



Enhancing Motivation among Online Distance Learning Students during the Covid-19 Pandemic in Malaysia

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Abstract

The study was undertaken to assess the essential peer influence and tutor performance as key drivers in students' motivation with the role of self-efficacy as a mediator in online distance learning higher education institutions in Malaysia during the Covid-19 pandemic. For data collection, the previously developed scales of peer influence, tutor performance, self-efficacy, and motivation in the context of online distance learning higher education institutions in Malaysia were distributed among the students in online distance learning higher education institutions. In total, 231 completed surveys were collected from the respondents and 12 outliers were detected through data screening using the Mahalanobis distance technique in SPSS, which left 219 clean data samples ready for analysis. The results from data analysis have shown that peer influence has no significant direct relationship with motivation but has significant indirect relationship with motivation, with self-efficacy as a mediator. Tutor performance has a significant direct relationship with motivation and also a significant indirect relationship with motivation, with self-efficacy as a mediator. Moreover, the implications of the findings were discussed, and future directions were recommended.

Keywords: Peer Influence, Tutor Performance, Self-Efficacy, Motivation, Online Distance Learning, Covid-19 Pandemic



Introduction

From the time when it was first declared a global pandemic back in March 2020, COVID-19 has had disturbing effects in different aspects of life, including education. Businesses and universities around the world have had to close down completely (Hirsch, 2020) and switching to online classes has been one of the efforts to keep contagion away from nearby communities and academic areas.

While online learning has become the new way to acquire knowledge, students and lecturers are facing some distinctive problems and challenges in their online courses which they need to overcome. To be highly motivated in participating in online classes and go through studying in an environment different from the conventional classroom environment can be very challenging. As a result, motivation plays a very important role in ensuring the online students will effectively gain the knowledge in their registered courses.

According to Pujals (1986), motivation is the force in an individual which is noticeable by the feelings and reactions that emerge to attain goals. The root word of motivation is “motive” and it signifies an inner force that pushes people forward or in doing something to attain some desired results or purpose. This has been supported by Smith (2012), who suggested that motivation is a very crucial factor that ensures the success or failure in students’ studying process. Motivation plays a very important role in ensuring students’ performance in their studies. A high level of study will lead to high academic performance (Kusurkar et al., 2013). Highly motivated students will be inclined to put more effort into their study and will eventually perform better (Gottfried et al., 2013). Malaysia is one of the countries that have implemented the Movement Control Order (MCO) in the region of Southeast Asia (Khor et al., 2020).

Various studies have found that the MCO has affected online distance learning (ODL) students in their studies. Many ODL students are familiar with the mode of delivery but cannot communicate or meet physically with their lecturers during the MCO. This has created a problem for the students and leads to low motivation and confidence for them to continue their studies (Almaiah et al., 2020). These states of affairs expose some hurdles to ODL students due to their inability to catch up in their studies and therefore they become unable to perform as they expect. Students may perhaps be prepared to undertake their study during the MCO; however, they may be hindered by the incompetency in technologies, lack of facilities, and their technical readiness may not be up to the mark (Allam et al., 2020; Chung et al., 2020; Noraini et al., 2020). Besides, many students are affected by noise pollution, such as interruption from people around them especially their family members (Sun et al., 2020). At the same time, there is a tendency for some students to use easy access to the Internet to deceive and plagiarise (Gonzalez et al., 2020; Kearns, 2012; Nizam et al., 2020; Timmis et al., 2016).

These circumstances will prompt negative implications of fear of failure, and also cause low self-esteem if they remain unaddressed, which will eventually cause their learning motivation to decline. Also, the ODL students’ self-efficacy will play a very important role in determining their motivation level, which will lead to their desired performance (Zahir et al., 2018). In view of the above, this study aims to assess the influence of tutor performance, peer influence and employer support on self-efficacy, and the influence of self-efficacy on student motivation.



