multicultural context in Malaysia. The inadequate information about the undergraduate's perception towards a compulsory switch to E-learning in the midst of pandemic is lacking. This identifies a noticeable gap in the recent e-learning research. Previous studies discuss more effective approaches and course materials that emphasize more educational strategies. It also discusses the importance of accepting technology in the teaching process. Samir & Taj-Eddin (2014) stated in their E-learning-based research that the future depends on the integration of technological enhancement within the multiple educational fields since this will definitely have a beneficial impact on academic instruction and understanding. Even though techniques to be adaptable to both formal and informal strategies are introduced, the mandatory requirement to accept e-learning in conjunction with the pandemic is lacking in prior studies. Previous research has looked at the problems and elements that influence e-acceptance learning and use as a mechanism for teaching in higher education. Despite the introduction of techniques that are adaptable to both formal and informal strategies, the university policy is lacking research in the previous study.

1.3 Research Objective

RO 1: To explore the perception of Malaysian undergraduates towards the E-learning approach during the pandemic period.

RO 2: To explore the effectiveness of university policies on E-learning towards Malaysian

undergraduates amidst pandemic.

RO 3: To explore the effects of the E-learning approach on the self-motivation of Malaysian undergraduates.

1.4 Research Question

RQ 1: What are the perceptions of Malaysian undergraduates towards the E-learning approach during the pandemic period?

RQ 2: How effective are university policies on E-learning towards Malaysian undergraduates amidst pandemic?

RQ 3: What are the effects of the E-learning approach on the self-motivation of Malaysian undergraduates?

1.5 Significance

1.5.1 Research Significance

Midst Covid 19 pandemic, educators and undergraduates faced a huge challenge, and they needed to implement a new situation for teaching and learning. They had to adapt to online teaching and learning (OTL) to continue their courses. Higher education institutions conducted their OTL according to their timetables through different platforms to solve the issue to ensure they could continue their lectures (Konig, Daniela, & Glutsch, 2020). However, students were difficult to adapt to the new situation (Chung, Subramaniam, & Dass, 2020).

According to Wijeratne, Thomas, Amaranathan, Chandru, & Don (2020), some of the students were not happy with the online class as they felt face-to-face class would be more effective for their course. A journal indicated that advanced technology is not able to fully motivate students in their learning process (Gunasekaran, 2018). Hence, E-learning has become an obstacle to educators and students, especially the connection between them (El-Seoud, 2014). On the other hand, the other students were able to rapidly adapt to the

technological, cultural, and social environment, and they showed that they had improved their academic performance (Edmundson, 2006).

In fact, this research can investigate Malaysian undergraduates' perception towards E-learning and explore the effectiveness of university policies on E-learning towards Malaysians during the coronavirus period. Additionally, the effects of the E-learning technique on the self-motivation of Malaysian undergraduates will be also investigated in this research.

1.5.2 Practical Significance

Education has changed considerably because of the rise of E-learning, in which instruction is delivered distantly and on online platforms. According to study, online learning facilitates greater retention and takes less time, indicating that the coronavirus's changes are here to stay (Cathay & Farah, 2020). At the end of this research, we can promote policy changes to universities, to ensure there is no interruption in the momentum of students during the pandemic period. Besides, Malaysian undergraduates can practice it without feeling demotivated to ensure the effectiveness of E-learning methods. The outcome of this research will serve as a point of reference for future studies looking into the perception and effectiveness of E-learning. This study will present insights for handling the E-learning approach in higher education.

1.5.3 Theoretical Significance

Davis (1989) introduced the Technology Acceptability Model (TAM), which has been widely used in the literature to assess the amount of user acceptance of a particular technology (Abdullah, Ward, & Ahmed, 2016). As a contribution to the field of Management Information Systems, the Technology Acceptance Model (TAM) was developed. The model has been a significant step forward in research because it improves the design and development of information systems and serves as a realistic testing tool for assessing system

acceptability in ex-ante use scenarios since its inception (Abdullah et al., 2016). Recent E-learning studies have also used the TAM as their grounding theory to investigate learners' intent to use e-learning in various circumstances (Gill, Malik, Iqbal, Haseeb, & Akhtar, 2020). The TAM was also employed as the underpinning theory of the current study's research framework in order to investigate the explained variance of exogenous influences on the endogenous variable of students' plans to implement E-learning in higher education institutions (Gill et al., 2020).

1.6 Operational Definition of Terms

1.6.1 Technology

Technology is the application of scientific knowledge to practical vital aspects of human existence, or the transformation and manipulation of the human environment (Solheim & Stolen, 2007). Technology refers to anything that humans put between themselves and their circumstances in order to suit particular demands, as well as the competent abilities that they build and maintain as part of the problem solving process (Ginner, 1996, as cited in Hallstrom, 2009), artifacts, socio-technical production and use systems, and knowledge, technique, know-how, or methodology are all examples of it (Ginner, 1996 & Kline, 2003, as cited in Hallstrom, 2009).

1.6.2 E-learning

In other words, electronic learning is called E-learning. It is categorized as developing learning through internet technologies. The freshmen who were not able to be full-time students could use this platform to attend their education (Moore, Dickson-Deane, & Galyen, 2011). Besides, the higher education system is undergoing constant development today, universities need to stay up with students' ambitions, wants, and expectations (Coman, Țîru, Mesesan-Schmitz, Stanciu, & Bularca, 2020). E-learning concentrates not only on process

but also on the transition of experience from the students themselves to how much information is received from them by using different electronic devices (Moore et al., 2011).

1.6.3 Academic Performance

Academic performance is a way of assessing student progress across multiple academic areas as well as their educational contentment. Instructors and education authorities often assess accomplishment based on academic achievement, grade point averages, and standardized test scores (Narad, 2016). Academic achievement is an essential part of schooling. They further stated that these targets are monitored by continual evaluation or examination scores such as their accomplishment in an examination, quizzes, and course work. Academic performance measures a student's educational success and ability.

It represents and assesses the extent to which an institution of higher learning, educators, and learners have achieved their learning objectives. Similarly, academic performance is a student's measured and apparent conduct during a given timeframe (Yusuf, 2016). Furthermore, a student's academic success is characterized by his or her performance in analysis, syllabuses, and curriculum work (Abdullah, 2016). The authors' concepts illustrate that academic achievement is dependent on quantifiable outcomes.

1.6.4 University Policies

A university policy is a document that outlines the university's stance on a certain topic and instantiates how to comply with it. University policy must have the following criteria which are, it has an extensive range of applications across the university (Cornell University, 2021). Next, it contributes to compliance with relevant laws and regulations, enhances operational efficacy, promotes the university's mission, or minimizes institution risks. (Cornell University, 2021). Furthermore, it must contain comprehensive compliance procedures and specify actions or limits. Finally, for policy issuing and major revisions, the university president or executive officer must evaluate and approve the subject matter

(Cornell University, 2021). A policy is a university policy if it fulfills these characteristics. If it doesn't, it's a departmental office, or unit concerned policy (Cornell University, 2021).

1.6.5 Student Engagement

Student engagement is universally acknowledged to be vital. This is because pupils who are actively interested in their studies are more likely to succeed (Kahu & Nelson, 2018). Student engagement has emerged as a key focus in attempts to improve teaching and learning. Furthermore, research has found a correlation between student engagement and motivation, with engaged students displaying "consistent behavioural commitment in learning activities accompanied by a positive emotional tone" (Groccia, 2018). These kids prefer to choose difficult assignments, take initiative in their learning, exert considerable effort and focus, and display positive feelings such as excitement, optimism, curiosity, and interest when learning (Groccia, 2018). Student participation can take various forms, as the descriptions above demonstrate, and if students find it difficult to join the class, it can help them enhance their academic performance (Groccia, 2018).

1.7 Summary

To summarize chapter 1, the researcher was discussing the problem statement on how undergraduate students adapted to E-learning during the COVID-19 pandemic period and developed research objectives and research questions based on that.

Chapter 2: Literature Review

2.0 Introduction

Related elements of E-learning and its effectiveness and benefits between E-learning and traditional learning will be discussed in the literature review for a comprehensive reading. It is to carry out the comparison of effectiveness and benefits between the E-learning approach and traditional learning approach in higher education. Moreover, the sub-topics are correlated to one another to show the connection of the study. Furthermore, student engagement and technical challenges faced by students and parents, as well as university policies will also be discussed to study how they affect the Malaysian undergraduates' education during the coronavirus outbreak. Lastly, conceptual framework and Technology Acceptance Model (TAM) will be implemented in this chapter to support the research study.

2.1 Effectiveness and Benefits between E-learning and Traditional Learning

In this advanced technology, online learning has been popular with a substantial increase in enrollment from students who wish to study. Due to this coronavirus pandemic, higher education also implemented online learning and teaching (OTL) in their study. It eased lecturers and students to have a flexible class as well as spend fewer expenses on their foods, accommodations and other needs compared to traditional learning (O'Shea, Stone, & Delahunty, 2015). Therefore, OTL is a new phenomenon in an academic environment in this generation (Bower & Kumar, 2015).

According to Thurmond, Wambach, & Connors (2002), when varied evaluation tools are useful to predict the success of e-Learning, behavior of students may be healed or modified through numerous judgments to achieve higher performance. Technology readiness increased the usability of the learning approach and value of the information increased the quality and their satisfaction (Ozkan & Koseler, 2009). By implementing educational

perceptions as a component of the E-learning environment, it is able to measure the variable students' improvement on their studies (Morgan, 2007).

Goura (2020) indicated that the term of online learning is to be defined as an academic learning that occurs via the internet, which is called E-learning. A lot of graduate students are choosing online learning in this pandemic to ensure they can study their academics fluently without disturbing external issues. It eases them to have their class with flexible time and place (Arkorful & Abaidoo, 2014). Students and lecturers do not need to attend their course and conduct their study to the particular class in the university (Arkorful & Abaidoo, 2014). Goura (2020) stated that students are also able to save some additional tuition and resources fees that are necessary for physical learning.

Additionally, Arkorful & Abaidoo (2014) mentioned that conducting E-learning can save extra cost compared to attending the traditional learning. It is because the students and the lecturers do not need to spend their transportation fee within the distance from hostel to university (Arkorful & Abaidoo, 2014). Besides, self-paced learning is one of the benefits for attending E-learning (Goura, 2020). In this article, it stated students may learn at their own schedule and arrange lectures around their existing schedules. They can also choose their favorite and interest course slots according to the timetable given by the university.

This flexible time slot is unable to get it from traditional learning. As well, those students who are slow in their academics are allowed to understand the subjects based on their own speed compared to the physical class (Arkorful & Abaidoo, 2014). They may refer back to the recording if they still need some time to digest the notes. It is because the lecturers are not able to fulfil the needs on the pace of every student (Arkorful & Abaidoo, 2014). Therefore, it can prove how effective E-learning makes the students learn in their own way, and more inclined to interest in their lessons (Goura, 2020).

On the contrary, traditional learning is relying on physical interaction between lecturers and undergraduates (Goura, 2020). It also indicated that traditional learning is the best ideal for the beginner students to continue their study until they graduate (Goura, 2020). It can train their routines, self-motivate, and regulate class schedules compared to E-learning (Goura, 2020). Peer and lecturer interaction and higher discipline are the benefits of traditional learning (Goura, 2020).

During face-to-face learning, students are able to meet their friends and classmates every day (Goura, 2020). They can form their groups when there is a group assignment. They are allowed to nourish the relationship between themselves or outside of the course as well as participate in the curriculum activity to acquaint new friends and peers (Goura, 2020). It can help the students to expand their network and the human connections effectively (Goura, 2020). For example, they may gather with their peers or friends at night for a meal to get to know each other. It can enhance friendships when the traditional learning is conducted. Besides, face-to-face interaction enables to increase the relationship with the students and is able to trace the progress of students' academics (Delhi, 2020).

Higher discipline is another benefit of traditional learning. Goura (2020) mentioned it is important for the undergraduate students to train their discipline, and punctuality before graduating from the university (Goura, 2020). It encourages them to evaluate themselves and follow a system of regulations created to allow them better people. For instance, they can learn discipline by attending the class on time and schedule their timetable effectively so that they can arrange their time accordingly. Moreover, Mark (2020) also stated that the students can keep in contact and discuss their coursework, and performance with the lecturers face-to-face.

To conclude the benefits between E-learning and traditional learning, E-learning is people learn through the internet like educational video, screen shares, and live sessions

whereas traditional learning is strictly following the class schedule in physical class (Goura, 2020). Furthermore, E-learning tends to be reduced in price, flexibility, and self-paced learning, however, traditional learning provides peer and lecturer interaction, socialization experiences, and higher discipline that cannot be duplicated digitally (Goura, 2020).

2.2 E-learning Engagement towards the Users

Artificial intelligence has changed the traditional method of learning into an advanced style of learning. Websites, YouTube tutorials, university learning portals, video conferencing platforms,, and other forms of technology-based learning are all included in the term "E-learning.", mobile apps, and a plethora of other free blended learning websites (Shahzad, Hassan, & Aremu, 2021). There is a strong link between course format and student perceptions of learning. Additionally, while student contact had no objectively significant impact on student satisfaction, the presence of an instructor had a scientifically significant effect on perceived student performance. The findings, however, demonstrated that student participation has an important influence on how students perceive their education. The statistics also revealed that the presence of an instructor had an impact on student satisfaction. Student involvement, the mediated variable, slightly mediated the impact of teacher presence on student satisfaction (Khan, Vivek, Nabi, Khojah, & Tahir, 2020).

According to the study, the majority of university professors believe Massive Open Online Courses (MOOCs) have a direct impact on boosting educational outcomes and students' learning abilities. As a result, we can infer that MOOC is an appropriate platform for training entrepreneurs because it gives instruments for collaborative mastery as well as increasing individuals' affective essential entrepreneurial qualities such as potential reputation and aid acquisition. Most of the higher education universities and schools in Malaysia are implementing online courses for their students for a safer environment and to avoid the spreading of COVID-19 among students (Khan et al., 2020). The Malaysian government has

plenty of beneficial resources to support the education sector to encourage the usage of MOOC.

Based on studies, the students' perceptions towards E-learning are mixed with various opinions based on the students' house environment. But mostly Malaysian students are happy with E-learning because students in higher education can utilise e-learning approaches to help them finish various activities and research. It's also thought to be a valuable tool for evaluating their academic performance. Consequently, student's intentions to use e-learning are positively influenced when they discover that it is simple to use and useful. One of the most significant benefits of E-learning is that it can be used to evaluate effectiveness in a number of educational settings (Al-Rahmi, Alias, Othman, Alzahrani, Alfarraj, Saged, & Rahman, 2018).

Furthermore, through E-learning undergraduates can access pre-recorded videos, and live streaming lectures are all options for self-paced learning. Students also argue that E-learning is not restricted to just one aspect, but also allows for synchronous and asynchronous learning. Watching pre-recorded videos offered by educators is an example of learning at your own pace after the class hours (Salina, 2020). Students are more likely to use an application if they believe it would guide them to accomplish their studies better (Al-Rahmi et al., 2018). On the other hand, good time management skills, self-reliance, regular participation, and contact with the professor are among the most difficult. Furthermore, students may suffer from a lack of important personal interactions, not just with lecturers but also with other students (Grabinski, Kedzior, Krasadomska, & Herdan, 2020).

As for the educators perspective, E-learning methods will be required to expand their online availability, as well as re-design, develop, and apply appropriate online content. Another issue is that, while some instructors have good academic knowledge, they may not have the essential capability to present in e-learning classes. Many academicians believe that

if E-learning is used appropriately, it can provide significant benefits, as it allows teachers to have more flexible teaching hours and to work from home on many occasions (Grabinski et al., 2020). The adaptability of lecturers' E-learning approaches is determined by a number of elements.

Moreover, with inadequate experience with information technology and minimal support from the IT department, several professors are hesitant to introduce this style of education. This new teaching method necessitates new modes of communication with students, which may cause discomfort for many lecturers and push them to adjust their routines. The type of teaching and how courses are given are frequently influenced by lecturers' views as well as psychological considerations. The significance of lecturers' familiarity with information technology and modern communication strategies is frequently emphasised by researchers (Grabinski et al., 2020). The learning environment, how course information is provided, and lecturers' attitudes toward E-learning are the most significant aspects affecting the usefulness of E-learning. These factors are significant to lecturers, students, and faculty, and they can be used as a criterion for evaluating this method of module delivery. Learning spaces are part of the learning environment.

The relationship between academic performance and E-learning involvement is complicated. Despite the fact that this was a longitudinal study, a number of empirical studies back up their findings. However, according to another study done by Arbaugh, the E-learning connection and student performance are influenced by the students' perceptions of the usefulness and convenience of these delivery platforms. It has been proposed that learners who allocate longer time to online courses are more likely to take ownership of the E-learning process and, as a result, profit the most from it (Madar & Ibrahim, 2011).

According to studies, E-learning can help students improve their involvement, motivation, and attendance, all of which are important for learning. A proper E-learning with

all those tools like proper internet connection and proper platform can also boost core subject performance and support the development of 21st-century skills, whether in developed or developing countries. Especially in Malaysia, the Borneo side must be equipped with all those tools to ease the students to conduct online class in a proper environment in their comfort (Madar & Ibrahim, 2011).

According to Timothy's research, higher educational institutions should consider developing E-learning teaching practices that stimulate enhanced students' engagement in E-learning while also taking into consideration the diverse learning methods prevalent among students in order to develop teaching and academic performance (Madar & Ibrahim, 2011).

2.3 Technical Challenges Faced by Students and Parents

Malaysian Higher Learning Institutions started executing web - based learning in the late 1990s (Hussin et al., 2009). In the foreseeable future, the demand for online learning has increased because of its capacity to attain worldwide populations, distinctive functionality, availability, and convenience. Even though education platforms are developing accordingly the process of convenience was complicated to certain groups of students. Students and educators needed to utilise hardware in order to conduct online classes and assessments. A good internet connection, digital device, and accessories such as headphones, speakers, and printers is the minimum necessary to attend the class without interruption.

Many issues were highlighted in the recent documentaries regarding the struggles faced by students from rural localities and remote areas (Azman, 2020). Due to the high transmission of this virus and the shutdown of physical classes, E-learning via diverse devices such as computers, laptops, Ipads, and smartphones with internet connection in synchronous and asynchronous settings has become an inevitable substitute learning method (Yaakob, 2021).

Technical challenges faced by students is an undeniable situation during E-learning during a pandemic. High involvement technology causes technical disruption to students with less accessibility and adaptability to the technological appliances. Particularly families from rural areas where they generally struggle with poor connection and line. As a result, they are having difficulties going live for virtual learning and other platforms that demand a good internet connection for improved participation (Dhawan, 2020). Students with poor computer literacy and self-motivation are affected by online learning. Participation in online learning is challenging without dependable internet access and technologies which creates a digital divide among students (Sayid, 2020). For instance, educators from Sabah are facing high difficulties in conducting online classes due to weak connections in their area (Lee, 2020). This situation distressing to both parties by creating a gap among rural area students.

Dissatisfaction among students due to internet connectivity limitations caused them to be unable to access virtual learning (Giewwrdoski, 2020). Students from Kelantan, Terengganu, complained that the internet services in their town are so inadequate that schooling is not constantly available (Yan, 2020). The connection is slow whereby students lose their attention in the midst. Similar situation occurred in the marginalized community of Malaysia where Gua Musang's 300 Orang Asli students are unable to join online home-based teaching and learning (Zainudin, 2020).

E-learning allows instructors and students to interact directly during class using facilities such as videoconferencing or chat apps available on a variety of handy educational platforms. However, enabling, underprivileged, and rural undergraduates with limited access and resources to E-learning might be problematic and difficult to attain the knowledge (Cerna, 2020). It benefits independent acquisition of new knowledge of useful abilities in the process of leading to life-long learning, but the difficulties in accessing and partaking in

E-learning generates discrepancy and turnover among students and weak students who require engagement in order to improve their social skills.

With poor connection and knowledge about E-learning approaches students tend to give up in the process of commitment and discipline which directly impacts their academic performance. Even though tech savvy students perceive it as a flexible time of learning, meanwhile with the versatility provided by online platforms, it is more flexible for them to obtain educational materials (Zalat, 2021). Flexibility of this platform is not equally utilised by students from underprivileged communities.

Earlier this year, a teenager from Sabah's Kg Sabanalang Pitas was stated to have had to climb a tree only to gain greater Internet connection for her schoolwork, and she voiced her discontent on behalf of the students in more remote parts of the population (Yaakob, 2021). For instance, institutions that depend on Microsoft teams when rushing to implement Microsoft Teams, it is common to encounter recline. The team in charge of implementation does not communicate effectively about the usage of Teams, does not really improve processes, and does not give instruction, leaving students to discover it on their own (Makarova, 2021).

The decision of the Malaysian education ministry considering the nation's technology and manpower capability in rural areas, switching learning to online mode seems debatable. (Azman, 2020). In actuality, numerous undergraduates and students in remote locations do not own phones or personal computers and are unable to convert to E-learning without previous notice during MCO (Mistirne, 2020). Despite the Malaysian government's proposal of free 1GB data everyday via chosen telecoms for MCO to the unhandy families, the student's complaint that that is not sufficient for a day's classes (Yeoh, 2021). In addition, students from Lundu in Kuching mentioned they do not have a decent internet connection with her postpaid phone plan, and she cannot afford it on a constant basis (Lah, 2021).

There are also some concerns about management commitment that are troubling the students in achieving a smooth flow in the learning process (Anna, 2020). Students with weak wifi connection subscribed for RM150 a month for unlimited data packages yet had to struggle because of a poor line where they had to switch their position timely to secure a better connection (Jee, 2020). It is a daily technical issue which must go through by educators too in order to stay connected with their students. Educators also stated that they can get up to 70 active participants out of 120 students for sessions that require live streaming (Zainudin, 2020).

Besides, parents play a major role in ensuring the smoothness of E-learning by facing the technical challenges along with the children. Families with low income or under B40 family categories could not afford the equipment required for E-learning where gadget shortage happens in the family among siblings (Chan, 2020). Parents are also financially impacted by the COVID-19 epidemic therefore their expenditures are spent carefully. Therefore, parents become more attentive in choosing the facilities required for E-learning such as a laptop, mobile phones and printers.

Amid family crises some students depend on their parents' mobile to attend class with minimal storage and data support. For instance, six siblings must share their mother's only smartphone and an obsolete computer for an E-learning session in kadazandusun (Mandl, 2021). Additionally, depending on the family's lone smartphone, a single parent from Kluang shuffled her business online and her seven children's home-based teaching and learning (PdPR) lessons (Imm, 2020). She is worried that the session taking turns will lead to distraction and lack of motivation to concentrate. Similar broadband issues have taken place because the parents of orang Asli students from Gua Musang cannot afford to buy the necessary devices or smartphones since many of the parents here only work as labourers and some even depended on forest produce to survive (Yahya, 2021).

A study conducted shows that in Malaysia, more than 670,000 households and up to 900,000 pupils own a personal computer, 6% percent own a tablet, 9 percent own a laptop, and 46% own a smartphone (Golingai, 2020). More than one-third, or 37% do not own a device, underlining the scarcity of gadgets and technologies. Students are refused access to higher education because they do not have connection to the web and cannot afford suitable equipment to obtain knowledge; as a result, knowledge distribution is hindered. Acquisition of E-learning resources by all instructors and students in all rural schools is still a hope that will be achieved in the long term (Yahya, 2021).

Moreover, several academic institutions are confronting a scarcity of E-learning fundamental equipment necessities, such as advanced gadgets and networks (Yeoh, 2021). This demonstrated that the hurdles in online education for developing nations such as Malaysia comprise technology investments such as hardware, software licences, training material production, maintenance of equipment, as well as educator and parental involvement (Selvanatha, 2020). The subscription of these education platforms is complex which causes no deduction in semester fees. Students must adjust to a new environment of computer-led instruction in virtual classrooms, which differs from traditional classrooms (Sanchez-Gordon & Luján-Mora, 2014). It is challenging when students and instructors are not computer competent, there is a lack of involvement (Dhawan, 2020).

The software requirements for various faculties required a different range of connection mentality to adapt to the software needs (Aiman, 2020). Certain programmes are not compatible to learn through-learning because it needs close attention and guidance from educators to teach the practicality of those implementations. In addition, educators from the Engineering field of study claimed participation and processes associated with practical training, such as laboratory sessions involving dimensional crystal structure, diffraction workshops, and conferences could not be supplemented easily (Bangert & Bates, 2020). This

proves engineering and medical students can not solely depend on E-learning to conduct the lab work and practical tests. It takes time to adapt to both formal and less formal teaching approaches of E-learning (Adnan, 2021).

2.4 Universities Policy

Private institutions and several foreign branch campuses in Malaysia, most of which are struggling for survival before the COVID-19 outbreak, are concerned for their existence since foreign students have been restricted, reducing tuition fees and making the country an international higher education hub (Sharma, 2020). Due to the COVID-19 outbreak most of the institutions had faced the new intake drops, and almost a quarter of the country's 440 private higher educational institutions (PHEIs) are on the verge of closing in Malaysia (Yunus, 2020). In addition, 44% of Malaysia's private higher education institutions are troubled in finance, and their debt is rising continuously as a result of rising operating costs.

This is because parents are also affected by the COVID-19 pandemic, and every dollar they spend is tracked. As a result, parents will think twice when it comes to selecting universities, they will be more sensitive in the way universities operate, particularly private schools, because of the higher price structure and the fact that most of the universities select by parents specifically for their children's educational development (Mahiswaran et al., 2020). Therefore, Universiti Tunku Abdul Rahman (UTAR) implemented a new policy, instalment plan for new and existing students in this difficult time (Universiti Tunku Abdul Rahman, 2020). Moreover, Universiti Teknologi Malaysia (UTM) gave financial flexibility to students who needed an extension whereby they need to complete their studies by both the end of semester three, they were not charged with additional payment on the extension of semester (Rayyan, 2020).

Next, COVID-19 has threatened the public alarm which the commit suicide case increase dramtically. 3,100 reports were sent to district officials, expressing concerns about

suicide ideation, self-harm, and calls for help in Las Vegas (Green, 2021). The Japanese National University Council of Health Administration Facilities' Mental Health Committee then performed an ongoing research named "The survey of undergraduate students who require temporary leave from school, drop out, or repeat the same class." which was completed by all 82 universities with a total of 433032 registered students (273308 men and 159724 women). 76 students died as a result of suicide or suspected suicide. With 21.2 men and 11.3 women, the overall suicide rate (per 100,000 students) was 17.6 (Yasuko et al., 2021).

Besides, in Malaysia, the number of suicides is on the rise, with police recording 468 suicides in the first five months of 2021, up from 631 in 2020 and 609 in 2019 (Pizaro, 2021). Family troubles, emotional stress, and financial concerns were the leading causes of suicide (Hazlin, 2021). So, higher education has improved services and made it more comfortable for young people to seek aid. However, because there is too much demand, institutions are required to think innovatively about how to guide undergraduates with a variety of contents and answers, rather than just depending on traditional counselling (Amour, 2020).

