



ISSN: 2222-6990

An Insight of Online Learning and Life Satisfaction: A Case Study of Kolej Universiti Poly-Tech Mara (KUPTM)

Raja Rosemawati binti Raja Abdullah, Che Nur Amalina S. binti Che Zainal, Shazni binti Bahari, Norfarahin bintiAmat @ Adnin, Mohd Asyraf Abdul Rahman

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v13-i13/17949

DOI:10.6007/IJARBSS/v13-i13/17949

Received: 05 June 2023, **Revised:** 06 July 2023, **Accepted:** 23 July 2023

Published Online: 04 August 2023

In-Text Citation: (Raja Rosemawati et al., 2023)

To Cite this Article: Raja Rosemawati, R. A., Shazni Bahari, Che Nur Amalina S, C. Z., Norfarahin Amat, A., Asyraf Rahman. (2023). An Insight of Online Learning and Life Satisfaction: A Case Study of Kolej Universiti PolyTech Mara (KUPTM). *International Journal of Academic Research in Business and Social Sciences*, *13*(13), 99–110.

Copyright: © 2023 The Author(s)

Published by Human Resource Management Academic Research Society (www.hrmars.com)

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licences/by/4.0/legalcode

Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3), 2023, Pg. 99 - 110

http://hrmars.com/index.php/pages/detail/IJARBSS

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at http://hrmars.com/index.php/pages/detail/publication-ethics





www.hrmars.com

An Insight of Online Learning and Life Satisfaction: A Case Study of Kolej Universiti Poly-Tech Mara (KUPTM)

Raja Rosemawati binti Raja Abdullah¹, Che Nur Amalina S. binti Che Zainal², Shazni binti Bahari³, Norfarahin bintiAmat @ Adnin⁴, Mohd Asyraf Abdul Rahman⁵

^{1,3,4,5}Universiti Poly-Tech Malaysia, Malaysia, ¹International University of Malaya-Wales (IUMW), Kuala Lumpur, Malaysia

Corresponding Author's Email: rosemawati@kuptm.edu.my

Abstract

The development of the internet especially when the pandemic hits the world affects the teaching and learning. While online learning has been adapted by universities since the early 1990s, higher education institutions are forced to use technology in teaching and learning as a result of the pandemic. Online learning affects the students physically and mentally by looking at issues that arise following the full adoption of technology in education. With that being said, this paper aims to understand the effects of online learning on students' life satisfaction. The study uses a cross-sectional method which is to survey 319 students of Kolej Universiti Poly-Tech MARA (KUPTM) Kuala Lumpur. The result of this study indicates the students accept online learning, however, it too affects the students' overall emotion and life satisfaction. The students feel that learning can be unfulfilling and stressful in comparison with traditional face-to-face classes. It can be concluded that the university students are not ready to accept online learning though it can provide good user experience and changes to the teaching and learning process in this 21st century. The study recommended future research to study proper methods that can be used to ensure the students are satisfied with online learning and life.

Keywords: Online Learning, Life Satisfaction, Private Learning Institution

Introduction

Prior to 2020, as part of digitization, the idea of online education existed; nevertheless, it wasn't until 2020 that the idea really took off throughout educational institutions. The development of the ICT industry has given rise to the new definition of online learning known as "e-learning," which makes technological literacy as one of the most fundamental skills (Moore et al., 2011). The development of online learning during COVID-19 has been significant, as many educational institutions around the world had to abruptly shift from traditional in-person instruction to online instruction to ensure continuity of education during the pandemic. In Malaysia, the government mandated the implementation of online learning

Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS

for all educational institutions in 2020 to ensure continued education for students which applies entirely online teaching solutions for instruction that would normally be delivered via face-to-face or blended learning mode.

During this emergency remote teaching period, learning environments were typically chaotic as teachers hurriedly moved their course materials online and students were compelled to switch to online learning as well (Schultz & DeMers, 2020). This sudden shift to online learning brought challenges for both educators and students, such as having to go through adapting to new technologies, lack of access to reliable internet and up-to-date devices, and challenges in maintaining engagement and motivation. Students and higher education institutions encountered several difficulties connected to the future during that trying time of lockdown. Due to a shortage of computers and internet access in rural locations, some students were unable to participate in online classes. A sizable percentage of those who had the good fortune to take classes concurred that the university curriculum had declined in quality and that they had no access to training programmes that would adequately prepare them for the future (Hirvath, 2022).