Literature Review

Motivation is one of the most basic elements for academic achievement. It constitutes both the internal and external factors that fuel aspiration and forces an individual to be constantly passionate and devoted to the role, task, or subject, or to make an endeavour to achieve the objective. Dornyei (2001) suggested that motivation describes why people are determined to do a certain thing, how eager they are to achieve it, and the duration in which they are willing to take action. Higher education students with a strong motivation will be more enthusiastic, self-driven, challenging, and feel pleasure in their studies. Externally motivated students will push themselves to complete their assignments, feel obliged to learn, and place minimum effort to attain maximum appreciation. Students with intrinsic motivation have the tendency to use strategies that need more effort and permit them to deeply process the information. According to Condry and Chambers (1978), when students are faced with varied academic tasks, intrinsically directed students tend to use more logical information and have the strategies to make decisions than those who are extrinsically motivated. Intrinsically motivated students have an inclination to favour tasks that are moderately difficult. In comparison, students with extrinsic motivation tend to take up less challenging tasks. According to Lepper (1988), the latter is less likely to place maximum effort in order to achieve the maximum reward. Brophy (1986) suggested that to ensure the students are intrinsically motivated, students should be openly praised for what they have achieved academically.

According to Armstrong (2010), an individual's performance depends on the attitude of that person. Performance in relation to attitude means that individual activity is directed towards the organisation's task. Mundarti (2007) stated that performance is an employee's success to complete the task. Performances, on the other hand, are things completed by the employees. The performance of online tutors is influenced by various factors such as ability, support, workstation, and organisational support (Mundarti, 2007). A study conducted by Ratih et al., (2017) on 392 lectures in Bandung found that a lecturer's performance has a positive and significant influence on motivation in higher education institutions. Online tutors' ability to perform during the online class is very important to ensure the class will be able to improve student interest and focus to follow what will be taught and discussed by the tutor. According to Zahir et al., (2018), employees, especially in higher education institutions, must demonstrate high performance when conducting online tutorials because in addition to attracting the students to participate in the online tutorial, their performance will also motivate the students to engage actively during the online session.

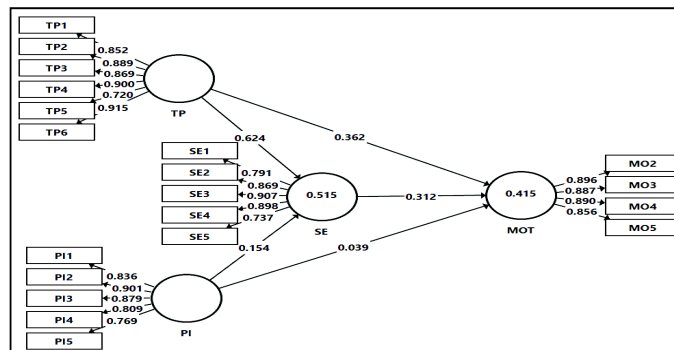
Students tend to feel that they are in the right place, understood, and receive concern from their peers when they start communicating with each other, obtaining support, and sharing learning experiences. Their active and frequent interaction with their peers will lead to a feeling of comfort and allow the students to achieve their needs in their study (Ciani et al., 2010; Furrer & Skinner, 2003; Martin & Dowson, 2009). Peer interaction that adds to the way students behave during their study is also crucial for self-development. Even though they may not behave in the same way as their lecturers do, their peers will make contextual affordances available to support their academic competency (Wentzel, 2009b). Interaction with classmates will lead to students initiating communication, shaping academic competencies, and developing academic target and behavioural values (Parr, 2002; Wentzel, 2009b). Olalekan (2016) suggested that in general, students' peer group has quite a strong influence on the students. Ahmad Khan et al., (2020) in their study on work productivity during the Covid-19 pandemic work-from-home arrangement in Malaysia found that peer influence has a positive and significant influence on the motivation.



