

Motivating Factors Influencing Online Learning Among University Students: A Study of a Private University in Malaysia

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Abstract

The purpose of this study is to examine the motivating factors that influence online learning among university students during the Covid-19 pandemic era. Due to sudden transformation from traditional face-to-face learning approach to remotely digital learning, some present studies revealed that students' motivation in online learning is probably the most important factor that educators can target to improve learning. There are four chosen independent variables in this study which are student's participation, role of instructors, online learning environment and technical infrastructure affect online learning. This research uses a survey method where 150 questionnaires are distributed online. Then, the collected data are tabulated to analyze the findings and results.

Keywords: online learning, student's participation, role of instructors, learning environment, and technical infrastructure

1. Introduction

The students' population around the world was affected by the closure of schools and educational institutions in 150 countries due to the rapid global spread of the Covid 19 pandemic (Sahu, 2020) and in this context, Malaysia is no exception. The chaotic circumstance worsened when the government declared that all universities should switch swiftly to online delivery model from traditional face-to-face teaching (Hashim, Kadir, Mansor & Azudin, 2020). The pandemic has a significant effect on the social, cultural, and economic life of higher education students, including their education (Aristovnik, Keržič, Ravšelj, Tomažević & Umek, 2020). Over 5 million school students and 1.2 million university students in Malaysia have access to online education during the COVID-19 pandemic (Selvanathan, Hussin & Azazi, 2020).

Motivation has a direct impact on learners' motivation to complete a course (Dubey, Piroška & Gautam, 2019). Students' abilities in traditional education might not be adequate to maintain high motivation in online learning. The research states that online learning offer students some versatility in terms of time, location, and pace. Past studies have found that lack of time and lack of motivation are the main factors associated with learner attrition in online courses (Selvi, 2010; Dubey, Piroška & Gautam, 2019). Fostering motivation to learn is one of the key principles for effective instruction. Moreover, researchers can expect students who are more motivated to learn to be less likely to drop out of online classes. This highlights the problem of how to improve the design of online classes in order to make the students to be motivated in learning (Kim & Frick, 2011). Besides, Tan (2020) explained that there must be some improvements in the conduct of online learning by collecting much information that relates to students' online learning. This is due to the changes in teaching and learning techniques.

While many studies have been postulated that role of instructors, online learning environment and technical infrastructure are the crucial motivating factors that can shape the student's experience in online learning, only few studies explain student's participation as an important motivating factor in online learning (Gedera, Williams & Wright, 2015). Therefore, this gives

an avenue for the current study to include student's participation in online learning which can influence student's success in online learning. The aim of this study is to investigate the motivating factors that can affect student's online learning through student's participation, role of instructors, online learning environment and online learning.

2. Literature Review

2.1 Student's Participation

The role of the student in learning is crucial in shaping motivation in online courses, and it goes beyond the conventional concept of the learner as a client or a receiver of knowledge. Students are critical members of the work force when it comes to inspiring motivation in school. Learners who are intrinsically motivated are more likely to accept learning course material without the need for external incentives or encouragement. Externally motivated students are more likely to perform poor in academic than internally motivated students. Thus, the students in online learning classes have higher intrinsic motivation compare to the students in traditional classrooms (Gedera, Williams & Wright, 2015). It has been argued that student participation is one part of intrinsic component in learning. Encourage of participation is a key challenge of online learning, as it is characterized as learning and teaching facilitated online across network technologies. Furthermore, it has been also proposed that participation has a positive effect on learner motivation. Several scholars appear to believe that online participation is a major element for learning, despite their differing perspectives about how online participation should be constructed (Hrastinski, 2008). Hence, students' participation in online learning is said to have a substantial effect on their motivation. The attractive format and content of the online course, the ability of interaction with other peers can also influence learner's participation. For example, the Learning Management Systems (LMS) gives an opportunity for the students to participate by creating an adaptive learning experience and platform for students (Lim, Ab Jalil, Maa'rof, & Saad, 2020). According to Zhao & Mei (2016), student's enthusiasm for experiencing and studying new technical distance integrated learning was linked to situational interest. Consequently, the student's own desire to learn can increase the participation of students in online learning. In line with that Wang, Shannon, & Ross (2013) posits that the students' approach on their online classes should be the same as their traditional classes. There must be some discipline in scheduling and allocating specific time for their online learning.

