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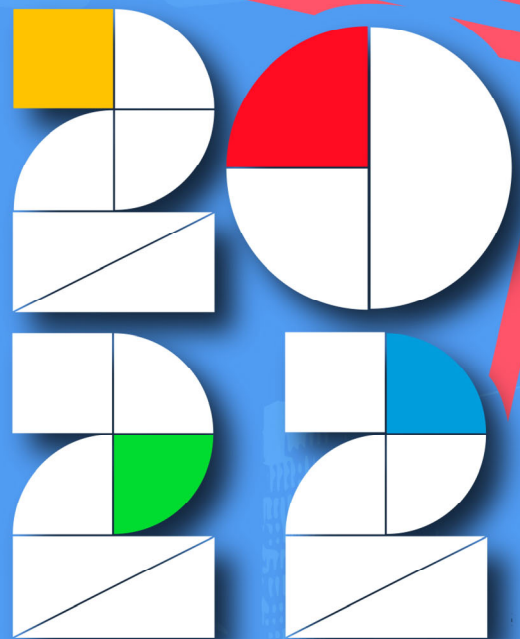
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Reengineering
Knowledge &
Creativity for
Global Excellence

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June



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TECHNOLOGY, SCIENCE, SOCIAL SCIENCES AND
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TeSSH 2022***

**Reengineering Knowledge and Creativity
for Global Excellence**

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Foreword

The papers compiled in these e-proceedings are papers presented online at Technology, Science, Social Sciences and Humanities International Conference 2022 (TeSSH I 2022) held on 30 June 2022 at Universiti Teknologi MARA (UiTM) Cawangan Kedah, Kedah, Malaysia. With the theme, ***Reengineering Knowledge and Creativity for Global Excellence***, the conference has brought together presenters of diverse background who shared their conceptual and empirical papers in broad areas that are subsumed under the fields of Technology, Science, Social Sciences and Humanities. These e-proceedings comprise current researches that were undertaken with the rigorous endeavour of knowledge enhancement to ensure that the world of academia will continue to flourish. It is thus hoped that readers will significantly benefit from knowledge contained in these proceedings.

TeSSH I 2022 and these e-proceedings would not have been possible without the great efforts from the presenters, and the generous support from the TeSSH I 2022 committee members and the Rector of UiTM Cawangan Kedah, Prof. Dr. Mohamad Abdullah Hemdi. A heartfelt gratitude is extended to all involved. It is hoped that these e-proceedings will be an impetus to stimulate further studies and research that benefit the society at large.

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Computer Sciences Students' Learning Preferences, Mental Health, And Emotional Issues During Pandemic COVID-19 While Moving Towards Endemic

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ABSTRACT

Student's learning preferences are becoming a critical issue as the educational system, particularly in higher education, quickly shifts from traditional face-to-face techniques to inescapable technological platforms for online distance learning. Decision-making during the COVID-19 pandemic, public and informal community education is used to regulate workplace distance. Students' emotional and mental health are becoming increasingly important since a variety of factors, including the learning environment and socio-demographic characteristics, can impact student learning success. During COVID-19, this article investigates the internal elements of students' emotional and mental health issues, as well as their learning preferences. From the result, most students would prefer face-to-face learning method wherever possible, even during pandemic. As a result, even during a pandemic, most students would choose face-to-face studying if feasible. The findings indicate that students' emotional states must be considered since they are disturbed and have difficulty studying. On the other side, it has recently been discovered that the mental health element is at an acceptable level, with surveys indicating that this feature has not significantly disrupted them, generally at a low and moderate level. Several problems have been highlighted, including the global implications of COVID-19 scenarios, and must be addressed, such as creating ODL platforms that might support face-to-face learning techniques. It is important to provide general guidelines for supporting decision-making to lecturers and students to facilitate learning process in higher institution especially with the goal of providing better education through endemic phase.

Key Words: decision-making, online distance learning (ODL), hybrid learning, face-to-face (F2F).

INTRODUCTION

The twenty-first century is commonly seen as an information era, despite institutions' reluctance to integrate online learning before the emergence of COVID-19 pandemic. Technology may be utilized as a tool for online learning. Many reasons contribute to online learning's ineffectiveness, including educators' lack of device understanding and abilities. Numerous local governments and higher education institutions in several countries launched programmes to provide

free internet packages to students during COVID-19 pandemic. The internet data aid programme, on the other hand, is perceived as being less impartial and uneven in its distribution to recipients. Some information, such as the quantity of internet use and the number of classes, is necessary. Also, instructors or the lecturers need to consider meeting lengths as well as the students' financial capabilities. Despite its various advantages, online learning has several drawbacks, including social isolation, a lack of face-to-face contact between instructor and student, and communication issues. The goal is to decrease the learning distance caused by lockdown.

