Relationship between Self-efficacy and Academic Motivation among University and College Students Enrolled in Kuala Lumpur during Movement Control Period (MCO)

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Abstract
Academic motivation and the elements that influence it have long been a source of concern for educational institutions. Self-efficacy has been identified as a significant component in academic motivation, interest, and academic achievement. Educators have long struggled with how to motivate their students. Self-efficacy is thought to be a significant determinant of a student's motivation. This quantitative research was undertaken to examine the relationship between self-efficacy and academic motivation among university and college students enrolled in Kuala Lumpur during Movement Control Period (MCO). A total of 120 (31 males, 89 females) undergraduates were selected through snowball sampling and participated in the research. Respondents completed two questionnaires, General Self-efficacy Scale (GSE) and Academic Motivation Scale (AMS), which measured their self-efficacy and academic motivation. Findings revealed that the level of academic motivation is higher than the level of self-efficacy among the undergraduates, and there is a statistically significant positive correlation between self-efficacy and academic motivation ($rs(120) = .204$, $p = .026 < .05$). This research has provided implications in which it enables educational institutions to respond by providing appropriate assistance in the use of technology and information systems to make the environment of virtual learning as convenient as feasible for students to increase their self-efficacy and academic motivation.

Keywords: self-efficacy, academic motivation, students, MCO, pandemic

Introduction

The strong relationship between self-efficacy and academic motivation is long recognised. Academic motivation refers to students' beliefs about their academic abilities that are crucial in their motivation to achieve (Ryan & Deci, 2000), which means to be motivated is to be moved to do something (Brewer & Burgess, 2005). Motivation is proven to extend individuals' efficiency, thus using their ability and talent better and feeling more satisfied (Deci & Ryan, 2008). As a student, it has been noted that motivation is pivotal for self-efficacy as only motivated students are inclined to put in the effort to be successful (Alaei, Narimani & Alaei, 2012). During this pandemic, with the government enforcing a Movement Control Order (MCO), the teaching faculty had to immediately switch from traditional teaching methods to e-learning. According to Garrison et al. (2000), creating a community of inquiry in a virtual learning environment is challenging for academics.

In determining the relationship between self-efficacy and motivation, self-efficacy is a significant factor in motivation. Students must have a high level of self-efficacy to remain

motivated academically. Self-efficacy refers to the belief that he or she can execute the behaviours necessary to achieve a given goal by exerting control over one's motivation, conduct and social environment (Bandura, 1978). Since self-efficacy influences our attitudes and thoughts, it is essential to understand how it affects students, especially during stress, such as a lockdown.

A recent study found that the academic motivation of students decreased throughout lockdown (Zaccoletti et al., 2020). The community of inquiry, which includes social presence, cognitive presence, and teaching presence, is said to impact academic motivation. As the learning methods must alter due to MCO, many find it strenuous to concentrate due to the lack of interaction with other students and rapid feedback from their lecturers. The result is that learning performance has declined, and pupils are stressed with their studies (Tan, 2020). Most respondents in recent research by Chung et al. (2020) during the COVID-19 pandemic do not want to continue their lessons utilising online learning methods. The lack of Internet access and a lack of grasp of their courses were some of the hurdles these students had to face. According to a survey, 65% of students do not have academic motivation during this pandemic (Nell et al., 2020). While students may have been ready for online learning as the COVID-19 pandemic arose, the available technology, facilities and technical abilities were inadequate (Chung et al., 2020). Noise pollution and distraction from family members could also impact students (Sun et al., 2020). Some students may take advantage of the fact that they have easy access to the internet to cheat, plagiarise and copy their peers' answers for their exams (Nizam et al., 2020). These situations could lead to adverse outcomes such as fear of failure and low self-esteem, impacting academic motivation (Hashim et al., 2020).

Self-efficacy and Academic Motivation
There is no doubt that self-efficacy is correlated with student motivation and learning. Self-efficacy is the belief in one's own ability to succeed. However, motivation is the individual's desire to succeed. Thus, self-efficacy correlates with motivation (Zimmerman, 2000). During the Covid-19 pandemic, a negative relationship was found between general self-efficacy and psychological distress (Shacham et al., 2020). According to a study by Husain (2014), there is a correlation between self-efficacy and academic motivation among undergraduate students. A study showed a highly significant positive relationship between self-efficacy and motivation to learn (Akram & Ghazanfar, 2014). Another study shows that students with a higher level of self-efficacy fulfil their tasks more successfully and exhibit better achievements academically. Accordingly, cognitive demands of higher education mark that self-efficacy beliefs are critical (Tenaw, 2013). According to Zahra Taheri-Kharameh et al. (2018), academic self-efficacy has a remarkable association with academic motivation in which as self-efficacy increases, academic motivation also increases. According to a study by Chowdhury and Shahabuddin (2007), their empirical results shows that there are statistically positive correlations between self-efficacy and intrinsic motivation ($r = 0.490$), self-efficacy and extrinsic motivation (0.297), intrinsic motivation and performance (0.327), and extrinsic motivation and performance (0.251).