However, it also created opportunities for innovative approaches to teaching and learning, such as the use of various online platforms and tools for collaboration and interaction, personalised learning experiences, and increased flexibility and accessibility. A reimagined education can be developed using a variety of resources and technologies, and this process will eventually lead to the development of new models that satisfy the needs of the entire society. Online learning will become increasingly accessible, data- and results-driven, and accountable as the new "normal" for some schools (DeVaney et al., 2011). The pandemic has also highlighted the need for more equitable access to technology and resources for education, as well as the importance of digital literacy and skills for both educators and students" (Ali & Yasin, 2020; Cheung & Slavin, 2020; Hodges et al., 2020; Khechine et al., 2021).

University students are a unique social group with active lifestyle patterns based on contacts and relationships, physical activity and academic pursuits, travel and social gatherings. Young individuals, notably university students, were greatly affected by these situations, which frequently resulted in a more lonely, passive and possibly stressful lifestyle. Every shift raises new concerns in the field. Examining the current level of students' wellbeing is crucial as the COVID-19 pandemic enters its third year and moves closer to the endemic phase in order to better prepare for the return to normalcy. As we prepare to teach in a post-pandemic era, there is an obvious need for research to be done to demonstrate how effective online learning is. This too may allow educators to design their courses to make it a useful alternative in the present. Therefore, the aim of this study is to explore and justify the relationship between the online learning experience and students' life satisfaction in Kolej Universiti Poly-Tech MARA (KUPTM).

Literature Review

The purpose of this literature review is to gain insight into the relationship between online learning and life satisfaction, with a focus on the case of Kolej Universiti Poly-Tech MARA (KUPTM). The COVID-19 pandemic has led to a rapid increase in the use of online learning as a mean of continuing education, and the importance of understanding the impact of this shift on students' overall life satisfaction. The review will explore the relevant literature on the topic, including history of online learning in Malaysia, studies on the effectiveness of online learning, factors influencing students' life satisfaction, and the relationship between online

Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS

learning and life satisfaction. Additionally, the review will examine the unique case of KUPTM and its implementation of online learning, having a focus on how it has impacted students' overall life satisfaction. Through this literature review, it is hoped to provide better understanding of the relationship between online learning and life satisfaction and provides insights and recommendations for educators and policymakers to improve students' educational experience and overall well-being.

History of Online Learning in Malaysia

Online learning in Malaysia started before the pandemic hit the world. It was started and used by higher learning institutions in the late 1990s (Hussin et al., 2009). In Malaysia, online learning is divided into three namely synchronous learning, asynchronous learning and hybrid learning environment (Perveen, 2016). Demand for online learning increased day by day with technological advancements offered by companies and internet connectivity that connected audiences globally. Moreover, online learning provides flexibility in terms of time to the learners (Azhari & Ming, 2015).

However, online learning in Malaysia has been in existence since the early 2000s, but it gained significant momentum in 2020 due to the COVID-19 pandemic. In 2002, the Malaysian government launched the Smart School initiative, which aimed to introduce technology in teaching and learning. In 2011, the Malaysian government established the Malaysian MOOC (Massive Open Online Course) initiative to provide free online courses to the public. In 2015, Malaysia launched its own online learning platform, the Malaysia MOOC (Massive Open Online Course) platform, which offered courses from various universities and institutions. In 2020, as a result of the COVID-19 pandemic, the Malaysian government mandated the implementation of online learning for all educational institutions to ensure continued education for students (Ali & Yasin, 2020; Khambali et al., 2018; Sabudin et al., 2018; Wong et al., 2007).

University Malaya (UM) was the first university to integrate a learning management system back in 1998. A year later, the integration of the learning management system was followed by Multimedia University (MMU), International Medical University (IMU) and Universiti Tun Abdul Razak (UNITAR) in 1999. An e-learning course started to be offered by Open University Malaysia (OUM) in 2001. It was followed by other universities in the early 2000s to adapt to various learning technologies that focus on all levels of education (Abas, 2004).