H1: There is a relationship between student's participation and online learning

2.2 Role of Instructors

Instructors play a significant role in fostering a learning atmosphere for students. Dhillal (2017) opined that instructors are critical in increasing students' motivation. Teachers motivate their learners by giving them constructive feedback (Johnson, 2017). Feedback is perceived as the most important aspect of any type of communication particularly in learning. Instructors must be very conscious of getting good feedback when planning and implementing learning process. Since there is no face-to-face contact in online learning, feedback is extremely significant (Yengin, Karahoca, Karahoca & Ozcinar, 2010). Students

gain confidence of their own learning and a feeling of security in their abilities when they receive feedback.

Developing students' online learning motivation can be accomplished in a variety of ways. Providing written or verbal praise, identifying fewer mistakes, remembering students' strengths, and concentrating on what is good about their work are some of the most common techniques. When instructors appreciate students' efforts in completing assignments, they will be more inspired to learn (Johnson, 2017). Instant feedback and interactions with classmates and the instructor tend to improve students' motivation in online classes. Interaction with teachers daily resulted in higher levels of students' learning and overall satisfaction with the course. The social interaction with peers and instructors in online learning can ameliorate motivation of students (Gedera, Williams & Wright, 2015). Besides, students' learning motivation is also influenced by their teachers' level of interest in their subjects. Instructors who are passionate about their topics or assignments have positive feelings, passion and interest in their approach in teaching. This will make the students to pay attention to what their teachers say and do in class. An instructor who shows interest in and enthusiasm for a topic will pass on those positive feelings to students, enhancing their motivation to learn the subject (Selvi, 2010). Positive and regular feedbacks, interactions between teachers and students, and teacher engagement and enjoyment are all linked to students' motivation in online learning experiences. However, in the same study, the researcher also found that giving instruction via online approach making the student teacher's relationship becoming less personal which might not motivate students to learn (El-Seoud, Taj-Eddin, Seddiek, El-Khouly, & Nosseir, 2014). This might affect the quality of the whole learning process where educators are not able to monitor student's degree of concentration behind the camera just like a physical class. It is undeniable that instructors may have difficulties in embarking the new social roles in teaching online, thus familiarizing with the online learning environment is essential (Wang, Shannon, & Ross, 2013). This can be done by designing course activities where the students can actively participate in discussions, hence exploring all options of creativity (Wang, Shannon, & Ross, 2013; Lim, Ab Jalil, Maa'rof, & Saad, 2020).

H2: There is a relationship between role of instructors and online learning

2.3 Online Learning Environment

The online learning environments are built on the flexibility, deliverability, freedom, and learning independence. According to many surveys, the convenience and flexibility of online learning have a significant impact on the student's motivation for online learning (Kim & Frick, 2011). The online learning is presenting greater flexibility for students who are finding difficulty in joining the class physically by removing geographical limitations in higher education (Kocdar, Karadeniz, Bozkurt & Buyuk, 2018) listed by more than half of undergraduate and graduate learners in response to a question about what motivates them to attend online classes (Jacobi, 2018). It is obvious that in an online learning environment, flexibility and convenience of learning are essential characteristics that promote students' motivation. The findings of the study show that these attributes of an online learning

environment can boost students' motivation to learn in an online course (Selvi, 2010).

Self-paced learning allows students to adjust to their disparate learning styles. Some students learn quickly, while others take more time. It eliminates the time constraints that occur in traditional learning. There is no obligation to finish the tasks and learn at the same pace as the rest of the class. Flexible learning allows the students to take the time to digest knowledge (Ferriman, 2020) and they can revise the content on their own. Students can view online lectures at their comfort. Furthermore, the convenience of time and place of studying, learner liked the ability to stop, reverse, and review lectures (Jacobi, 2018). The research showed that self-paced learning boosted learner satisfaction and decreased stress, resulting in increased academic performance for everyone involved (Tamm, 2020). Self-paced learning can also improve retention, according to a study published in the Journal of Memory and Language (Subramanian, 2020).