These findings support the hypothesis that motivated and students with high self-efficacy outperformed those with low self-efficacy and motivation. According to a study by Bedel (2015), some medium to strong relationships between academic motivation and academic self-efficacy were found, with correlation coefficients ranging from .43 to .53. A Malaysian based study suggested that self-efficacy impacts learning motivation. Students' learning motivation is strongly correlated to academic performance and a mediating role of learning motivation between students' self-efficacy and their academic performance using distance learning during MCO (Hashim et al., 2020). On the other hand, a study conducted in the Philippines suggested that during this pandemic, college graduates' self-efficacy and intrinsic academic motivation persisted high and they still did all they could to complete school tasks. However, the college graduates' reading experience was above average, showing that this new learning model is rather not enjoyable for several students. This indicates that, despite the

pandemic, learners' motivation and self-efficacy could be a way forward (Yapo et al., 2021). These studies affirm educators' view that the self-belief of a student's capabilities determines their motivation to achieve (Zimmerman, 2000).

Studies on motivation and self-efficacy individually are numerous. However, few studies have examined the relationship between certain academic variables, such as motivation and students' self-efficacy and even fewer during this MCO period. Many studies have studied this relationship in foreign countries, but the university and college students in Malaysia, especially Kuala Lumpur are overlooked. Also, while the relationship of these two variables has been studied, the studies lack the focus on the level of each variable to show its significance. Thus, this research is vital to identify the relationship between self- efficacy and academic motivation and its level among university and college students enrolled in Kuala Lumpur during MCO. Therefore, this gap and the chances of losing hope in studies among university and college students significantly contribute to the research in this area.

Thus it brings to the three research objectives of this research which are : (1) to determine the level of self-efficacy among university and college students enrolled in Kuala Lumpur during Movement Control Period (MCO), (2) to determine the level of academic motivation among university and college students enrolled in Kuala Lumpur during MCO and (3) to examine the relationship between self efficacy and academic motivation among university and college students enrolled in Kuala Lumpur during MCO. In line with the objectives, the research questions that this research aims to research are : (1) 'What is the relationship between self efficacy and academic motivation among university and college students enrolled in Kuala Lumpur during MCO?', (2) 'What is the level of self efficacy among university and college students enrolled in Kuala Lumpur during MCO?' and (3) 'What is the level of academic motivation among university and college students enrolled in Kuala Lumpur during MCO?'.

Theoretical Framework
This research is established based on the learning motivation theory and Bandura's self efficacy theory. According to Bandura (1977), self-efficacy impacts a person's choice of effort, activities and perseverance. Thus, self-efficacy could be a psychological resource that aids individuals cope with various demands to hit specific targets (Bandura, 1993). It influences students to act positively or negatively according to how they distinguish opportunities or obstacles. Individuals with a high level of self-efficacy approach complicated tasks as challenges to be understood, which enhances their commitment. People who are confident in their abilities are thought to work harder and persist longer than those who are unsure (Schunk, 1991). Meanwhile, students' with a low sense of efficacy dwell on their competencies and commitments, thus avoiding their tasks and eventually giving up. Therefore, it becomes clear why some students are motivated to work harder while others succumb to helplessness and self-defeating patterns, especially in a time of pandemic (Hashim et al., 2020). While working on a task, a student's initial self-efficacy depends on their aptitude and prior experience. Students derive cues from these factors about how well they are doing, which they use to measure their efficacy for future learning (Schunk, 1989).