Furthermore, spending long periods of time learning in front of a computer screen or on a mobile device has a severe impact on their physical, mental, and psychological health. According to the news 'Emergency, remote, and online: Student learning amidst lock down' (2021), the accumulated burden across many topics demands students to spend more time online, exacerbating the physical, mental, and emotional stress they are already under. As a result, universities should adopt systematic anxiety-reduction activities that have been shown to reduce anxiety levels, such as training in life skills and meditative treatment (Sundarassen et al., 2020).

2.5 Technology Acceptance Model (TAM)

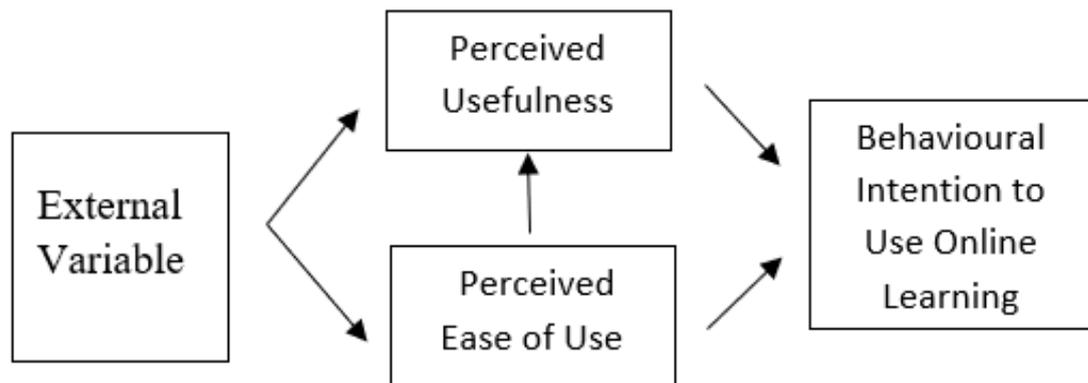


Figure 1: Original Technology Acceptance Model

Technology Acceptance Model's primary factors, perceived ease of use and perceived usefulness, predict the user's behavioural intention to use online learning to employ a technology. Previous studies have found direct correlations between perceived usefulness and behavioural intention to utilise online learning, and between perceived ease of use and behavioural intention to use online learning (Khan et al., 2020). According to the original Technology Acceptance Model, there is a direct link between perceived ease of use and perceived usefulness, which has been confirmed by subsequent research. Aside from the fundamental Technology Acceptance Model characteristics, several extrinsic variables can help to improve the predictability of technology acceptance intention. As a result, several external elements have been added into the Technology Acceptance Model in order to better measure behavioural intention (Khan et al., 2020).

By referring to past studies of a comparable sort, theoretical significance aids the researcher in getting fresh ideas. As a result, the researcher is able to imitate the theory and attempt to apply it to their research. The Technology Acceptance Model (TAM) is one of numerous theories on the use of information technology systems that has been widely utilised to explain individual acceptance of these technologies (Rahmawati, 2019). TAM was created

by Davis (1985) and is based on the Theory of Reasoned Action (TRA) model. Besides, TAM is a model that is especially created to anticipate the acceptance of technology by consumers.

There are two particular beliefs that have been examined in the basic TAM (Rahmawati, 2019). There are two types of perceived usefulness that is perceived usefulness (PU) and perceived ease of use (PEU) (Rahmawati, 2019). PU and PEU have a considerable impact on people's attitudes toward technology. Furthermore, TAM has already been employed in research to investigate student acceptability of online learning. Despite being established as a viable model in forecasting technology adoption, a number of external factors are also recommended in addition to the model's major elements to accompany the original version of TAM (Khan et al., 2020).

TAM theory has been changed up to three times. TAM 2 was released in 2000, and it removed the attitude towards usage construct, where perceived ease of use and perceived usefulness constructs directly impact behavioural intention to use (Rahmawati, 2019). TAM 3 was the name given to the next version of TAM, which was released in 2008. TAM3's most recent innovations provided a new dimension to perceived ease of use (PEU). TAM development tries to build basic assumptions capable of predicting and explaining behavior that stimulates the adoption of ever-increasing technology (Rahmawati, 2019).

2.5.1 Perceived Usefulness

Perceived usefulness, or utility, is the degree to which a person believes that using technology would improve work performance. The extent to which students consider that using E-learning would improve their learning and performance is referred to as perceived usefulness (Mad, Omar, Sarudin, & Aziz, 2020). Besides, Students' motivation to use a new

platform, and hence their acceptance of online learning, is influenced by perceived usefulness (PU).

A study of 102 Malaysian undergraduate management information system students discovered a positive relationship between PU and students' involvement with E-learning (Mad et al., 2020). According to the research, E-learning enhances learning performance, and attending an online course can also increase productivity (Lazim, Ismail, & Tazilah, 2021). They had a positive influence on E-learning acceptability, which might increase online learning understanding and efficacy. (Lazim et al., 2021). Aside from that, perceived usefulness implies that employing technology leads to improved learning performance among users. The concept of perceived usefulness has been frequently utilized to assess adoption and acceptability, particularly in E-learning studies (Osman, Ustadi, Kamar, Johari, & Ismail, 2021). According to previous E-learning study, perceived usefulness influenced users' behavioral intention to use E-learning platforms (Osman et al., 2021). In reality, undergraduate students, according to Faqih (2016), had the same findings to back up the prior research (Osman et al., 2021).

2.5.2 Perceived Ease of Use

Perceived ease of use refers to what level the usage of technology can be easy and effortless and it will encourage students to improve their own confidence during E-learning. It will cause students' confidence in using E-learning tools to grow (Rahmawati, 2019). The notion of usefulness, attitudes, intentions, and actual use of technology are all influenced by perceived ease of use. However, effect to the construct of utility is the most substantial, whereas influence to other constructs is insignificant (Rahmawati, 2019). Perceived ease of use refers to the degree to which potential users believe the target system to be straightforward to deploy. To put it another way, the user does not expect a high level of effort in understanding and implementing such technology (Rahmawati, 2019).

According to the study, perceived usefulness and perceived ease of use are the characteristics that impact students' responses to E-learning use. However, students' utilisation of E-learning is more influenced by perceived ease of use. According to the study, when students perceive the E-learning platform to be convenient, they appear to spend more time on the learning content, resulting in better engagement. Aside from that, students are more happy with systems when E-learning is simple and straightforward, according to the study (Osman et al., 2021)

2.5.3 Conceptual Framework

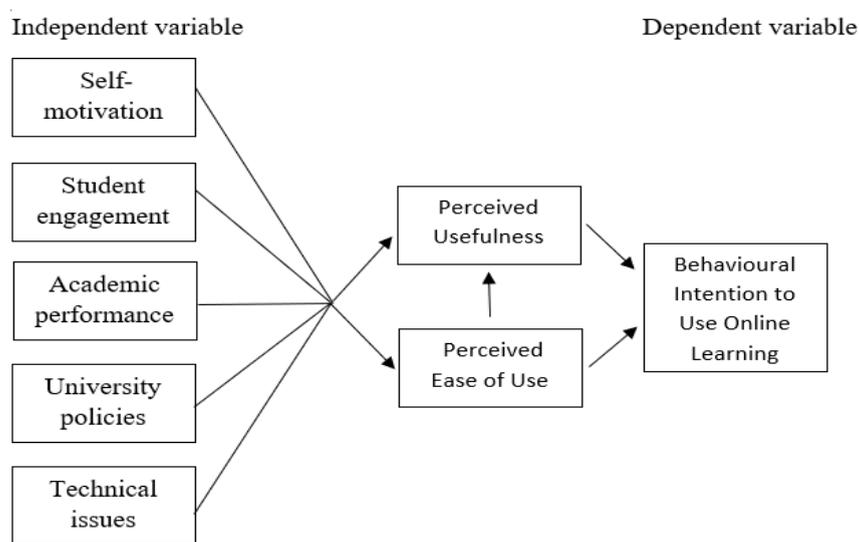


Figure 2: Technology Acceptance Model Conceptual framework

According to Adom, Hussein, & Agyem (2018), the conceptual framework may be characterised as giving relevant and acceptable research findings using theoretical concepts in the study domain, as well as ensuring the research's dependability. TAM is a paradigm used to analyse how and when people embrace developing technologies, according to Davis (1996). TAM has been shown to be effective in describing user behaviour when it comes to using computing technology. This model depicts the relationship between perceived ease of use, perceived usefulness, and intention to use technology (Mailizar, Almanthari & Maulina, 2021).

The independent variable of this research is self-motivation, student engagement, academic performance, university policies and technical issues. Most studies keep the core of the theory the same, with the bulk of adjustments being made to the independent variable described in the theory or adding features as part of perceived usefulness and ease of use (Mailizar et al., 2021). The model's arrows depict the impact of one variable on another. Independent variables have an impact on both the perceived ease of use and the perceived usefulness of technology (Abdullah et al., 2016). Besides, the perceived usefulness is influenced by perceived ease of use. Perceived usefulness and perceived ease of use have an impact on behavioural intention to use (Abdullah et al., 2016).

This is since independent variables influence perceived usefulness and perceived ease of use, causing students to have differing perspectives on E-learning and lastly will affect intention of use because some students will feel good or bad in using E-learning. Moreover, the intention to utilise is closely related to actual action. It is a metric that indicates a user's readiness to engage in a particular action. Teo (2010) claims that utilising intention to use as a dependent variable has benefits since asking participants about their actual usage of E-learning may deter them from participating in research (Mailizar et al., 2021). Furthermore, behavioural intention to use is a more progressive dependent variable than actual usage. As a result, the intention to utilise was included as a dependent variable in this study (Mailizar et al., 2021).

The research found that E-learning usually necessitates a higher level of self-motivation, and learners who work alone are more likely to feel irritated (Tan & Hsu, 2018). Then, another independent variable is academic performance because the research advocated the use of an updated TAM model to show that in e-learning, relationships between system usage and benefit outcomes through academic achievement may be established.

According to the connection, when a student uses an E-learning tool model, their academic performance improves (Tawafak, Malik, & Alfarsi, 2020).

Meanwhile, the technical challenges have a major influence on E-learning since the application of technology is involved. Every variable is constructed based on the relevancy and the interrelation with one another. In past research papers, extra attention is essential for students to become connected with the online environment before participating in the actual discussion. Undergraduates will be able to discover more productively if technological difficulties do not prohibit them from participating in online discussions (Yee, 2020). Such technical obstacles can have an impact on the experience and complexity of their interactions, and therefore, undergraduates' education comes to a standstill when such problems are identified. As a response, synchronized learning environments must provide enough time and technical assistance to alleviate students' dissatisfaction (Sulaiman & Suid, 2018). Moreover, technical issues diminish students' sense of independence, which has an impact on their educational performance.

University policy is a factor that will benefit undergraduates in the educational system, especially in the event of a pandemic. In a difficult period, it will have an impact on undergraduate intentions in E-learning. For example, UTAR offers a laptop rental programme for undergraduates, which assists students in overcoming technological challenges (UTAR Faculty of Creative Industries, 2021).

Moreover, the new university policy that has been issued because of this pandemic has made students feel safer, especially students who are on campus. For example, during this period, students will be fully informed, safeguarded, and cared for by the higher educational institutions. This entails students should have current information on COVID-19 and be aware who they need to approach if they need assistance with health, well-being, or housing, and understand how to access health and counselling facilities (Education Malaysia, 2020).

2.6 Summary

To conclude, most researchers prefer the qualitative research approach to study E-learning on undergraduate engagement and the university that has implemented it. In the literature review, the researcher was discussing the different aspects of E-learning during the COVID-19, for example, the technology issue during E-learning, undergraduate engagement during E-learning, and the university policy that had been implemented in the university during the pandemic.

Chapter 3: Methodology

3.0 Introduction

Methodology gives precise descriptions of the selected procedure or approach implied to identify, select, process, and analyse data regarding the research topic. This method enables the reader to analyse the validity and reliability of the research topic discussed (Bhandari, 2020). He also recognizes that the motive of qualitative research is to discover and analyse large amounts of data in order to recognise concepts, experiences, and ideas. This part discusses the procedure for collecting the data, as well as how to identify and assess data with the most suitable tool by utilizing semi-structured interviews.

3.1 Research Design

By using qualitative research methods, this research is able to answer the research questions and fulfill the research objectives of the topic. Zohrabi (2013) defines that qualitative research focuses on how people interpret and comprehend in order to better understand people' social realities. It employs interviews, group discussion, and open-ended surveys to gather, evaluate, and assess information from interviewee's the point of view being studied (Zohrabi, 2013). The method chosen is determined on the questionnaire given (Viswambharan & Priya, 2015). Thus, a qualitative research method is more suitable to use in the research topic.

Semi-structured interviews are applied in the research. According to Doyle (2020), this type of qualitative interview is when the interviewer changes from a predetermined set of questions. They will provide brief questions opening for a discussion with the respondent, rather than having a simple question and response approach. Because of the two-way communication, the interviewee may feel more comfortable sharing processes and insights with the interviewer (Doyle, 2020). Moreover, follow-up questionnaires are created to give

extra in-depth information about the person's perception. The interviewer is unable to respond to one answer during the interview session (Doyle, 2020). Therefore, semi-structured interviews are appropriate to apply in this research.

There were 4 sections in the structured questionnaire. Section A contains reasonably basic information and non-intrusive details. Section B is transition, linking the introductory questions to the main points to be discussed. Section C is the key, closely linked to the study's research questions and objectives and these questions provide the most valuable information. Lastly, section D is closure, simple questions to address and provide a sense of closure which gives participants a chance to raise any topics not addressed or provide advice. This also indicates a conclusion.

3.2 Population

A semi-structured interview will be conducted on the undergraduate students in Malaysia to investigate the perception of the E-learning approach on higher education. It is critical to assess the dependability and validity of such a large research article before starting it. As a result, a pilot study was taken to validate and ensure the instruments' dependability. The population in this study are undergraduate students in Malaysia who are either in their second or third semester or completed at least one semester. Malaysian undergraduates are selected because they are the closest in the E-learning process and experiencing this for the first time.

Their point of view towards the instant changing from traditional learning to E-learning will be valuable to provide insights about it. This is to know the perception towards the effectiveness of university policy in academics particularly in E-learning approaches. Other than that, undergraduates are picked to provide their experiences in E-learning and how they self-motivate to keep up this instant change from traditional learning to E-learning under 3 months and still going on until now. Therefore, the researcher must

have advanced knowledge about the purpose of carrying out this study to selected qualified participants (Marshall, 2014). This sampling will guide to reach the objective of this study.

According to the Ministry of Higher Education, there are 20 public universities and 47 private universities in Malaysia. Moreover, there are 34 university colleges and 10 foreign universities branch campuses. Around 292 thousand male students and 415 thousand female students attended government higher education institutions. Researchers collected 15 undergraduate students because it can reach a sufficient number of data that is needed for this study.

3.3 Sampling

To be specific, a sample is a subset of people; they are the individuals selected to be representative of a larger population related to this research (Acharya et al., 2013). A sampling frame is a resource where researchers can obtain data on a representative population. In an investigation, sampling also refers to the likelihood of a small number of individuals who will be participating in the investigation (Bhandari, 2020). This is the process of confirming research participants according to the criteria for participation. For this research, the sampling frame will be obtained from Malaysian university undergraduates. Multiracial students and graduates from Malaysian universities will be the perfect community for the participants.

Purposive sampling will be approached when conducting the interview session for the study. According to Patton (2002), the definition is a strategy that is used in qualitative study to discover and choose knowledge examples in order to make the best use of resource constraints. This requires discovering and picking someone or subgroups who are particularly familiar or knowledgeable with a topic of interest (Cresswell & Plano Clark, 2011). Purposive sampling primary studies encompassing the qualitative evidence synthesis has its advantages and disadvantages. It can qualify us to attain an adequately broad geographic spread of

primary studies while limiting the number of studies included in the combination. It can allow studies with rich data and research that most closely resemble the synthesis objective (Ames, Glention, & Lewin, 2019).

Since it allows us to select a sample based on criteria, the undergraduates will be selected to obtain their point of view towards the E-learning approach and the perception towards other aspects of E-learning which influences their engagement and motivation. Therefore, the researcher must have advanced knowledge about the purpose of carrying out this study to selected qualified participants. This sampling will help to specially reach objectives of study. In this research, the researcher will notify the interviewee of the research's goal and guarantee that the data provided by the interviewee is protected before conducting the interview (Gentles, 2015). Moreover, if the interviewee has questions concerning the study questionnaire, the researcher will explain but not comment in order to avoid interfering with the interviewee's response.

The sampling size would be 15 participants from Malaysian private and government universities within the age of 18 to 24 years. Each interviewee will be requested to complete a questionnaire detailing his or her participation in the E-learning research before commencing the session. Undergraduates from various universities in Malaysia and multiracial students will be a perfect community for the participant as the study is about the perception of Malaysian undergraduates on E-learning. Purposive sampling will be used since it enables one to extract a sample based on an understanding of the population, its characteristics, and the study's objective which is about undergraduates' students in Malaysia's perception of the E-learning approach on higher education.

A total of 15 participants from 11 different universities is chosen for this study. Those universities are Universiti Islam Antarabangsa (UIA), Universiti Sains Malaysia (USM),

Universiti Teknologi Mara (UiTM), Universiti Utara Malaysia (UUM), Inti International University, Tunku Abdul Rahman College (TARC), Quest University, Monash University Malaysia, Universiti Kebangsaan Malaysia (UKM), and Universiti Tunku Abdul Rahman (UTAR). The chosen are various private and public universities in Malaysia made up 16% of universities in Malaysia. Researcher has chosen 15 students because it has reached the sufficient data needed for this study. The objective of this study is to emphasise the importance of Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education. Examples are provided to aid in the comprehension of the basic ideas involved in their calculation. A large sample size may increase the study's complexity and accompanying expenditures, making it impossible (Martinez-Meza, Gonzalez-Chica, Bastos, Bonamigo, & Duguia, 2014).

3.4 Research Instrument

Semi-structured interviews will be employed to collect research data. One of several qualitative research methods is the semi-structured interview. Semi-structured interviews are a common type of research investigation (Adams, 2015). The goal of semi-structured interviews is to allow interviewees to freely share their experiences and opinions. Semi-structured interviews can assist researchers in gathering precise information for this study. The semi-structured is more like a conversation, allowing the interviewee to freely share facts and thoughts (Wethington & McDarby, 2015). Prior research has found a considerable influence of users' experience on their perceived usefulness of E-learning. Previous study has indicated that users' computer expertise impacts their desire to utilise E-learning tools in terms of behavioural intent (Mailizar et al., 2021). So, this study aims to discover how students feel about online e-learning. Firstly, our independent variables are

self-motivation, student engagement, academic performance, university policies, and technical issues.

Then, we need to construct the interview question by using our independent variables. Because perceived utility and convenience of use will be influenced by external factors. The learner will dispute the effectiveness of E-learning because of its usefulness and simplicity. This is because all the changes of independent variables will affect the intention of use of E-learning. Therefore, this research has conducted 4 questions that have included independent variables to ask students what their perception about E-learning. Including independent variables in the Technology Acceptance Model helps researchers to not only explain technology adoption behavior but also to highlight specific reasons why a technology might not be accepted, allowing researchers and practitioners to "pursue necessary remedial procedures" (Abdullah et al., 2016). Besides, our questions are constructed to study whether the independent variables are important against the usefulness and ease of use in E-learning. From the interview, this study gets information about student perception which helps to explore the perception of students.

This session will focus on the Malaysian undergraduates' perception towards the effectiveness of the E-learning approach on higher education and student engagement which provides the disclosure to the aspects of E-learning. The purpose of this study will be set by using semi-structured interviews with open-ended questions to investigate the opinion of Malaysian undergraduates from the interviewee. The purpose of having a semi-structured interview is because interviewers are instructed to begin with open-ended questions that cannot be answered simply with "yes" or "no", but follow-up questions will be asked to elicit more specific evidence regarding the candidate's assets and potential for research (Doyle, 2020).

3.5 Rigour

Rigour is distinctly defined as the quality or state of being very specific, precise, cautious or simply detailed, or the quality of being thorough and exact. According to Maher et al. (2018), rigour belongs to the process and its reliability in qualitative research. Various studies mentioned that research is pointless, becomes fiction, and reduces its use when it is without rigour because rigour and truth are the vital components of qualitative research. Semi-structured interviews and purposive sampling will be carried out in this research. (Cypress, 2017).

To attain rigour and quality, the researchers should choose and implement referenced study and methodology used in this study to match the research objectives of the investigation. Therefore, a pilot study has been conducted with an Undergraduate from UTAR. The objective of the pilot study was to ensure the quality and rigour in qualitative research is to reduce bias while increasing the accuracy, validity, and reliability of findings study (Johnson, Adkins, & Chaovin, 2020). Researchers made sure rigorous was clear, precise, and understandable through the semi structured interview. Because, the researchers and the public need to know what they do and explore. Through the pilot study to ensure the validity researchers were able to investigate all the possible aspects and analyse the data to foster the research for better cognition and theoretical development. The response and answers provided by the interviewee's had met the expectation of researchers and contributed some insights on aspects that needed improvisation and in-depth discussion (Maher, Hadfield, & Hutchings, 2018).

By enhancing the validity and reliability of the data acquired from the pilot study, the researcher can develop various research methods to assemble accurate data for the actual

study (Mohajan, 2018). Therefore, clearly evaluating the research topic, the theme, and the model we used can help to bring more trustworthiness to qualitative research.

3.5.1 Pilot Study

Pilot study helps to establish the practicality of research ideas and allows researchers to share the findings effectively. A pilot study is a generalized form of a research project or a trial run for a research investigation and might be conducted to verify a research instrument. A competent pilot study does not guarantee that a research effort will be beneficial. However, it does support researchers in evaluating their planned approaches and implementing the appropriate strategies for the study. This determination of the feasibility opportunity is provided by a pilot study with an ethical and scientific obligation (Enago Academy, 2021).

To ensure a reliable quality research outcome a pilot study was conducted for the semi structured interview (Junyong, 2017). A pilot study is a scaled-down version of the main study that is undertaken prior to the real investigation or to test a research instrument (Ismail, 2017). A pilot study is a prominent step in the research methodology that the researcher must understand in order to acquire qualitative data. It can assist us in assessing the study topic as well as the research design's reliability, validity, and feasibility (Thapa et al., 2021). Its findings may indicate that certain revisions and betterments to the main research are required (Razak, 2021).

Three stages were composed under the pilot study which are pre interview interview and post interview. After the session all the data collected from the interviewee was analysed accordingly; it shows no significant changes were necessary. This implies that the survey instrument, semi-structured questions, are valid and reliable and may be applied in a serious investigation. The interactions and valuable experience will be applied by the researchers in

real study for obtaining in-depth analysis, which will provide them with a more full and clear picture of the research findings (Gani et al., 2020). According to a few researchers (Hundley & Teijlingen, 2002), a pilot study can be used to detect possible measurement instrument errors and mistakes, albeit this can be prevented by pre-testing the instrument on a small group of people with similar criteria required for the study (Dikko, 2016).

Furthermore, a semi-structured interview for pilot study was executed by the researcher because a structured interview seems to be regimented and bound to a pre-planned series of questions, a semi-structured interview is more adaptable in terms of modifying the sequence of questions and allowing for a more comprehensive follow-up participants' answers, thoughts, feelings, and opinions about E-learning (DeJonckheere & Vaughn, 2019). It is neither too rigorous nor too unstructured, and it enables for additional questions to be asked during the interview session based on the responses provided by the respondent.

The need of conducting the pilot study in order to uncover any potential issues early in the research process was suggested by many writers to be able to handle the demand for instrument modifications as well as contribute value and authenticity to the research (Dikko, 2016). For this research about undergraduate's perception, the interview question was focused on how and what participants face during E-learning. The open-ended questions were used to allow the researcher to analyse the problem or solution from the comprehension of the participants (Castillo, 2016).

The researcher could recommend a follow-up question to obtain a wider range of responses and encourage interviewees to provide more truthful answers (Singer & Couper, 2017). The researcher had put a lot of energy into establishing the entire process of the semi interview session with the undergraduate interviewee from Universiti Tunku Abdul Rahman

(UTAR) to assure the significant aspects of resources such as research tools, participants, setting of interview atmosphere and flow of online interview with the purpose of conducting this pilot test. The interview was conducted in 15 minutes. It is completely satisfactory and in accordance with the researcher's goal.

To conclude, the management and execution of this pilot test strengthened the validity of semi-structured interviews while investigating the needs to construct and develop the research concerning undergraduates' perceptions of E-learning. Despite the fact that it is an initial pilot study, the steps of the interview process were completed, which is essential for validity and reliability in the qualitative research technique (Williams, 2019). Finally, this pilot study provided an opportunity for the researcher to rehearse the interviewing procedure and develop knowledge for future research.

In order to provide a high-quality research output, a good research study as well as a suitable experimental design are required (Junyong, 2017). A pilot study is a smaller version of the main study that is carried out before the full-scale inquiry or to test a research equipment (Ismail, Kinchin & Edwards, 2017; Mikuska, 2017; Dikko, 2016). It can help us analyse the study topic's reliability, validity, and feasibility, as well as the research design's reliability, validity, and feasibility (Thapa et al., 2021).

A pilot study, according to some researchers (Hundley & Teijlingen, 2002), can be used to detect potential measurement instrument faults and errors, albeit this can be prevented by pre-testing the instrument on a small group of persons with similar characteristics (Dikko, 2016).

The interview topic for this study will focus on what Malaysian undergraduates think about the success of the E-learning strategy on higher education and student involvement, as well as other aspects of E-learning. The goal of this study would be to analyse the opinions

of Malaysian students from the interviewee utilising semi-structured interviews (open-ended questions).

3.6 Interview Protocol Framework

In this process the Interview Protocol Refinement framework has given importance since semi-structured interviews are best refined using the IPR structure (Corbin & Strauss, 2015). The IPR framework incorporates 4 phases for systematically establishing and refining interview guides in a structured manner (Castilo, 2016). Firstly, the researcher must ensure interview questions align with research questions developed earlier. Hereby the questions must be related to E-learning, self-motivation, technical challenges, academic performance, and student engagements.

This research aims into the perceptions of Malaysian undergraduates on the efficiency of the E-learning approach on higher education and student involvement, as well as the many aspects of E-learning. The researchers created numerous interview questions for respondents in this data collection process. The most common approach of qualitative research is to conduct interviews to gather people's life stories and various parts of their lives (Jacob & Furgerson, 2012). In this research, the interviewees' experiences and opinions will be collected through a semi-structured interview. The interview will be conducted online via Microsoft Teams and Google Meet.

Secondly, it will construct an inquiry-based conversation between the interviewer and the interviews which are the Malaysian universities undergraduates. Whereby researchers will compose interview questions differently than research questions to create a protocol that facilitates a discussion. This is because interview questions are what researchers ask participants to obtain their understanding towards the discussing issue, while study questions formulate what researchers want to know more about this study. Rather than

a mechanical conversion, the construction of effective interview questions necessitates creativity and intuition; however, the focus is to obtain further additional data regarding this study (Castilo, 2016). The researchers will collect personal information from the interviewees prior to the interview, such as name, age, graduation date, and other relevant details. In addition, the researcher will explain to the interviewer the term's purpose, title, and definition. This will provide the interviewer with a better knowledge of the study.