H3: There is a relationship between online learning environment and online learning

2.4 Technical Infrastructure

Brown (2017) claimed that any learner interested in enrolling in an online learning course must obtain a range of equipment involving a laptop, smartphone, and a strong Wi-Fi connection. There is completely no physical interaction between learners and lecturers since learning is given over the Internet. Therefore, enough Internet access is needed for online learning to be effective (Aboagye, Yawson, & Appiah, 2020). Technology makes an environment that supports cooperation, teamwork, and energetic, hands on learning. Technology rich classrooms supported learner communicating and developed an understanding of self-motivated learning compared to the students in traditional classrooms (Wiekling, 2016).

Not all studies conducted has yielded the same findings with regards to technology and learning motivation. Aboagye, Yawson, & Appiah, (2020) study revealed that the most crucial obstacle learners face in an online course is accessibility. As a result, when a technological problem arises, negative experiences of online learning will emerge. The technology issues offer barriers to learner access to course materials, activities and assignments. This would likely be very discouraging for both teachers and students. Besides, students may face some difficulties in their online learning due to technical problems and communication breakdowns (Kim & Frick, 2011). They believed that unprecedented challenges in technology like electricity issue, bad signals, delay voice and blur pictures really give negative influences on their faith and ability to comprehend the delivered learning materials. This situation was revealed as a demotivating factor and students are more likely to drop out of online courses (Dubey, Pirooska & Gautam, 2019).

Furthermore, the real challenge that further obliterate student's motivation via e-learning is the accessibility and technological devices readiness in Malaysia. Some of the students have poor internet connectivity in their resident area facing difficulties to connect to lecture sessions which makes them frustrated to continue attending the online learning sessions (Lim, 2020). Disparity of Internet speeds between various regions is felt in many situations.

People who live in urban areas often have faster Internet access than those who live in less developed areas (Jalli, 2020). This has shown that the readiness of the government to fully implement e-learning in higher education in Malaysia has not reached the acceptable level.

H4: There is a relationship between the technical infrastructure and online learning

2.5 Online Learning

Online learning has undergone major transformation and related technologies has created online teaching and learning into university routines as a viable option. Bates states that term online learning and e-learning are sometimes used interchangeably, but he distinguishes where e-learning can include any form of technology whereas online learning refers precisely to using the internet and the web (Hartnett, George & Dron, 2011). Distance learning by far is considered one of the many methods that is posited best and has many benefits, particularly for higher educational institutions. Online education is deemed cost effective since the learners do not have to travel. This is supported by Sadeghi (2019) where students do not have to travel in packed buses or local trains as commuting is very challenging. It is also cost-effective in a way that it provides learning opportunities to many students without the need for many buildings (Arkorful, & Abaidoo, 2014). Apart from the epidemiological benefits during COVID-19 pandemic, other benefits like access to resources regardless of location, reduction of costs and air pollution as the need of travelling to learn is eliminated. These are some worth mentioning advantages of learning online (Baczek, Zaganczyk-Baczek, Szpringer, Jaroszynski, & Wozakowska-Kaplon, (2021). Thus, online education is accessible flexibly. Every learner has the freedom of selecting the time and place that is most suitable for him or her (Sadeghi, 2019). Without the needs of having lectures session in a physical classroom, the educators can still deliver the materials and knowledge to students with e-learning.

Nevertheless, there are constant worries about the quality of online learning in comparison to a face-to-face learning environment (Adams, Sumintono, Mohamed & Noor, 2018). The learners must adjust themselves to a new environment in virtual classrooms from the traditional classroom, which is a difficult task. With the presence of COVID-19, government has pushed schools, higher education institutions (HEIs) and all kinds of trainings to online learning method to ensure continuous learning. Yet, the accessibility to quality digital or e-learning content remains questionable during the Movement Control Order (MCO) period even though the technology can facilitate migration of face-to-face learning (Chin, 2020). This hurdle becomes apparent as institutions are still in the early preparatory stage or even have not begun developing quality digital teaching materials. This will create a circumstance that the materials might not reach the standard as expected in physical classroom. In addition, online learning can be problematic for the disabled, underprivileged, and marginalized learners who got inadequate assets and accessibility to online learning (Selvanathan, Hussin & Azazi, 2020).