It can be said that the application of online learning in tertiary education is a common practice that offers flexibility to the learners to gain knowledge. Additionally, it started in the 2000s not as the main communication medium yet, but as an aid to support the learning process.

Development of Online Learning during Covid-19

E-learning or online learning is defined as the use of online platform technologies and the Internet to encourage students and provide more access to online services and resources (Ehlers & Pawlowski, 2006). The usage of technology raises the educational standard of a university (Cattelino et al., 2021). The effectiveness of online learning can be as effective as conventional face-to-face classroom teaching (Lawton, 2019; Otsuka et al., 2020; Williamson, Eynon & Potter, 2020). It can be seen that the combination of technology and conventional classroom learning provides opportunities for higher learning institutions to adapt to the changes of method in teaching and learning.

Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS

Prior to the COVID-19 the government instructed the universities and colleges in Malaysia to shutdown physical classes back on 1st April 2020, only a few educational institutions used online or blended learning methods. Slowly, more institutions; schools, universities, and education ministries began to embrace the use of technology in teaching and delivering. Educators, professionals and learners' education changes overnight due to the pandemic (Langford & Damsa 2020; Sangster, Stoner & Flood 2020). The pandemic therefore gives no room for institutional education to reject technology but to embrace the experience for learners and educators.

In recent years, the stable development of online learning (Mulder & Janssen, 2013) has also inspired universities and teachers to use a variety of online learning techniques, such as Learning Management Systems (LMS), Internet-based technology for learning, Information, Communication and Technology (ICT), and Social Network-based Learning or mobile learning (Liao et al., 2019; Eksail & Afari, 2020; Huang et al., 2020), to assist students in learning on their own and developing problem-solving skills, and then to enhance the efficiency of traditional classroom education (Liu et al., 2010; Tian et al., 2014).

Online Learning and Life Satisfaction

Having a good mind and satisfaction with online learning is extremely important especially during the pandemic. Life satisfaction is overall the subjective well-being on how one experiences their life. The well-being among others are evaluation of life satisfaction (the cognitive component) and emotional characteristics (pleasant/unpleasant feeling) Diener et al., (1985) as cited in (Ningtyas et al., 2018).

Life satisfaction differs from individual to one another. The positive feelings by an individual provide less stress and lead to happiness in life. The happy feelings experienced during a learning lesson are the positive feelings experienced in the learning process. Hence, it is important to create a healthy and supportive learning environment in ensuring better adoption of technology (Ke & Kwak, 2013). During the pandemic the physical contact between educators and students was limited hence required high intention to look at the adaptation and the student's preparation physically and mentally (Adedoyin & Soykan 2020).

Students are pushing themselves hard to accept the changes of classroom delivery. The challenges caused students to face negative feelings despite mental stress and lead to not being happy with life. Among negative aspects are depression, sadness, stress and others (Ghafar et al., 2021).

Online learning moreover has been associated with both positive and negative effects on students' life satisfaction. On the other hand, online learning provides students with greater flexibility and convenience, which can lead to increased satisfaction with their educational experience. In a study by Pimmer et al (2016), students who participated in online learning reported higher levels of satisfaction with their course than those who participated in traditional face-to-face learning. Similarly, a study by Al-Qahtani (2017) found that students who participated in online learning reported higher levels of satisfaction with their educational experience than those who did not.

However, there are also potential negative effects of online learning on students' life satisfaction. For example, the lack of face-to-face interaction with peers and instructors can lead to feelings of isolation and disconnection, which can negatively impact students' overall well-being. In a study by Anitha and Vijayakumar (2020), students who participated in online learning reported higher levels of stress and anxiety than those who participated in traditional face-to-face learning.

Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS

Methodology

This cross-sectional research used questionnaires to collect the data. Data was collected from 319 Kolej Universiti Poly-Tech MARA (KUPTM) respondents with different backgrounds in the programs and semesters. The instrument used in the questionnaire is divided into three main sections: i) Demographic, ii) 'Students' Perception on Online Learning (SPOL)' and iii) the English version of 'Satisfaction with Life Scale (SWLS)'. SWLS was adapted from Diener (1984); the Likert Scale measurement was changed from seven to five (Extremely Dissatisfied (1), Dissatisfied (2), Neutral (3), Satisfied (4) and Extremely Satisfied (5)) while the contents of the questionnaire were maintained.

At the time of the data collection, KUPTM was still undergoing online learning. Taking advantage of this situation, the data collection was conducted via an online platform, Google Form. Respondents took approximately five to ten minutes to complete the survey. Statistical Package for Social Sciences (SPSS) version 28.0 is used to analyse the data collected. Data then tabulated and all categorical attributes were expressed as frequencies and percentages while mean and standard deviation was used to calculate for continuous attributes. Cronbach's alpha correlation coefficient was measured to ensure the reliability of this research.

SPOL questionnaire has a high reliability test, with a strong Cronbach's Alpha index value at 0.96 (M = 55.8, SD = 9.39). All items in this questionnaire have strong scores too, as they passed over .95, with the lowest score of .953 for item 7 (M = 3.96, SD = .83) and 12 (M = 3.98, SD = .84). A SWLS reliability test was conducted to ensure that this questionnaire is as reliable as the original version. The questionnaire has a strong Cronbach's Alpha index value with 0.82 (M = 16.65, SD = 3.60), comparable with other research (Lakioti et al., 2017; Maroufizadeh et al., 2016; Yun et al., 2019). All items in this questionnaire have good scores in the reliability test, with most scores more than .70. The lowest score is 0.76 for item 2 (M = 3.34, SD = 0.95) and item 3. However, all scores are acceptable and reliable.

Findings

Background Information

From the question distributed, 319 respondents who took part in this research came from various backgrounds. The number of students per semester varies according to the intake of the students per semester. 8 (2.51%) out of the 319 are students from semester 1, 72 (22.57%) semester 2, 110 (34.48%) semester 3, 7 (2.19) semester 4, 21 (6.58%) semester 5, 90 (28.21%) semester 6, 9 (2.82%) semester 7 and 2 (0.63) are those in semester 8 and above, as illustrated in Table 1.

Table 1
Respondent's Background Information

Semester	n	%
1	8	2.51
2	72	22.57
3	110	34.48
4	7	2.19
5	21	6.58
6	90	28.21
7	9	2.82
Other	2	0.63

Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS

Students' Perception on Online Learning

The findings in respondents' perception on online learning (M= 4.36, SD = .82). Figure 1 showed that on average, each item in the questionnaire scored more than 3.8, equal to 'Agree' to the statement. From the figure, it was clear that they did have an optimist view on this condition.

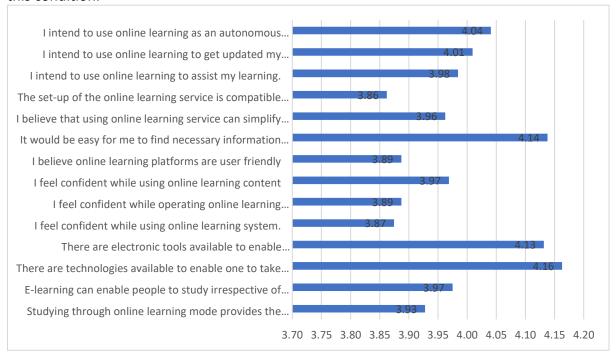


Figure 1 Perception on Online Learning

Further analysis found that 166 respondents (52%) strongly agree (M = 4.5, SD = 0.38), 117 (36.7%) agree (M = 3.6, SD = 0.24), 21 (6.6%) neutral (M = 3, SD = NA), 14 (4.4%) disagree (M = 2.7, SD = 0.27) and 1 (3%) disagree (M = 1.6, SD = NA) with the statements. From these findings, the results of 'Strongly Agree' and 'Agree' were combined to represent Positive Perception and 'Strongly Disagree' and 'Disagree' were combined to represent Negative Perception, while Neutral remains as Neutral. Figure 2 showed the respondents' level of positivity on online learning. Interestingly, 88.7% (n = 283) view online learning positively, 6.6% (n = 21) have neutral perception and only 4.7% (n = 15) saw online learning negatively.