Third phase is about receiving feedback on interview protocols implied, and then piloting the interview guide. The aim of obtaining feedback or learning their experience about the interview session protocol is to refine its reliability and credibility as a research tool. Feedback will enlighten the researcher about the interviewees' perception of the questions and if their understanding meets what the researcher requires or expects.

The final phase the researcher is ready to pilot the fine-tuned interview procedure with people who closely resemble the characteristics of the study's sample. Via piloting, the researcher intends to reach a realistic estimation of the duration and the ability of interviewees to respond to questions. The limitation in this framework is the researcher might not have enough resources such as money, or access to participants to engage in a piloting phase. In that case step 3 becomes even more pivotal to refining the interview protocol (Willis, 2004).

It requires a high-quality research output, a quality research study, and an appropriate experimental design (Junyong, 2017). Pilot study helped researchers analyse the study topic's reliability, validity, and feasibility, as well as the research design's reliability, validity, and feasibility (Thapa et al., 2021). The semi-structured interview focused on what Malaysian undergraduates perceive about the effectiveness of E-learning strategy on higher

education and student involvement and other aspects of E-learning. The motive of this study is to analyse the opinions of Malaysian students by conducting semi-structured interviews.

Overall, by promoting attempts to increase the efficiency of interview protocols used in qualitative analysis, the IPR methodology will enhance the accuracy of data received from research interviews (Castilo, 2016). The goal of a semi-structured interview is that interviewers are instructed to start with open-ended questions that cannot be answered simply with "yes" or "no," and then ask follow-up questions to bring out more detailed information about the candidate's assets and research potential (Doyle, 2020).

3.6.1 Data collection

The interviewees categorized it to be free of bias and appropriate for the context, culture, and diversity of the study by researchers to obtain information. These respondents were selected because they are involved in E-learning, have critical thinking skills, and are aware of current events, all of which aided in the development of insightful results. A semi-structured interview approach will be used since it is free, unstructured and opens for innovative concepts to develop as a response to what the interviewee says throughout the interview. The timeframe has been fixed for data collection which will commence on 1st February 2022 till 30th April 2022. Considering the semi structured interview approach, researchers will plan and execute the time slots arrangement accordingly for in depth understanding of the perception of Malaysian undergraduates.

In a semi-structured asymmetrical interview, where the interviewer asks the first question and poses a problem. In contrast to the closing questions, the interviewer usually has a framework of subjects to address that allows participants to provide their own distinctive responses. Furthermore, semi-structured in-depth interviews are the most popular qualitative

data source and are generally recommended for use in qualitative research (Kallio, Hanna, Pietila, Johnson, & Kangasniemi, 2016).

This method usually incorporates a conversation between the interviewer and the respondent, which is guided by a detailed methodology design and includes follow-up inquiries, questions and comments. The approach enables the researcher to gather open-ended data, investigate interviewees thoughts, sentiments, and attitudes on a given topic, and get insights into societal, and often contentious concerns (Kallio et al., 2016). The interviewer will invite the participants to join in the interview to contribute relevant and reliable information for a final year project study.

Considering COVID-19 pandemic, the interview will be performed entirely online. This discussion will take place in online platforms, using Google Meet and Microsoft Teams as the main mediums. This is because, based on the view of undergraduates, most universities are using these platforms for E-learning and discussion. Therefore, an email will be issued to participants as a reminder of the group discussion email for this study. A screen recording and audio recording of the group discussion are required for the transcript section and as evidence for this research.

As a result, the moderator will brief the participants about the recording method and its purpose before the group discussion begins. The acknowledgment of recording is to ensure that this study adheres to the research study's ethical requirement, which is the informed permission of the participants. The personal data of the interviewee will also be kept confidential. The interviewer begins by asking the interviewee common questions and demographic information, and then gradually progresses to the interview session.

Interviews are conducted only once, with a single person or a group, and can span anywhere from 30 minutes to an hour (Pharm, 2014). This interview will take around 25 to 30

minutes. 7 questions will be asked to interviewees based on the time allocated and for them to process the need of the question. There were 4 sections in the structured questionnaire. Section A consists of basic questions that elicit generic and non-intrusive information. The transition section, Section B, connects the introductory questions to the key themes to be explored. Section C is the most important, as it is strongly related to the research objectives and questions of the study, and these questions provide the most useful information. Finally, section D is closure, which consists of easy questions to answer and provide a sense of closure by allowing participants to voice any unresolved issues or offer recommendations.

This also denotes the end of the discussion. During the interview session the participants' answers will be recorded. These audiotapes will be used to allow for more consistent transcription later for deeper understanding of answers. The responses will be transcribed and entered into a computer file, which will be analyzed following the interview. The limitation in this method is if they are uncomfortable in sharing their thoughts and want to do it anonymously.

Classification of question	Description of classified question	Questions to the interviewees
Introductory	Reasonably common and non intrusive details.	a) Based on the information that you provided in the questionnaire; you are studying at University _____. Which year student are you and how are you adapting to E-learning so far? What do you feel about the new experience in E-learning?
Transition	Linking the introductory questions to the main points to be discussed	b) Based on your experience, which mode of learning is more effective ? Do you think that the educators have delivered the courses or contents effectively through E-learning compared to

		traditional methods?
Key	Closely linked to the study's research questions and objectives and these questions provide the most valuable information.	<p>c) Does E-learning impact your engagement and academic performance? Can you explain further about your time management to maintain academic performance?</p> <p>d) What is your perception about the inevitable technical challenges faced by most of the students during online classes? Do you face any technical challenges during E-learning? <i>If YES, how do you cope with it? If NO, then move to others Q</i></p> <p>e) How is the development of your self-motivation throughout an E-learning environment? Do you face any difficulties in interacting with your lecturers and group mates? Is it reducing teamwork and communication between students?</p> <p>f) Are there any university policies that have been introduced in conducting E-learning? Does the introduction of new policy have impacted the learning process of E-learning?</p>

Closing	Simple questions to address and provide a sense of closure which gives participants a chance to raise any topics not addressed or provide advice. This also indicates a conclusion.	g) Before we wrap up this session, is there something about your experience in E-learning that you think influences how you engage in your online classes that we have not yet had a chance to discuss?
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Table 1: Type of interview questions for participants

3.7 Data Analysis Procedures

To analyze the interview data, it is effective and guarantees accuracy of information if a structured analysis method is used which helps to make sense of collected data from the interviewees. A thematic analysis method through its theoretical freedom gives a highly flexible approach that can be modified for the needed research. In 2006, Braun and Clarke addressed and considered thematic analysis to be a core approach for qualitative research since it provides important abilities for completing many other varieties of qualitative analysis. This analysis provides rich and detailed data for the study conducted.

Moreover, it is proved that if thematic analysis is conducted in a systematic approach it can be transparently communicated to others. To be acknowledged and trusted, qualitative researchers must demonstrate that research analysis was done in a precise, trustworthy, and professional manner. (Nowell, Lorelli, Jill, Deborah, & Nancy, 2017). Thematic method is selected as a convenient tool for analysing various research participants' viewpoints, highlighting similarities and discrepancies, and producing unexpected insights. Since it helps the researcher to manage data in a well-structured way, thematic analysis is commonly effective for determining key elements of a huge data collection, resulting in a detailed and well-organized initial report for this analysis.

The first step will be to familiarize with data collected from the in-depth interview. Immersion of data requires active reading of the data repeatedly in search of meanings and trends. It is strongly advised that before starting to code, researchers can read through the whole data collection at least once, as ideas and developments will arise as researchers become more familiar with all elements of their data (Nowell et al., 2017). Moreover, researchers should record the analytical and reflective thoughts that emerge from data immersion, such as values, preferences, and growing observations about the research subject (Kalilo, 2016).

Secondly, generate the initial codes. Coding is a method of communicating with and thinking about data that involves contemplation and helps the researcher to concentrate on data characteristics while simplifying the data. The initial generation of codes from data and theorizing behavior causes the researcher to revise the data. This is a form of interaction with data gathered from the interview (Victoria, 2019). This process necessitates the researchers move from unstructured data to structured data. In addition, researchers need to focus systematically through the entire data analysis, paying complete and fair attention to each data item, and recognise engaging features in the data items that structure the base of themes across the set of data (Savage, 2000).

Thirdly, coded data will be extracted into themes after sorting and collating the relevant data because themes putting together parts of concepts or experiences which when viewed in isolation are frequently meaningless. Themes tend to be major structures that connect significant portions of the data once it is discovered. Therefore, it is crucial not to discard details or codes at this point because it is unclear if the themes can retain or be fused, refined, isolated, or discarded without thoroughly reviewing any of the extracts during the fourth step of thematic analysis (Braun & Clarke, 2006).

Later, themes will be reviewed where individual themes will be evaluated for credibility and validity to determine whether they accurately reflect the meanings discovered in the data collection. The data would be extracted into a manageable set of major themes that concisely interpret the document. The data inside themes should make sense together, and there should be a strong distinction between them.

The fifth step researchers decide what part of the data the theme collects, the interest and the reason behind it (Bhandari, 2020). Researchers will perform and write thorough analyses for each theme, accordingly, describing the tale that each theme tells (Corbin, 2015). When the researcher has completely developed the themes and is ready to begin the final review and report writing for the research.

3.8 Ethical Consideration

Privacy and confidentiality are crucial throughout our semi-structured interview to avoid victimisation in our study (Mealer & Jones, 2014). In order to safeguard our respondents, an informed consent form will be deployed in our study in accordance with the Personal Data Protection Act 2010 (Act 709) and the "POL-IPSR-R&D-004 Research Ethics & Code of Conduct" from Universiti Tunku Abdul Rahman (UTAR, 2019).

The interaction between researchers and participants could be ethically challenging due to the essence of qualitative studies. Therefore, the establishment of detailed ethical guidelines in this regard appears to be significant. This incorporates anonymity, confidentiality, informed consent, and the possible influence of the researchers on the participants and conversely. In this case, researcher need find participants based on criteria begin preparing for the interview to explain privacy concerns and ethical deals which includes the rules and regulations, prepare consent forms to receive mutual agreement to participate in this interview, the researcher need

to make participant feel comfortable to share their thoughts, and find the right and appropriate words to start the interview in order to have a productive session.

Before initiating the interview session and brief and explicit description of the study protocol and the interview process will be informed to all interviewees to ensure that they are ready to keep and ensure their participation throughout the session (Bhutta, 2004). Interviewees shall be guided and their right to ask questions, refuse or end the interview if inconvenience occurs will be respected (Zaal, 2017). These ethical and communication skills can guide researchers in moderating roles in the interview by generating the appropriate power balance and degree of cooperation. It also provides guidance on how to handle complex interview conditions and participants.

3.8.1 Informed Consent Form

This research includes an informed consent form because it ensures researchers meet the criteria of ethical research and safeguards participants' basic human rights (Bond, 2004). We will also notify interviewees of their rights to withdraw their agreement at any moment and for any cause during the interview session without penalty or denial of benefits (Musmade et al., 2013) The informed consent form from the UTAR Research Portal Official Website with the code "FM-IPSR-R&D-057 Volunteer Information and Consent Form" will be modified (UTAR Research Portal, 2021).

Participants will complete this form with the investigator's name, the title of the research project, the objective, method, risks, and advantages. Personal information submitted by interviewees, such as name, identification number, residence, study results, or pictures will be kept strictly private.

3.9 Summary

Students in higher education can use e-learning to help them finish various activities and research. It's also thought to be a valuable tool for evaluating their academic performance. The researcher has explained how the semi-structured interview will be conducted and how many students from which university in Malaysia are chosen. The researcher also has discussed how the research will take place and discussed briefly about the pilot study that has been conducted to help the researcher with future semi-structured interviews.

Chapter 4: Findings & Analysis

4.0 Introduction

The research findings and data analysis are covered in this chapter. 15 undergraduate students were chosen to be the interviewees, and a semi-structured interview was done with them to gather the data in order to address the research questions of this study. Then proceed to data analysis and aim to have a better understanding about the study. The findings are relevant to the research questions that guided the analysis and research objectives. This chapter would focus on presenting the collected data in order to have a discussion, coding, thematic analysis, key themes, and conclusion on the research topic, Malaysian Undergraduates' Perception Towards The Effectiveness Of The E-learning Approach On Higher Education.

4.1 Data Analysis

The objectives of the research are to explore the perception of Malaysian undergraduates towards the E-learning approach during the pandemic period, and the effectiveness of university policies on E-learning towards them. Besides, exploring the effects of the E-learning approach on the self-motivation of Malaysian undergraduates is also one of the objectives that we concern in the research. Therefore, we will discuss the finding from the interviewees who are in different universities which are Universiti Tunku Abdul Rahman (UTAR), QUEST University, Universiti Tun Hussein Onn Malaysia (UTHM), Universiti Sains Malaysia (USM), Universiti Islam Antarabangsa (UIA), INTI International University, Universiti Teknologi Malaysia (UTM), Universiti Kebangsaan Malaysia (UKM), Universiti Utara Malaysia (UUM), Monash Universiti Malaysia, and Tunku Abdul Rahman College (TARC).

Qualitative research method is used as the criteria is suitable in our research as it is able to recognize more in-depth opinions and knowledge from our interviewees. It allows for the collection of rich data analysis about how people think and act, as well as the revealing of complicated systems (*B2B International, 2022*). The researcher conducting the in-depth interviews is able to collect the expectations and ideas from them through their professional perspective. It is suitable for collecting the results from them which meet the research objectives. Moreover, this method can guide the researcher to further follow up the questions

and get more information from the interviewees to gain the valuable and worthy understanding about the research in their point of view. Open-ended questions are also applied in this research method to conduct the interview. It needs the interviewees to collect, analyze, and interpret the information from the interviewees to ensure the researchers can meet the research objectives through the interview. The interviewees can ask more about the students' opinion as they are experiencing E-learning and are able to give them a freedom to share their ideas without limitation.

4.2 Line by line coding

Transcribing the data collected during the interview that were subjected to line-by-line coding comes next after the interview is done. Line by line coding is an effective method of representing, analyzing, and interpreting data that has a significant impact on how data is thought. In order to describe and construct a collection of social behaviors, transcripts produced as a consequence of transcription need to be carefully arranged, examined, and understood. In other words, line-by-line coding is a social cognitive activity that emphasizes processes and calls for attentive, critical, and reflective cognition at both the macro and micro levels of transcription. After that, line by line coding helped the researcher to organize systematically and analyze the textual data and choose the theme from the content. Analytical demands can be satisfactorily met by transcription, but text relevance must be taken into account. Always base inclusion decisions on the research question that an analyses try to provide a solution. Additionally, in order to use transcript summaries efficiently.

4.3 Codes

In a qualitative research approach, a code is a word or a short sentence that is transferred from the data. In the research, the reliability of coding is a key direction for the study discussion. In the steps to generating the codes, researchers will go through the collected data and generate the initial codes. It is a strategy of thinking and communicating with data that requires reflection, enabling the researcher to focus on data features while making the data simpler. The researcher revises the data as a result of the first development of codes from the data and behavior theorizing. This is a method of interacting with the interview information collected during the interview. The codes in this study focused on student behavior factors, E-learning benefits, technical issues and so on that affect the perception of E-learning. These codes will test the reliability on the discussed topic of Malaysian Undergraduates' Perception Towards The Effectiveness Of The E-learning

Approach On Higher Education. With the objective of "reliable" or "extract" coding, numerous coders are practicing, and coding reliability tests are utilized to test for consistency of judgment (Braun & Clarke, 2019). Based on the limitation amount of raw data to the information that is pertinent to the research topic, grouping the data into understandable terms, and using coding, researchers can transform the raw data into higher-level insights or abstractions that can be used to construct a theme (Vaismoradi, Jones, Turunen & Snelgrove, 2016).

4.4 Thematic analysis

Thematic analysis is a popular approach for analyzing qualitative data. It is concentrating on identifying semantic patterns across the dataset that offer the answer to the inquiry. The purpose of thematic analysis is to gain an understanding of meaning patterns from data on lived experiences. Thematic analysis is approached in six steps which are familiarization with the data, coding, looking for themes, reviewing themes, defining and identifying themes, and writing up.

First, the researcher must peruse, comprehend, and become acquainted with the data. The researcher used an internet platform to interview 15 people for this study. The researcher will next record the interview audio and utilise the transcription as the interview script. Following that, the researcher will go through the interview script one by one. The researcher will next develop the code to identify the information from the interview scripts that is critical to answering the question. The researcher will next lead a discussion and gather data to establish the importance of the potential themes. Following that, researchers will compare the possible themes to the dataset to determine their relevance between data and theme in addressing the study question. The researchers will next create an analysis to determine each of the themes and name each topic. Besides that, the researcher will next compare the potential themes to the dataset to determine whether there is a link between the data and the topic and so answer the research question. The researchers will next conduct an analysis to select and name each issue. Lastly, the researcher will integrate analytic and data analysis, as well as correlation analysis with current literature.

Theme	Sub Theme(Codes)	Excerpts(Labels or important moment
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Student engagement	Less interaction	Less interaction between group members and lecturers has caused misconception during teaching.
	Independent learning	Students opt with independent learning through online platforms to gain extra knowledge about their subjects.
	Proactiveness in learning	Being prepared on hand is vital in learning to be able to absorb knowledge. Proactive respondents maintained their performance well throughout the semesters.
	Lack of involvement	Less commitment because E-learning created less interaction and the assessments methods are not persuasive for them to be involved fully.
	Communication barrier	Respondents perceive that it has been difficult for them to communicate online, especially when our lecturers gave us the online group activity that we need to settle. Their comprehensive level is not good and it became a barrier in group tasks.
	Self-discipline	Students are not aware of the seriousness of the E-learning due to the environment.
Academic performance	Helpful lecturers	Lecturers tend to teach the students with extra materials and guidance to ensure they understand the content. They have contingency plans as well to conduct classes if any emergency occurs.
	Self discipline	Students understood self discipline and scheduling is prominent in education which maintains their academic performance throughout the process.
	Quick adaption	Adaption was needed in a quick manner to stay on track and assessment plans. The students had to adapt to the elearning in order to sustain in educational online platforms.

	Time management	Schedule the time properly so can complete the assignment on time. The adaption of E-learning had saved the time on traveling and created flexibility in planning timetable. Prepares students to be goal oriented and wise in managing time between family, friends and studies.
	Management on academic	Divided the task for assignment
Self motivation	Focused in class	Focus during class helps them to revise back the studies and encourages them to perform more on academic.
	Efficient in planning	Having their own schedule and time table has made it easier to track the activity throughout the day which avoids procrastination.
	Flexibility in learning	The E-learning mechanism has reduced the workloads among students. Reduction in credit hour is flexible which allows the students to make the choice.
Elearning benefits	Additional knowledge	Respondents mentioned that they can have additional knowledge which can apply out of academic purposes.
	Time management	Respondents mentioned that the time management during Elearning is good because it avoid lateness in class.

Table 1 : Key themes

4.4.1 Key Themes

Theme 1: Student Engagement

This theme consisted of 5 sub-theme which focused on less interactions, independent learning, proactiveness in learning, lack of involvement, and communication barriers. Less interaction is focused on the student engaging in E-learning. Next, independent learning is when the student spends extra time learning and gains more knowledge in the study. Proactiveness in learning is discussed when the student will get prepared before the class.

Lack of involvement will discuss the involvement in discussion during E-learning. Communication barriers will discuss the e-learning will create the miscommunication issue and the challenges faced during e-learning.

Less interactions: Respondents mentioned that they feel E-learning is a lack of interactions, especially during discussion.

R7: ... we lack interaction with our lectures and also our classmates.

Independent learning: Respondent mentioned that he will learn new knowledge by himself in order to gain more knowledge about certain topics. At the same time utilizing the convenience brought by the technology.

R2: I have learned on how to be independent and not solely depending on the lectures in order to master my knowledge

R3: got less restrictions for me and I could watch back the recording for a study back the lecture and tutor tutorial class.

R11: I will ask my lecturer through WhatsApp

Proactiveness in learning: Respondents responded that they will ensure they will self-study first before the class by ensuring they have a brief idea about the topic. At the same time, they will ensure the stability of the Internet, facilitating learning. Next, respondents also highlighted the benefits of lecturer video recording in their study.

R8: I've spent much more time going over recording of classes and watching videos on YouTube so I could better understand my subjects.

R9: Different way for studies and we will be not face meet each other face to face. So we will need to ensure that the Internet for us is very stable.

R9: Since I will make sure the technical issue such as the Internet access will be solve before the class and make sure that I having a class in an effective way.

Lack of involvement: Respondent mentioned they do not dare to consult lecturers as they have a peak schedule or even need to ask right after the end of the lecturer class. Besides, the respondents mentioned that E-learning is conducted via the Internet, therefore; it cannot support face-to-face interactions.

R2: We cannot inquire much because our lectures will have another schedule that they need to attend. If if you want to clear doubts we have to wait until the class end and after the class end the lectures will rush into their other classes

R14: impact the interactions because the online study is not able to support the face to face interactions

Communication barrier: Respondent mentioned that there is a difficulty in communication, especially during group discussion via words written which will impact the understanding of the individual and the impacts of conflict.

R2: It has been very difficult for us to communicate through online, especially when our lecturers gave us the online group activity that we need to settle.. my friend does not really understand what they're trying to convey.

R9: using word for communication and there will be a misunderstanding and conflict with each other which will cause a poor teamwork.

R11: communication is the most difficult part when doing group assignments

R14: cannot show the questions more effective way through the computer like the understanding between me and the lecturer, we will often have a conflict.

In conclusion, E-learning is a platform that will discipline the students' behavior on engagement in group activities or self studies. Students who care about their academic performance, they will consult their lecturer personally through social media (consult through Whatsapp) or online communication (consult through Email) to have a better understanding of their courses as they are aware that their lecturer has a packed schedule on the teaching. However, some of the students drop their engagement in group discussions because there is an ease of miscommunication which leads to poor teamwork while communicating in word form, and conflict occurs.

Theme 2: Self-motivation

This theme consisted of 3 sub-theme which focused on academics, flexibility in learning, and time management. Focused on academics is explaining about the students paying attention to their academics and always asking questions to their lecturers. Besides, flexibility in learning in this sub-theme is able to provide free time to students to adjust their time by themselves during E-learning so that they can manage their time effectively in their daily life. Lastly, time management enables students to arrange their time in order to well-prepare their tasks and improve on their academics.

Focused on academics: Respondents said that they feel that focus and monitoring themselves is good during E-learning as well as keep questioning if facing some issues on the

academic side, no matter if it is difficult or simple things. They will actively be asking to ensure he can understand and get a correct answer from the lecturers.

R2 : I actively ask question to my lecturers, if I have any doubts or even though it is a small doubt, small thing, simple thing, I would definitely ask them.

R10: ...it would only be effective for someone who is really focused and self-disciplined. Because self-control is very important for e-learning

Flexibility in learning: Respondent stated that he can schedule his time according to his time allocated. Because it is E-learning mode during COVID-19 pandemic, he will take the advantage to arrange his time on his academics.

R1 : If you taking E-learning classes you can manage your time flexible.

Time management: Respondents mentioned that they make good use on the platform to ensure his academic performance is sustaining the level. He utilized it so that he can arrange his time and be able to find a way to follow up the subjects and enable them to plan their tasks. Furthermore, during the interview session, one of the respondents answered that a good mindset is effective for him to keep going in a new learning mode. He will also have adequate time to take a rest.

R10: ...I would try to sort out my To Do List for every day.

R12: ...well prepared by scheduling timetables and playing back the recording in order to maintain my academic performance.

R12:...take a break and stay positive in order to stay motivated in a learning environment.

In short, conducting the interview session is able to show and notice the respondents' self-motivation during E-learning. They are enabled to learn by themselves and schedule their time efficiently to make sure their academic performance is not affected. They update themselves and always question their inquiries so that they can handle their subject during online learning.

Theme 3: Technicality issue

This theme consists of 3 sub themes which have interrelated one another which implies unstable network connection and advanced software and gadget required for the class

execution. The connection issue is considered as one of the inevitable obstacles during online classes, meanwhile the requirement of gadgets and software varies according to the course undertaken. This theme has a strong relationship with students because it is the main tool for a successful E-learning approach.

Unstable network : This is considered a challenge to the E-Learning platform. Students or lecturers are required to be well prepared to face this situation with a contingency plan where they must find other ways to quickly reconnect and attend the class. 15 out of 11 students had technical issues where they had to reconnect continuously to stay focused in class because there was no other option. The weather plays a role in causing disconnection in line. However, this unstable network causes students to rewatch the videos for further information. Students consider this unpleasant situation as one of the major cons of E-Learning. The electricity and electric current can trip off when it rains which causes unanticipated disconnection. Students need to rely on mobile hotspots to reconnect. Unstable networks trigger many other possibilities such as taking advantage and losing focus in class. The residential areas also influence the stability of the connection and the accessibility to the internet. Besides respondents mentioned that an unstable network discourages them from attending the class continuously

R1 : "I do undergo technical difficulties certain times whenever it rains. The electricity at my house will trip whenever there's thunder and I will have to wait for it to come back or or what I usually do is I will buy mobile data"

R2: Microsoft Teams has some issues regarding can't join the class due to getting technical issues and sometimes the apps have no sound during the lecture class

R3: occasionally worry about network issues. So, for this I bought data to overcome the issue and lecturer 's is not clear due to some factors such as the network issue

R4 : Flood happens in our neighborhood, or is like the environment is too noisy, the Internet connection is very poor.

R5 : I once lost my internet connection, not just for a few hours or a couple of hours, but one whole day. And there isn't much I could do to cope with it

R6 : The most saddening part was most of my classes were scheduled in the evening and I frequently disconnected from the class. Due to the poor connectivity,

Advanced software or gadget required : This sub theme explains the different preferences in course and the IT requirement can be different according to the subjects. 4 students mentioned that E-learning has cost them to upgrade their existing laptop because the current display can't incorporate certain software's. They mentioned it is hard to maintain the performance and

R1 : buying a new laptops, new phones just to cope up with the learning and so on, but not everyone of us are very fortunate as a computer science student I have to own laptop with high end features. Which I must install an extra RAM for programming coding like that”

R2 : These features also stimulate hardware issues among student's equipment because when an unsupported file installs it can cause virus spread on the laptop. students preferred the traditional method because in University the unity management will provide them computer lab facilities with required installed desktop

R3 : They have a dedicated computer lab for their projects which helps in coding and practical tasks. They aren't able to do this at home therefore they are forced to install a higher GDP, RAM and purchase a good number of graphic cards.

In conclusion technicality issues have been faced by most of the students during e learning. This has caused them to lose motivation and some approached contingency plans to continue their studies. To resolve this practically students need to seek help in Learning Resource Centers for technical assistance. The only solution to this problem is knowing exactly what kind of technological support they will need for a certain course before enrolling in it, as well as properly equipping themselves for the course's successful completion.