2.6 Theoretical Framework

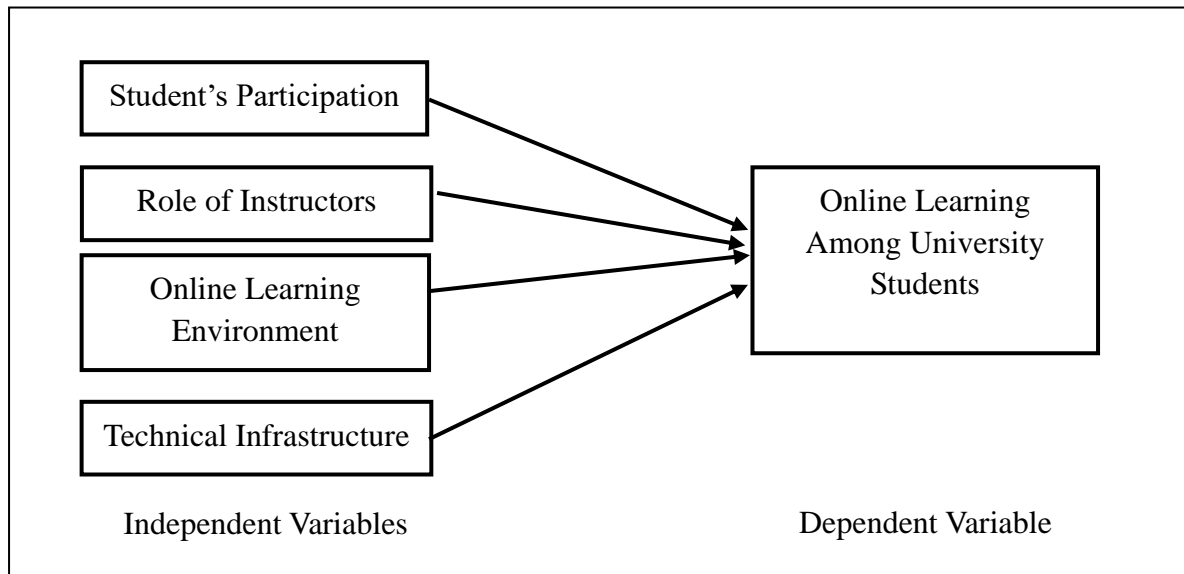


Figure 1. Proposed Theoretical Framework

Based on the previous theoretical model, student’s participation, role of instructors, online learning environment and technical infrastructure are the major factors that affect student’s motivation in online learning (Selvi, 2010; Johnson, 2017). Therefore, this study proposed a theoretical framework to examine the relationship between the four factors that influence student’s motivation in online learning.

3. Results

This study adapted the quantitative approach for designing the data collection. Cross-sectional method will be applied in this descriptive study. Data were collected using an online survey among university students in a private university located in the Klang Valley, Malaysia. In this study, information, data and questionnaires are created in google form which the survey will conduct through online and social media platform due to the Covid-19 pandemic crisis where Malaysia is at the situation of lockdown known as Movement Control Order (MCO). In other words, the implementation of MCO had limit the movement of the people, as all students are told to stay at home to conduct online classes. Therefore, due to the unforeseen circumstanced, the researcher will have some limitation acquiring respondents for the survey. The final study sample consisted 150 students. The collected data from the respondents was analyzed and coded by using the Social Sciences Statistical Package (SPSS) version 27. The data contained no missing data. The descriptive statistics indicated more male respondents accounted for 61.3% of total response compared to female 38.7%. The rating-based of questionnaire were measured on a five-point Likert scale, ranging from (1) strongly disagree to (5) strongly agree. A scale of five points is used to prevent ambiguous or neutral responses, as answers appear to be a mean value when possible (Etikan, Musa & Alkassim, 2016). Measurement instruments have been adopted and adapted from the

previously published journals.