Many studies have explained educational and environmental elements including self-esteem and confidence (Komarraju, 2014), hope (Gautam & Passi, 2014), coping styles (Fried & Chapman, 2012), the level of quality of learning programmes, teaching and learning, and learning environment as having an impact on students' level of interest, which could eventually improve their motivation (Taylor, 2014). The student's self-determination and possession of an internal locus of control will elevate their level of motivation (DePasque & Tricomi, 2015). According to Bernacki et al., (2015), self-efficacy is the result of motivation, and if students are unable to overcome the problem, self-efficacy may diminish, and they may become discouraged in their learning and fail to attain academic success. Ghaleb et al., (2015) suggested that positive and successful experiences derived from internal factors can increase efficacy while creating success due to external elements, and failure can lead to students feeling of lack of competency. According to Alei et al., (2012), students with learning difficulties have lower self-efficacy levels and less motivation for progress due to lower expectations. Both motivation for progress and self-efficacy push students forward to maximise their potential. In addition, disability has been reported to potentially reduce performance in achieving learning objectives and adversely affect academic performance (Alaei *et al.*, 2012).

Given the above conceptual development, the following research hypotheses were proposed:

- There is a relationship between peer influence and motivation among online distance learning students during the Covid-19 pandemic in Malaysia;
- There is a relationship between peer influence and self-efficacy among online distance learning students during the Covid-19 pandemic in Malaysia;
- There is a relationship between self-efficacy and motivation among online distance learning students during the Covid-19 pandemic in Malaysia;
- There is a relationship between tutor performance and motivation among online distance learning students during the Covid-19 pandemic in Malaysia;
- There is a relationship between tutor performance and self-efficacy among online distance learning students during the Covid-19 pandemic in Malaysia;
- There is a mediating effect of self-efficacy on the relationship between peer influence and motivation among online distance learning students during the Covid-19 pandemic in Malaysia; and
- There is a mediating effect of self-efficacy on the relationship between tutor performance and motivation among online distance learning students during the Covid-19 pandemic in Malaysia.

Figure 1*Research Model*

Methodology

Approach, Design & Software

The research model of this study consisted of tutor performance, peer influence, self-efficacy, and motivation. The proposed research model consisted of four latent variables and 22 observed variables. The model comprised an independent variable for tutor performance, which consisted of seven measurement items, and another independent variable for peer influence, which consisted of five measurement items. The mediator of self-efficacy consisted of five measurement items and the dependent variable of motivation consisted of five measurement items. All the four variables measurement items were constructed in the online distance learning context in Malaysia. This study employed a quantitative research approach using primary data. All the 22 measurements that stood for their construct were assessed by adopting a Likert scale ranging from 'strongly disagree' to 'strongly agree'. This was to allow for most of the response rate and quality and reduce the "frustration level" of the respondents (Babakus & Boller, 1992; Sachdev & Verma, 2004). Before the main analysis, the data were screened and cleaned using SPSS 18. The partial least squares-structural equation modelling (PLS-SEM) was adopted as the main approach (Hair et al., 2017) in evaluating the data. The SmartPLS 3 software (Ringle et al., 2015) was used for data analysis.

Sample

This study was aimed at online distance learning students in Malaysia. Online distance learning students who made up the sample of this study included students who were studying at diploma, bachelor's degree, master's, and doctoral levels. Three ODL institutions' students in Open University Malaysia, Wawasan Open University, and Asia e-University were randomly selected to be involved in data collection. Online questionnaires were e-mailed to 321 students from these three ODL institutions in Malaysia. A total of 231 students (response rate = 72%) responded to the survey. Because this study utilised a variance-based approach for data analysis, and after taking into account that no specific standard for the minimum acceptable response rate in performing the online survey (Hamilton, 2003), the sample obtained was considered adequate for analysis. Then, the data screening technique suggested by Field (2013) was used. This was followed by the

application of SPSS 18 for reassessment to ensure the absence any outliers that exist in the data. Through this method, 12 outliers were detected and removed before the main analysis. In total, the PLS-SEM algorithm was performed on a sample of 219 respondents.