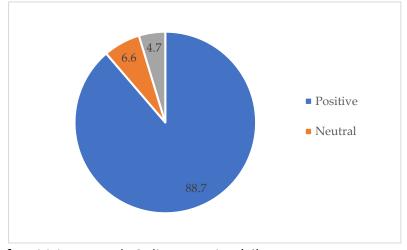


Figure 2 Level of Positivity towards Online Learning (%)

Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS

Level of Satisfaction with Online Learning

The results in Figure 3 indicate the level of satisfaction with online learning. Out of 319 respondents, 43.3% are satisfied with online learning (M = 17.93, SD = 1.49), 12.5% extremely satisfied (M = 23.13, SD = 1.51), 19.1% neutral (M = 1.04, SD = 1.13), dissatisfied 23.5% (M = 9.54, SD = 0.78), and 1.6% extremely dissatisfied with their online learning life.

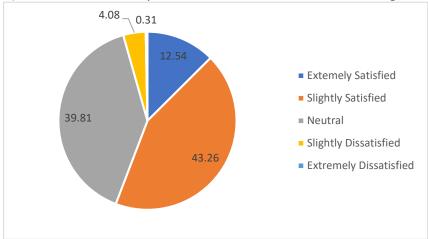


Figure 3 Level of Satisfaction with Online Learning (%)

Relationship between Students' Perspective and Their Life Satisfaction on Online Learning

A Pearson correlation coefficient was computed to assess the relationship between the participant perception during online class with their level of life satisfaction. There was a positive correlation between the two variables, r = 0.492, n = 319, p = .000, as portrayed in Figure 4. Although the relationship is considered weak, the finding still proved that having a positive perception will influence one's life satisfaction.

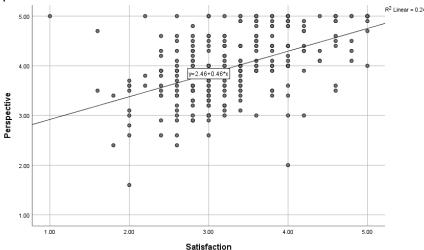


Figure 4 Correlation between Students' Perception and Their Life Satisfaction towards Online Learning

Discussion

This study examined the relationship between perception on online learning and their life satisfaction in a sample of students from KUPTM during the COVID-19 pandemic. When the pandemic hit and everything went online, many people were worried about their compatibility with this situation. Since all classes changed to online, this situation had a significant impact on the students. Fortunately, students in tertiary education may not be

Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS

struggling much as they were exposed to partial online classes even before the pandemic (Lim, 2022). Thus, it was expected for the finding to be positive. This is true in the case of KUPTM. Students experienced online learning as the institution implemented the usage of learning management system (LMS). Instructors shared teaching and learning materials, assessments and conducted classes online by utilising this learning portal. As a result, the respondents were positively adapted to the online classes, resulting in a positive perception of the condition. This is consistent with findings such as in (Almahasees et al., 2021; Bączek et al., 2021).

During online learning, students were still able to communicate with instructors and peers. According to Lee et al (2011), the learning experience is optimised by proper support from the instructor, peers and institution. A great support system will positively influence the level of satisfaction, even during online learning. In addition, students can still manage, control and initiate their own learning initiative, with the assistance of online learning tools, and this is known as agency (Dziuban et al., 2015). Participants agreed that the e-learning platform, technologies and electronic tools greatly enabled them to communicate as well as access learning materials easily, leading them to conduct their own independent learning. Online learning allows the students to learn autonomously and up-to-date with their lesson, even though they are not meeting the lecturer face-to-face since instructors commonly upload their teaching notes and other learning materials to the e-learning platform (Lim, 2020).