4. Results and Discussion

Table 1. Model Summary^b

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	of Durbin-Watson
1	.888 ^a	.789	.783	.50006	1.826

a. Predictors: (Constant), T_TI, T_SP, T_OLE, T_RO

b. Dependent Variable: T_OL

R² represents the degree to which the data fits the regression model. The rule of thumb on the acceptable value range of R² has been proposed. The acceptable R² rule is 0.75, 0.50 and 0.25, respectively, which are described as significant, moderate, and weak (Henseler et al., 2009). In Table (1), 78.9% of overall variance in DV is explained by IVs. Thus, we can conclude a positive and strong relationship between predictors and dependent variable with the value observed on data collection and rule of thumb. The remaining 21.1% influences online learning is from other variables or factors which are not included in this study. Hence, the proposed model predictability indices the importance of motivation factors that private higher education institutions need to consider in order to influence students' online learning for retention and achieving their learning goals.

Table 2. Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.460	.157		2.932	.004
	T_SP	.697	.060	.738	11.571	.000
	T_RO	.215	.061	.217	3.494	.001
	T_OLE	.002	.065	.002	.026	.980
	T_TI	-.037	.060	-.038	-.614	.540

a. Dependent Variable: T_OL

Based on the results in Table (2) above, this study posits that Student's Participation (T_SP) and Role of Instructor (T_RO) have significantly influence online learning among university students thus confirming the findings of Hrastinski, (2008); (Gedera, Williams & Wright, 2015). (Selvi, 2010). (Dhillia, 2017). The other remaining two hypotheses are rejected. This does not mean that the other variables are not important however less significance for the students' motivation in online learning. It can be elucidated that the success of the students' online learning is related to student's participation. It allows the student greater flexibility to study anywhere and at any time as well as providing an alternative for student to study full-time or part-time as well. When there is strong participation, students are more likely to undertake challenging activities, to be actively engaged, to enjoy and adopt a deep approach to online learning, and exhibit enhanced performance, persistence, and creativity. This posits that, rewarding the behavior of the strong participation of students in the form of digital certificate can boost the positive reinforcement of such behavior. High participation of students in online learning can increase learner motivation and ameliorates retention rates. Thus, student's participation has a great influence on the motivation of participants in online learning.

It is also noted that the role of Instructor is equally essential in increasing students' online learning through motivational support. They need to carefully facilitate the content that compliments the learning in online class. The method of knowledge delivery should include more interactive contents, charts, 3D animation, and many others which allow students to have a view on how some industry processes worked instead of learning the theory on-books. Instructors should encourage the students to participate by providing prompt feedback regularly in order to mitigate the difficulties faced by the students in online learning. This is in line with Johnson (2017) findings that instructors can motivate their students to learn by providing them with positive and frequent feedback. Thus, instructors should be familiarized with deploying technologies effectively and creatively in delivering their online classes. In addition, it is vital to stimulate and sustain student's interaction to actively increase student's participation.

5. Conclusion

Research indicates that motivated learners are more likely to undertake challenging activities, to be actively engaged, to enjoy and adopt a deep approach to learning, and to exhibit enhanced performance, persistence, and creativity. Considering of the current situation, COVID-19 has a huge impact on education and to curb the spread, most learning has shifted to online learning. In a nutshell, this study suggest that student's participation and the role of instructors should be investigated vigorously by the higher education institutions as the motivation factors in online learning. This is necessary as online learning will add value and create convenience to everyone. Alternately, institutions may strategize applying workshops or training sessions to increase the acceptance and familiarization of instructors and students of the online learning platform. Both instructor and students will progressively and increasingly become interconnected and interdependent the Fourth Industrial Revolutions that intensifies technology to another level. Comprehending the above-mentioned relationship would able to provide insights to assist the instructional designer, policy makers, the

instructor/ educators and the institutions with useful information to motivate the students in online learning and successful transition for instructors by tailoring appropriate policies and practices. In addition, it also helps to promote Malaysia's education system ranking in the world which can attract the international students' enrolment that creates diversity culture in tertiary education institutions. Future research should concentrate on qualitative analysis and investigate the university students' challenges on online learning, particularly during the aftermath of pandemic. This study can also be explored further by conducting robust research by expanding the type of instructor roles, the type of strategies in student's participation and incorporating mediator to augment the outcome of the result