Theme 4: Behavioral Factor

This theme consisted of 5 sub-theme which are focused on social media usage, discomfort during class, self- discipline, attention span, and taking advantage. Social media usage is focused on the attention span of students during E-learning. Next, uncomfortableness during class is focused on student's comfort during the E-learning process. Taking advantage will discuss the benefits of E-learning to students. Self-discipline which will discuss the student's learning environment during the E-learning and lastly is attention span which will discuss effects on students from E-learning.

Media usage: Respondents mentioned that putting away phones during the E-learning

process helps to concentrate more during the class. Technology is advancing and becoming increasingly integrated into our daily lives. The use of technology is becoming ever more prevalent at COVID-19. However, it doesn't imply that students should use their phone in class or even just have it next to them.

R2: won't use my phone or engage in any text messaging or social to improve my concentration while studying and I think that's the reason why my academic performance good

Uncomfortable during class: Respondents mentioned that E-learning was uncomfortable compared to traditional learning methods. Students already were too comfortable with the traditional method of learning, when it made a sudden change transforming from a physical method online students can't cope with it and feels uncomfortable.

R10: So actually at the beginning of E-learning it was quite uncomfortable

Self-discipline: Respondents mentioned that they were unable to discipline themselves during E-learning because of the other tasks they have to focus on during E-learning at their home. By juggling both studies and house work, students need a high level of discipline to be committed to their online classes. The seriousness of the class is not felt by students because the environment while attending the class is affecting that.

R5: lack of knowledge absorption in my part because I couldn't really feel the seriousness of learning in this environment.

R6: Unable to discipline myself to be a student to follow their live lecture session

R6: due to the fact that I was not disciplined during the lecture and sometimes I postponed what I was going to do

Attention Span: Respondents have mentioned that their attention span has reduced after the implication of E-learning. The impact of a shorter attention span and lower level of concentration impacts harder on online learnings as students continue to struggle to retain their focus on the content offered to them. The reality that paying attention requires a lot of cognitive effort to stay focused on anything. One of the most difficult tasks for teachers is encouraging pupils to pay attention during the class period in order to maximize learning possibilities.

R4: takes time for me to pay attention to class and everything

R5: The time focus is limited after the E-learning

Taking Advantage : Respondents have said that by E-learning , it makes their arrangement to attend meetings or classes easier. The convenience of online learning for attending classes and completing homework. Students really valued the flexibility of online study. The advantages of online education in terms of convenience and time flexibility have been extensively discussed in the majority of studies linked to COVID-19. Less time spent commuting, gas savings, better time management, and more family time are just a few of the advantages. It has also been demonstrated that greater freedom encourages students to learn independently.

R5:due to the fact that I was not disciplined during the lecture and sometimes I postponed what I was going to do

In conclusion, student's behavioral factors played a vital role in their academic performances during the process of E-learning. Students have to be disciplined themselves from distracting their studies from various factors at home such as media usage. By disciplining themselves from restricting the usage of media during E-learning students have mentioned that they can focus more. On the other hand, students also had to adapt and make themselves comfortable quickly to the E-learning environment for a better outcome in their studies. Lastly, student has also have to self-discipline them self in the E-learning environment for not taking advantage of the flexibility of E-learning.

Theme 5: E-learning benefits

This theme consists of four subthemes, post class recordings which can let students easily repeat and re-watch the recording of the class. The other sub-themes which are technical competence which refer to the technical proficiency required to exercise effective control. Then, the other two sub-themes are time-management which can better arrange the time and additional knowledge referred to can learn extra knowledge through online E-learning.

Post Class Recordings: Respondent said that recordings give viewers the freedom to view or rewatch material at their own speed. During study week, he can easily find the recording and do the revisions until understand all the lessons. Apart from that, the respondent mentioned that can get more information from the way of re-watch the recording. This is because recordings can let him do the research information at the same time view the recordings.

R2: in online students can go through the recordings or even watch a prerecorded video for the particular subject

R4: I get lectures who does live classes via Webex. Microsoft Teams and then some lecturers they provided prerecorded videos, which is more convenient for me

R10: rewatch the recording when we are free and also we can look up any further information online because everything is at our fingertips.

R12: I can refer back to the recording when I have missed the lecture and tutorial class

R12: pre-recording the lecture class which makes the learning process more effective

R12: can replay and review the recording as many times as I can, which makes me more understanding about the lesson

Technical competence: Based on the interview, the respondents say that using online platforms to learn is better because they have mastered the benefits of e-learning and know how to use it to further their academic endeavors. Respondents mention that they have used an online platform for the group discussion meeting. Furthermore, respondents also mentioned that he gets a lot of new knowledge of the computer through E-learning. Moreover, respondents have mentioned that they can easily interact with their friends or lecturer through online platforms. This is because through online platforms, communicating with people can increase their confidence.

R5: students are able to have a better computer knowledge

R5: quite easy to interact with people

R15: can have the WhatsApp and Google meet so can overcome this problem

Time management: Respondents mentioned that E-learning can let him have more time for doing revisions. This is because students can have a good time management to arrange their own schedule.

R11: the time is very long enough for me to do revisions

Additional knowledge: Respondents have mentioned that they can learn extra knowledge during E-learning. This is because nowadays many students will be doing community

learning through online platforms and can discuss some difficult questions together. In addition, respondents mentioned that he will use his knowledge to join many activities and can use the knowledge to hold activities to attract more people to join their activity.

R5: I was able to use my knowledge on that to apply outside of my university. For example, I have held online activities with my friends

R12: I have gained a lot of knowledge

In conclusion, there are many benefits of E-learning given to students in their college time. Most students will like post class recording during an E-learning session. This is because of post class recordings which can let students easily repeat and re-watch the recording of the class. Furthermore, students will gain greater technical competence during E-learning classes because they may readily participate in MCO discussions and communicate with or ask professor questions. Besides that, students will have effective time management since they will plan their time so that they can complete tasks efficiently. Finally, students can gain more knowledge by participating in online seminars or workshops.

Theme 6: University policy

This theme consisted of 4 sub-theme which focused on equipment assistance, technical assistance, assessment methods, and technical competence. Equipment assistance is offered by the university to help students in learning. Technical assistance is offered by the university to ensure the smoothness of learning. Assessment method discussed in the assessment method to measure the knowledge of students during E-learning. Technical competent discussed the utilization of technology to discuss with her group mates, and ease the communication flow.

Equipment assistance: Respondents have mentioned that the university takes action to solve the issue faced by the students during difficult times (Covid 19).

R8: students have to go to the laboratory engineering lab which means that they have to stay in the College hostel, so I guess in terms of policy changes it hasn't changed so much as more like additional requirements for 'mohon' hostel.

R12: a laptop rental program that is offered by UTAR

R13: Got the rent computer program

Technical assistance: Respondents have mentioned technical support offered by the university to ensure the smoothness of learning.

R8: They will give the students basically mobile data like what do you call it? Internet plan.

R12: It assists students who are facing technological challenges to learn

Assessment methods: Respondents have mentioned that due to the difficulty of the course, they think it is more suitable to have a physical class. And, another respondent said that the university retains the style of teaching during E-learning although they practice a hybrid mode of learning.

R5: E-learning mechanism, where we actually reduced the workloads and also they are recently in UIA. They reduced the Minimum credit hour required, which is from 15 credit hour credit hours to 12 credit hours

R5: leniency in our first year of E- learning and for the dropping the course after looking at our result was during the first semester of learning,

R11: Because I'm studying multimedia, for my course many new things that we learn need more tutorials, so traditional methods will be more effective to us so that we can know our mistakes directly when doing tutorials

Technical competent: Respondents mentioned that she utilizes the technology to discuss with her group mates, and ease the communication flow.

R12: made it online by using WhatsApp and Microsoft Teams

R14: remain unchanged for the video recording and want us to attend physically for the tutorial, there's better for us to interact with the lecturer during the tutorial class

In conclusion, universities played their role to reduce the burden of students during the year of E-learning. University provides help in two ways, technological help and mental health. For technology, university offers Internet connection which can ensure that the student can have a better experience in E-learning. Next, mental health which allows students to drop their courses aims to ensure the academic pressure can be handled by students. The issue can be resolved if the students know exactly what kind of technological support or assistance they will need for a certain course before enrolling in it, as well as properly equipping themselves

for the course's successful completion.

4.5 Conclusion

In short, there were seven main themes under this research topic about E-learning. To answer research question one which is to explore undergraduate's perception about E-learning. Those eight components that cultivated their perception were the stated themes. The effectiveness of e-learning was measured through their response and experience in participating in e-learning classes. These themes and codes by thematic analysis are guided in extracting the clear perception which is mostly neutral.

Chapter 5: Discussion & Conclusion

5.0 Introduction

This chapter is investigating our research objectives and suggestions for future study. We evaluated the responses from the interviewees by following the research questions that we set in the beginning. It is to ensure that we can achieve the research objectives through the interview with the respondents. As mentioned in Chapter 1, our research objectives are to explore the perception of Malaysian undergraduates towards the E-learning approach during the pandemic period and to explore the effectiveness of university policies on E-learning towards Malaysian undergraduates amidst the pandemic. As well as to explore the effects of the E-learning approach on the self-motivation of Malaysian undergraduates in this research.

5.2 Discussion on the related themes

5.2.1 Perception of Malaysian undergraduates towards the E-learning approach during the pandemic period

Most students feel that E-learning will help them a lot such as increase their academic performance. This is because there are many benefits that E-learning brings to students. As the interviewees say, post-class recording will help them to have good time management to manage their timetable because they can review back the recordings at any time. Through this study we found out students from different universities have dissimilar points of view towards the acceptances and adaptiveness to E-learning methods. The interviewees from government universities perceives E-learning methods are ineffective to them as the lecturers are performing perfunctory academic approaches. 40% of the interviewees perceive that the ineffectiveness of e-learning only takes place when there are no clear instructions and expectations fulfilled. They find it e-learning and its convenience is only making the students lose interest and interaction with their tutors. Meanwhile, other groups of interviews accept the advantages and benefits of e-learning accordingly. The perception that students can access the content from home without having to come to the classroom is an easy way to retrieve content and information. The adoption of e-learning allows institutions and their students to offer, receive, and select learning programs since the implementation of e-learning provides a great deal of flexibility in terms of time and place where it can influence students' mentality and emotional engagement towards educational purposes (Pustika, 2020). Students can save

time by learning digitally and selecting classes depending on their own availability which increases their spirit to learn more about the related subject based on their course.

Besides, an educational constructivism concept that places the student at the center supports e-flexibility. The focus is on learners' learning autonomy since e-learning is a "learner-centric" educational style (Looi, 2021). This "learner-centric" educational approach gives students a wealth of learning options and empowers them to take greater ownership of their education. As a result, learning effectiveness and efficiency are increased, as are higher-order thinking abilities like questioning, creativity, and problem solving (Looi, 2021).

Besides, E-learning allows students to readily access and share resources through various materials as mentioned by the interviewee from QUEST and UTAR. The sharing of materials widens their scope of learning, either by direct upload to ready-made cloud storage or distribution via any type of social network (both formal and informal), boosting student collaboration, particularly in the group or project-based learning contexts (Pustika, 2020).

Besides, satisfaction with online learning is a notable indicator of a student's intent to continue with online courses in the long run. since the educational field is rooting to achieve optimum digital literacy. While some interviewees perceive that impromptu and hasty transition to elearning - with no training, totally inadequate network capacity knowledge, and little planning to the approaches. Others believe that this rapid shift to e-learning via a new hybrid model of education will result in weak user experience that is detrimental to the learning platform's long-term growth. (Paulsen & McCormick, 2020). Besides, flexibility in e-learning can provide free time to students to adjust their time by themselves during E-learning so that they can manage their time effectively in their daily life. The proper balance of academic achievement and daily activities can develop the students' motivation to learn and utilize educational technology. Lastly, time management enables the interviewees to allocate and spend the time provided wisely onto the related and important content .

Interviews also do perceive the e-learning is a great way assimilate with technology to enhance the digital knowledge which can be useful during their career development; they also mentioned that eLearning has skills we acquire to live, learn and work in a society where communication access to technology is speedily elevating through many platforms. Numerous researchers believe that the incorporation of information technology into educational settings will be amplified even further, and that digital learning will eventually become an essential part of educational curriculum. Malaysian educational institutions, particularly those at the tertiary level, have ventured on an unprecedented journey to achieve

a compromise between the MCO regulatory requirements and the resumption of studies for their pupils (Mahmud & Bakar, 2020).

E-learning is growing exponentially in higher learning institutions as an outcome of the rapid advancement of technology over the years, as well as the current Covid-19 pandemic situation, and has preceded changes in the mechanisms of learning and teaching in Malaysian universities. Interviewees explained that the highest benefit of their learning experience is the adaptivity and encouragement from the tutors to uplift their enthusiasm to use the existing platforms to learn and evolve. Traditional methods are conventional based on their perception and they prefer online platforms more especially students from Quest and UTHM university since the facilities provided are top notch. During the Covid-19 pandemic, the concern for higher learning institutions is to provide survivable and purposeful learning experiences through the right e-learning courses or programmes that can enhance tertiary students' self-development and academic achievements. The interviewees' perspectives of the approach differ depending on the course and adoption behavior.

As academic institutions rely primarily on e-learning tools and strategies to deliver instruction, the challenge for software developers, higher education administration staff, and educators is to develop the best e-learning opportunities for learners (Chung, Subramaniam & Dass, 2020). An ideal e-learning curriculum would provide students with a broad range of online tools and resources to assist them in enhancing their learning capacity and guide them to become self-directed students. Furthermore, an e-learning program should also provide beneficial activities and materials that can stimulate learning interest among students and alter the negative attitude of some students towards online learning. This amendment of perception needed to improve their self-motivation towards studying. If such aims can be achieved then the program can be said to be successful (Ismail, 2021)

Furthermore, Mahmud et al (2018) believe that students' favorable views and their presumption in the effectiveness of e-learning, as well as their lecturer's competence and dedication, assist them in maintaining their good attitude toward it and, as a result, energizes them to be fully engaged in the learning, which improves their output. As a result, students will recognize and value the chance to acquire knowledge through an effective and appropriate e-learning course. Similarly, Peng (2010) contends that students' acknowledgment and mindset toward a specific e-learning course are crucial to determining the course's success and guaranteeing their passion and commitment and interest in it. A few past studies have also demonstrated the significance of students' positive attitudes toward

e-learning programmes and their presumption that it has changed their bad perceptions of learning (Ismail, 2019).

Most of the private university interviewees stated their knowledge about online platforms, implementations and related subjects has elevated due to constant practice and interaction in digital education. Multiple findings show that instructionally more source of innovation and interacting e-learning had a positive influence when compared to standard and passive face-to-face learning guidance (Ismail, 2019) According to interviewees' perceptions, effective e-learning instruction can lead to improved self-motivation, effective instancy, and interaction within the surroundings of online teaching and learning among the people participating. Thus, according to similar findings, students felt more encouraged and had positive perceptions toward e-learning, making a contribution to one of the key qualities of computer-assisted elements' accomplishment (Stephens & Coryell, 2020).

During the COVID-19 pandemic, Chung and Mathew (2020) conducted a study to determine whether university students' identity, study programme, geographical area, and internet access influenced their online learning contentment and plan to continue using online instructional skills. Through this semi structured interviews with various students from government and private universities it has unleashed their perception in depth and their experience using these online learning approaches. They are novice to a full time online learning environment however the constant practice and involvement has prepared them fully for the requirement. This proactiveness is acquired and implemented by most of the interviews in this study to track their progress to maintain their academic performance throughout a semester. The self-motivation they gain from these online learning platforms solely depended on their behavioral factor because some of them admitted to taking advantage of the facilities and privileges provided in online platforms. Semi-structured interviews were used to collect data from 15 students from several public and private universities in Malaysia to learn about their experiences and adaptation to learning. Besides, the finding of this study also shows that the interviewees in a smaller scale have the capacity to rebuild their character development to assimilate and make use of the freedom given in online platforms. They prefer and practice independent learning which is developing their hard and soft skills for the future. Moreover, the students have convinced that the interaction and communication within members and tutors varies according to the platform.

The findings revealed that 76% of the respondents were satisfied with their online learning because it offered them an opportunity to explore and venture into a new learning

system with independent learning. They mentioned independence in obtaining knowledge without solely depending on one source which is the lecturer helps them to commit fully to the task given. In terms of their plan to continue employing online education in the future, students encourage the future generation to equip themselves with digital literacy which can be fruitful in the long run.

The reciprocation in the traditional method is more rapid compared to online where students complained about the period of waiting to receive replies for their emails or inquiries. Such situations have developed the students to practice self-learning through various platforms. Interviewees mentioned the connection problems are contemporary and they need to be more proactive in resolving these issues which encouraged them to practice prompt critical thinking. They believe the limitations can be overcome through efficient contingency plans. Additionally, because universities create policies to aid students, they will assist students during their time spent learning online. Institutions should provide a learning environment that meets the demands of the instructors and creates a platform that is innovative, collaborative, safe, welcoming, and up to date with high-quality interactions between students and instructors (Kulikowski et al, 2021). Participants at all levels have said that institutional support is crucial for the adoption of e-learning. Researchers have discovered that the university atmosphere and administrative personnel who were approachable, courteous, and responsive to students' demands substantially influenced how satisfied students were with their online courses (Kulikowski et al, 2021).

5.2.2 Effects of the E-learning approach on the university policy of Malaysian Undergraduates

During Covid-19, the government provided a lot of support to undergraduate students. For example, the government allocates RM5 million for undergraduate students in the Yayasan Kebajikan Mahasiswa (YKM) program, assisting some individuals from less low socio-economic backgrounds (Nathan, 2021). At the same time, the university also plays its role in assisting the undergraduate in difficult times. From the discussion of respondents, the university offered help in equipment assistance, technical assistance, assessment methods, technical competence, and financial aid.

First, equipment aid. Interviewees discussed how the university helped them during difficult times, and respondents indicated how the institution intervenes to address problems that students confront during difficult times (Covid 19). For instance, students must attend the engineering lab, which necessitates that they remain in the college residence hall. Respondents guess that rather than a significant shift in policy, there are now more criteria for

the "mohon" hostel. In addition, UTAR offers a laptop rental program (UTAR,2021) This action has successfully assisted the students to have a better experience during E-learning which respondents mentioned technical support offered by the university had ensured the smoothness of learning and eased the communication flow.

In the discussion, the contributions offered by the university did help students going through the difficult time in the Covid-19 pandemic, especially for the students who are from B40 families. The selfless act of RM450,000 from the JinBodhi Bursary Deed for the year 2021 to students as financial aid gives those in need the opportunity to continue their studies at the university and, ideally, enhance their family's standard of living once they graduate and seek employment. Financially struggling students shouldn't be denied access to quality education, especially during this terrible time in the world (UTAR, 2021). According to Multimedia University (2021), provided help to the 20 locals and 7 students that is worth RM 2,280 to reduce the burden on families.

The findings of the research and analysis show that students are dealing with a variety of mental health problems while completing their coursework online. These issues have an impact on their physical and mental health, and they may also be a key contributor to more significant mental health issues like depression and anxiety (Ayman, 2021)For instance, the University of Malaya in Malaysia's Psychology and Counseling Management Section has introduced an online e-counseling service to all of the university's students, instructors, and employees. On the other hand, the Malaysian university Universiti Teknologi Petronas conducted seminars and webinars to talk about the problems and implications of mental health issues in the context of a worldwide pandemic (Caryl, 2022). Therefore, the university did offer help in reducing the burden on students. Based on the discussion with the interviewee, the university is practicing humanity in the first year of online learning with the option to abandon the course if the students are not satisfied with their results in the first trimester. The minimum credit requirement for students is also reduced from 15 to 12 credit hours. It illustrates how concerned the institution was about students' mental health during the Covid-19 pandemic.

5.2.3 Effects of the E-learning approach on the self-motivation of Malaysian Undergraduates

Due to the COVID-19 pandemic happening in 2019, most of the students needed to change the physical learning environment to E-learning to ensure they could continue their studies. Thus, self-motivation is important during that time as it can affect the academic

performance of students. While online learning places it all in the hands of the student every day, it can sometimes cause a loss of concentration and inspiring difficulties. Because we have control over when and how much we understand, motivation is essential to your success (Edge, 2013). From the interview session, few respondents answered that they would focus and monitor themselves since the pandemic was coming. They kept questioning the lecturers if they were facing any issues with their learning subject. They ensured that they were able to understand the academics well without face-to-face teaching and learning. Hence, they would concentrate more on their academics in order to avoid misunderstanding from the practicals and notes.

Another sub-theme is flexibility in learning. From this sub-theme, there is one respondent who replied that he can schedule his timetable in a well-planned way to make sure he can allocate his time to different tasks. He liked to take this advantage during E-learning in order to make himself self-motivated. For instance, make a schedule that you can follow by highlighting your assessment times and some other everyday tasks and prioritize them in ascending order of importance. It is preferable to develop and implement a schedule that works for you rather than demotivates yourself with one that depresses you and you are unable to devote to (Edge, 2013).

Following the sub-theme above, time management is also enabled to influence the self-motivation of Malaysian Undergraduates during the pandemic. Most of the respondents would make good use of the platform to ensure their academic performance is sustaining level. Besides, they could find their own way to follow up on their subjects as well as plan their time in a day. The students have adequate time to take a rest when the E-learning mode is conducted for all the students. Good time management skills make it simpler to stay motivated. There are numerous resources that can assist you with time management. Online courses and journals will provide you with the necessary information. For example, scheduling software is an excellent time management tool (*Appointment King*, 2018). A good mindset is effective for a student to keep going in a new learning mode. They can see difficulties as opportunities to develop toward their goals. Thus, time management can encourage students to have self-motivation no matter if it is through online learning or face-to-face interaction.

Furthermore, student engagement is also an essential theme to affect Malaysian Undergraduates in order to engage them in self-motivation. There were few respondents who felt that E-learning caused the learning process less interaction between students and lecturers. It will influence the students to minimize their motivation to continue studying

during the pandemic period. According to Selby (2010), lecturers are unable to discover nonverbal signals from students that imply they are disconnected, unmotivated, or incensed without face-to-face interaction. On the other hand, some respondents might get some extra knowledge, at the same time fully utilizing the advanced technology. Self-motivation appeared as the students were enabling independent learning, but not only depending on the lecturers. Therefore, students could use any platform to seek their answers and knowledge from the internet, instead of ignoring the difficulties.

There were few respondents who stated that they were proactive in learning as they would read and study their notes before entering their class online to make sure they had a basic understanding of the course. They would refer to various channels to look for their tutorial and their topic so that they can follow up on the subject efficiently. Thus, the students will ensure that their internet connection is connecting and functioning properly when they are in E-learning mode. Moreover, lack of involvement can influence the self-motivation of the Undergraduate students. It is because the students will feel that they are lacking engagement with their lecturers and their self-motivation will slowly decrease during their online learning. The anonymity of the digital age may encourage students to surrender, be involved minimally, or be completely isolated from the lesson (Selby, 2010). Furthermore, a few respondents would worry to consult their lecturers because of their timetables. They were not sure that their available time was suitable for them to meet up with the lecturers. They also mentioned that traditional learning will be better to interact with each other, rather than E-learning. Therefore, the students feel that online learning can produce a lack of involvement in their studies and decrease their self-motivation during the MCO. As they were unable to feel that they are involved in the course and had less interaction with their lecturers and might feel frustrated (Selby, 2010).

5.2.4 Effects of the E-learning approach on the academic performance of Malaysian Undergraduates

Academic performance of Malaysian Undergraduate students has its effects during the introduction of the E-learning method. According to the findings, there was an improvement in academic performance prior to the use of e-learning. According to research that has been made, academic performance improves significantly among students who have a good attitude and utilize their time properly on the e-learning portal. During the interview session, students stated that they consulted their instructor directly via social media (consult via Whatsapp) or online contact (consult via Email) to gain a better knowledge of their courses since they are aware of their lecturer's busy teaching schedule. However, some students

withdraw from group discussions due to the ease of misunderstanding, which leads to poor collaboration when communicating in written form, and conflict arises which affects academic performance.

Furthermore, mismanagement disturbs the academic performance of students. Time management plays a significant role in improving students' academic performance and accomplishments. Effective time management is connected with higher academic performance and reduced levels of anxiety in students. According to the interviews conducted, many students are able to establish a balance between their studies and their day-to-day life during the E-learning process. Respondents mentioned that they make good use of the platform to ensure their academic performance is sustaining level. This study adds to the research of data indicating how students view their time management interacts positively with academic success.

On the other hand, media usage also plays an important role in the academic performance of undergraduate students. Media usage is becoming increasingly significant in many people's lives, particularly among the younger generation, particularly during the COVID 19 epidemic, when all colleges have converted their educational methods to online classrooms. The key benefits of social media that drew many people into the digital world were limitless communication, limitless knowledge, and limitless digital amusement. Whether the effect is good or negative is determined. This study clearly shows that a student's use of media for academic purposes had a favorable influence on their academic performance. Furthermore, time spent on social media was found to have a strong link with academic achievement. Respondents mentioned that putting away phones during the E-learning process helps to concentrate more during the class. Technology is advancing and becoming increasingly integrated into our daily lives. The use of technology is becoming ever more prevalent with COVID-19. However, it doesn't imply that students should use their phone in class or even just have it next to them.

5.3 Limitation

The final limitation of the current study examines the mediating variable of attitude to discover students' intents to use online learning. An alternative mediating variable can be used by a future researcher in place of an attitude to better comprehend the intents to utilize E-learning. Besides, the limitation in this study is limited source of reference about E-learning in conjunction with Covid-19 outbreak since this pandemic occurred recently only. Besides, there were limitations during conducting the interview. The interviewees are from

different universities therefore their perception differs which leads to new dimensional of idea in furthering our studies. Another limitation would be about the concept of university policies. Many government universities didn't really implement any new university policies, instead they made enhancements to the existing policies which are common such as attendance apps, examination rules and regulations. Therefore, the sources and information related to this context was still novice to researchers. From the aspects of students' perception, the limitation would be faculty members and students said that through online learning modalities they were unable to teach and learn practical and clinical work. They could only teach and assess knowledge. Due to lack of immediate feedback, teachers were unable to assess students' understanding during online lecturing.

5.4 Recommendation

Due to limitation, it is advised that future researchers do the interview sessions face-to-face rather than using an online platform. This is so that face-to-face interviews may gather more information and quickly determine whether a candidate has a more positive attitude. It is feasible to view the responders' expressions clearly by physically approaching them since verbal communication will take place throughout the physical approach. By doing this, misunderstanding may be avoided to the best extent feasible. Face-to-face interviews provide several advantages for interviewers, including the ability to ensure the respondent because of the interviewer's ease of communication and the respondent's ability to provide a satisfactory response. Additionally, the physical interview will be more flexible so that the interviewer may ask a detailed inquiry at that time. The current study only considers semi-structured asymmetrical interviews. Future researchers can explore using a combination of data collection approaches, such as a survey so that they can get the most complete answer with respondents.