Students' motivation increases when they believe they're making progress in their studies. Few learning motivation theories could be applied in the educational sector. One of them is intrinsic and extrinsic motivation theory. According to Ryan & Deci (2000), something done solely for one's satisfaction without any external anticipation is described as intrinsic motivation. Intrinsic motivation is triggered by various factors, including challenge, curiosity, control, and imagination. It takes a lot of willpower and a positive attitude to keep students motivated especially in a time of pandemic. Moreover, according to Pérez-López & Contero (2013), intrinsic motivation and academic success have a strong and positive relationship. Without any external pressure or compulsion, a student's intrinsic motivation drives them to participate in academic activities just to experience the challenge, fun and uniqueness (Deci & Ryan, 2016). On the other

hand, extrinsic motivation refers to external activities such as a reward, punishment or compulsion. Students are extrinsically motivated when they receive a reward or are forced to do something. A highly motivated student would often participate in learning activities without anticipating any rewards. Still, a low motivation student needs some sort of incentive for him or her to participate (Skinner & Belmont, 1993). It is possible to cultivate motivation extrinsically at first, but as you learn more, it becomes intrinsic motivation (Tohidi & Jabbari, 2012). Motivation is a powerful tool for achieving goals, while a lack of motivation can be a major roadblock to success (Jeamu, Kim & Lee, 2008).

According to the discussion above, in Figure 1, a conceptual framework is postulated to determine the relationship between self-efficacy and academic motivation.

Figure 1
The correlational relationship between self-efficacy and academic motivation
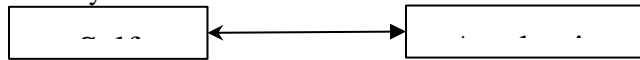
Method

Research Design
This quantitative research aims to determine the relationship between self-efficacy (independent variable) and academic motivation (dependent variable) among university and college students enrolled in Kuala Lumpur during MCO. One of the quantitative research methods used in this research is the correlational design to assess the participants, and each participant obtains a unique score for each variable (Creswell & Creswell, 2018). As a cross-sectional design, the data were acquired from university and college students at a particular time. It provided information in a limited time, making it suitable to be used in a pandemic time.

Participants
Participants were gathered from private and public universities and colleges to secure a diverse pool of participants. A total of 120 participants, 19-24 years of age, were recruited to ensure valid results. Of the 120 participants, 89 were females. All participants were ethically recruited based on their willingness to participate in this research. The recruited participants are from Degree Year 1 to Year 4 university and college students enrolled in Kuala Lumpur only. Both female and male participants were included as the research does not measure the gender difference. Students from all ethnicities and social statuses in Malaysia were included as ethnicity and socioeconomic status differences were not measured. However, non-Malaysian students were excluded to prevent cultural factors from influencing the data as the way they perceive motivation and self-efficacy may vary. Students diagnosed with severe mental disorders before the lockdown were also excluded as they are already affected and may affect the research outcome.

Sampling Procedure
The recruitment of participants and data collection were done through a snowball sampling method which involves participants recruiting others to participate in the research. It is a non-probability sampling technique. The ball rolls as it collects more "snow" along the way and grows larger and larger, thus the name snowball sampling (Levine & Stephan, 2015). Prospective subjects, usually only one or two, were identified among students and asked to recruit others and then ask them to recruit others, until the needed sample size, 120 participants are reached. Snowball sampling has the advantage of allowing studies to be conducted in situations where they would otherwise be impossible due to a lack of participants. As a bonus, snowball sampling may help uncover previously unknown characteristics of a population. It will also be rapid and uncomplicated in getting response during the pandemic. Due to sampling bias and difficulty determining the sampling error or making inferences about populations based on obtained samples, this method is not without drawbacks (Everitt & Skrondal, 2010). However, it was still used in this research as this research aims not to generalize the findings to the population but to have a better understanding.

Instruments
In this research, the instrument of this questionnaire was divided into three main parts

after the informed consent.

Demographic data of the participants, such as age, gender and degree year, was inquired.

Achievement Motivation Scale (AMS) college version is found by Vallerand et al. (1992) and used to evaluate academic motivation. A substantial body of research on self-determination theory has led to the development of this instrument, which measures intrinsic, extrinsic and amotivation. AMS evaluates 7 kinds of constructs : intrinsic motivation towards knowledge, accomplishments, to undergo stimulation, external motivation as introjected, and identified regulations and amotivation. AMS has twenty-eight questions, four questions every subscale, evaluated on a 7 points Likert scale (strongly agree to strongly disagree). The range of complete scores goes from 28 to 196. Higher scores specify the higher academic motivation of the participant. AMS has satisfactory validity and reliability with Cronbach's alpha of .88 and test-retest of .79 after two weeks (Bahrani, 2006).