Online learning combines classroom and online education to provide students with the opportunity to study independently, interactively, and cooperatively. The acquisition and success of knowledge by students because of online learning was shown to be equivalent to that of face-to-face techniques. However, the move to online learning has generated concerns about the quality of education. The standard of online education may be a critical issue that needs essential focus in rural areas. The pandemic has impacted all levels of education and has a negative effect on both undergraduate and postgraduate populations. Various online learning resources have been shown to be beneficial for teaching and learning in the fields of health professions, including dentistry, in previous studies. The students' information gain and success because of Online learning were found to be comparable to that of face-to-face approaches. This method encourages involved, self-directed learning and is now widely used in dental education as a supplement to conventional instruction (Quinn et al., 2020; Bennardo et al., 2020).

Student learning at higher institution have been impacted by the occurrence of COVID-19 pandemic which need student and lecturers to adapt with changes in learning environment and the whole learning process from enrollment until the examination process (Ghazali et al., 2021). Online learning has proliferated in recent years in at least one distance, remote, virtual, or web-based course rising from 8% in 2000 to 35.3% in 2007 (Allen & Seaman, 2017). Many reasons contribute to online learning's ineffectiveness, including educators' lack of device understanding and abilities. Numerous local governments and higher education institutions in several countries launched programmes to provide free internet packages to students during the Covid-19 epidemic. The internet data aid programme, on the other hand, is perceived as being less impartial and uneven in its distribution to recipients. Some information is necessary, such as the quantity of internet use, the number of classes and meeting lengths, as well as the students' financial capabilities. The purpose of this study is to examine how much student data is used and how it relates to meeting duration. Their findings can help decision-makers support the administration of internet data package assistance programmes for students participating in online learning owing to the COVID-19 pandemic. Despite its various advantages, online learning has several drawbacks, including social isolation, a lack of face-to-face contact between instructor and student, and communication issues. The goal is to decrease the learning distance caused by lockdown.

It is critical to manage stress and emotional aspects. Rapid changes in the educational system have presented problems and triggered many emotional characteristics of pupils, causing stress and emotional discomfort. To avoid serious difficulties and social concerns, mental health must be treated. Mental health is becoming one of the most important issues in understanding and facilitating student learning processes. Student preferences in learning techniques are referred to as learning preferences. To improve the virtual learning environment and promote learning processes, student learning preferences must be determined. As a result, the current study aims to explore Malaysian learners' perceptions of online and distance learning (ODL) instructional design as it relates to their happiness and experience with the platform. Realizing the current issues in students' decision-making processes in learning, this research serves as an effort for understanding the role of technology during COVID-19 pandemic.

REVIEW OF RELATED STUDIES

Interactive lectures were delivered in a classroom setting during the first half of the semester. Learning activities were provided entirely through distance learning in the second half of the semester. At the end of the course, undergraduate dental students received an online

questionnaire. The positive outcomes of students' embrace of distance learning as a new learning technique applied during the COVID-19 pandemic is hypothesised (Biswas et al., 2020; Mlekus et al., 2020). Online learning is still a relatively recent concept, and it is constantly evolving because of rapidly changing technology. To improve student learning, all online educators must put in more effort to combine pedagogy with technology.

Students' perceptions of different engagement methods used in online courses were investigated in a survey-based research report. Among the three types of student engagement, learner-to-instructor engagement methods seemed to be the most valued. Their study findings have implications for online educators, instructional designers, and administrators. Online learning has had a huge impact on adult education. Researchers in Malaysian higher education has paid little attention to the effect of online learning on learning satisfaction. One of the main problems is the lack of facilities for this form of education. There are few models that describe and analyse its utility (Azzi-Huck & Shmis., 2020; Aljawarneh, 2020). However, overall perceptions of online courses were positive, with students viewing instructional technologies as reliable and easy to use, as well as reporting that online technologies facilitated prompt feedback, enhanced their problem-solving skills, and met their learning needs. Alongside this, students exhibited positive views towards their instructors' skill level and use of technology to support academic success.