5.5 Conclusion

Based on our research , we can conclude that perceptions of Malaysian undergraduates towards the E-learning approach during the pandemic period were positive. Flexibility in E-learning enables students to set their own schedules while they are learning, enabling them to manage their time efficiently in their daily lives' schedules. This study also shows that students' awareness of E-learning practices needs to be raised and that they also anticipate prompt responses from professors and university staff when they have questions or technical problems. Besides, the effectiveness of university policies on E-learning towards

Malaysian undergraduates played a vital role. Based on our research, new university policies were introduced to help Malaysian undergraduates to go through this E-learning period amidst the pandemic.

Universities policy such as allowing students to drop their subject due to concern of mental health of students and reduced tuition fees has helped Malaysian undergraduates to overcome the E-learning obstacles. Other than that, university policy such as assisting the under-privileged students with technical assistance and equipment assistance has made the E-learning process more efficient. Students anticipated that e-learning tools would be simple to use. Additionally, most students knew what to expect from the course materials. Additionally, it has been confirmed that more than 50% of Malaysian students were pleased with e-learning and most of them had the necessary digital devices, even though they acknowledged the high monthly cost of internet connectivity (Nafrees, 2021).

Finally, the effectiveness of the E-learning approach on the self-motivation of Malaysian undergraduates is based on the behavioral factor of the student. Based on our findings, students who practice self-discipline during the E-learning period have managed to cope with it. Students' academic performance is affected by poor management. The academic performance and achievements of students can be significantly enhanced through effective time management. Students who manage their time well perform better academically and experience less anxiety.

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Appendix

Interview Questions

Classification of question	Description of classified question	Questions to the interviewees
Introductory	Reasonably nonthreatening and elicit general and nonintrusive details.	<p>a. Based on the information that you provided in the questionnaire; you are studying at University _____. Which year student are you and how are you adapting to E-learning so far? What do you feel about the new experience in E-learning?</p>
Transition	Linking the introductory questions to the main points to be discussed	<p>b) Based on your experience, which mode of learning is more effective? Do you think that the educators have delivered the courses or contents effectively through E-learning compared to traditional methods?</p>
Key	Closely linked to the study's research questions and objectives and these questions provide the most valuable information.	<p>c) Does E-learning impact your engagement and academic performance? Can you explain further about your time management to maintain academic performance?</p> <p>d) What is your perception about the inevitable technical challenges faced by most of the students during online classes? Do you face any technical challenges during E-learning? <i>If YES, how do you cope with it? If NO, then move to others Q</i></p>

		<p>e) How is the development of your self-motivation throughout an E-learning environment? Do you face any difficulties in interacting with your lecturers and group mates? Is it reducing teamwork and communication between students?</p> <p>f) Are there any university policies that have been introduced in conducting E-learning? Does the introduction of new policy has impacted the learning process of E-learning?</p>
Closing	Simple questions to address and provide a sense of closure which gives participant a chance to raise any topics not addressed or provide advice. This also indicates conclusion.	g) Before we conclude this interview, is there something about your experience in E-learning that you think influences how you engage in your online classes that we have not yet had a chance to discuss?

Participants Consent Form

FACULTY OF ARTS & SOCIAL SCIENCES
UAMP3013 : FINAL YEAR PROJECT 1



Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Phajan Magndran
Age : 21
University : UTAR
Ethnicity : Indian
Contact No. : 0167339753
Email : phajanmagen@1utar.my

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
- I confirm that the research interview will last approximately 10-15 minutes.
- I agree to my interview being audio-recorded.

3.0 Disclosure and Protection of Confidentiality

- I understand that all information I provide for this study will be treated confidentially.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I have been given a copy of the consent form.
- I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage as specified above.
- I agree that the researchers may publish documents that contain quotations by me.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

4.0 Declaration

- I have read this consent form and have been given the opportunity to ask questions. Thus, I agree to take part in this study.

- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

4.0 Declaration

- I have read this consent form and have been given the opportunity to ask questions. Thus, I agree to take part in this study.
- I understand that if I inform the researcher that myself or someone else is at risk of harm, they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.

5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

Date: 25th May 2022

Phajan

Signature of researcher :

Date: 25th May 2022

Pooja

Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Perekaash Raaj Raguraman
Age : 23
University : Quest
Ethnicity : Indian
Contact No. : 0169460852
Email : kaashrai@gmail.com

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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4.0 Declaration

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5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

Date: 18.6.2022

Perekaash

Signature of researcher :

Date : 18.6.2022

Pooja

Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : **Rebecca Bharathan**
Age : **23**
University : **UTHNM**
Ethnicity : **Indian**
Contact No. : **0145703098**
Email : **rebeccabharat@gmail.com**

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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- I agree to my interview being audio-recorded.

3.0 Disclosure and Protection of Confidentiality

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5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

Date: 25th May 2022

Rebecca

Signature of researcher :

Date: 25th May 2022

Pooja

Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : MUHAMAD LUKMANUL HAKEEM BIN SHAJAHAN
Age : 22
University : UNIVERSITI SAINS MALAYSIA
Ethnicity : INDIAN MUSLIM
Contact No. : 010-808-5396
Email : lukmanulm432@gmail.com

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:



Date: 15/6/2022

Signature of researcher :

Fadhil

Date: 15/6/2022

Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Arieifah binti Mohammad Rafiq Muban
Age : 23
University : International Islamic University Malaysia
Ethnicity : Indian
Contact No. : 019-6556685
Email : arieifahmdrafiq@gmail.com

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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- I agree to my interview being audio-recorded.

3.0 Disclosure and Protection of Confidentiality

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5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

Date: 16/6/2022

Arieyah Rafiq

Signature of researcher :

Fadhsil

Date : 16/6/2022

Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Anwar Ariff bin Mohd Khairie
Age : 23
University : Universiti Tunku Abdul Rahman
Ethnicity : Melayu
Contact No. : 019 445 9686
Email : ariff21@utar.my

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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4.0 Declaration

- I have read this consent form and have been given the opportunity to ask questions. Thus, I agree to take part in this study.

FACULTY OF ARTS & SOCIAL SCIENCES
UAMP3013 : FINAL YEAR PROJECT 1



- I understand that if I inform the researcher that myself or someone else is at risk of harm, they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.

5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

A handwritten signature in black ink, consisting of several overlapping loops and a horizontal stroke at the bottom.

Date: 17 June 2022

Signature of researcher :

Fadhsil

Date : 17 June 2022

Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Andrew Ng
Age : 22
University : INTI International University
Ethnicity : Chinese
Contact No. : +60 16-340 9873
Email : andrewng@gmail.com

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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- I agree to my interview being audio-recorded.

3.0 Disclosure and Protection of Confidentiality

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5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant: *Andrew*

Date: 7.1.2022

Signature of researcher :

Date : 7.1.2022





FACULTY OF ARTS & SOCIAL SCIENCES
UAMP3023: FINAL YEAR PROJECT 2

Participant Consent Form

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

Participant name: AHMAD HAFIZUDDIN BIN RAHMAT

University: UNIVERSITI TEKNOLOGI MALAYSIA

Interview date: 19.4.2022 (Tuesday)

Platform: Google Meet

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
- I confirm that the research interview will last approximately 10-15 minutes.
- I agree to my interview being audio-recorded.
- I understand that all information I provide for this study will be treated confidentially.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I have been given a copy of the consent form.
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- I understand that if I inform the researcher that myself or someone else is at risk of harm, they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.

By signing this form, I agree to terms indicated above.

Signature of research participant

Date
16/4/22

Signature of researcher

Date
19.4.2022

Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Chew Mei Yan
Age : 22
University : Universiti Tunku Abdul Rahman
Ethnicity : Chinese
Contact No. : +60 19-652 9617
Email : meiyan23@utar.my

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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- I agree to my interview being audio-recorded.

3.0 Disclosure and Protection of Confidentiality

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4.0 Declaration

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5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

Date: 16.6.2022



Signature of researcher :

Date : 16.6.2022



Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Goh Pek Yun
Age : 22
University : Universiti Kebangsaan Malaysia
Ethnicity : Chinese
Contact No. : 018-5704605
Email : heyyunn08@gmail.com

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:



Date:

12.6.2022

Signature of researcher:

Tan Xue Lin

Date:

12.6.2022

Consent Form of Participation in A Research

Research title: Malaysian University Undergraduate's Perception towards the Effectiveness of the E-learning approach on Higher Education

1.0 Particulars of Participant

Full Name : Sum Li Yee
Age : 22
University : ~~Universiti~~ ~~Utara~~ ~~Malaysia~~
Ethnicity : Chinese
Contact No. : 014-9435849
Email : sumliyee@gmail.com

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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- I agree to my interview being audio-recorded.

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-

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5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

Date:

Sum Li Yee

12.6.2022

Signature of researcher :

Date :

Tan Xue Lin

12.6.2022

Consent Form of Participation in A Research

Research title: Malaysian University Undergraduate's Perception towards the Effectiveness of the E-learning approach on Higher Education

1.0 Particulars of Participant

Full Name : Lee Sook Qi
Age : 22
University : Universiti Tunku Abdul Rahman
Ethnicity : Chinese
Contact No. : 011-16429532
Email : leesq05@utar.my

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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- I have been given a copy of the consent form.
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4.0 Declaration

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5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

Date:

SERRAV

12.6.2022

Signature of researcher:

Date:

Tan Xue Lin

12.6.2022

Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Kh'ng Jia Ming
Age : 22
University : Tunku Abdul Rahman University College
Ethnicity : Chinese
Contact No. : +60 10-74089019
Email : khng0168@lutar.my

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
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by me
-

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5.0 Consent

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Signature of research participant:

Date: 18.6.2022



Signature of researcher :

Date : 18.6.2022



Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Lim You Jing
Age : 22
University : Monash University Malaysia
Ethnicity : Chinese
Contact No. : +60 10-7001163
Email : limyoujing44@gmail.com

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
- I confirm that the research interview will last approximately 10-15 minutes.
- I agree to my interview being audio-recorded.

3.0 Disclosure and Protection of Confidentiality

- I understand that all information I provide for this study will be treated confidentially.
 - I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
 - I have been given a copy of the consent form.
 - I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage as specified above.
 - I agree that the researchers may publish documents that contain quotations by me
-

- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

4.0 Declaration

- I have read this consent form and have been given the opportunity to ask questions. Thus, I agree to take part in this study.
- I understand that if I inform the researcher that myself or someone else is at risk of harm, they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.

5.0 Consent

- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

Date: 19.6.2022



Signature of researcher :

Date : 19.6.2022



Consent Form of Participation in A Research

Research title: Malaysian University undergraduate's perception towards the effectiveness of the E-learning approach on higher education

1.0 Particulars of Participant

Full Name : Liew Gwai Jun
Age : 22
University : Tunku Abdul Rahman University College
Ethnicity : Chinese
Contact No. : +60 10-6528869
Email : liewkui0088@gmail.com

2.0 Voluntary of Participation

- I confirm that my participation in this semi structured interview for research project is voluntary.
- I understand that I will not receive any payments for participating in this research interview.
- I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.
- I confirm that the research interview will last approximately 10-15 minutes.
- I agree to my interview being audio-recorded.

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- By signing this form, I agree to terms indicated above and to participate in this study.

Signature of research participant:

Date: 19.6.2022



Signature of researcher :

Date : 19.6.2022



Interview Transcript

Names of interviewees and link to the recorded session

1. Phajan Magandran (UTAR)

Link : [FYP G17 INTERVIEW SESSION \(UTAR STUDENT\)-20220607_193408-Meeting Recording.mp4](#)

2. Perekash Raaj Raguraman (QUEST)

Link : [FYP G17 INTERVIEW SESSION WITH \(QUEST UNIVERSITY STUDENT\)-20220608_195847-Meeting Recording.mp4](#)

3. Rebecca Bharathan (UTHNM)

Link : [FYP G17 INTERVIEW SESSION \(UTHM UNIVERSITY STUDENT\)-20220610_105746-Meeting Recording.mp4](#)

4. Muhammad Lukamul Hakeem Bin Shajahan (USM)

Link: https://utarict.sharepoint.com/sites/UTAR-FYPIn2terview939/_layouts/15/stream.aspx?id=%2Fsites%2FUTAR%2DFYPInterview939%2FShared%20Documents%2FGeneral%2FRecordings%2FMeeting%20in%20%5FGeneral%5F%2D20220615%5F203517%2DMeeting%20Recording%2Emp4

5. Arieifah Binti Mohammad Rafiq Muban (UIA)

Link: https://utarict.sharepoint.com/sites/UTAR-FYPInterview939/_layouts/15/stream.aspx?id=%2Fsites%2FUTAR%2DFYPInterview939%2FShared%20Documents%2FGeneral%2FRecordings%2FMeeting%20in%20%5FGeneral%5F%2D20220617%5F003206%2DMeeting%20Recording%2Emp4

6. Anwar Ariff Bin Mohd Khair (UTAR)

Link: https://utarict.sharepoint.com/sites/UTAR-FYPInterview939/_layouts/15/stream.aspx?id=%2Fsites%2FUTAR%2DFYPInterview939%2FShared%20Documents%2FGeneral%2FRecordings%2FMeeting%20in%20%5FGeneral%5F%2D20220617%5F204604%2DMeeting%20Recording%2Emp4

7. Andrew Ng (INTI)

Link : <https://drive.google.com/file/d/1i7sP9sgYzmgmcfDcnxDBvw73oOQXkUKi/view?usp=sharing>

8. Ahmad Hafizuddin Bin Rahmat (UTM)

Link : <https://drive.google.com/file/d/1CyLnWKRGreRE8WdEJ6JvFJCJ9dxXU0os/view?usp=sharing>

9. Chew Mei Yan (UTAR)

Link: https://drive.google.com/file/d/1FuYrC_cJsaLpnLUJtTM99JNP8nuxeBD3/view?usp=sharing

10. Goh Pek Yun (UKM)

Link : [FYP Interview Session \(UKM student\)-20220611_092624-Meeting Recording.mp4 \(sharepoint.com\)](#)

11. Sum Li Yee (UUM)

Link: [FYP Interview Session \(UUM and UTAR student\)-20220612_174032-Meeting Recording.mp4 \(sharepoint.com\)](#)

12. Lee Sook Qi (UTAR)

Link: [FYP Interview Session \(UUM and UTAR student\)-20220612_174032-Meeting Recording.mp4 \(sharepoint.com\)](#)

13. Kh'ng Jia Ming (UTAR)

Link: [New channel meeting-20220618_211343-Meeting Recording.mp4](#)

14. Lim You Jing (Monash)

Link: [Interview session-20220619_175318-Meeting Recording.mp4](#)

15. Liew Gwai Jun (TARUC)

Link: [Interview session-20220619_175318-Meeting Recording.mp4](#)

Interview Transcript

Interviewee: Phajan Magandran

Interviewer: Pooja Magandran

Demographic details of the interviewee:

Gender: Female

Job description: Student

Email: phajanmagen13@lutar.my

Contact number: 0167339753

Date of Interview: 8th June 2022

Platform of Interview: Microsoft teams

Link to recorded interview :

List of Acronyms: Pooja Magandran = P, Phajan Magandran = PM

P: Hi phajan, thanks for filling up consent form we may commence now. **Based on the information that you provided in the questionnaire you are studying at university Utar, right?**

may I know your which years student are you and how are you adapting to E learning so far and what do you feel about the new experience in e-learning since it's new to you?

PM : first of all, I'm a first year student. I just finished my second semester, so I'll be entering my third. I'm a marketing student from FBF faculty. Adapting to the E learning environment so far I'm adapting well and also I wouldn't say it's a for a new experience for me because like half of my STPM period was conducted through e-learning. it was not new to me. Now this whole elearning environment though, there were additional matters that I had to learn like Microsoft Teams. I was aware of it, but I have never used it. So it did take some time to get adapt to it, but yeah I adapted to it quick and well.

P : Well, that's cool and it must be easy for you. I mean, at least easier since you're mildly exposed to that. OK, then. So I'll want to the second question.**Based on your experience, which mode of learning is more effective in your opinion and do you think that the educators which are which are the lectures have delivered the courses or contents effectively through elearning compared to the traditional methods in classroom and physical approach in the classrooms?**

PM : Yeah, actually, personally I feel like elearning is more effective than the traditional method. So why I say that is because students well to me, I felt more comfortable to engage with my teachers or even like ask questions through the chat box without like having to deal with unwanted anxiety like, you know.

Deciding when to ask my question, so without that pressure plus it also like saves plenty of time in that sense. So and also tutors they can immediately spot when someone asks something in the chat box or when they unmute. And like in my experience, the tutors they have done a great job in delivering the contents cause like for me most of my context. They don't only like give us the slides content but they also give us numerous external sources for the syllabus. Also information from other textbooks and websites. I think they have done a pretty good job.

P : So you are seeing like it's effective so solely because of the lectures as well since they are being so involved in the teaching.

PM : Yeah, they are very involved in teaching because they already know like traditional method is a no go for the COVID pandemic. So yeah, they're doing their best to online.

P : Do you think it's because of the cost you have taken because since our marketing student, you need like more engagement with the lecture because it's more or in calculations. Do you think it it is applicable to the FBF students also?

PM : Yeah, it is applicable. What I personally feel like is that it is applicable for anyone who is willing to take effort on their own as well. we cannot solely depend on the features we have to like put in our own effort as well to engage with them.

P : Yes, you are right. So moving on to the next question, **does elearning impact your engagement, which is your involvement in studies and academic performance? Can you explain further about your time management to maintain your academic performance?**

PM : Yeah. I mean, as I mentioned earlier, for me, it did improve my engagement in classes because as I said earlier, I was more comfortable in asking questions and was not overthinking the perfect time to ask to clear my doubts. I just did it. for my academic performance, it is safe to say that I have performed well and my results are above average. Time management in that sense, it has always been an issue for me since high school. But like right now I have improved and I have stopped procrastinating because to me, procrastination was the root for my time management issue. So when I stopped that the time management wasn't an issue anymore and I could allocate time for each courses effectively because I couldn't like speak for all of the students. This is like just for me personally.

P : Do you think the home environment is like good for you to conduct your online classes?

PM : Yeah, it is good for me because I have my own space studying space. So it's good for me.

P : Good. So I'll move on to the next question. What is your perception about the inevitable technical challenges faced by most of the students during online classes? As you know, we are reading lots of news about the rural areas, students, they're facing some Internet issues. And do you face any technical challenges throughout e-learning? If yes, how do you cope, cope out with it?

PM : OK, my view on this is as the question itself mentions, it is inevitable. We only have so much we can do, like only two ways. One, we have to find other ways to quickly reconnect, to attend the class or two. If there's really no other choice, then we'll have to rewatch the lecture tutorial videos. That's one of the good things about it. We can always rewatch the videos for later use, and yeah, it can be frustrating. That's one of the major cons of elearning. And for me, I personally do undergo technical difficulties certain times whenever it rains.

The electricity at my house. It will trip whenever there's thunder and I will have to wait for it to come back or or what I usually do is I will buy mobile data. I would connect my mobile hotspot and then try to reconnect quickly so yeah, but then this is only when I'm at my home. When I'm at my hostel, the probability of me facing technical difficulties is quite low. Technical difficulties is not a major obstacle and I don't sweat much about it.

P : True but I see some of the students, they're like phasing this a lot of issues regarding the technical issues and some of them are taking advantage of that, some of them saying my Internet is not working well. What do you think about such students like taking advantage of the privilege given to them because some lecturers they're being cool and considerate.

PM : I think I mean, it's obvious. I think it's not good and they have to undergo character development and yeah, fix their at PC because this is like taking advantage towards the lectures and also other class members. This is both wasting everybody's time, not only theirs but the end of the day.

them just facing the disadvantage of them taking advantage. Because now the as as you mentioned earlier, even if you have any technical challenges, you still can refer back to the recording and students taking advantage of that is lost to them obviously, right. OK, PHAJAN, I'll move on to the next question.

P : Yes, I ll move to the next question. **How is the development of yourself motivation throughout an E learning environment? Do you face any difficulties in interacting with your lectures and groupmates? Do you feel like it's reducing teamwork and communication between students** since you guys are just meeting online and you guys barely meet each other at the campus? Do you think your focal point of an assignment is not achieved through physical meeting?

PM : OK. I'll start off with self-motivation. Elearning. Mm-hmm. Most of the times it can affect our motivation because it basically puts everything on the student's shoulders like it will seem like we have to do everything by ourselves. I didn't find most times demotivating because my lecturers, they were always ready to help. They always offered and encouraged us to meet them during consultation hours like each one of them. They had their own

consultation hours. Some even created a separate channel for past year questions or assignment related questions in teams as well. So self motivation was not affected in that sense. When it comes to communication, I think it maintained better it like communicating with lecturers and teammate has been easier. We all were just a text away like we could quickly schedule the time and day to have a meeting and do it via Microsoft Teams. So it didn't to me, it didn't reduce communication or even teamwork. It rather amplified it. Compared to traditional methods because like if, like physically, we'll have to take into consideration like they will have to arrive to the venue and sometimes it's not always, things don't always happen like how we want them to, we will have setbacks, but since it's online, we can always make time and it's easier compared to traditional methods.

P : That's cool also because we learned that the online learning it created the convenience between the students and less time consuminf.

PM : Yes, you're right.

P : Phajan **are there any university policies you are since you are a third, you are going to approach your third semester, right? Are there any university policies from Utar that have been introduced in conducting the e-learning? Does the introduction of new policy impacted the learning process of elearning.**

PM : OK, about the policies, as far as I know, I think the management introduced this policy where students, they get to use the laptops provided for them for half the price, those who are facing financial crises well, I do not know much about it because I did not use that benefit. But personally, I am very glad and I do think it's impressive because there are many students who would need that policy and they would be very thankful for that policy.as I mentioned earlier, financial prices, yeah.

P : That's cool. And do you know there's another policy that Utar introduced, which is they collaborated with YES telecommunication where they provide 30 GB of data usage to students for a month.

PM : Ohh yes, yes, I'm aware of it. Yeah, totally forgot about that.

P : Ohh did you apply for that? Because some students they don't know how to apply for it. So did you try doing that?

PM : No, I didn't. I didn't. If I did, I would have mentioned it. But the university management taking an initiative to provide a data to the students, they don't pick the students. I mean they don't see the eligibility as long as you apply for it, you'll get it. Which is a great effort by the management and also yes, I mentioned earlier people might be facing technical difficulties, for example, like uh Wi-Fi going down, so they could use this data and on their mobile hotspot and use it for their online classes. It's a yeah, it's useful for the students.

P : True Phajan, so **before we conclude this interview, is there something about your experience in E learning that you think influences how you engage in your online classes that we have not had a chance to discuss earlier?**

PM : I think I think all aspects have been covered by your questions. Actually I really have nothing more to add on to it.

P : Yeah, no problem. So do you have anything to say to the future students like to the students that is going to enrol because everything is going back to normal now. It's hybrid

PM : Yeah, they'll be exposed to it. So all I want to say is take advantage of this E learning it provides us with many benefits. It provides us with many knowledge and information, gives us a chance to explore as well. So use it to your to learn more about your course. You have plenty of time when it's elearning compared to traditional methods. To collect information. saves time, especially when you don't have the need to go to library because they already made it in E library now. So make everything convenient for the Utar students though.

Interviewee: PerekaashRaaj Raguraman

Interviewer: Pooja Magandran

Demographic details of the interviewee:

Gender: Male

Job description: Student

Email: kaashraaj13@gmail.com

Contact number: 0 16-946 0852

Date of Interview: 10th June 2022

Platform of Interview: Microsoft teams

Link to recorded interview :

List of Acronyms: Pooja Magandran = P, Perekaash Raaj = PR

P : So based on the information that you provided in the question, now you are studying at University Quest people, which year student are you Prakash and how are you adapting to E learning so far and what do you feel about the new experience in elearning?

PR : Alright. Hi POOJA. Before we start the answering session, let me introduce myself. I'm Prakash Raj from Quest International University. I'm currently doing my batch of computer science at Quest. I'm from Faculty of computing. Coming back to the answer for your question, currently I'm in my third year last sem. If you ask me about how am I adapting to the E learning approach, I would say that staying organized was the most important method that I followed till date when the entire mode of study was changed into online. The usual structure of my daily life had changed cause online learning gives me more flexibility of costs, but also can make it more difficult to dedicate my time to study. So all I did was build a study plan by own my by my own and identify my learning objectives and work accordingly, cause keeping in mind what I hope to accomplish by at the end of course, had helped me to stay on track. By

following this. I also quite happy that I could maintain my CGPA to the best till now. In terms of new experience in E learning, I feel happy that due to this E learning approach I have learned on how to be independent and not solely depending on the lectures in order to master my knowledge in particular subject. I also learned on how to manage the family time and also schoolwork well..

P : Wow. So you're a computer science student? That must be really hard for you to go pop with because you guys have more into programs and database. I'll move on to the next question. Based on your experience, like what you shared earlier, you say that you already like have your own plans on how to study which mode of learning is more effective to you. I mean, asking you personally, you're a computer science student. **Do you think like it's effective for you in online learning? And do you think that the educators we try your lectures have delivered the courses or contents effectively through elearning compared to the traditional method as in class?**

PR : Personally every mode of learning is effective in its own way of say, whether it is online or after only the way of delivering the content to the student might be different, but in online people can go through the recordings or even watch a prerecorded video for the particular subject. As what I've done. So far, when it comes to online, but if FF we won't have any kind of recording to refer and also in after F mode, students can learn more by interacting with lectures or even discuss with them in a good way regarding the subjects when it comes to FF. That's why I say it both matters are effective in its own way. Delivering course is a big no for . This is due to the technical issues that the lecturers faced during the E learning approach. Most of my lecturers will have a bad connectivity where they start to lack and frequently disconnected from the call you to their vet connectivity, especially when it comes to the rainy days. They only could join back and continue with the lecture session if they're connectivity be back to normal, if not. Most of my time will be wasted there by waiting for them to fix their connect connection issues. However, as a student, I still need to do a lot of self study in order to finish the syllabus.. Even though the educators could not able to deliver the contents as per their schedule.

P : OK, so from what you said, you said that some of the lectures they have connectivity problem and you cannot solely depend on them. Also you said you learn from online as from YouTube and so on. So do you think it's like cool now is that you can at least learn from online platform which made it convenient for you?

PR : Sometimes it's good and sometimes it's not good, actually. So certain things we need to meet them after F2F for us to, like, discuss more and get the answers from them more you know, like if it's online, We cannot inquire much because our lectures will have another schedule that they need to attend. If if you want to clear doubts we have to wait until the class end and after the class end the lectures will rush into their other classes yeah. Can you get me what I mean, what?

P : Yeah, yeah, I I can. We all students. So I get what you're saying here. Uh, because we cannot inquiry much about certain topics when it comes to like face to face, because they tend to go for another class. Understandable.