In 2021, the Ministry of Education conducted a survey to look at school students' condition during online class. The survey found that over 50% of the students were unhappy and stressed out ("Over 50% of Students Say Online Learning Stressful," 2021), which affected their life satisfaction. Similar findings were also found in other research, as they found that online learning can be unfulfilling and stressful in comparison with traditional face-to-face classes (Einhorn, 2021; Fawaz & Samaha, 2021; Mheidly et al., 2020). However, this current research discovered a contradictory result, as most participants were satisfied with their online learning life, of over 50%.

This study found that positive perceptions will influence life satisfaction. The participants had a positive perception on online learning. They were able to cope and utilise online tools and materials effectively in their learning. This greatly affected their satisfaction in life. The finding is similar to (Abdullah et al., 2021; Elshami et. al., 2021 Shahariah & Najdah 2021; She et al., 2021). Overall, this study provided an important insight regarding students' perceptions and their satisfaction with life during online learning.

Conclusion

In this study, we looked at how KUPTM students' perceptions of stress related to the COVID-19 emergency and their life satisfaction related to online learning. In comparison to traditional learning, we discovered that digital learning provides more time flexibility and allows students to obtain electronic educational resources at a lower cost. Furthermore, obtaining a good score and succeeding is interpreted as more important than surviving the pandemic and recovering from the illness itself. Finally, a positive attitude promotes life satisfaction. The findings of this study have some practical implications. While all universities have chosen to continue teaching, the pandemic has also highlighted the critical role that education plays in our higher education institutions. Universities must urgently revalue the people who work in them. Academic institutions must immediately take mental health and workload into consideration not only for students but instructors as well by implementing

Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS

mental health action plans and adapting working conditions. There is a need to reduce workload and invest in teaching and learning, mentoring, and psychological support. The pandemic crisis demonstrated the adaptability and facilities that universities can provide. However, it also demonstrated the imbalances that not only exist, but have been impacted by the pandemic. It is critical to proceed and reconsider. Moving forward and reconsidering how to improve the higher education system's capacity to carry out its mission in the future especially when involving technologies are critical.

References

- Abas, Z. A. (2004). "E-Readiness among Enablers of E-Learning: Impact on Higher Education in Malaysia." In SEAIR 2005 Indonesia Conference Proceeding: Higher Education Degrees: A New Global Currency? Universitas Widyatama, September 14-16, 2005, 1–8. Open University Malaysia.
- Abdullah, M. H. T., Roslim, N., & Salleh, M. I. M. (2022). Open and distance learning during the Covid-19 pandemic: University students' learning experiences and academic achievements. *Asian Journal of University Education*, 18(1), 106–117. https://doi.org/10.24191/ajue.v18i1.17177Adedoyin, O. B., and E. Soykan. 2020. "Covid-19 Pandemic and Online Learning: The Challenges and Opportunities." *Interactive Learning Environments*. 1–13. https://doi.org/10.1080/10494820.2020.1813180.
- Ali, R., & Yasin, S. H. M. (2020). The Impact of COVID-19 on Education in Malaysia. *Journal of Social Sciences and Humanities*, 3(7), 542–551.
- Al-Qahtani, A. A. (2017). Exploring the potential benefits of using online courses in Saudi higher education. *Turkish Online Journal of Educational Technology*, 16(1), 48-57.
- Anitha, R., & Vijayakumar, P. (2020). Online learning and mental health of undergraduate students during COVID-19 pandemic. *Journal of Education and Health Promotion*, 9, 361
- Almahasees, Z., Mohsen, K., & Amin, M. O. (2021). Faculty's and Students' Perceptions of Online Learning During COVID-19. *Frontiers in Education*, 6. https://doi.org/10.3389/feduc.2021.638470
- Azhari F. A., and Ming, L. C. (2015). "Review of E-Learning Practice at the Tertiary Education Level in Malaysia." *Indian Journal of Pharmaceutical Education and Research* 49, no. 4: 248–257. doi:10.5530/ijper.49.4.2.
- Cheung, A. C. K., & Slavin, R. E. (2020). How Methodological Reports Can Improve Education Research: The Case of Distance Learning. *Educational Researcher*, 49(7), 491–498.
- Diener, E. (1984). "Subjective Well-Being." *Psychological Bulletin* 95, no. 3: 542–575. https://psycnet.apa.org/doi/10.1037/0033-2909.95.3.542.
- Ehlers, U.-D., and Pawlowski, J. M. (2006). "Quality in European e-learning: an introduction," in Handbook on Quality and Standardisation in E-Learning, eds U. D. Ehlers and J. M. Pawlowski (Berlin: Springer), 1–13. doi: 10.1007/3-540-32788-6_1
- Einhorn, E. (2021). Remote students are more stressed than their peers in the classroom, study shows. *NBC News*. https://www.nbcnews.com/news/education/remote-students-are-more-stressed-their-peers-classroom-study-shows-n1257632
- Eksail, F. A. A., and Afari, E. (2020). Factors affecting trainee teachers' intention to use technology: a structural equation modeling approach. Educ. Inform. Tech. 25, 2681–2697. doi: 10.1007/s10639-019-10086-2

Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS

- Elshami, W., Taha, M. H., Abuzaid, M., Coumaravelou, S., Sausan, A. K., & Abdalla, M. E. (2021). Satisfaction with online learning in the new normal: perspective of students and faculty at medical and health sciences colleges. *Medical Education Online*, *26*(1). https://doi.org/10.1080/10872981.2021.190090
- Fawaz, M., & Samaha, A. (2021). E-learning: Depression, anxiety, and stress symptomatology among Lebanese university students during COVID-19 quarantine. *Nursing Forum*, 56(1), 52–57. https://doi.org/10.1111/nuf.12521
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The Difference Between Emergency Remote Teaching and Online Learning. *EDUCAUSE Review*, 55(4), 1–12.
- Huang, F., Teo, T., and Zhou, M. (2020). Chinese students' intentions to use Internet-based technology for learning. *Educ. Tech. Rese. Deve.* 68, 575–591. doi: 10.1007/s11423-019-09695-y
- Khambali, K. M., Hamzah, M., & Khalid, F. (2018). The Malaysian Online Learning Landscape: Challenges and Opportunities. *In Proceedings of the 2018 7th International Conference on Educational and Information Technology (ICEIT 2018)* (pp. 17–21). Association for Computing Machinery. https://doi.org/10.1145/3201579.3201582
- Ke, F., and Kwak, D. (2013). "Online Learning Across Ethnicity and Age: A Study on Learning Interaction Participation, Perception, and Learning Satisfaction." Computers & Education 61. 43–51. https://doi.org/10.1016/j.compedu.2012.09.003.
- Khechine, H., Lakhal, S., & Esposito, A. (2021). Online Learning in the Time of COVID-19: A Systematic Literature Review. *International Journal of Information and Education Technology*, 11(2), 69–75.
- Lakioti, A., Pezirkianidis, C., Karakasidou, E., & Stalikas, A. (2017). Reliability and validity of the Satisfaction with Life Scale (SWLS) in a Greek sample counselling and psychotherapy in Greece view project SUCCESS EU: Strategies to utilize and cultivate positive characteristics (Positive Career Counselling for adolescent students) view project. *The International Journal of Humanities & Social Studies*, 5(2), 120–127. www.theijhss.com
- Langford, M., and Damsa, C. (2020). Online Teaching in the Time of COVID-19: Academic Teachers' Experience in Norway. Oslo: Centre for Experiential Legal Learning (CELL) University of Oslo.
- Lawton, G. (2019). "Why are students at university so stressed?" The Guardian. Last modified May 31, 2019. https://www.theguardian.com/education/2019/may/31/why-are-students-at-university-so-stressed.
- Liao, Y. W., Huang, Y. M., Huang, S. H., Chen, H. C., and Wei, C. W. (2019). Exploring the switching intention of learners on social network-based learning platforms: a perspective of the push–pull–mooring model. *EURASIA J. Math. Sci. Technol. Educ.* 15, 1–10. doi: 10.29333/ejmste/108483
- Lim, I. (2022). Reality for Malaysia's university students: Online learning challenges, stress, workload; possible solutions for fully digital future until Dec. *Malay Mail*.
- Liu, Y., Li, H., and Carlsson, C. (2010). Factors driving the adoption of m-learning: an empirical study. Comput. Educ. 55, 1211–1219. doi: 10.1016/j.compedu.2010.05.018
- Maroufizadeh, S., Ghaheri, A., Omani Samani, R., & Ezabadi, Z. (2016). Psychometric properties of the satisfaction with life scale (SWLS) in Iranian infertile women. *International Journal of Reproductive Bio Medicine*, 14(1), 57–62. http://internal.psychology.