Regan et al. (2012) investigates teacher emotion rather than student emotion in online learning settings (OLEs). Six instructors teaching in various OLE formats (e.g., asynchronous, hybrid, and synchronous via videoconferencing) took part in two focus groups to discuss their emotional experiences and strategies to manage emotions when teaching in OLEs. The underlying themes were feelings of (a) restriction, (b) stress, (c) devaluation, (d) validation, and (e) rejuvenation. The essay also includes practical recommendations for how the participating teachers managed to deal with the difficult feelings. The findings indicate that participants in this study encountered a variety of obstacles when giving training. According to Sutton and Wheatley's (2003) review, K-12 instructors recognised comparable feelings while teaching in a conventional face-to-face format, such as good emotions (e.g., enthusiasm and satisfaction) and negative emotions (e.g., anxiety, guilt, uncertainty, frustration).

While those teaching in asynchronous settings were concerned about a lack of student feedback, those teaching in synchronous videoconferencing formats were more concerned about the degree of student learning and participation in class. While all participants experienced comparable feelings, those who taught in an asynchronous style experienced greater negative emotion. Those who taught big groups through videoconferencing from remote locations reported feeling less alone and detached. Furthermore, the experienced participant, who was also the coordinator of a distant education consortium programme, stated that she had greater control and understanding of technology. Thus, for these six participants, OLEs appeared to be "interesting" for novices, "stressful" for the majority, and "satisfying" for those who are well-versed in the technology and had the most comprehensive ongoing experience.

RESEARCH METHODOLOGY OF THE STUDY

The nature of the study is in quantitative research mode. The present study is cross-sectional research that involve descriptive methods to investigate student emotional aspects, mental health and learning preferences during pandemic. This study was conducted among students at one public university located in Johor, Malaysia. The internal consistency of each variable was assessed for both emotional stress and mental health variables based on the Cronbach's alpha values. The results shows that all factors have Cronbach's coefficient alpha greater than 0.60, showing the research instruments is reliable for the context of present study as in table 1.

Table 1. Cronbach's Alpha coefficient of the variables towards the effectiveness of online learning

<i>Variables</i>	No of items	Cronbach's Alpha
Emotional Stress	3 items	0.718
Mental Health	4 items	0.624

Decision-making application concept for multiple criteria is used to rank the learning preferences of computer science students' during pandemic while moving towards endemic phase in Malaysia.

POPULATION AND SAMPLE

The respondents involve 111 female students and 50 male students which coming from different family background and income level. The total number of respondents involved in this study was 161 respondents. This is a cross-sectional study, where the survey questionnaires were distributed through online survey. Most of the respondents are from family with income between RM1000-RM5000 which accounted for 60.2% from the total sample size. All the respondents were Diploma level students as shown in the demographic analysis of participants in Table 2.

Table 2. Demographic analysis of participants

Items	Demographic	Frequency	Percentage
Program level	Diploma	161	100%
Faculty	Computer and Mathematical Sciences	161	100%
Gender	Male	50	31.1%
	Female	111	68.9%
Family Income	More than RM5000	47	29.2%
	RM1000- RM5000	97	60.2%
	Less than RM1000	17	10.6%

STATISTICAL ANALYSIS

The information about the purpose of study was also included together with the questionnaire which is a part of instrument. A total of 161 students, who joined the ODL for online courses, participated in the study. The respondents were Diploma learners from Faculty of Computer and Mathematical Sciences in a higher learning institution in southern peninsular of Malaysia. There were 161 learners who completed the survey. The questionnaire was divided into two sections, which were demographics and impeding factor section. For Emotional and Mental Health factors, the questions were tested for internal consistency according to Reliability Test by referring to the value of Cronbach's Alpha. The SPSS was used to analyse the data and the descriptive analysis (frequency and percentage analysis) were conducted to answer the research objective. The level of acceptance based on the range mean discussed by Allam et al. (2020), where three different acceptance level was defined based on mean score: Low, Medium, and High with Mean score 1.00-2.33, 2.34-3.67, and 3.68-5.00, respectively. The instrument measured variables on a Likert-Scale of 5 points, from strongly disagree to strongly agree.

DATA ANALYSIS AND INTERPRETATION

Data collection process was done via online platform in one of local University in Johor, Malaysia. The data were stored automatically in the hosted online survey service (Google Form) after submission of the responses. Data was analysed using SPSS version 18.0 using descriptive data analyses such as frequencies, min and average were conducted using SPSS. The findings were tabulated and displayed using graphs. The measurement constructs used are shown in Table 3.