PR : Yes true

P : **Prakash does e-learning impact your engagement, which is your involvement in class and academic performance? And can you explain further about your time management to maintain the academic performance because earlier you said that your CGPA is good till now. So can you explain more on that how to maintain academic performance even though it's online?**

PR : For me, the elearning does not impact neither my engagement in class nor my academic performance. I would say that because I'm the person who actively ask question to my lecturers, if I have any doubts or even even though it is a small doubt, small thing, simple thing, I would definitely ask them. This is to ensure I know the right and actual thing rather than knowing what I understood from my point of view. In terms of time management, there you ask, I'll usually find a dedicated study space and time to study. I'll make sure the place is free from any distraction from my friends, family, or hobbies I'll normally like won't use my

phone or engage in any text messaging or social to improve my concentration while studying and I think that's the reason why my academic performance good so far.

P : Ohh, I see. So you're the type of person that doesn't like get distracted by the telephone since you're just focused on your studies while you're in the past, because now it's online, people tend to go for other browse and then they'll just use the Instagram and so on. So you're not that kind of person, are you?

PR : I'm not that kind of person, actually.

P : Great I'll move to the next question, Prakash. What is your option about the inevitable, which is the unavoidable technical challenges faced by most of the students during online classes? Especially, you're a computer science student, and I'm so eager to hear what are your challenges here, and do you face any technical challenges during E learning? If yes, how do you cope up with it?

PR : I have also faced many times. I'm staying in A Simpang area where the Internet connectivity will be the worst sometimes, especially during the evening time. The most saddening part was most of my classes scheduled at evening and I frequently disconnected from the class. Due to the poor connectivity, I miss out many important content from the class sometime, but only good thing in elearning is that I can refer back to the recordings whenever I missed out the content during. And apart from that, also like as a computer science student I have to use my own thing like own laptop with high end features. Which I have to install an extra RAM in order for me to do some sort of programming coding like that.

P : Ohh I see.

PR : That that, that is the most challenging part in terms of like I can't avoid in terms of technical.

P : Ohh, which means it's more of involving the financial need too because I believe that when you want to install high RAM the price is quite high right?

PR : Yeah, true, true. True, even normal office desktop it can I use to do a programming code? You know, we have to install a higher GDP, RAM and it can cost.

P : So you as a computer science student, you just don't face some technical issues, but you also do face some installation issues in your software.

PR : Yeah, hardware issues. Like if it's after 12, it's no problem Yeah, but OK. for us, you know, cause unity management will provide us a computer lab. We have a dedicated computer lab for us if you wanna do coding or we wanna do practical, we can just go to the computer lab and chain, do whatever we want. But at home, we can't do that. We have to be forced to install a higher GDP, RAM and purchase a good amount of graphic cards.

P : I see. I want to ask **how is your development of self-motivation throughout an E learning environment?** Because just now you say that sometimes it can be stressful because your evening classes can be interrupted by the weak connectivity. Do you face any difficulties in interacting with your lectures or groupmates because sometimes we know like we when we are doing the group assignment? We need to talk to the group mates; we need to ask lectures. What is their expectation in the assignments and all? **Do you face any difficulties in interacting with your tutors and groupmates? And do you think it's reducing teamwork and communication between students?**

PR : In terms of development of myself, motivation, usually in the classroom during FF learning mode, right the most of the lectures could see like they will see our issue and motivate when we are doing a programming coding in front of them, they know what are the difficulties we are facing in front of them and they try encourage . But during this E learning we would say that the same. Lecturers do not see our your struggle. What we are facing inside our house, it's not same as what we are facing at campus. So I'm the one who supposed to motivate myself in order to move forward without giving up because it is not easy to study computer science. In in terms of reducing the teamwork right, like when it comes to teamwork and communication between students, I would say that yes, it has reduced cost. It has been very difficult for us to communicate through online, especially when our lecturers gave us the online group activity that we need to settle and submit it within the time period, right.

P : Yeah, yeah, I understand.

PR : Yeah. Some of my friend does not really understand what they're trying to convey. So I had call them and inform verbally to make them understand. The process is quite complicated in elearning.

P : True because you guys are not more into theoretical part only you guys are more into coding and things that needs practical assistance

PR : Yeah, true.

P : So do you think like do you face any situation where some of the friends take advantage of this online thing where they don't attend the meeting where they don't cooperate well, how do you manage that?

PR : Normally we'll inform them. twice or thrice before they need to attend any meeting. we will keep on reminding them.

P : So that's cool. So I'll move on to the question.Are there any university policies in Quest that have been introduced in conducting e-learning? That the introduction of new policy have impacted the learning of process of elearning?

PR : Yeah. Our you know, they introduce a new policy where they provide 30GB free data under the maxis is for all the students like who maintain the GPA to 2.5 and above you know during this pandemic right now not everyone can like purchase a good Internet plan in order for them to continue their e-learning classes without any interruption.

P : Did you apply for that? Did you get that also?

PR : Umm I did apply for that and yeah, I do get also. And apart from that, the assessment mode also have changed under the new university policy. Due to this E learning approach, you know where all the exams are changed into assignment-based assessments. It's no more solely final exams. And also just to add one computer science students are also required to obtain a 50% marks out of their total continuous assessments to be eligible for final exam.

P : Wow 50 from 60 is quite tough.Wow.

PR : If not, consider we failed. that's a situation where the stress comes in.

P : OK, before we conclude this interview, **is there something about your experience in elearning that you think Influences how you engage in your online classes? That we have not yet have a chance to discuss earlier?**

PR : I think I've covered all the answers for this during my previous questions but personally, as a computer science student I would recommend FF class rather than E learning you know. if it's F2F, we can gain more knowledge from the lectures by asking more questions and interacting and communicating with them more. You know in online we couldn't do that. They only can, depending on the online and YouTube videos.it's not easy to be a computer science student when all you guys depend is on software and then the coding thing.

Interviewee: Rebecca Bharathan

Interviewer: Pooja Magandran

Demographic details of the interviewee:

Gender: Female

Job description: Student

Email: rebeccabharathan@gmail.com

Contact number: 0164286815

Date of Interview: 10th June 2022

Platform of Interview: Microsoft teams

Link to recorded interview :

List of Acronyms: Pooja Magandran = P, Rebecca Bharatha = RB

P : Hi rebecca we will start off with the interview. Before we start the interview, I just wanna let you know if during interview, if you couldn't hear me clearly, you can stop me so that I can repeat the questions.

RB : OK.

P : Let's move to the very first question of this session. **Based on the information that you provided in the question earlier, you are studying at Universiti Tun Hussein Onn Malaysia from JB, right? Which year student are you and how are you adapting to E learning so far? What do you feel about the new experience in elearning?**

RB : Uh, currently I'm studying final semester. Uh, so funny. I find you learning a bit difficult for in my experience.

P : Is it because of the cost that you're undertaking?

RB : Ah yes, because like some of my subjects, it has like mathematics subjects. So like when it comes to online, others department students we find difficulties in understanding that particular subject.

P : Uh, so from based on your answer that I can conclude that this is solely based on your course and it's a. It's not basically theoretical subjects only. May I know you're from which faculty.

RB : I'm from technology in management. So therefore it's more involves of software and then the mathematical parts.

P : Therefore you think you need like personal assistant from the tutor. Therefore elearning is little bit hard for you to adapt. Is that right Rebecca?

RB : Yes, since im not very astute in mathematics

P : OK. Then Rebecca then I'll move to the second question. **Based on your experience, which mode of learning is more effective, whether it's online or traditional method from the physical classes? Do you think that the educators, which are your lectures, have delivered the costs contents effectively through elearning compared to the traditional method?**

RB : I find face to face was better because when it comes online learning. Sound like they won't conduct class like they won't use like Google me. They won't use that kind of platform. Things like to us they will just send recording. So in that case, like we cannot interact with the lectures, we cannot ask them questions. If we ask them also, they will take time to reply. Therefore I find the face to face class is better after the class. If you have any doubt you can consult it immediately.

P : Ohh OK, so in your opinion you don't find it much effective because of the lack of interaction between the tutor and yourself.

RB : Yes to be precise.

P : OK. Then Rebecca, I'll move to the third question. **Does he learning uh impact your engagement, which is your involvement in studies and academic performance? Can you explain further about your time management to maintain your academic performance by far?**

RB : Well you have like 3 hours class everyday basically and you will only have like one gap in between. students will definitely get tired and bored by sitting at one place. This requires discipline in giving attention to a continuous 3 hours lecture. So in that case, like some students will leave the class. Some students will lose their concentration by doing something else. Time management wise. Uh, I'm quite bad at it, because when it comes to online I won't feel that you have to do it. on the spot, like you, you will think like you have time can do it slowly. Compared to like if you face to face , you will feel that you have to do it like you will have the sense of urgency but when it comes to online mood is totally different because we are at

home. We'll take our own sweet time to progress our task. Some students are working so when it comes to like good group discussion everything it will be very hard. Time management is like quite bad for online learning.

P : So what do you mean here is you're saying that the situation is not same for all the students? Some taking advantage of the online learning as you mentioned because as you said, it's very true that some students, when the class is going on there on another tab doing something else.

RB : Yes, they're not solely focusing in the class.

P : Rebecca, do you think you are a very disciplined person that follows daily schedule of timetable?

RB : No im not uhm yes

P : OK, that's an honest answer. Before moving to the next questions, can you tell us about your academic performance? Are you happy with your results or disappointed because of all disappointed because online classes have affected your CGPA?

RB : I know so far I'm happy with my results.

P : Then it's cool. You're a disciplined person because you're able to maintain your performance..

RB : Umm, because like the the questions we can search in online and it's open book test so you can refer from various sources. So I think that's where I can maintain my GPA.

P : So you are saying like online has has its own advantages also like open book tests where you can actually look for the answers in Google and you need to be quick on that?

RB :Yeah.

P: OK. Because I'll move to another question. **What is your perception about inevitable technical challenges, which is like unavoidable challenges, technical challenges like your Wi-Fi problem, like your data problem faced by most of the students doing online classes? We hear a lot of news about that, right? And do you face any technical challenges touring elearning? If yes, how do you manage with that?**

RB : Sometimes yes if during raining time I will face electric cutoff. But I don't face any severe technical challenges. During cut off I will inform my group members and will rejoin later.

P : Does your lecturers or your educators face such situation where sometimes you guys couldn't attend the class solely because the educator couldn't join?

RB : So far, no. They will inform earlier and will always have second platform to conduct classes if main platform is not strong.

P : Don't you think that this is an advantage of e-learning where like they actually have a contingency plan like Plan B to conduct the class instead of avoiding the class?

RB : Yes.

P : OK, Rebecca. So I'll move to the next question. **How is the development of your self motivation, which is your self willingness throughout an E learning environment, do you face any difficulties interacting with your tutors group mates and do you feel like this online platform is reducing teamwork and communication between students?**

RB : Yes, it definitely will. It's something we want to interact with our lecturers. There will be like you have totally interrupt. Yeah, via email and then email. Then they repeat their own sweet time to reply after. 2-3 days which like we we need the answer immediately. You want to know the answer immediately, but when the lesson is like you didn't reply, yes, we understand that they are busy and stuff, right? So it's quite Difficult for us and one more thing in treatments like we always I personally I and my group means we always face difficulties like this. One person will join the meeting and the other the other person wont. They say like they are out. They are working so they can't join. It will be very difficult for us to. We need explain again and hey don't complete fully.

P : Yes, that's very true. Next question. Ohh talking back about yourself motivation, is there any? How to say any specific way of you motivating yourself during this elearning classes that keeps you stay focused in the class instead of like making your mind wander all around the place?

RB : If the class is important subjects, important theories objective with 3 hours plus, like I'll make sure that I did be on the screen. I don't go around. I will have my earphones with me, I will access to it like I would need that class.

P : OK are there any university policies from UTHM that have been introduced in conducting the e-learning? That's the introduction of new policy. Does that impacted the learning process of elearning?

RB : We have specific app to record attendance where we need to scan thrice during lecture classes according to the hours. Lecturer will spread the list name in the WhatsApp group.

The university also provide data SIM card SIM card for students from rural area. Im not very sure about the facility in detail because I didn't apply for it.

P : ok Rebecca, **before we conclude this interview, is there something about your experience in E learning that you think influence how you engage in your non class that we have not yet had a chance to discuss? Do you have anything to say about your experience in online class, you're engagement, any, any piece of mind of yours?**

RB : I will encourage students pay attention to the class eventhough it is online never take light on the requirements. Pay attention during the online class and like if you pay attention and if you like really listen to what they can do all the sudden they require you to see for example like face to face you will manage to answer. Online is just contemporary solution

Interviewee: Muhammad Lukamnul Hakeem Bin Shajahan

Interviewer: Muhammad Fadhsil Bin Zainudeen

Demographic details of the interviewee:

Gender: Male

Job description: Student

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Contact number: 010-8085369

Date of Interview: 16th June 2022

Platform of Interview: Microsoft teams

Link to recorded interview :

List of Acronyms: Muhammd Fadhsil = MF, Lukmanul = LK

FD : Alright OK, uh. Hi I'm Muhammad Fadhsil. I'm from UTAR. I'm doing this questionnaire for for our FYP, so can you tell your name and which university you are from?

LK: Alright, so my name is Lukman. I'm from University Science Malaysia and I'm doing my final year.

FD: OK Lukman, we can go to the questions?.

LK: Yeah, sure go ahead

FD:OK for the first one **based on the information that you provided in the questionnaire you are studying at University Science Malaysia USM, right?**

LK: Yes

FD: OK, which year student are you and how are you adapting to E-learning so far?

LK: OK, so as I said earlier, I'm a final year student so I started online learning since. Uh, my second year, which is the year the our government announced the lockdown right? So we started online learning by using Webex, Microsoft Teams and Google Meet and More utilization of our earnings or E-learning website. So your question was you asking me how my adapting to it right now, right?

FD:Yeah.

LK: OK, so this is a not so subjective, but uh, it depends on the semester. Sometimes it's in certain semesters, I get lectures who does live classes via Webex. Microsoft Teams and then some lecturers they provided pre they prerecorded videos, which is more convenient for me. So, Depends on the semester. So for this semester I have two two live classes, so it is a very difficult for me because, uh, it takes time for me to pay attention to class and everything. If there was prerecorded lectures, it'd be more easier for me because I can skip to whichever parts in the video that I want like that.

FD: Mm-hmm. OK. So for now. So you're telling me it's like a bit hard for you for this semester.

LK: Yeah, this semester is very difficult for me.

FD: OK, So **what do you feel about the new experience in E-learning?**

LK: Uh, I would say it cannot beat face to face. Yeah, it's not as good as face to face.

FD; Understand that. So OK, moving on, uh, **based on your experience, which mode of learning is more effective? Do you think that educators have delivered the courses or contents effectively through E-learning compared to traditional methods?**

LK: Umm, they do deliver it Uh, they do deliver the learning materials effectively as usual, it's just that the approach sometimes depends from the lecturer to lecturer like that. Some lecturers, they are really good in utilizing the E-learning some lectures they're not really good in utilizing it.

FD: So like the older age, lecturers can't adapt with and then the new generations are better. Is it like that?

LK: Like that, but my case, uh, some. My lectures are mostly young there in their 30s and 40s, so some of them they utilize the features, some of them they don't.

FD: So they're doing better in face to face compared to E-learning

LK: Yes..

FD: Next question, **does E-learning impact your engagement and academic performance? Can you explain further about your time management to maintain the academic performance?**

LK: UM, E-learning and impacting my academic performance. OK, so for E-learning since for live classes like that, it's affects quite a lot my academic performance because I need to put more preparations for my study instead of prerecorded lectures because I can view those prerecorded lectures in my free time instead of the live class because live classes certain lectures they won't they won't record the class so you have to be very putting 100% attention in the classes like that. So so I need to come up with a strategy like setting aside some time to do some self study and then I set aside like every three weeks like that for consultation lecturer to get all the facts facts right.

FD: OK so. It is easier when it's recorded, but when it's not recording, it's hard, right?

LK: True.

FD:OK, uh, can the second question is **can you explain further about time management to maintain the academic performance during this E-learning?**

LK: OK so I can give my time management based on my previous semesters. So the previous I took about 16 credit hours so I had about. Let's see, I had, uh. I think I had as far as I remember, I had two core papers, one elective papers and two university required courses, so the core paper was the difficult one. The Oh yes, I just I had one core, people 2 electives and two university courses, so total of 16 credit hours. The core paper is the most difficult 1 the elective ones. I merge with other. Other majors and also merging other majors, make our make our approach to cost more easier because we have different ways of thinking on how to learn the course like that. So when it comes to time management, since my core paper has four credit hours, so I usually spend about 8 hours per week per week, including the class, time to study the material, like 4 hours on the class and other four hours on my own time. Just doing the studies like that.

FD:Totally the 8 hours for, uh for all subjects. Ohh OK.

LK: Yeah I take 8 hours for all subject. For my electives since they are elective. Usually I spend an hour and a half or something like that per subject They easy that I don't need to do much self study on that.

FD: So, uh compared to E-learning and traditional methods, right? Your time management and your academic performance to maintain economic performance. Is it affecting you during this E-learning rather than your rather than traditional methods?

LK: My course we are doing fully 100% online. I think that E-learning is more good when it was time management because you don't need to worry about commuting back and forth to classes to doms like that. They're doing all in the comfort of your dorm or just in your home. Just like that. So you have more time to spend on studying and all.

FD: Understand. So moving on to the next question. Uh, **what is your perception about the inevitable technical challenges faced by most of the students during online class?**

LK:OK, so technical challenges usually for, for us as students one is unstable Internet connection or very slow Internet connection. That's number 1. Number 2 is sometimes unexpected power cuts due to how to say overflow current and so on. Number3, sometimes the usage of outdated devices and so on. Because when early the pandemic a lot of us are rushing on buying devices and so on like buying a new laptops, new phones just to cope up with the learning and so on, but not everyone of us are very fortunate on there, so they had to go for second hand and so on. Because when the pandemic starts already like the we have a supply and demand issue there. A lot of devices has to. The price is already marked up that it is not affordable for people with low income.

FD:Yeah true, true,

LK: Those are one of the things that we are aware of.

FD: **Do you face any technical challenges during this E-learning?**

LK: So far the only technical challenges I face is just unstable Internet connection because even if you use a very high speed Internet or sometimes there will be, uh, uh, five minute, uh, no connection just like that. So something where the lecturers won't be recording classes. So so that's my toughest challenge so far during this E-learning.

FD: So **how do you cope with it** right? Because you have to attend the class right? If not it's going to be hard to know the updated. So how do you cope with that unstable line connection.

LK: OK, so when it comes to classes like that and so on, I have to rely on my friends on it so I have to ask them to cover the material for me. Which part I'm missing and so on, but most of the time I can negotiate with lectures in case bad internet connection. I can't join the class, I let them know beforehand itself.

FD: So that lecturer have to be lenient, right? Have to understand.

LK: Yes, they must be very lenient. Must be very empathetic to the students and all.

FD: OK.

LK: Does that answer your question?

FD: Yeah Yeah. Moving on, **How is the development of your self motivation throughout an E-learning environment?**

LK: Uh, I would see that I don't need motivation because all I need is just to push myself for like 10 minutes. Then I'll be getting the job done like just like that.

FD: Understand that.

LK : Because for me, I cannot rely much on motivation, otherwise I wouldn't be. I wouldn't be doing my job at all.

FD: I understand that, even for me too. **Do you face any difficulties in interacting with your**

lecturers and group mates during these in these E- learning environment.

LK: Uh, not at all. I don't face any difficulties.

FD: During your group meetings like. For example, assignment discussion or FYP discussion. To get together all of your teammates.

LK: So I have no problem there, only this one particular semester. Where did my minor paper psychology I had this unresponsive group meet, so I had to be very stern with him and take the actions accordingly.

FD: OK, I understand that

LK: and that that is based on his attitude. That's all. It's not the learning environment.

FD: It is his problem, right?

LK: Yeah yeah, yeah, that is his problem.

FD: Yeah, I mean if he's face to face, maybe he'll be more interactive because everyone's talking everyone's physically, and because it's E-learning, right? He can't see physically people out there talking here, so he might do his own work.

LK: True True.

FD: So, uh, is it reducing teamwork and communication between students? Uh, during this E-learning?

LK: I think that depends on the person. For some people they can adapt to it. Some people they can't adapt to it. Like my case I I am quite flexible with the situation when it comes to E-learning because my way of doing for example is group assignments. I will be leading the pack. I'll tell them what they must do, what they shouldn't do, and I tell them to be ask any questions, whatever that's doubting them like that so. Now, what was your question again scared I I go out of the topic.

FD: So um , Is it reducing teamwork and communication between the students during this E-learning?

LK: Yeah, so it depends on the person.

FD: So yeah, moving on. **Are there any any university policies that have been introduced in conducting E-learning? And does the introduction of new policy has impacted the learning of the process. The learning process of E-learning.**

LK: Uh, I'm not sure sure, how about UTAR how do they do it?

FD: Like um, our university policies right, For example, uh from FA, I mean from physical exam they have like FA. Right now the final assessment is not final examination anymore, so there's one of the policies that they have changes. One of the example I can give you are from UTAR.

LK: OK this one I know, For example, my university. We have the for the examination season, which is about three weeks we have these. OK, for example there are two types of papers ,One is the 100% course work , then there is a 60% course work and 40% final examination. So for the 40% final exam we have the synchronous and asynchronous type exam. When it comes to synchronous exam it's like before this when our learning is fully online the synchronous exams usually handling proctoring like that like you have responders, lockdown browser and so on. So far I have not experienced any of this because my exams are mostly my exams are all asynchronous so. For asynchronous we just use our our Webex Webex teams to do the exam.

FD: OK, so OK, so there's not much of changes in University Policies during this E-learning.

FD: I would say those are quite, uh, major change actually.

LK: OK alright.

FD: So yeah, going to the final questions. **Before we conclude this interview, is this something about your experience in e-learning that you think influences how you engage in your online classes that we have not yet had a chance to discuss?**

LK: Ohh no, I don't have any.

FD : Alright, alright thank you for taking part and interview session.

LK: Alright, you're welcome.

Interviewee: Arieifah Binti Mohammad Rafiq Muban

Interviewer: Muhammad Fadhsil Bin Zainudeen

Demographic details of the interviewee:

Gender: Female

Job description: Student

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Contact number: 019-6556685

Date of Interview: 16th June 2022

Platform of Interview: Microsoft teams

Link to recorded interview :

List of Acronyms: Muhammd Fadhsil = MF, Arieifah = AY

FD: Hi Arieifah, first of all thank you so much for participating in this interview session. Actually we are running this session for our FYP. So can we move on to our question?

AY: Sure, Fadhsil.

FD: Before they can you introduce your, uh, your name and which, which university are you from.

AY: Hello, my name is Arieifah Binti Muhammad Rafie and I am from International Islamic University, Malaysia.

FD: OK, so based on the information that you have provided the questionnaire, your studying at University Islamic Malaysia , UIA. Which is student are you and how are you adapting to E-learning so far?

AY: I am currently a 4th Year 1st semester student and how am I adapting to elearning? Is that first?

FD: Yes.

AY: In my opinion, my lectures are quite accommodating to our e-learning mechanism, where we actually reduced the workloads and also they are recently in UIA. They reduced the Minimum credit hour required, which is from 15 credit hour credit hours to 12 credit hours. So I think in terms of the remote teaching and learning. Uh, there are some leniency provided by my university. So I think that actually eases our way in adapting to the new norm.

FD: So E-learning makes it much more easier than physical, right?

AY: Yes, it does.

FD: So what do you feel about the new experience in E-learning?

AY: Honestly, I don't. I particularly enjoy being in elearning because I feel like there are some lack of knowledge absorption in my part because I couldn't really feel the seriousness of learning in this environment.

FD: Because, uh, because uh, from your home and the environment is different rather than in the campus, right?

AY: Yes, because I'm just in the comfort of my own home. Therefore, I don't really feel the seriousness and sometimes I don't even. There are some time instances where I don't really attend my classes. For example, I will just open my class and go to do my work, or I sometimes treat my E-learning like podcast, that's how. The time focus is limited after the E-learning.

FD: Understand that. So moving on to the next question, uh, based on your experience, which mode of learning is more effective?

AY: In my opinion I will go for the physical learning and teaching because first when we are at the universities, the lectures can actually see us, for example if they are teaching something and you make some kind of reaction face reaction. They will know, or this student is not getting the topic and they will pause the session and they will repeat back what they have explained earlier in a much simpler terms.

FD: Uhm, get it.

AY: However, for online learning. Of course, uh, when we are in online learning, we it takes up a lot of our data, so we will. We will opt to not open our camera so when we are not opening our camera, the lecturer doesn't know how exactly are we catching up with the topic that they are teaching. So yeah, that is why I think physical teaching is much more better.

FD: If the students didn't on the camera, so we never know the students is keeping attention or doing anything else. So do you think that the educators have delivered the courses or content effectively during, uh, through E-learning, compared to traditional methods?

AY: OK, regarding this I'll take one of my ,one of my courses one of the courses in my department. But I will not name the course name obviously, but then OK in. The elearning. And the first time we enter into E-learning three quarter of the class failed because the lecturer tried to do something new for elearning, however they failed, however, but then. After we went on E-learning for two years now, I think the lecture somehow got the hang of it and they modified it better compared to how they thought in the traditional methods.

FD: So by time they have improved the learning methods lectures .

AY:Yes. However, when it was first implemented uh, there were a lot of people in my department that failed for most of the courses.

FD: Because it's the new new procedure, new new methods. So maybe the time makes improvement from there. Alright

AY: yes, true.

FD: So moving on to the next question. Does E-learning,impact your engagement and academic performance. Can you explain further about time management to maintain the academic performance?

AY: Uhm, regarding the engagement I will say yes. It did. It did has an impact on my engagement because Like I explained earlier, the students tend to not give any response during E-learning. Therefore, in my university, the courses that I took the lectures actually make it compulsory for us to open our camera for our attendees to be taken. So I think by him

doing that they also kind of made everyone to ask a question before the lesson comes to an end. So in that way I think it did increase. The engagement of the class. And regarding the academic performance, I will see yes it did have an impact on my academic performance, and it was not on a good terms. Obviously it was on a bad terms because in my opinion during elearning there were a lot of new changes that was brought to the Curriculum and because the lectures were actually trying to How would I say? They're trying to come up with something new, but then it wasn't really working. And the one that is working. ,the new new methods are not exactly working, so it did have an impact on our academic performance and Yeah, I think That will be my answer for your question.

FD: so it was difficult right for the academic performance to maintain from traditional methods to E-learning?.

AY: Yes, regarding my time management, I will see, uh, my time management was bad because like I said, I couldn't really focus in E- learning. Therefore I had a very bad time management as well as the lectures Give us tons of assignments during E-learning so we couldn't really keep up with other courses. So yes.

FD: Understand. They want to balance it out because there's no final examination, so they substituted it with tons of assignments.

AY: Yes, true.

FD: OK, moving on for the next question. Uh, when? What is your perception about the inevitable technical challenges faced by most of the students during online class? You face any technical challenges during this E-learning?.

AY: Uh, yes, uh, when E-learning was first implemented, there was no Wi-Fi in my house, so we fix it. We faced some serious problem as me and my sister were also going through E-learning. But Alhamdulillah, , maybe we are privileged in terms of financial matters, so my parents were able to Buy Wi-Fi router for our house. But I don't think that was a lot of technical challenges that we faced, because like I said, We were kind of privileged in those aspects because we had good facilities provided by our parents.