The General Self-Efficacy Scale (GSE), created by Ralf Schwarzer and Mattias Jerusalem in 1995, measures self-efficacy. This scale was generated to establish a general belief in self-efficacy. Unlike other scales that assess optimism, this scale refers to personal factors such as the belief of one's actions being responsible for success. GSE uses a comprehensive questionnaire comprising ten items with 4- Likert scale without reverse coded items, which are : (1) = Not at all true ; (2) = Hardly true ; (3) = Moderately true ; and (4) = Exactly true. The complete score is computed by finding the total of all items. The total score ranges from ten to forty. A higher score indicates higher self-efficacy. GSE has Cronbach's Alpha ranging from .76 to .90 (Nel & Boshoff, 2015), split-half reliability of .77 and test-retest reliability of .69 (Yildirim & Ilhan, 2010).

Data Collection Procedure
The research was approved by the Ethics Committees of Tunku Abdul Rahman University College. The aim and objective of the research were first described to the participants in written form, and they were assured that their responses would be confidential. Consent was given on the first page of the Google Form. The data was then collected through self-report survey questionnaires containing students' age, gender, degree year, demographic category and the instruments (AMS and GSE). The questionnaires were first sent to several students and willing lecturers to forward the link to their students by sending the Google Form link through social media platforms and messenger apps like Facebook and Whatsapp, respectively. The students then sent it to their peers from the identical category by executing snowball sampling. The data collection took place from the end of September 2021 to the end October 2021. It was made sure that each participant matched their predefined criteria before examining the data.

Data Analysis
This research was analyzed using 'Statistical Package for Social Science (SPSS)' version 26.0. Both AMS and GSE can measure the levels of academic motivation and self-efficacy, respectively (Taheri-Kharameh et al., 2018). Therefore, a descriptive analysis was used, in which several statistical characteristics (mean, confidence interval 95%, median, standard deviation) were utilized to represent the variables determining the level of academic motivation (AMS) and the level of self-efficacy (GSE). The descriptive data were analysed to evaluate normality (Skipworth, 2011). Spearman's rank correlation coefficient is a non-parametric test that measures the relationship between self-efficacy and academic motivation among university and college students enrolled in Kuala Lumpur during the Movement Control Period (MCO). It is found that Spearman's rank correlation coefficient (ρ or *rs*) measures the strength of a relationship between two variables, thus matching this research's objective. Spearman was used in this research as the data were not normally distributed. Spearman's correlation coefficients range from -1 to +1. The coefficient's sign shows whether it is a positive or negative monotonic relationship. A positive correlation signifies that when one variable increases, the other variable also increases. A negative correlation indicates that as one variable increases, the other also decreases. Values close to -1 or +1 represent stronger

relationships than values closer to zero (Schober, 2018).

Results

This section presents the results of the research. The current research examines the relationship between self-efficacy and academic motivation among university and college students enrolled in Kuala Lumpur during the Movement Control Period (MCO). 120 respondents in total supplied their responses without any missing data.

Table 1

Descriptive Statistics of Respondents

Variable	Frequency (*n*)	Percentage (%)
Gender		
Male	31	25.80
Female	89	74.20
Age		
19	9	7.50
20	5	4.20
21	53	44.20
22	27	22.50
23	10	8.30
24	16	13.30

Table 1 shows the summary of demographic information of the respondents. While 74.20% of the respondents who participated in the survey questionnaire were female, less than half (25.80%) were male. Regarding age, respondents aged 21 recorded the highest number of responses which is 53 (44.20%). This is followed by respondents aged 22 with a number of 27 (22.50%) and respondents aged 23 with 16 (13.30%) responses. Respondents under the age of 23 and 19 recorded responses of 10 (8.30%) and 9 (7.50%), while respondents who are aged 20 recorded the lowest number of responses which is 5 (4.20%).

Table 2

Descriptive Statistics for Self-Efficacy and Academic Motivation

Variable	*n*	M	SD	Skewness		Kurtosis		Shapiro-Wilk Test
				Statistic	Std.Error	Statistic	Std.Error	
Academic Motivation	120	131.51	19.74	-1.76	.22	6.69	.44	.00
Self-efficacy	120	28.97	6.32	-.70	.22	-.01	.44	.00