Table 3. Measurement Constructs

Label	Variable	Description
3EM	Emotional Stress	I was very stressful and thinking about leaving my study during ODL and would prefer to work
4EM	Emotional Stress	I was unable to sleep properly since MCO
5EM	Emotional Stress	I feel very difficult to live and study at home with my family during ODL and examinations
17MH	Mental Health	I am not motivated to study and even thinking about committing crimes because of multiple problems that I am facing now
18MH	Mental Health	I was thinking about to commit suicide
19MH	Mental Health	I do not want to come back to campus
20MH	Mental Health	I am afraid to go out of my house even though after post-covid pandemic
21S	Learning preferences decision-making	Please rank your preferences (Most preferred to less preferred study mode)

The questionnaire was divided into two sections, which were demographics and impeding factor section. For Emotional and Mental Health factors, the questions were tested for internal consistency according to Reliability Test by referring to the value of Cronbach's Alpha. The SPSS was used to analyse the data and the descriptive analysis (frequency and percentage analysis) were conducted to answer the research objective. The level of acceptance based on the range mean discussed by Allam et al. (2020), where three different acceptance level was defined based on mean score: Low, Medium, and High with Mean score 1.00-2.33, 2.34-3.67, and 3.68-5.00, respectively. The internal consistency of each variable was assessed for all variables based on the Cronbach's Alpha values. The results shows that all factors have measure students' learning preferences Cronbach's coefficient alpha greater than 0.60, as well as emotional (0.718) and mental health (0.624) showing the research instruments is reliable for the context of present study.

For student learning preferences, the respondents study preferences vary according the the online teaching method provided. The results shows that the majority of diploma student from Faculty Computer and Mathematical Sciences would prefer to study via F2F learning mode which accounted for 37.35 of the respondents. The second study preferences is via Hybrid techniques (35.4%) and Online Distance Learning (ODL)(27.3%) techniques (Figure 1).



Figure 1. Student learning preferences decision-making during COVID-19 Pandemic while moving to Endemic

RECOMMENDATIONS TOWARDS ENDEMIC PHASE IN MALAYSIA

- Future study should investigate how to cope with students' emotional elements, particularly when it comes to learning during a pandemic and moving towards endemic phase in Malaysia.
- Because most students prefer face-to-face learning, which facilitates contact during learning, creating an online learning environment should take interaction into account for both students and lecturers.

The continuously changing social, economic, and health condition in the world produced by the COVID-19 pandemic, which need specific adaptive resources and social support, may be significant stresses in ensuring that many kids have adequate mental as well as overall well-being. A sensation of loneliness during the epidemic, as well as a deterioration in one's financial situation during the pandemic that necessitated borrowing money to survive, were similarly linked to an increased chance of heightened emotional reactions. There is continuous need to include emphasizing the monitoring on students' mental health, as is identifying potential risk factors that may contribute to the onset of mental disorders, so that those in greatest need can receive sufficient mental and psychiatric care that should not be taken for granted.

On the other hand, recently, students' fatigue and feeling exhausted should be focused more in the next upcoming study due to students and lecturers situations that had fully adjusted to online learning; now, they are facing challenges again moving towards endemic phase for full F2F learning mode.

CONCLUSION

According to the present survey, the most preferred learning modality of students is face-to-face (F2F) instruction. Arispe and Blake (2012) investigated the relationship between verbal and abstract intelligence (cognitive variables) and learning preferences (online textbook, chat, or class) and discovered no significant connections between personality characteristics and student preferences or final grade. This conclusion does not appear to be surprising because we anticipated from the start that learners participating in any sort of online course, whether hybrid or entirely online, would need to demonstrate the capacity to work independently.

The hybrid technique is the second favourite, followed by the ODL method. The ODL technique is the last option, indicating that most students would like to engage with their professors during the learning process. Muthuprasad et al. (2021) investigated students' preferences for different aspects of online courses, which will be useful in designing an effective online learning environment. According to the findings, most responders (70 percent) are willing to use online classes to handle the curriculum throughout the epidemic. Many pupils opted to learn online using their smartphones. We discovered through content analysis that students prefer recorded lessons with quizzes to improve the effectiveness of learning. Students believe that the flexibility and ease of online classes make it an appealing choice, but broadband connectivity difficulties in remote regions make it difficult for students to participate in online learning programmes. However, in agricultural education, where many courses are practical in nature, a total transition to online mode may not be viable, necessitating the development of a hybrid mode; the insights from this article might be useful in creating the curriculum for the new normal.

According to the research, emotional elements are more significant consideration factors that impact student learning process than mental health issues. To achieve balance in the learning process, the emotional element is critical for both students and lecturers.

Positive emotions are elicited when the characteristics are considered to support these concerns, whereas negative emotions are elicited when the features are perceived to be detrimental to them (Park et al., 2011). According to Raes et al. (2020), the Self-Determination Theory (SDT) emphasises that relatedness is a contributing element for intrinsic motivation and, as a result, indirectly predicts learning performance. Although there have been several research utilising SDT in

other contexts, only a few have utilised this theory to investigate learning in the hybrid virtual classroom, comparing different learning environments and their impact on relatedness, intrinsic motivation, and learning accomplishment. The educational environment is determined by whether students are physically present and therefore attend the lecture face-to-face (F2F) or remotely (virtual), as well as whether the educational setting is the same for all students (pure) or mixed (hybrid).