FD:OK, get it. So next question, how is the development of itself motivation throughout the E-learning environment?

AY: A dilemma of myself motivation.

FD: Anything like through out, E-learning,Um, like during face to face you maybe meet your friends to gain yourself motivation to read more and now you don't meet your friends that often.

AY:So yes, Yes, it it did. I did lose some motivation while I was going through E- learning. Because first I I was out of touch with my friends. I could I have to do everything on my own so I didn't really feel like enjoying the learning process.

FD: Understand that. Like you face any difficulties in interacting with your lectures or your groupmates. Is it reducing teamworks and communication between students during these E-learning.

AY: For your first question, regarding the interaction with lecturers and groupmates, yes I did face tons of problems regarding that because, first, my course is considered one of the oldest course in this university, therefore a lot of old lectures in my in my department,. So when we first. Transitioned into online learning.They had difficulties in utilizing the latest technology for our classes, so there are times where we were unable to proceed with the class because,First, they were either kicked out from the class and they don't know how to come back in to. They also faced some problems regarding their connectivity issues because there were some lectures. If I'm not mistaken they were staying at rural areas at that time. And also regarding group mates, they were taking advantages of E-learning system where, They always tend to give the excuse of “ohh, I didn't have enough data to enter the class.” ”I didn't have Wi-Fi my house. Got a black out”, so I think we faced really difficult time in communicating.With our group meets regarding our assignments so that, I also think that it's also the reason why during the online learning for my department the lectures actually discouraged group works, so that at least it will encourage the students to be more responsible with their Academic Responsibilities.

FD:understand. So students are make taking advantage of this, right?

AY: Yes, some students, because I mean of course not everyone take advantage of the problem because *Memang Adalah* some people there are. Struggling with their connectivity issues, but also the very simplest thing that sees that or they can't enter the class because they have this problem that problem, but you will see them on social media posting about I went to this place. I went to this places so yeah during the classes they said they can't attend because of connectivity issues.

FD: OK I understand that. So moving on to the next question. Are there any university policies that have been introduced in conducting E-learning? That's introduction of the new policy effected learning process of E-learning? Like the university policies, right like for example in UTAR they have they have substitute final final exam to final assessment, so that's one of the university policies in UTAR that they have changed, there's anything in your university?

AY: Uh, yes they do. Um , as I explained earlier, uh, UIA actually reduced the minimum credit hours required from 15 credit hours to 12 credit credit hour. This is so that for students that have difficulties in adapting to the new environment, they could actually just take few courses instead of taking a lot of courses. And also during the first year of E-Learning, my ,I think this is also the same procedure back in UTAR where if you want to drop a subject. After the mid semester break you will be, you will be required to pay maybe around 300 or 500, right? However, in my university, they actually waved the payment where you can drop the subject anytime. But this was only uh going on during the first year of E-learning and also during the first semester of E-learning they give us the leniency of for example. OK this is kind of funny but then they were actually very nice about that. For example we already received our grade. If we are unsatisfied with that grade we can actually drop the course so that course will not appear on our transcript. They give this leniency in our first year of E-learning and for the dropping the course after looking at our result was during the first semester of learning, so the university first was being very very lenient to the students. Yeah, they were very generous regards to that and also. What? What else did they do ? I think they did something else which was really helpful. But I can't really remember what it was, but then. What was that? It was regarding the, uh. Ohh yeah another thing was uh now I

remember it. The new policy is that the lecturer cannot take attendance during online learning.

FD: Ohh so this was during the sem one of E-learning or..

AY: Throughout whole E- learning so because throughout the E-learning ,can take the attendance However the attendance cannot Uh, how do I say ? Because there's some students they get kicked out from the meeting from the Google meet from the zoom from teams due to their connectivity issues.That is also the reason why the lecture is said. I mean sorry, sorry the university state that the lectures can take attendance. However, the attendance don't really play much role because in our physical classes.If you are absent more than three or four times, you will be barred from sitting for the exam. However, that is not the case for online learning.

FD: I understand. The university is being very very lenient for this new adaptation.

AY: Yep. So I will read it back. What I say regarding this question. First, my lecture , my university reduced the credit hour from 15 credit hour to 12 credit hour for the minimum required. That can during the first semester of learning they give us the leniency to drop a course after looking at our results after the result is out. But that was only permissible during the first semester and then also for the first year they let us to drop a course in any weeks without any payment and also the last one will be on the attendance were not playing much role in determining if you will be barred or not from the class.

FD: That's very good. Policies bring up by UIA actually . So yeah, before we conclude this interview, is there something about your experience in E-learning that you think influences how you engage in your online classes that we have? We have not yet had a chance to discuss?

AY: I will see. For me personally, it kind of induced anxiety and stress. Because first regarding the anxiety is that when we were doing E-learning we were given a lot of assignments because they think that we are home. Therefore we will have much time to spend . yeah, we will have free time to do the assignments when we were unable to meet the deadlines. So obviously we will be losing our carry mark so that actually induced a very much anxiety in myself. And also I think in our in my I mean to my friends as well and also

the stress of. because it's E- learning. Sometimes there are some lectures that have to cancel their class on that day because they have some emergency. However, they will be replacing the class on the very same day but at different time. So for example, I have classes until 5 This lecture who had her class at 10:00 AM but she cancelled it. She'll be saying, let's she will be proposing. OK, let's have a class at 3:30. However, I have another class to attend , but then to her it will be like *"siapa free enter la, siapa tak free tak perlu enter"* But we are actually losing our knowledge, which because they are teaching like normal so we will not be able to know what is being taught.

FD: 1st, it's not fair for students who want to join. Another thing students might take advantage of this like they might say. Oh, I have another class and they just simply don't join it.

AY: Yeah.

FD: there's always the anxiety that we missed we missed something? Because we are not in touch physically with our lecturers with our friends ,with our groups. OK, thank you for thank you very much for participating in our interview for our FYP. Really appreciate that .

AY: You're welcome, hope everything goes well on your part.

FD: Thank you.

Interviewee: Anwar Ariff Bin Mohd Khaire

Interviewer: Muhammad Fadhsil Bin Zainudeen

Demographic details of the interviewee:

Gender: Male

Job description: Student

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Date of Interview: 17th June 2022

Platform of Interview: Microsoft teams

Link to recorded interview :

List of Acronyms: Muhammd Fadhsil = MF, Ariff = AF

FD: Hi Ariff , first of all thank you so much for participating in this interview session. Actually we are running this interview for our FYP .So before we begin our interview, can you introduce yourself your name and which University are you from?

AF: OK, my name is Anwar Ariff Bin Mohd Khaire,I'm BioMed student faculty of science. I'm currently in year 4 semester 3.

FD: OK, alright so based on the information you provided in the questionnaire you are studying at University Tunku Abdul Rahman ,UTAR , right?

AF: Yes.

FD: OK, which year student are you and how are you adapting to E-learning so far?And what do you think about the experience in E-learning?

AF: OK, I'm currently in year 4, semester 3. Which is my second last semester here in UTAR And then for me, I think the earning is quite difficult for me to follow. But at the same time, there's also pros, which whereby I can look back and listen back to the lectures that I may not understand. But the cons is that I'm unable to discipline myself to be a student to follow their live lecture session and sometimes as a student I do not focus on the class during the E-learning. Like for example I may be walking or jogging while I'm in the class.

FD: So it's like it's like easier for us right then other than rather than traditional methods we all always in the class the same building the same room for, E-learning. We can attend our class in different places like outdoor in the garden or in our backyard

AF: Yeah, agree.

FD: So what do you feel about the new experience in E-learning?

AF: Well, the new experience in E-learning . I think it's quite OK. The positive side is the students are able to have a better computer knowledge like you know how to operate our software and other system whereby the student can interact with their friends or their lecturer during group discussion or during lecture. And this will like boost the students IT knowledge. OK and then yeah that's it.

FD: So OK, moving on for the next question based on your experience, which mode of learning is more effective? You think that educators have delivered the course or contents effectively through e-learning compared to traditional methods?

AF:For me, for my experience, I think that the traditional method is better because the lecture will be more “*semangat*”, so the lecture will be able teach because the lecture get to see his or his students one by one. And then other than that, the student, they will be able to discipline themselves like during lecture they will do. They will not play phones, they will focus on lecture. And then yeah, if there's anything that they don't know, they are able to discuss with the lecture on the spot and do not postpone any queries.

FD: True true, because face to face, umm, the lectures can see if students are focusing on not they can see the facial expression of the students.

AF: Yeah, yeah,

FD: Much it's much more lively.

AF: Yes

FD: So OK, uh, moving on for the next question, does E-learning impact your engagement and academic performance?

AF: Umm , Again,

FD: Does E-learning. Impact your engagement and academic performance ?

AF: Ohh Academic performance. For me I think yes, because so far from what I observe before this, during the online or E-learning my academic performance , I think, Umm, deteriorate a little, maybe due to the fact that I was not disciplined during the lecture and

sometimes I postponed what I was going to do. So in that case it yes, it impacts my academic performance. Yes, it decreased my academic performance.

FD: It decreased your performance?

AF: Yeah,

FD: OK. Can you explain further about your time management to maintain to maintain academic performance during the E-learning?

AF: Time management to maintain academic performance? Is it?

FD: Yeah.

AF: OK, time management. My time management. I think what I used to do back in the earlier E-learning is why I will locate time, for example, I will read first the lecture like maybe one day before before I entered the class because for me after the lecture I would not. We recall back what I learn so. I meaning that, how to say.. Umm, I read the lecture first and then during the online class. Then I will touch up what I've learned from the lectures, but time wise I think. I don't know what to say because I think I'm I have better, more time management during traditional method of learning compared to E- learning.

FD: Understand, understand because maybe in traditional learning we only focus on the class. The time management is easy to maintain, but in online class it's harder to focus because we're in the house, right? So much more focus than only for studies.

AF: True. I agree with you.

FD: So OK, moving on, what is your perception about the inevitable technical challenge? Faced by most of the students during online classes and do you face any technical challenges during these E-learning?

AF: I think from my side and my my friends side, I think there's no technical challenge because the platform that we use is quite easy. For example, in UTAR we are using Microsoft team and it is quite easy and user friendly to say so that is not a challenge but one challenge that I do face is my Wi-Fi or data, because here in Kampar I'm. using Celcom and Celcom is so-so it's not good. It's not bad, it's in the middle and then as for Wi-Fi, for example, during the day I have trouble during the lecture because sometimes I disconnect. Because too many students with are using the same Wi-Fi, so the Wi-Fi become burden and I was disconnected for a few seconds, which led me to miss few parts of the lectures. So Wi-Fi is quite problem during my E-learning .

FD: I mean that is something we can't control, right Wi-Fi? All those Wi-Fi problems cause of bad weather and it disrupted not only student's but lectures also, so it's like the the flow is disrupted there.

AF: Yeah.

FD: OK, how is the development of your self motivation throughout the E- learning environment?

AF:Development of motivation during E- learning I think it was demotivating because I was unable to interact with my lecture. If for example me as a science student. Moreover, a biomedical science and there need for me and my friends to attend practicals and physical class is very important because most of our courses is basically like 90% hands on. So if we during the E-learning it's very difficult for me and my friends to catch up and follow with the class.

FD: Understand.

AF: Difficult to find the motivation.

FD: So, do you face any difficulties in interacting with your lecturers and group mates you?

AF: Cannot hear you Fadhsil.

FD: OK can you hear me now? Testing testing 123.Yeah, I can hear you.

AF: Try to meet and unmute, because I cannot hear you.

FD: OK, Can you hear me?

AF: Still cannot hear you.

FD: OK, wait.

AF: What happen?

FD: Can you hear me now?

AF:Umm? Let me try like leave and then I enter back, but you stay alright.

AF: Testing

FD: Testing 123. Can you hear me now?

AF: Yes I can hear you now.

FD: OK, that's another technical challenge we faced, yeah? OK, moving on to the questions, uh, do you face any difficulties in the interacting with your lectures and group mates during the E-learning?

AF: So far. Surprisingly, no, not much difficulties because it's quite easy to interact with people like online nowadays because everybody has, for example, social media. Like if we cannot reach them through our Microsoft Teams, we can reach them via WhatsApp and also our UTAR lecture they are very responsive when we e-mail them or send message to them. So for me and my friends, I think so far I have. Haven't heard any complaints So far OK.

FD: Alright, is it reducing team works and communication between students during these E-learning?

AF: Ooh from what I've experience, I would like to see like no, because so far. I I can see the efforts on the students like they are trying to make an effort to be as a team like everyone do their jobs and then they did not procrastinate any work or they did not keep silent. They are responsive. That's what I've experienced.

FD: Alright, that's good. So OK, moving on. Are there any university policies that have been introduced in conducting e-learning and that's the introduction of the new policy have impacted the learning process of learning?

AF: A new policy, is it?

FD: Yeah, new Policy University's new policy.

AF: From what I've known I'm not sure because so far I don't think I follow any news with New policies

FD: Alright.

AF: Because when I interviewed other other students, They said that the new policies like reducing the credit hours or reducing in fees, facilities, fees or some have changed from final examination to final assessment ,something like that.

AF: Here in science no no OK alright.

FD: So before we conclude this interview, is there something about your experience in e-learning that you think influences how you engage in your online classes that we have not yet had a chance to discuss?

AF : Umm? Experience. I'm not, I don't know. There's too many experience. OK, umm like can you like repeat the question one more time?

FD: Yeah sure sure, OK? Is there something about your experience in e-learning that you think influences how you engage in your online classes that we have not yet had discussed?

AF: Ohh ,OK OK for example E-learning. The students will need to use various platform like for example Microsoft Teams. Other than that I think some lectures. They use, uh, zoom

and Google meet, so OK, based on my experience, personally I've learned or I would not say master, but I've learned the basics of using most of the E-learning platform. For example Microsoft team, Google meet Zoom and I was able to use my knowledge on that to apply outside of my university. For example, I have held online activities with my friends. And also with my society in UTAR, E-learning platform to conduct activities such as the Yassin recital for Islamic Society so this was able to broaden my knowledge in how to use the E-learning softwares and to adapt with the current situation. Like I can conduct any activity with any platform regardless.

FD: I understand. It's like elearning, as open opportunity to learn more about IT, stuff about how really remote learning it, yeah? How to do remotely on everything?

AF: Yep, true true.

Interviewee: Andrew Ng

Interviewer: Lai Pui Er

Gender: Male

University: INTI International University

Interview date: 7.1.2022, Friday

Platform: Google Meet

List of Acronyms': Andrew Ng= AN, Lai Pui Er= PE

PE: Hi, Andrew. My name is Pui Er. Currently I am studying in Bachelor of Public Relations. We are having an interview session for you is because currently we are doing FYP 1, collecting data for our research study. Our topic is E-learning during Covid-19. We want to analyze that the University's student perception towards the new experience during the Covid-19. And, currently I am a Year 3 Semester 1 student, and next semester I will having my Internship. Now, it's your turn to introduce yourself.

AN: Ok, hi Pui Er. Thanks for inviting me for this interview. So, I am Andrew and currently I am a Final Year student in Inti International University. And, you may start the interview.

PE: Alright. Ok. Based on your introduction right, you mention that you are studying in Inti University, right? So, may I know that how do you experience E-learning during this Covid-19 since it's a new experience to all of us.

AN: Ok. Ermm. Since we had experienced the online learning for around 2 years. I actually have already adapted in E-learning, but it still makes me feels unreal sometimes because ermm...we are lack of interaction with our lectures and also our classmates. Yaa... That's basically what I think about it.

PE: Ennn. Ok. So, do you think that E-learning is effective? Because, since we have more time to do our own things and no need rush up and down. Because ermm.... Sometimes we during travelling to the university right, it takes some times and then travelling back to our hostel also takes some times. Do you think that E-learning is effective?

AN: Ermm... It's actually a very good question. For my perspective, because I am actually studying in Bachelor of Financial Planning. So, it's a finance subject, and in my course structure it will be a lots of calculation ermm... that will be done during the class. And, it's is actually make me feel like it's not that effective to ermm... to go on in online learning. Because, E-learning ermmm... we are very hard to communicate, and also read the instructions, understand the instructions that lectures give us on how to use the calculation

method, formula, calculator and so on. And, sometimes it also hard for our lectures to show the calculation in our class. Because normally, in the class they will use the marker pen like just ermmm..... draw on the whiteboard, but in the class some of our lecture is not capable with the....

PE: The whiteboard function?

AN: Ermm.... Not just the whiteboard function. Because in order for you to write smoothly must have ermmm..... sometimes like tablets, and the digital pen for you to write smoothly, but they just most of the time using the mouse scroll which is like the handwriting is not that ahhh.... Nice and difficult for us to understand as well. Yaa.

PE: Ermmm... How about the during your lecture... Because as I now right, some of the will write in a white paper, and using the camera to snap a picture and shows to the students. So, does your lecturer do like this?

AN: Ermmm... My lecture have done this on for the tutorial answer but in the discussion, it have actually ermm..... cause a lot of problems because it very hard for us to conduct a discussion and also ermm... teaching on the calculation. So, I think its not that effective by going on with E-learning.

PE: Ohhh.... Ok, now let's us move on to the engagement. Do you think that E-learning impact your engagement in academic performance? And, can you further explain your time management on your academic performance. Since you think that E-learning is not effective and unreal for you sometimes.

AN: Ermmm... For academic performance, actually I have done something that I am not often done when face-to-face classis we are having a study group. Ermm..the reason why we are having this is because, ermm... before that we are having a study group, we usually study at library, and because it's face-to-face so it have a lots of distraction, like some will playing with their phone and so on. But, in online (E-learning), we are not able to meet each others, so we only able to have a study groups in some platform likes, voice call, Whatsapp which can able us to exchange our information in class. So, that really helps me to maintain my academic performance.

PE: Ermm... do you think that it's effective using social media to communicate with each others. Do you think it will have misunderstanding of by using words compare to verbal communication? Do you think that words is effective than verbal communication? Since, it will affect your academic performance. Because, in sometimes, right, while we use words to communicate there will bring some misunderstanding in between. Because we don't understand the tone, the emotions in the words.

AN: For this situation. Yes, it is easily for us to misunderstanding the wording used because we can't read their face, and their emotions. Ermmm... so that's why most of the time we are

normally like having voice call if possible for further discussion. Yaa. But, it is also quite hard for us because some of them, some of my classmates, they are in their house, and their house's Internet connection is not stable and their environment is noisy. So, it quite hard for us to conduct the discussion effectively.

PE: Ohhh. That brings to the next question, which is the technical challenges. Since, you mention about the Internet problems, right? So, it is part of the technical challenges. Do you think that technical challenges for you since your friends is facing. Do you facing this issue?

AN: Actually for my side, the biggest technical issue for us is the clashing for the online platform. Because, for INTI, we are using an online platform called 'Blackboard' which is like something similar to Microsoft teams that use in UTAR. But it is a little bit different, we can submit our assignment using the platform, and I still remember is like around October last year. When the system is upgraded to the latest version, there have a lot of bugs like ermm..... our lecturer cannot access to classroom or our student will suddenly get kick out from the classroom and so on. Or, we can't see the slides that show by our lecturer and many things happen during that time. So that have really affect the experience and for me to go on in the E-learning process that my university provide.

PE: Ok. Do you think face these challenges, will your self-motivation drop in your academic performance? Because, ermm... most people will face difficulties. When they face problem, they will easily give up. Will you face this?

AN: Ermmm... for an integrity student, that's definitely will affect a lots on academic performance, eventhough some of the students try to cheat in a online exam.

PE: Yaaaa.

AN: Yesss. Because, they are not supervise by their lecturer and so on. But ermm... it for myself, I am not that kind of person, ermm.. how to say.... Able to like cheat, searching answer and doing for my final exam. So, it very hard for me, because ermmm... for me to understand what the lecturer told is a very big issue. Emmm... eventhough our lecturer have tried their best to deliver the information and the knowledge to us. But, ermm I still think is not that effective to have face-to-face class in the campus.

PE: Ok, since you mentioned about FA. Since it is an open book test. Are there any university policy introduce in conducting this E-learning apart from FA? Since its an open book teat, we know that people will cheat, googling sometimes.

AN: Yaaaa. So in term of policy, INTI had actually forced our lecturer to must conduct 70% to 80% for the whole online class period. It's hard for me to explain in wording but I will give an example like the class is 2hours, our lecturer must at least in the classroom for 70% to 80% for the whole class. Ermm.... Why our university are having this policy is because some

of our lecturer are using online platform, they will think they have nothing to talk because can't see the student.

PE: Yes.

AN: The student also very shy and refused to answer the question that asked by the lecturer and, I know some lecturer in other university, they even straight away record a video for recording, and they just play the recording for 2 hours then he or she spent 10 minutes and asked the student what the question about it.

PE: Ohhh.

AN: Yaa. And to prevent this kind of issue. Because it really downgraded the experience of E-learning. Because we already cannot see our lecturer and our lecturer even playing the video.

PE: And not playing the role.

AN: Yaa. They are not even online teaching us but they just record a video and play to us and they used it as a cheat on their working time. So, to prevent the low quality of teaching method or to preserve the quality of teaching, our university had come out this policy to make sure the lecturer will be in the class for at least 80% of the whole class time, and able to assist the student and bear the responsibility.

PE: Ohhh. I see. Because for us right, normally is only calculate for the attendance overall the semester. So, you must have achieve 80% above then only you can sit for the exam means final.

AN: Yeahh. But, since it's online class ermmm... our university had come out a similar policy to our lecturer itself. Because they are human being as well so, sometimes they will be lazy.

PE: Ok. So, before we conclude for this interview, is there anything to add about E-learning experience. Do I miss anything? Like err... our university policy, technical challenges, this is

the most important, and then your self-motivation, because this is for your own self, right. Do you have anything that need to add on?

AN: Ermmm... I think that not much on my side but ermm... I would like to emphasize again on the environment for us to conducting E-learning is actually quite challenge for us because sometimes there will electricity might be cut off.

PE: Yesss.

AN: Ya. Like recently, there is flood happens in our neighborhood, or is like the environment too noisy, the Internet connection is very poor.

PE: Yess, sometimes it can't focus.

AN: Yes. I think the external factor have play a very important role like affect the experience of E-learning experience that we are getting. The point I still consider it as backup plan for not able to be conducting face-to-face class.

PE: Does your university allows you all back to campus in the coming semester?

AN: Ermm... as what I know our university, INTI International university only allowed student to back to campus on May which is next semester. Because we already start our new semester on January this year.

PE: Ohhh. Ok.

AN: But some of the international student, they will start to come back to Malaysia around March, because when they come back o Malaysia, they will need to quarantine and some process like test their latest covid condition. So, it will take time. But, they will start to come back from March as I know. But, for local student, they will only allowed be in campus start from May.

PE: Ohhhh, ok, I see. Because us, UTAR will allow us back to campus in the coming February.

AN: Ohh, that's good.

PE: Yaa. But, I having Internship so don't have the chance back to campus larhh.

Interviewee: Ahmad Hafizuddin Bin Rahmat

Interviewer: Lai Pui Er

Gender: Male

University: University Teknologi Malaysia (UTM)

Interview date: 19.4.2022, Tuesday

Platform: Google Meet

List of Acronyms': Ahmad Hafizuddin Bin Rahmat= H, Lai Pui Er= PE

PE: Hi. Good evening, Hafiz. And thank you for accepting my invitation to take part in this survey, which is our topic is major focus in Malaysian University undergraduate perception towards the effectiveness of the E-learning approach in the higher education. Firstly, I will introduce myself. My name is Lai Pui Er, now currently is a Year 3 students taking in Bachelor of Communication (Hons) Public Relations courses. Now your turn.

H: Okay. My name is Ahmad Hafizuddin Bin Rahmat and I'm a third year diploma student from University Teknologi Malaysia and I'm really grateful for you to choose me as your interview.

PE: Thank you for accepting me too. The me too. So based on your information. Right. You mentioned that you're studying in UTM, which is University Teknologi Malaysia. So which the use of you is the final year student. Right. In the diploma?

H: Yeah.

PE: So do you have new experience in E-learning?

H: I'm sorry, could you repeat the question again?

PE: Okay. How do you feel about the new experience of E-learning?

H: I see. I would answer that my experience with Elearning task has been quite lackluster. You could say it's behind that of physical learning.

PE: So you think it's not effective to you.

H: I believe Elearning is less effective and I much prefer physical approach and face to face learning.

PE: Okay, so based on your point of view is lack of effectiveness. So do you think that the educators have delivered the course of context effectively through the Elearning compared to the traditional method?

H: Are we talking about Elearning?

PE: Yes, Elearning and comparison to the traditional.

H: Ahhh I see. In my experience, I think Elearning has caused educators ahhh, sorry by the way, educators be more less in educating students. Much of the educator is simply who read into slides and just listening to lengthy talks.

PE: Okay, so do you think that does Elearning impact your engagement in academic performance? You can maintain your coco and your study at the same time?

H: As a matter of fact, it did actually impact my academic performance for the last two years, which is my whole Elearning experience. I've spent much more time going over recording of classes and watching videos on YouTube so I could better understand my subjects.

PE: Okay. So it is more on your self studies more than Elearning?

H: Yess. I've done a lot more self studies since the last two years.

PE: Okay, so apart from yourself studies, do you have any experience in technological challenges such as internet breakdown and so on?

H: Technical difficulties are a bit unfortunate and usually inevitable and it's also huge setback to those who have faced that. And I'm one of that victim. One of my technical difficulties is that I once lost my internet connection, not just for a few hours or a couple of hours, but one whole day. And there isn't much I could do to cope with it. Losing internet connection means losing any communication with my classmates and lectures. Until I have any imbalance of internet connection, I'm basically lost.

PE: Okay, how about you don't have call to your friend to inform them.

H: Ahhh, basically I'm out of the loop and I just hope that I can get my internet back as soon as possible.

PE: Okay, based on your situation since you self study more and then you are facing the technical issue then do you feel that less motivate through the Elearning process and feel difficulty to interact to lecturer because you have this internet connection?

H: I said elearning and the semester go on I find my motivation towards studying starts to crumble I barely pay attention to classes to my lecturers I even start to have as my assignment a lot of procrastinating doing bare minimum of work and most of the time I just submit them either on time or leaving them overdue.

PE: Okay do you report this to your University Department? They will come out of solution for you.

H: Unfortunately there wasn't any kind of support for this kind of problem due to the fact that it was only just implemented so there wasn't much care or concern going into technical difficulties in my university.

PE: Even not conducting a survey to students do them feel any difficulty or need some support from university also?

H: Well we do have it but it's more towards students that actually have financial problems like they will give the students basically mobile data like what do you call it? Internet plan.

PE: do you apply for it?

H: Unfortunately I'm not qualified for the plan.

PE: Yeah, okay. so apart from this right does your University have any other University policy such as student can back to campus and during the coincidence some they can't travel back to their hometown some is overseas so does your campus provide a hotel for them?