Table 2 illustrates the descriptive statistics such as mean, standard deviation, skewness and kurtosis of the variables in the present research. The descriptive statistics were employed to respond to the first two research questions, which is to determine the level of academic motivation and self-efficacy, respectively. Academic motivation reports a mean of 131.51 and a standard deviation of 19.74, while self-efficacy reports a mean of 28.97 and a standard deviation of 6.32. Academic motivation has a much higher mean and standard deviation than self-efficacy, showing that it has a more spread distribution. Since for both variables, a higher score shows a high level of academic motivation or self-efficacy, it can be concluded that the level of academic motivation is much higher than the level of self-efficacy in the respondents. A skewness-kurtosis test was run to identify the normality for the variables. The test shows the skewness for academic motivation is -1.76 and for self-efficacy is -.70 while the kurtosis for academic motivation is 6.69 and for self-efficacy is -.01. Values of -2 to +2 for skewness and kurtosis are acceptable for psychometric implementations (George & Mallery, 2010). Thus kurtosis for academic motivation is not normally distributed. Another normality test was run, and the value of the Shapiro-Wilk test for both academic motivation and self-efficacy were .00 (below .05), indicating that the data deviated significantly from a normal distribution.

Table 3

Mean, Standard Deviation, and Reliability for Study Measures

Scale	Mean (SD)	Cronbach's Alpha
AMS	131.51 (19.74)	.87
GSE	28.97 (6.32)	.92

As shown in Table 3, the reliability for the 28-items scale Academic Motivation Scale (AMS) showed Cronbach's alpha of .87, relatively good reliability and internal consistency, and the 10-items scales General Self-efficacy (GSE) showed .92, relatively excellent reliability and internal consistency.
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Table 4

Summary Table of Spearman's Rho Correlation

|		Total Score of Academic Motivation Scale	Total Score of General Self-efficacy scale
Total Score of Academic Motivation Scale	Correlation Coefficient	1.000	.204*
	Sig (2-tailed)		.026
	N	120	120
Total Score of General Self-efficacy scale	Correlation Coefficient	.204*	1.000
	Sig (2-tailed)	.026	

N	120	120

Table 4 displays the analysis of the correlation between self-efficacy and academic motivation among undergraduate students. It can be noted from Table 1 that one of the variables, academic motivation, is not normally distributed. Thus, the Spearman correlation coefficient was run to determine the third research question, which is to determine the relationship between self-efficacy and academic motivation. Based on the analysis, Spearman correlation between both variables was shown to be positive and weak, $rs(120) = .204$, p $= .026 < .05$. Hence, following the third research objective, the findings suggest a weak positive relationship between self-efficacy and academic motivation, which was statistically significant.

Figure 1

Path Diagram for the Relationship between Self-efficacy and Academic motivation.
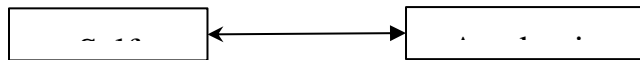
Discussion

Education has significant obstacles in terms of motivation and self-efficacy. Motivation promotes educational progress and academic achievement, reduces the likelihood of academic failure, and boosts students' self-efficacy, boosting motivation (Mehrabi et al., 2016). In this research, a descriptive analysis was run to examine the levels of self-efficacy and academic motivation among the undergraduates. The results showed that the level of academic motivation was much higher than the level of self-efficacy among the respondents during this MCO. The association between self-efficacy and academic motivation were determined by running the Spearman correlation coefficient in SPSS 26.0 as the data was not normally distributed. In consonance with the statistical analyses, there is a statistically significant but weak, positive relationship between self-efficacy and academic motivation among university and college Students enrolled in Kuala Lumpur during Movement Control Period (MCO).

This is consistent with the findings demonstrated in the previous research, which portrays a highly significant positive relationship between the two variables (Akram, 2014). Ze-Ju Zhang's study demonstrated a positive, significant association between self-efficacy and motivation (p < 0.05, r = 0.432) (Zhang, 2015). Akomolafe's study found that there is a positive relationship between academic performance and self efficacy (p <0.05, r=0.39) and motivation (p <0.05, r=0.42) (Akomolafe, 2013). Self-efficacy has frequently been linked to the drive to learn in previous studies, which is consistent in this research despite its level. These findings support educators' beliefs that student's self-belief in their talents determines their motivation to succeed. Another study found that pupils who have a higher level of self-efficacy are more successful at completing tasks and achieve higher academically. Available theories about human motivation postulate that students' perception of their competency is crucial in motivational behaviour and encouraging them to work for their goals. As a result, self-efficacy beliefs are critical when it comes to the cognitive demands of higher education (Tenaw, 2013). The learner who is secure in his capacity to complete assignments outside of class is more likely to attribute his or her achievement to internal reasons and personal effort. Students with an internal locus of control have a high level of self-efficacy and motivation, according to "documents in motivation theory," because they attribute their success to internal factors. In contrast, students with an external locus of control have a low level of self-efficacy and motivation because they attribute their success to external factors (Ghaleb et al., 2015) Although, teachers who assist students during the educational process can improve their students' learning ability, they should be conscious, however, that students may ascribe their success to them, leading to a loss of confidence in students' abilities and feelings of failure (Schunk, 1991).