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References

- Aboagye, E., Yawson, J., & Appiah, K. (2020). COVID-19 and E-Learning: the Challenges of Students in Tertiary Institutions. *Social Education Research*, 1(1), 109-115. <https://doi.org/10.37256/ser.122020422>
- Adams, D., Sumintono, B., Mohamed, A., & Mohamad Noor, N. (2018). E-Learning Readiness among Students of Diverse Backgrounds in a Leading Malaysian Higher Education Institution. *Malaysian Journal Of Learning And Instruction*, 15(2), 227-256. <https://doi.org/10.32890/mjli2018.15.2.9>
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective. *Sustainability*, 12(20), 8438. <https://doi.org/10.3390/su12208438>
- Arkorful, V., & Abaidoo, N. (2014). The role of e-learning, the advantages and disadvantages of its adoption in Higher Education. *International Journal of Education and Research*, 2(12). Retrieved from <http://www.ijern.com/journal/2014/December-2014/34.pdf>
- Baczek, M., Zaganczyk-Baczek, M., Szpringer, M., Jaroszynski, A., & Wozakowska-Kaplon, B. (2021). Students' perception of online learning during the COVID-19 pandemic. *A Survey Study of Polish Medical Students*, 100(7). <https://doi.org/10.1097/MD.00000000000024821>
- Chin, C. (2020). *Learning mustn't stop with Covid-19*. The Star. Retrieved from <https://www.thestar.com.my/news/education/2020/03/29/learning-mustnt-stop-with-covid-19>
- Dhilla, S. (2017). The role of online faculty in supporting successful online learning enterprises: A literature review. *Higher Education Politics & Economics*, 3(1), 136-155. <https://doi.org/10.32674/hepe.v3i1.12>
- Dubey, S., Pirooska, B., & Gautam, M. (2019). Exploration of Factors Affecting Learners' Motivation in E-learning. *International Journal Of Scientific Research In Computer Science, Engineering And Information Technology*, 5(2), 1269-1275.

<https://doi.org/10.32628/CSEIT1952307>

El-Seoud, M. S. A., Taj-Eddin, I. A. T. ., Seddiek, N., El-Khouly, M. M., & Nosseir, A. (2014). E-Learning and Students' Motivation: A Research Study on the Effect of E-Learning on Higher Education. *International Journal of Emerging Technologies in Learning (IJET)*, 9(4), 20-26. <https://doi.org/10.3991/ijet.v9i4.3465>

Etikan, I., Musa, S., & Alkassim, R. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal Of Theoretical And Applied Statistics*, 5(1), 1. <https://doi.org/10.11648/j.ajtas.20160501.11>

Ferriman, J. (2020). *How to Incorporate Flexible Learning Into Your Online Courses - LearnDash*. Retrieved from <https://www.learndash.com/how-to-incorporate-flexible-learning-into-your-online-courses/>

Gedera, D., Williams, J., & Wright, N. (2015). Identifying Factors Influencing Students' Motivation and Engagement in Online Courses. *Motivation, Leadership And Curriculum Design*, 13-23. https://doi.org/10.1007/978-981-287-230-2_2

Hartnett, M., George, A., & Dron, J. (2011). Examining motivation in online distance learning environments: Complex, multifaceted and situation-dependent. *The International Review Of Research In Open And Distributed Learning*, 12(6), 20. <https://doi.org/10.19173/irrodl.v12i6.1030>

Hashim, H., Kadir, N., Mansor, F., & Azudin, M. (2020). Open and Distance Learning (ODL) During Movement Control Order (MCO): Conceptualising the Relationships between Self-Efficacy, Learning Motivation and Performance of Higher Learning Education Students. *International Journal of Academic Research In Business And Social Sciences*, 10(8). <https://doi.org/10.6007/IJARBSS/v10-i8/7530>

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). *The use of partial least squares path modeling in international marketing*. Emerald Publishing Limited. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)

Hrastinski, S. (2008). *What is Online Participation and How may it be Studied in E-Learning Settings?* ECIS 2008 Proceedings. Retrieved from <https://core.ac.uk/download/pdf/301350511.pdf>

Jacobi, L. (2018). What Motivates Students in the Online Communication Classroom? An Exploration of Self-Determination Theory. *Journal Of Educators Online*, 15(2). <https://doi.org/10.9743/jeo.2018.15.2.1>