H: In UTM, we have a college where students can live and they are usually only for the first year, and the second and third you have to go through so during Elearning. So during the E-learning some of the students have to go to laboratory engineering lab which means that they have to stay in the College the hostel, so I guess in terms of policy changes it hasn't changed so much as more like additional requirements for 'mohon' hostel.

PE: So for other courses like the communication classes or English courses then they need to go back to their hometown?

H: Yes. So basically like if you were to be studying for engineering where you need to be using heavy machinery you'll most likely be able to apply for College or hostel while for

those who are simply studying English, mathematics and computer science they will probably not be accepted for the hostel.

PE: So there is a term and condition to apply for the hostel.

H: Errrr... There actually a lot of term and conditioning you need to be qualified for. First, you have to be well the usual you need reasons for staying at the hostel you need to be financially not so financially great and then there's also need to be what kind of progress, courses you're studying for which is the additional requirement started after Elearning.

PE: Okay, so before we end our Interview, do you have any I miss or you wanted to add on based on the question we discussed such as the Internet connection, self- motivation and time-management towards the academic performance.

H: Errr, I think there's no much to add on, just you pretty much included about the E-learning that I had experienced for these 2 years. So, I have nothing to add.

PE: So, my very last question. Do you wanted to have E-learning or final exam in online basis in future?

H: 100% no, hahah, I will prefer physical learning.

Interviewee: Chew Mei Yan

Interviewer: Lai Pui Er

Gender: Female

University: Universiti Tunku Abdul Rahman (UTAR)

Interview date: 16.6.2022, Thursday

Platform: Microsoft Teams

List of Acronyms': Chew Mei Yan= MY, Lai Pui Er= PE

PE: Hi. Mei Yan. Thank you for accepting my interview section. And I firstly, I will introduce myself. My name is Lai Pui Er and the purpose of this interview is we wanted to know about Malaysian university undergraduate position towards the effectiveness of the E learning approach on higher education. And lastly, my currently I'm taking Bachelor of Communication (Hons) Public Relations courses and I'm a year three student which is this year this semester which is my last semester for this trimester. Now is your turn.

MY: Alright, Pui Er, nice to meet you. My name is Mei Yan and this is my last year of my studies, and I am studying of Bachelor of Accounting.

PE: OK. So thank you for your introduction and based on your information I that provided in you mentioned you study in university is of UTAR which is same campus with me just different location. And then may I know that E-learning for you so far, do you feel that this is a new experience for you and what is your expectation for this?

MY: Yes, I think this a new for me things are it will be a different way for studies and we will be not face meet each other face to face. So we will need to ensure that the Internet for us is very stable (Perception towards E-learning) when you are online for learning as well as asking the question with the tutor or lecturer larhh. So if you like aaaa... discussing for the assignment with your team member, you will also need the Internet access which very stable in order for you to conduct all the activities in a stable way.

PE: OK, so based on your information that you provided is highlighted the Internet connection. So let's I want to proceed to the education purpose, which is the do you think that the E-learning is effective compared to the old times studies which is traditional method?

MY: Errr... I don't think so. Since you are conducting the E-learning, you need to make sure the Internet connection is very stable and you will to ensure that you have a computer or a laptop to conduct the class. However, if conducting in a physical way, they will face to face with the lecturer and will ask question if you have any part you are not understand, and you

also can discuss with the team member or group member when you are discussing the assignment, so you will be more..how to say like... be more familiar with what is the lecturer and the tutor explaining. So will be like ensure that you can understand what each other what received and you can conduct the class or discussion in an effective way.

PE: Alright, based on your answer right. You prefer traditional method compared to E-learning. And, my question is, does E-learning impact your engagement in academic performance especially in time management to maintain your academic performance?

MY: I think yes. If you taking E-learning classes you can manage your time flexible. So, like after the class you can a... going out for eat or do some important things. And, if taking physical class, after the class, you need to gather with your friends, groupmates you may not having others time to do your personal things as your friend may asking you for having lunch together. So, it will be like errrrm... if you conducting a E-learning classes you may have more time for yourself larhh.

PE: Alright, next I will pass to the next question which is the technical challenges. At the first you mentioned we must have a stable connection. Do you face any Internet connection during your entire E-learning?

MY: Errr... I think no. Since I will make sure the technical issue such as the Internet access will be solve before the class and make sure that I having a class in an effective way.

PE: Alright, thank you for your answer about the technical issue. And then I will move to the self-motivation, because you are alone in your hometown and no friends discuss on the group assignment or having group discussion during the final. Do you face any difficulties in interacting with lecturer and your groupmates or poor communication between teammates?

MY: Yesss, I think is not very effective in this way since if you are like us conducting the E-learning in class, if we have any part or not clearly understand it, you will asking the lecturer right after the class. So, you will using the Microsoft teams for communication. And, we are just typing our message for our lecturer and tutor and wait for the reply. There is a scenario or situation that the lecturer or tutor cannot answer us immediately since they will not be online at all time. So, we will be waiting for them, and finally we will not sure that what is the lecturer or tutor respond since the word using we may not understand the lecturer or tutor. Maybe they are using their own way of explain to us, and there is the way not very suitable for us. And, for the assignment, I think the communication where will be reduce also since like we just now I had mentioned we are using word for communication and there will be a misunderstanding and conflict with each other which will cause a poor teamwork. It will reduce the effectiveness and efficiency for the process of assignment as well as the case study.

PE: Alright, thank you. And then, lastly because since E-learning is a new norm for us, do you think that university policies that have been, do you aware that the new university policy introduced in our campus?

MY: Errmmm.. for this one I am not sure but for university through the Email, the had provide the laptop for the students for loan, which means the student can loan the laptop on the university, but for this one actually for the university before the pandemic they also provide this benefit for the student which can loan the laptop from the university. And, I think this is a good way for the university to continue conduct to loan the laptop since errr.... We can saying that not every student can have a laptop for the learning. So, if they can continue to provide this benefit for students, it will be very useful larhh.

PE: Alright, so this come to our end before I conclude this interview. Do there you wanted to add on in your experience on how you engage in during your entire online classes?

MY: Uh, I think now that's all from me so. Thank you.

PE: Alright, thank you for answering and taking part in this interview session. Thank you for participation.

Interviewee: Goh Pek Yun (UKM)

Interviewer: Tan Xue Lin

Gender: Female

University: Universiti Kebangsaan Malaysia (UKM)

Interview date: 11.6.2022, Saturday

Platform: Microsoft Teams

List of Acronyms': Tan Xue Lin= PY, Goh Pek Yun= PY

XL: Uh, right, let's start it. Pek Yun, based on the information that you provided in the questionnaire, you are studying at UKM. May I know which year students are you and how are you adapting to E learning so far?

PY: OK, so I'm actually a year 2 student now at UKM as you know. So I think I've already adapted well to elearning because I already have two years of experience. So actually at the beginning of elearning it was quite uncomfortable. OK, so because it was a totally new mode of learning that we haven't tried before and there were a lot of challenges especially for me as a newbie because elearning started when I was a first year student.

XL: Ohh, that means you conducted e-learning since you were in year 1 sem 1 till now.

PY: Yeah, true.

XL: Ohh I see. So actually what do you feel about the new experience in e-learning? Is it fresh and suitable for you?

PY: Uhm, I feel like e learning really gives me different feelings compared to face to face learning. For example, it was my first time making friends online. But to be honest I prefer to make friends face to face so that we can hang out together. But sadly that is what we can't do during the e-learning and also it was our first time for me to attend online without sitting in the exam hall like what was actually done before covid. So it's kind of like that kind of exam feeling. So like that kind of nervousness, you know? Yeah.

XL: Yeah, yeah, I guess I agree with you. Physical interaction is giving a different feeling to people. So hard to express that feeling. OK, since you have experience with e-learning, which mode of learning is more effective to you? Is it e-learning?

PY: So from my point of view, I think e-learning would be more effective from the aspect of saving time, because like we can proceed with our own pace. For instance, if we have anything that we missed from the lesson, we can rewatch the recording when we are free and also we can look up any further information online because everything is at our fingertips.

But to be honest, it would only be effective for someone who is really focused and self-disciplined. Because self-control is very important for e-learning.

XL: Yeah, yeah. Me too. Me too. Sometimes I need to playback the recording so I can better understand the topic and it is easier to do my notes. Yeah. Since you have experienced physical and virtual classes, I actually do think that the educators have delivered the courses or content effectively through e-learning compared to traditional methods.

PY: I think that the educators really have delivered the courses effectively, even though it's in e-learning, they try their best to do everything they can. For instance, I encountered one of the best lecturers who really did a great job on delivering the content. She tried to demonstrate the lab in various ways for herself to show us all of the details. This kind of work and this can let us have a virtual experience of doing the laboratory.

XL: Umm, since the lecturers are trying their best to transfer the knowledge to us, I am grateful to have them. Does e-learning impact your engagement and academic performance? What is the impact?

PY: So, I think that you only impacted me for a little bit, but for me, it mostly didn't impact my engagement and performance. When I have some problems that I don't really understand, I'll try to contact the lecturers in charge just like what I did for traditional methods for performance. I think that it's still the same and maybe even better because we got lots of free time to do our own revision at our own pace.

XL: Ohh I see. OK can you explain further about the time management to maintain academic performance for you?

PY: Yeah, sure. So, for my time management, I would try to sort out my To Do List for every day and arrange them based on the urgency and also every time when I get my assignment I will directly start to do it because I know there are lots of assignments, quizzes and exams are coming. If possible, I will try to set up what I can do at that moment so that all those assignments would not be accumulated.

XL: Well, I need to learn more from you. I am sure I will get a good result if I know you earlier. So, what's your perception about the inevitable technical challenges faced by most of the students during online classes? Do you face any technical challenges during your e-learning?

PY: OK, I think the inevitable technical challenges are the stability of the Internet and the functionality of the laptop. I really do have to face it because sometimes when it rains, that's inevitable. The line will be unstable and disconnected from the meeting sometimes and also last time I will not be able to do my assignment because my laptop was lacking and needed to be repaired.

XL: We are the same. That's why I can't even follow the steps of the lecturer while they are teaching and I need to play back the recording. I am always angry about it. How is the development of your motivation throughout an E-learning environment? Do you face any difficulty in interacting with your lecturer and your group mates?

PY: OK, so sometimes actually to be honest, I will feel it. I'm motivated to do anything, maybe because I'm at home and learning all the time alone, like I can't meet my friends in real life and also feeling frustrated when I have no idea how to start the assignment. So, but luckily I don't have difficulties in interacting with them. All of them are friendly and actually help me a lot when I ask them questions. They are all very patient and try to help me as much as they can. I really appreciate that, yeah.

XL: Yeah. Yeah, yeah, yeah. I tried it for a long time and was in no mood to continue. So, uh, do you think that is reducing teamwork and communication between students?

PY: I think maybe because it's actually a bit difficult to communicate with all Members in the same meeting. You know, like sometimes maybe they have an Internet problem which makes the communication during the meeting becomes ineffective. But as long as the work is distributed and all students are willing to cooperate and think it should be fine, yeah.

XL: Wow. OK. I wonder if there are any university policies that have been introduced in conducting e-learning? Does the introduction of new policy have impacted the learning process of e-learning?

PY: Uhm, I'm sorry, I can't think of any of this for this moment, yeah.

XL: OK. It's OK. Haha. Before we wrap up this section, is there something about your experience in e-learning that you think influences how you engage in your online classes that we have not yet had a chance to discuss?

PY: Uhm, at this moment I think no. So yeah, I think that's all from me.

XL: Alright. And yes, we are done discussing e-learning and I would like to thank you for spending time with me to discuss this topic and share your opinions. Once again, thank you so much. Hope we will meet together soon. Yeah

Interviewee: Sum Li Yee (UUM), Lee Sook Qi (UTAR)

Interviewer: Tan Xue Lin

Gender: Female

University: Universiti Utara Malaysia (UUM), Universiti Tunku Abdul Rahman (UTAR)

Interview date: 12.6.2022, Sunday

Platform: Microsoft Teams

List of Acronyms': Tan Xue Lin= PY, Sum Li Yee= LY, Lee Sook Qi= SQ

XL: OK. Hello everybody. Good afternoon to all of you. Hello, Li Yee, Sook Qi

LY, SQ: Hello.

XL: Hi. Nice to meet you all here. How are you?

LY: I'm fine.

SQ: Good.

XL: That's great. OK, by the way, thanks for attending today's group discussion section, yeah. Hope to meet you all soon physically. Well, let's start our discussion. I would like to inform you all that today's section will be recording from the beginning till the end. Hopefully you all don't mind. Besides, your personal data will also be kept confidential. So, don't worry. Yeah. Alright, let's start it. Li Yee, based on the information that you provided in the questionnaire; you are studying at your UUM. May I know which year students are you and how are you adapting to E-learning so far?

LY: I'm currently in Year 2 right now, when I first entered university, e-learning was already implemented. So, for me it is not difficult to adapt to. Only occasionally worry about network issues. So, for this I bought data to overcome the issue.

XL: Oh, you experienced it during your year one and sem one till now. How about Sook Qi? You are UTARian also, you will also use e-learning from the beginning of your study.

SQ: No, for me, I'm attending e-learning from year two. I have gained a lot of knowledge and saved on expenses during e-learning. So, I'm feeling great and more able to adapt to e-learning.

XL: I see. So actually, what do you both feel about the new experience in e-learning? Is it fresh to you because this study mode hasn't been tried before?

LY: Yes, e-learning is fresh to me because before that, when I was form six, we still had face to face classes. So, I think e-learning is not suitable for me. I cannot pay full attention when I'm joining an online class.

XL: OK, how about Sook Qi?

SQ: I feel excited for e-learning because I didn't experience it before.

XL: Oh yes, I agree with both of you. Uh, Since Li Yee and Sook Qi had experience on e-learning, which mode of learning is more effective to you? Is e-learning or traditional?

LY: As I mentioned just now, I'm very happy to focus on e-learning so physical classes are more effective to me.

XL: How about Sook Qi?

SQ: For me, e-learning is more effective and more convenient. This is because I can refer back to the recording when I have missed the lecture and tutorial class.

XL: Yeah, yeah, me too. I will choose e-learning too. Haha. Uh, since both of you have experienced physical and virtual class. Actually, do you think that the educators have delivered the courses or content effectively through e-learning compared to traditional methods? Maybe Sook Qi can share with us first.

SQ: Yeah, the educators deliver content in an effective way through the e-learning process compared to traditional methods because some lecturers have pre-recording the lecture class which makes the learning process more effective (Effectiveness of E-learning, Technical competent).

XL: Li Yee?

LY: Umm, I don't think the educators can deliver the courses effectively. Because I'm studying multimedia, for my course many new things that we learn need more tutorials, so traditional methods will be more effective to us so that we can know our mistakes directly when doing tutorials.

XL: Umm, both have their own pros and cons lah. Actually they are trying their best to convey the information to us. They help us to get the knowledge as much as we can, and we have to concentrate more when they're teaching. Does e-learning impact your engagement and academic performance? Li Yee, what is the impact?

LY: Actually it does not affect me so much. Umm uh, this will not affect my grades. To be honest, It is better than offline teaching lah. So, but my engagement is affected because sometimes the instructions given by the lecturer are not so clear due to some factors such as the network issue.

XL: Oh, can you explain further about your time management to maintain academic performance.

LY: Time management is more convenient than offline teaching because we do need to spend time on the way to the classroom. So, the time is very long enough for me to do revisions.

XL: Umm, how about Sook Qi?

SQ: For me, e-learning has a little bit on my engagement and academic performance. I feel less engaged with the lecturers because I can't meet them in real life. And for time management, it can be managed and well prepared by scheduling timetables and playing back the recording in order to maintain my academic performance. So, I can replay and review the recording as many times as I can, which makes me more understanding about the lesson.

XL: Well, I need to learn more from both of you. Your ways are quite good for me. And yes. Sook Qi, I'm similar to your way, playing back the recording once I can't follow it. So, what is your opinion? What is your perception about the inevitable technical challenges faced by most of the students during online classes? Do you face any technical challenges during E-learning?

LY: Umm for me? No.

XL: OK.

SQ: For me. Yes, because Microsoft Teams has some issues regarding can't join the class due to getting technical issues and sometimes the apps have no sound during the lecture class, and I will ask my friend to invite me to join the class when I can't join it. For the no sound problem, I will rejoin the class and it will be solved.

XL: Wow, Li Yee, I'm jealous of you. Your network is quite good. I heard some of my friends are facing the same issue with you, Sook Qi, they are quite irritating. How is the development of your motivation throughout an e-learning environment and do you face any difficulties in interacting with your lecturers and groupmates?

LY: Umm, when I was facing some problems in my study, I will ask my lecturer through WhatsApp and luckily the lecturers that I met are very kind to answer my questions. So, for interacting with my group mates. Umm for me, communication is the most difficult part when doing group assignments.

XL: Umm. How about Sook Qi? Is it the same with Li Yee?

SQ: No, because I will take a break and stay positive in order to stay motivated in a learning environment and also I didn't face any difficulty in interacting with lecturers and my friends.

XL: Wow, that's great. So, uh, do you think that e-learning will reduce teamwork and communication between students?

LY: Yes, it will, because we don't know what kind of people our group mates are when we communicate online.

XL: Uh. Sook Qi?

SQ: Uh, for me, I did not face any reduced teamwork because we have divided the task of assignment and made it online by using WhatsApp and Microsoft Teams.

XL: Umm, I agree with both sharing uh, I wonder if there are any university policies that have been introduced in conducting e-learning, does the introduction of new policy have impacted the learning process of e-learning.

LY: No, I think you in heaven introduce a new policy in conducting e-learning.

XL: Oh I see. How about Sook Qi?

SQ: In UTAR, I think yes, but I'm not sure about that. However, I have heard about a laptop rental program that is offered by UTAR. It assists students who are facing technological challenges to learn.

XL: Yeah. Yeah, for UTAR, uh, it implemented a new policy, which was an installment plan for new and existing students in the covid period to reduce stress of students and their parents. So, before we wrap up this section, is there something about your experience in e-learning that you think influences how you engage in your online classes that we have not yet had a chance to discuss.

SQ: No. For me, I think we have to discuss all the issues about e-learning.

LY: Me too.

XL: Alright. And yes, yeah, we are done discussing e-learning and I would like to thank both of you for spending time with me to discuss this topic and share your opinions. Once again, thank you so much. Hope we will meet together soon. Yeah. Take care and stay safe. Bye bye.

Interviewee: Kh'ng Jia Ming

Interviewer: Yong Jie Ren

Gender: Female

University: Universiti Tunku Abdul Rahman (UTAR)

Interview date: 15.6.2022, Saturday

Platform: Microsoft Teams

List of Acronyms': KH'NG JIA MING= JM, Yong Jie Ren= JR

JR: Hi. Thank you for accepting my interview section. And I firstly, I will introduce myself. My name is Yong Jie Ren and currently I'm taking Bachelor of Communication (Hons) Public Relations courses and I'm a year three semester three student. The purpose of this interview is we wanted to know about Malaysian university undergraduate position towards the effectiveness of the E learning approach on higher education. OK, now is for you to introduction yourself.

JM: Ohh OK my name is KH'NG JIA MING. I'm a BA student currently year 3 sem 3.

JR: Ok. First question, I want to ask that may I know how are you adapting to E learning so far and What do you feel about the new experience in E-learning?

JM: For the E-learning, Uh, so far I'm adapting it quite well and for me the experience is quite great so far because it's quite new for me also.

JR: Ok. So the second question is based on your experience, which mode of E-learning is more effective, effective is E-learning or you more like physical class?

JM: Ohh I prefer E-learning because of got less restrictions for me and I could watch back the recording for a study back the lecture and tutor tutorial class.

JR: Same with me! Since you have experienced physical and virtual classes, do you think that the educators have delivered the courses or contents effectively through E-learning compared to traditional methods?

JM: Ohh. Yes, I think E-learning is quite good for me because I got less restriction just like what I mentioned before. It's quite convenient for us also.

JR: Ok, can. Next question is does e-learning impact your engagement and academic performance? What is the impact?

JM: Ohh yes, at first it it impacts me and my academic performance. So actually I got create my own schedule timetable and planner to manage it.

JR: Ok. OK can you explain further about the time management to maintain academic performance for you? Like just now I have said that can u explain more about your timetable?

JM: OK, I actually got quite my own timetable(Personal behavior factors)like a planner with every month got the dates, all that. Then I will wrote which date, which day I got class and I will plan when to have my after class study and my revisions when should I do my tutorials those things.

JR: OK, thanks. Next question is what is your perception about the inevitable technical challenges faced by most of the students during online classes? Do you face any technical challenges during E-learning?

JM: Uh, I think would be the Wi-Fi connection since sometimes it would be not so stable or maybe or electricity since Kampar or and maybe other places quite raining then will effect.

JR: Yeah, the wifi will be so weak. Next is how is the development of your self-motivation throughout an E-learning environment? Do you face any difficulty in interacting with your lecturer or with your groupmates

JM: So far I use as I mentioned I use my planner so I could check my progress and I would set goals to achieve it. So far there has no difficulties for me. Last since I prefer this method online so I think it remained the same for me.

JR: Thank you. Last, I wonder if there are any university policies that have been introduced in conducting e-learning? Does the introduction of new policy have impacted the learning process of e-learning?

JM: Can u repeat?

JR: Ok, I wonder if there are any university policies that have been introduced in conducting e-learning? Does the introduction of new policy have impacted the learning process of e-learning?

JM: So far I heard our Utar got the rent computer program for those things but I'm not sure like and I've no comment on that.

JR: ok, thank you. Before we wrap up this session, is there something about your experience in E-learning that you think influences how you engage in your online classes that we have not yet had a chance to discuss?

JM: So far no, I thing pressure to me.

Interviewee: Lim You Jing (Monash), Liew Gwai Jun (TARUC)

Interviewer: Yong Jie Ren

Gender: Male

University: Monash University Malaysia, Tunku Abdul Rahman University College

Interview date: 19.6.2022, Sunday

Platform: Microsoft Teams

List of Acronyms': Yong Jie Ren= JR, Lim You Jing= YJ, Liew Gwai Jun=GJ

JR: Thank you for accepting my interview section. And I firstly, I will introduce myself. My name is Yong Jie Ren and currently I'm taking Bachelor of Communication (Hons) Public Relations courses and I'm a year three semester three student. The purpose of this interview is we wanted to know about Malaysian university undergraduate position towards the effectiveness of the E learning approach on higher education. So now if for you two to introduce yourself first.

YJ: Hi, my name is You Jing. I study at Monash University, Malaysia. I Am a Year Four student. The course I take is Bachelor of Civil Engineering

GJ: Yeah. So my name is Liew Gwai Jun and now I'm study in Taruc Kl campus and now I'm studying in year three for the Bachelor in Enterprise Information System.

JR: OK, thank you. OK, now I will asking the first question, may I know how are you all adapting to learning so far and what do you feel about the new experience in E-learning? Yeah, so You Jing answer first later Gwai Jun continue answer.

YJ: Unfortunately my second and third year study is at home because of the COVID-19 pandemic. That's my E-learning experience is around two years for my experience. I think that learning is not my preference for the educations like the traditional way is more is more better.

JR: Ok. How about Gwai Jun?

GJ: For me, the online assessment is more convenient for me because we don't need have to physically go to the campus so we can attend to our class any everywhere. So yeah.

JR: ok. Thank you. Next question is based on your experience, which mode of learning is more effective? Is e-learning or u more like physical class.

YJ: Uh, for my opinion, traditional way that they are traditional way of learning is more effective than useful. However, E-learning have some benefits in it such as the lecture regarding that allow us to replay the video at anytime (Effectiveness of E-learning).

JR: How about Gwai Jun?

GJ: Yeah, for me, if I want to say is effective, I think the physical way is more effective because we have to physically go to attend the class and like the online way, we can just sleep and we don't need to attend the class.

JR: Ok, yeah next question is since you have experienced physical and virtual classes, do you think that the educators have delivered the courses or contents effectively through E-learning compared to traditional methods?

YJ: Uh, sorry?

JR: Ok, I repeat again. Since you have experienced physical and virtual classes, do you think that the educators have delivered the courses or contents effectively through E-learning compared to traditional methods?

YJ: Yeah, it's more effective than the traditional way because like we can play, keep, replay the video until we understand the meaning of it(Effectiveness of E-learning).

JR: Ok

YJ: It's better than the traditional way.

JR: How about Gwai Jun?

GJ: And in my opinion, I think the physical is more effective because We have to attend the class physically so we can listen to the lecturer and ask the question in the lecture hall.

JR: OK, next question is does e-learning impact your engagement and academic performance? What is the impact

YJ: Uh, yeah, the E-learning actually is negative impact to my study because is like the current state we cannot show the questions more effective way through the computer like the understanding between me and the lecturer, we will often have a conflict.

JR: How about Gwai Jun?

GJ: In my opinion is same with You Jing. Also is negative impact.

JR: Thank you. Next question is can you explain further about the time management to maintain academic performance for you? Like u two have a time management in school or what?

YJ: Time management, ya, I think for E-learning is better time like we don't need to use the time to travel to school. Like we can just wake up and use the computer and go into the class and it's better(Time Management).

JR: how about Gwai Jun?

GJ: Yeah. For the online assessment it's more effective for the time management because we don't have to move to the campus and we can reduce the waste of the motion. It can save more time.

JR: Ok, the next question is What is your perception about the inevitable technical challenges faced by most of the students during online classes? Do you face any technical challenges during E-learning?

YJ: There is no technical challenges for me actually like my computer is able to support the zoom like we use zoom for our class, so OK.

GJ: And for me, and they there is no any technical challenge.

JR: Ok, because I have heard that many people will face technical challenges is like many student will say that the line will sometimes weak. Ok, the next question is How is the development of your self-motivation throughout an E-learning environment? Do you face any difficulty in interacting with your lecturer and your groupmates

YJ: Yeah. impact the interactions because the online study is not able to support the face to face interactions, we cannot see the body language of each other and it will definitely lower down our communication efficiency. Our friendship can also be weakened when the real meaning is not able to transfer through the small screen of computer.

JR: How about Gwai Jun?

GJ: Yeah, it's difficult to discuss with the assignment with the groupmates because we cannot have had a face to face communication and but however we can have the WhatsApp and Google meet so can overcome this problem(Good communication with groupmates).

JR: So. I wonder if there are any university policies that have been introduced in conducting e-learning? Does the introduction of new policy have impacted the learning process of e-learning?

YJ: I think our university policies is quite good because it takes the advantage from both traditional and modern way of studying. I can see that our university want to remain unchanged for the video recording and want us to attend physically for the tutorial, there's better for us to interact with the lecturer during the tutorial class (Online and offline education meet different needs of students respectively).

JR: Ok, how about Gwai Jun? For your school have any university policy?

GJ: Actually I'm not understanding fully about the university policy, so I can't really answer this question.

JR: Ok , nevermind. Before we wrap up this session, is there something about your experience in E-learning that you think influences how you engage in your online classes that we have not yet had a chance to discuss?

GJ: No

YJ: For me no

JR: So, today our interview session is end. Thank you very much for accepting the interviews. Thanks.