Data Analysis

Common Method Bias

Kock (2015) and Kock & Lynn (2012) suggested the total collinearity test as a wide-ranging method for the corresponding assessment of vertical and horizontal collinearity. The variance inflation factors (VIFs) values greater than 3.3 point out pathological collinearity, and it also signifies the problem of common method bias of the model. Hence, if total collinearity checks VIFs values were lower than 3.3, the model is deemed to cause no common method bias concern. Table 1 demonstrates the total collinearity check VIFs values, which are lower than 3.3 and therefore indicated no issue of common method bias.

Table 1

Full Collinearity

	MO	TP	PI	SE
MO		1.474	1.477	1.302
TP	1.882		1.755	1.52
PI	1.435	1.335		1.402
SE	1.817	1.662	2.015	

Reflective Measurement Model Evaluation

Hair et al., (2017) advice for assessing every measurement in the first- and second-order measurement models was implemented. By performing these steps, one item with lower loading was spotted and taken out from the framework. Right after the removal of this measurement item, all the statistical requirements to confirm the reliability and validity of the proposed model were achieved. The item factor loadings are depicted in Figure 1. Table 2 summarises the proposed model's values for Cronbach's alpha and composite reliability, together with the convergent validity evaluation. These evaluations ascertained there was no issue in validating internal consistency. Additionally, all the Average Variance Extracted (AVE) values were greater than 0.5, suggesting the presence of convergent validity (Hair et al., 2017) for each variable in the research framework. Discriminant validity was also measured by calculating the Heterotrait-Monotrait (HTMT) ratio, which was a recommended criterion for appraising discriminant validity in Variance-Based Structural Equation Modelling (VB-SEM); (Henseler et al., 2015). Table 3 shows the HTMT ratio figures of the variables with the original sample and 95% confidence intervals (two-tailed), signifying the discriminant validity confirmation on HTMT 0.85 and that the upper level of the Bias-Corrected and Accelerated bootstrap confidence intervals were less than one.

**Table 2***Construct Reliability & Validity*

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
PI	0.896 (0.868, 0.918)	0.923 (0.892, 0.952)	0.923 (0.903, 0.939)	0.706 (0.651, 0.754)
MO	0.905 (0.867, 0.930)	0.910 (0.868, 0.933)	0.933 (0.909, 0.950)	0.778 (0.715, 0.826)
SE	0.896 (0.861, 0.923)	0.907 (0.868, 0.932)	0.924 (0.901, 0.942)	0.710 (0.647, 0.766)
TP	0.928 (0.910, 0.941)	0.933 (0.916, 0.944)	0.944 (0.931, 0.954)	0.739 (0.693, 0.775)

Note: Confidence interval computed based on percentile bootstrapping test with 10000 sub-samples and at 5% confidence level.

Table 3*Heterotrait-Monotrait Ratio*

	PI	MO	SE
PI			
MO	0.405 (0.282, 0.518)		
SE	0.52 (0.388, 0.626)	0.649 (0.497, 0.771)	
TP	0.564 (0.429, 0.678)	0.646 (0.532, 0.741)	0.753 (0.658, 0.832)

Note: A two-tail percentile bootstrap test at 5% confidence interval (2.5%, 97.5%) with 10,000 sub-samples were performed.