Noteworthy, in this research, when the descriptive statistics were analysed for the first two research objectives which is to examine the level of self-efficacy and academic motivation, it was found that the level of self-efficacy is lower compared to the level of academic motivation among undergraduates during MCO. This is not consistent with other findings in the previous research which were conducted before the pandemic. Arik's study revealed that the students had high levels of both self-efficacy and academic motivation (Arik, 2019). Husain's study has also revealed almost the same result, in which the participants had equally high levels of self-efficacy and academic motivation (Husain, 2014). The current research produced different results may be due to the challenges faced by students in an online learning environment during the pandemic. According to Kim and Gurvitch (2020), the pandemic has impacted students' lives, as they must adapt to online based communication to continue receiving education. Nevertheless, the study indicated that students face a number of technological and challenges in the virtual learning condition. Unfortunately, their learning methods must alter due to MCO, and many students find it burdensome to concentrate and lack motivation and interaction. Students want quick feedback from their lecturers, which seems strenuous via online learning. As a result, students' learning performance has declined, and they are anxious about their studies, affecting their self-efficacy. Thus, as this research proves the relationship between self-efficacy and academic motivation while providing the levels of the variables present among the students, the objectives of this research are met.

Conclusions

The pandemic has taken us by surprise, and it has had a negative impact on students' patterns of learning. Even if the teaching faculty successfully transitioned from conventional methods of teaching to online learning, the consequences are still unknown. Furthermore, most of the teaching team lacks experience with online teaching methods and has been pushed to adapt due to the situation. According to academic research during the last two decades, self-efficacy is a predictor and influencer of students' motivation and learning. Altogether, this research provides empirical evidence that the level of academic motivation is higher than the level of self-efficacy, and there is a relationship between self-efficacy and academic motivation among university and college students enrolled in Kuala Lumpur during the Movement Control Period (MCO). Therefore, considering the relationship between self-efficacy and academic motivation of students, effective measures to increase the variables can lead to better academic performance among students during this pandemic and virtual learning period.

Limitations of the Study

The fact that the data collected was only quantitative is a key disadvantage of this research. There was no qualitative data obtained to examine the respondents' possible subjective reactions. Because the research was limited to undergraduate students enrolled in Kuala Lumpur universities and colleges and the sample was small, it is unlikely to be typical of all Malaysian undergraduates. Increasing the number of students from various parts of the country could improve the research's outcomes. Furthermore, data obtained through an online evaluation may be of lesser quality than those obtained through face-to-face interviews. In addition, snowball sampling was used to select research participants. It may have resulted in sampling bias and difficulty determining the sampling error or making inferences about populations based on obtained samples. As a result, we must interpret our findings in light of these limits.

Recommendations for Future Research

This research focused on the levels and relationship of the variable. Therefore, future studies may include predictive research design to identify how both variables influence each other in this relationship to understand the concept better. Research on gender and cultural differences that impacts the relationship can also be studied. In addition, future research can include students from all over Malaysia and have a larger sample so that the results can be generalized to Malaysian students. Qualitative research in this area can also be looked forward to as it may enlighten the relationship between self-efficacy and academic motivation in the

long term more accurately. Future researchers can also research what affects students' academic motivation and self-efficacy, in a time of crisis, as this would be useful for academic interventions to increase academic motivation and self-efficacy.

Implications of the Study
The findings of this research that there is a significant positive relationship between self-efficacy and academic motivation are consistent with previous findings. As far as concerned, this is the first research to investigate the association between self-efficacy and academic motivation among University and College Students Enrolled in Kuala Lumpur during Movement Control Period (MCO). This research enables stakeholders and policymakers to respond by supplying appropriate assistance in using technology and information systems to make the environment of online learning as convenient as viable. The relevance of collaboration and interaction in learning, particularly in this virtual learning situation, need to be demonstrated by social presence, cognitive presence, and teaching presence. Higher education institutions must use an online learning management system to provide a suitable online learning environment that will increase students' academic motivation and self-efficacy while raising the community of inquiry, and ultimately improving their learning performance as students require guidance to reach their learning objectives. The research's implications could also lead to teachers being trained to use strategies that boost students' self-efficacy, such as collaborative teaching, peer learning and subject-specific techniques.

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