The findings of an experimental within-subjects design research comparing students' learning experiences as F2F vs virtual students in a pure or hybrid context are presented in this paper. A mixed-methods approach is utilised, with real-time intrinsic motivation measures supplemented by retrospective self-report surveys and interviews. The results reveal that, while the hybrid virtual classroom is promising in terms of educational flexibility since it allows students to choose where they want to attend the course, it is also the most difficult to teach in and learn in as a distant participant. It has been discovered that in the hybrid-virtual context, both relatedness to peers and intrinsic motivation are the lowest. Nonetheless, our findings demonstrate that mix approaches have a beneficial impact on all students' motivation. To verify this conclusion in the context of the hybrid virtual classroom, more study with other types of tests and at varied time intervals is required.

REFERENCES

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REFERENCES

- Aljawarneh, S.A. (2020). Reviewing and exploring innovative ubiquitous learning tools in higher education. *Journal of computing in higher education* 32(1), 57–73.
- Allam, S.N.S., Hassan, M.S., Mohideen, R.S., Ramlan, A.F. & Kamal, R.M. (2020). Online Distance Learning Readiness During Covid-19 Outbreak Among Undergraduate Students. *International Journal of Academic Research in Business and Social Sciences*, 10(5), 642-657. <https://doi.org/10.6007/IJARBSS/v10-i5/7236>.
- Allen, I. E., and Seaman, J. (2017). Digital compass learning: Distance education enrollment report 2017. Babson survey research group.
- Arispe, K., & Blake, R. J. (2012). Individual factors and successful learning in a hybrid course. *System*, 40(4), 449–465. <https://doi.org/10.1016/j.system.2012.10.013>
- Azzi-Huck, K. and T. Shmis (2020). Managing the impact of COVID-19 on education systems around the world: How countries are preparing, coping, and planning for recovery.
- Bennardo F, Buffone C, Fortunato L, Giudice A. 2020. COVID-19 is a challenge for dental education—A commentary. *Eur J Dent Educ*. 1–3.
- Biswas, B., Roy, S.K., Roy, F. (2020). Students Perception of Mobile Learning during COVID-19 in Bangladesh: University Student Perspective. *Aquademia*, 4, ep20023.
- Ghazali, A. F., Suhaimi, A., and Yusof, R. M. (2021). Online and Distance Learning (ODL) and Hybrid Learning in COVID-19 era: The Effects of Pandemic to Undergraduate Students, *International Journal of Learning and Development*, 11(2), 175-190.
- Mlekus, L., Bentler, D., Paruzel, A., Kato-Beiderwieden, A.L. (2020). Maier, G.W. How to raise technology acceptance: user experience characteristics as technology-inherent determinants. *Gr. Interaktion.Organ. Z. Angew. Organ.* 51, 273–283.

- Muthuprasad, T., Aiswarya, S., Aditya, K. S., & Jha, G. K. (2021). Students' perception and preference for online education in India during COVID -19 pandemic. *Social Sciences & Humanities Open*, 3(1), 100101. <https://doi.org/10.1016/j.ssaho.2020.100101>
- Park, D., Lee, J. H., & Kim, S. (2011). Investigating the affective quality of interactivity by motion feedback in mobile touchscreen user interfaces. *International Journal of Human Computer Studies*, 69(12), 839–853. <https://doi.org/10.1016/j.ijhcs.2011.06.006>
- Quinn B, Field J, Gorter R, et al. 2020. COVID-19: The immediate response of european academic dental institutions and future implications for dental education. *Eur J Dent Educ*. 1–4.
- Raes, A., Vanneste, P., Pieters, M., Windey, I., Van Den Noortgate, W., & Depaepe, F. (2020, September). Learning and instruction in the hybrid virtual classroom: An investigation of students' engagement and the effect of quizzes. *Computers and Education*, 143, 103682. <https://doi.org/10.1016/j.compedu.2019.103682>
- Regan, K., Evmenova, A., Baker, P., Jerome, M. K., Spencer, V., Lawson, H., & Werner, T. (2012). Experiences of instructors in online learning environments: Identifying and regulating emotions. *Internet and Higher Education*, 15(3), 204–212. <https://doi.org/10.1016/j.iheduc.2011.12.001>.
- Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review*, 15(4), 327–358, doi:10.1023/A:1026131715856.