Structural Model

The guiding principle of Hair et al., (2017) was used to estimate the structural model in this study and determine the significance of path coefficients. Table 4 shows the results of hypotheses testing. *H1* proposed there is a positive relationship between peer influence and motivation, and the statistical analysis result showed that there was a positive but not significant influence of peer influence on motivation ($\beta = 0.039$, $t = 0.845$, $p = 0.398$); therefore, *H1* was not supported. The statistical result of *H2* demonstrated there was a significant and positive relationship between peer influence and self-efficacy ($\beta = 0.154$, $t = 3.371$, $p = 0.001$), therefore *H2* was supported. *H3* also proved that self-efficacy had a positive and significant influence on motivation ($\beta = 0.312$, $t = 3.223$, $p = 0.001$); as a result, *H3* was also supported. The *H4* result also proved to be positive and significant for the relationship between tutor performance and motivation ($\beta = 0.362$, $t = 4.609$, $p = 0.000$); thus, *H4* was also supported. The *H5* result also showed that there was a positive and significant relationship between tutor performance and self-efficacy ($\beta = 0.624$, $t = 13.121$, $p = 0.000$); therefore, *H5* was also supported. For the mediating effect relationship analysis, *H6* showed that self-efficacy had a significant mediating effect on the relationship between peer influence and motivation (Total indirect effect = 0.048, $t = 2.234$, $p = 0.026$, LLCI = 0.015, ULCI = 0.102); hence *H6* was supported. Lastly, *H7* was found to be supported as self-efficacy was proven to have a significant mediating effect on the relationship between tutor performance and motivation (Total indirect effect = 0.194, $t = 3.197$, $p = 0.001$, LLCI = 0.066, ULCI = 0.305).

Table 4*Hypotheses Testing Results*

	Beta	T Statistics	P Values	LLCI 2.5%	ULCI 97.5%	Decision
<i>H₁: PI -> MO</i>	0.039	0.845	0.398	-0.050	0.128	<i>Not Supported</i>
<i>H₂: PI -> SE</i>	0.154	3.371	0.001	0.067	0.244	<i>Supported</i>
<i>H₃: SE -> MO</i>	0.312	3.223	0.001	0.130	0.481	<i>Supported</i>
<i>H₄: TP -> MO</i>	0.362	4.609	0.000	0.218	0.522	<i>Supported</i>
<i>H₅: TP -> SE</i>	0.624	13.121	0.000	0.522	0.711	<i>Supported</i>
<i>H₆: PI -> SE -> MO</i>	0.048	2.234	0.026	0.015	0.102	<i>Supported</i>
<i>H₇: TP -> SE -> MO</i>	0.194	3.197	0.001	0.066	0.305	<i>Supported</i>

Discussion

The study aimed to evaluate the influence of peer influence and tutor performance on ODL students' motivation with self-efficacy as a mediator during the Covid-19 pandemic in Malaysia. From the results of the statistical analysis, it was found that peer influence has not directly affected students' motivation. However, with the introduction of self-efficacy as a mediator, peer influence was found to have an indirect effect on students' motivation during the Covid-19 pandemic. This shows that the role of self-efficacy as a mediator in the relationship between peer influence and students' motivation is very important. During this Covid-19 pandemic, students need to have self-belief in their competence, and ability to face and overcome the challenges in their study. With self-efficacy as a mediator, peer influence would have an effective influence on the students' motivation. When compared against students with a low level of self-efficacy, students with a high level of self-efficacy set higher goals, use more effective self-regulatory techniques, monitor their work more effectively, and tackle more difficult tasks. Students need to develop strong self-efficacy while at the same time increase their interaction with peers, which would lead to a higher motivation level in their study. Students of various ages have demonstrated the positive relationship between effectiveness and flexibility in academic performance due to higher levels of achievement and learning. It has been found that students with high self-confidence and efficacy worked more often, lasted longer, and achieved higher levels than students with low self-confidence and self-efficacy. Students with high levels of self-efficacy can set challenging goals, strive to achieve them, and use a variety of techniques to achieve them. Students need to communicate with other students and interact in class. By interacting with their peers, the students can share the problems they face in their studies and get the necessary support from their peers when needed. Students must be encouraged to get involved in group studies and interacting in them; this could motivate them to perform better in class. Peer interaction must not only take place during class, but also after class, especially in e-learning platforms or forums. Students can ensure more effective learning with peer discussion and assistance. ODL institutions must be able to provide activities that can promote peer interaction at the university or online. There are a series of motivational mechanisms by which peers can influence each other. These focus on the premise that motivation has an interesting function and can direct behaviour. Friendships can be thought of as relationships that can provide exhilarating preparations, such as emotional support, warmth, security, participation, and autonomous support. Keep in mind that the mechanism for motivation is more than just moving. Simply having friends is to excite the students and guide their