Jalli, N. (2020). *Lack of internet access in Southeast Asia poses challenges for students to study online amid COVID-19 pandemic*. Retrieved from <https://theconversation.com/lack-of-internet-access-in-southeast-asia-poses-challenges-for-students-to-study-online-amid-covid-19-pandemic-133787>

Johnson, D. (2017). The Role of Teachers in Motivating Students To Learn. *BU Journal of Graduate Studies in Education*, 9(1), 46-49. Retrieved from

<https://files.eric.ed.gov/fulltext/EJ1230415.pdf>

Kim, K., & Frick, T. (2011). Changes in Student Motivation During Online Learning. *Journal Of Educational Computing Research*, 44(1), 1-23. <https://doi.org/10.2190/EC.44.1.a>

Kocdar, S., Karadeniz, A., Bozkurt, A., & Buyuk, K. (2018). Measuring Self-Regulation in Self-Paced Open and Distance Learning Environments. *The International Review Of Research In Open And Distributed Learning*, 19(1).

<https://doi.org/10.19173/irrodl.v19i1.3255>

Lim, C. L., Ab Jalil, H., Maa'rof, A. M., & Saad, W. Z. (2020). Self-regulated learning as a mediator in the relationship between peer learning and online learning satisfaction: A study of a private university in Malaysia. *Malaysian Journal of Learning & Instruction*, 17(1), 51-75. <https://doi.org/10.32890/mjli2020.17.1.3>

Lim, I. (2020). *Reality for Malaysia's university students: Online learning challenges, stress, workload; possible solutions for fully digital future until Dec*. Malay Mail. Retrieved from <https://www.malaymail.com/news/malaysia/2020/05/30/reality-for-malaysias-university-students-online-learning-challenges-stress/1870717>

Sadeghi, M. (2019). A Shift from Classroom to Distance Learning: Advantages and Limitations. *International Journal Of Research In English Education*, 4(1), 80-88. <https://doi.org/10.29252/ijree.4.1.80>

Sahu, P. (2020). *Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact on Education and Mental Health of Students and Academic Staff*. Cureus. <https://doi.org/10.7759/cureus.7541>

Selvanathan, M., Hussin, N., & Azazi, N. (2020). Students learning experiences during COVID-19: Work from home period in Malaysian Higher Learning Institutions. *Teaching Public Administration*, 014473942097790. <https://doi.org/10.1177/0144739420977900>

Selvi, K. (2010). Motivating factors in online courses. *Procedia - Social And Behavioral Sciences*, 2(2), 819-824. <https://doi.org/10.1016/j.sbspro.2010.03.110>

Subramanian, S. (2020). *Leveraging The Flexibility Of Online Learning*. Retrieved from <http://bweducation.businessworld.in/article/Leveraging-The-Flexibility-Of-Online-Learning-/08-10-2020-329239/>

Tamm, S. (2020). *10 Major Advantages of E-Learning | E-Student*. Retrieved from <https://e-student.org/advantages-of-e-learning/>

Tan, C. (2020). The impact of COVID-19 on student motivation, community of inquiry and learning performance. *Asian Education And Development Studies*, 10(2), 308-321. <https://doi.org/10.1108/AEDS-05-2020-0084>

Wang, C. H., Shannon, D. M., & Ross, M. E. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, 34(3), 302-323. <https://doi.org/10.1080/01587919.2013.835779>

Wieking, B. (2016). *Technology Integration and Student Learning Motivation*. Retrieved from

https://nwcommons.nwciowa.edu/cgi/viewcontent.cgi?article=1014&context=education_masters

Yengin, İ., Karahoca, D., Karahoca, A., & Ozcinar, Z. (2010). Being ready for the paradigm shifts in e-learning: Where is the change happening and how to catch the change? *Procedia - Social And Behavioral Sciences*, 2(2), 5762-5768.

<https://doi.org/10.1016/j.sbspro.2010.03.940>

Zhao, C., & Mei, Z. (2016). A Case Study of American and Chinese College Students' Motivation Differences in Online Learning Environment. *Journal Of Education And Learning*, 5(4), 104. <https://doi.org/10.5539/jel.v5n4p104>

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