- Vol. 13, No. 13, Special Issue: International Virtual Conference on Islamic Studies, Education, Social Sciences, and Laws 3 (ICO-ISOL 3). 2023, E-ISSN: 2222-6990 © 2023 HRMARS
- Mheidly, N., Fares, M. Y., & Fares, J. (2020). Coping With Stress and Burnout Associated With Telecommunication and Online Learning. *Frontiers in Public Health*, 8. https://doi.org/10.3389/fpubh.2020.574969
- Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). E-learning, online learning, and distance learning environments: Are they the same? Internet Higher Educ, 14(2), 129–135.
- Mulder, F., and Janssen, B. (2013). Opening up education. Open Educ. Resour. Trend Rep. 36–42. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.429.2450&rep=rep1&type=pdf
- Over 50% of students say online learning stressful. (2021). *Free Malaysia Today*. https://www.freemalaysiatoday.com/category/nation/2021/10/05/over-50-of-students-say-online-learning-stressful/
- Perveen, A. (2016). "Synchronous and Asynchronous E-Language Learning: A Case Study of Virtual University of Pakistan." *Open Praxis* 8, no. 1: 21–39.
- Pimmer, C., Mateescu, M., Grohbiel, U., & Junger, J. (2016). Mobile and ubiquitous learning in higher education settings. A systematic review of empirical studies. *Computers in Human Behavior*, 63, 490-501.
- Sabudin, M., Mohamed, N., & Sahari@Ashaari, N. (2018). Malaysia MOOCs: Perception of University Students towards Their Learning Experience. *In Proceedings of the 2018 7th International Conference on Educational and Information Technology* (ICEIT 2018) (pp. 76–80). Association for Computing Machinery. https://doi.org/10.1145/3201579.3201595
- Sangster, A., Stoner, G., and Flood, B. (2020). "Insights into Accounting Education in a COVID-19 World." *Accounting Education* 29, no. 5: 431–562. https://doi.org/10.1080/09639284.2020.1808487.
- Schultz, R. B., & DeMers, M. N. (2020). Transitioning from emergency remote learning to deep online learning experiences in Geography education. Journal of Geography, 119(5), 142–146.
- Shahariah, H., & Najdah, A. A. (2021). Covid 19 pandemic: impact on students' acceptance towards online learning. *International Journal of Business, Economics and Law*, 24(5).
- She, L., Ma, L., Jan, A., Nia, S. H., & Rahmatpour, P. (2021). Online learning satisfaction during Covid-19 pandemic among Chinese university students: The serial mediation model. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.743936
- Tian, Y., Xiao, W., Li, C., Liu, Y., Qin, M., Wu, Y., et al. (2014). Virtual microscopy system at Chinese medical university: an assisted teaching platform for promoting active learning and problem-solving skills. BMC Med. Educ. 14:74. doi: 10.1186/1472-6920-14-74
- Williamson, B., Eynon, R., and Potter, J. (2020). "Pandemic Politics, Pedagogies and Practices: Digital Technologies and Distance Education during the Coronavirus Emergency." *Learning, Media and Technology* 45, no. 2: 107–114. https://doi.org/10.1080/17439884.2020.1761641.
- Wong, S. L., Lee, T. H., & Lim, W. M. (2007). The Smart School Flagship Project: A National-Level Initiative in Educational Technology. *Educational Technology & Society*, 10(2), 113–127.
- Yun, Y. H., Rhee, Y. E., Kang, E., & Sim, J. A. (2019). The satisfaction with life scale and the subjective well-being inventory in the general Korean population: Psychometric properties and normative data. *International Journal of Environmental Research and Public Health*, 16(9). https://doi.org/10.3390/ijerph16091538