actions. Such a primary energy supply can also provide a primary source for influencing the mechanisms of all other peer types. If the selected peer has refreshing motivational skills, experimental simulations with randomly assigned peers can accurately estimate the actual amount of impact that can occur. Know that you may not be able to do this. Peer relationships can also support autonomy, as students choose their own partners. Thus, this can give students space to be themselves and facilitate the exploration and experimentation of possible academic identities from relationships with cultural peers. The results arising from the above data analysis clearly show that self-efficacy significantly mediates the relationship between peer influence and student motivation during the Covid-19 pandemic ($\beta = 0.048$, $t = 2.234$, $p = 0.026$, LLCI = 0.015 ULCI = 0.102).

From the above statistical analysis, it is also very clear that tutor performance must be given greater emphasis to ensure and to maintain the students' motivational level. Tutors play a crucial role when conducting face-to-face or online classes. Tutors need to be efficient and effective during class. Their behaviour is a way for them to communicate and interact with students at a higher education institution. Tutors with a high performance in teaching will have a great impact on the students and affect their motivation to learn the subjects they are enrolled in. Tutors must believe that students are motivated to learn when they attend classes with tutors who demonstrate good performance. This suggests that students will be highly motivated to study if the tutors' performance is always at a high level when conducting the class. This has been proven in the above data analysis, in which the relationship between tutors' performance and students' self-efficacy is positively and significantly related ($\beta = 0.624$, $t = 13.121$, $p = 0.000$). Therefore, ODL institutions must develop a strategy to ensure their academic staff have the required competencies to deal with students during teaching. Tutors' performance will enhance students' self-belief and determination in their study. Furthermore, with the role of self-efficacy as a mediator, the influence of tutors' performance will be strengthened further. Based on the above statistical analysis, self-efficacy significantly mediates the relationship between tutors' performance and students' motivation ($\beta = 0.194$, $t = 3.197$, $p = 0.026$, LLCI = 0.066 ULCI = 0.305). Therefore, students' self-efficacy must be enhanced further during their study and at the same time, tutors' performance must be strengthened so that the level of the students' motivation can be further elevated to produce better performance in their academic achievement.

Conclusion

This study aimed to investigate the indirect effect of self-efficacy, peer influence, tutor performance, and motivation among students in Malaysian online distance learning higher education institutions. The statistical analysis results have demonstrated that self-efficacy has significantly mediated the relationships between peer influence and tutor performance with motivation among ODL students during the Covid-19 pandemic in Malaysia. Based on the results, ODL institutions must give greater attention to plans and strategies for beefing up peer influence and tutor performance, and at the same time improve self-efficacy among the ODL students. This will allow the motivation among ODL students to be further strengthened and reinforced to make their learning more effective. This will ultimately allow them to improve academic performance in the courses they are taking. Online distance learning higher education institutions must be proactive in adopting approaches through which peer influence and tutor performance can be made stronger, and also in improving students' self-efficacy by ensuring they can acquire the right attitudes and behaviours. This will allow the students to develop their motivation in online learning. Student motivation is very important in ensuring good performance in their study, therefore ODL institutions must take every step to ensure that the peer influence and tutor performance factors are always at a high level. Online tutors must communicate frequently with students to encourage them in online participation, study in a group, and interact with their peers. Online tutors must be



creative enough to encourage the students to develop the right attitude and behave in the right way towards their study so that that they will feel more at ease and focused in their online learning. Students must also be given the confidence to help and guide their peers to overcome problems in their study. For future studies, it is recommended that other variables such as digital readiness, communication, and family support be used as variables in developing the research framework to better understand student motivation in online distance learning study.

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