

## ASSESSING STUDENT MOTIVATION IN MACROECONOMICS COURSE DURING TEACHING AND LEARNING FROM HOME

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### Abstract

The COVID-19 pandemic has adversely affected various sectors including the education sector. According to the UNESCO Monitoring Report there are 192 countries that postponed school and university sessions due to the COVID-19 pandemic. Since the Movement Control Order (MCO) was enforced, the education system in Malaysia has also shifted from traditional classes to Learning and Teaching from Home (LTfH) classes. The transition to this new education system surpassed expectations as it required the involvement and support of various parties, especially lecturers and students. One of the difficulties faced in this transition is to identify the level of students' motivation in the LTfH environment. Thus, this study would like to see the level of students' motivation who take Macroeconomics Course in the LTfH environment. The research instrument was a questionnaire distributed through the Google Forms platform to 113 Diploma in Accountancy students. Findings of the study indicate that students' motivation level is influenced by performance goals, achievement goals, Macroeconomics Course learning values and active learning strategies. It is hoped that this study can help lecturers in planning and compiling online learning strategies in order to contribute to the students' academic success in LTfH.

**Keyword:** Learning and teaching from home (LTfH), macroeconomics course, students' motivation

### Introduction

The COVID-19 pandemic has had a major impact on populations around the world. Almost every sector is affected including the higher education sector. Since the Movement Control Order (MCO) came into force on 18 March 2020 in Malaysia, Learning and Teaching from Home (LTfH) has been implemented to provide continuous education to students without the risk of being infected with the COVID-19 virus.

To date, three LTfH academic sessions have been implemented at Universiti Teknologi MARA (UiTM). During the course of this LTfH, there were several cases such as students choosing to apply for special leave or quit their studies. This situation indicates that students' involvement in LTfH is low, possibly due to various reasons. If left without proper supervision or control, this situation may have a negative impact, especially on the management of UiTM in fulfilling the Graduate On Time (GOT) policy. Under this policy, 90% of Diploma level students are required to complete their studies within five semesters. If this cannot be achieved, then UiTM is considered failed to achieve the Key Performance Index (KPI) as set by the Ministry of Higher Education Malaysia (MOHE).

However, to what extent is the students' motivation level during the LTfH is not very known. Thus, this study was conducted to find out the level of motivation among Diploma in Accountancy students, especially those taking Macroeconomics Course at UiTM Pahang Branch Jengka Campus. This course was chosen because it is offered in semester four which is one semester earlier before the students graduate. If they fail, they have to repeat the same course in the fifth semester (final semester), hence, they have to extend their studies. This would likely cause the university fail to achieve the GOT policy.

This paper further discusses the literature review related to the students' motivation level during LTfH environment, followed by the research methodology which includes sampling and data collection methods, and empirical discussion on the findings of the study. Finally, the paper highlights the conclusions of the study.

## **Literature Review**

### **Motivation and Students' Involvement in Learning**

Regardless of what type of sample and location, findings showed that there is a direct relationship between the level of motivation and students' involvement in learning. According to Papp (2017), the use of gamification in LTfH increases the students' motivation level, thus, increasing their involvement in LTfH. This indicates that the higher the students' motivation level, the higher would be their involvement in the LTfH environment.

Turan et al. (2016) linked academic performance as an indicator of students' motivation with their involvement in learning. According to him, this is achievable when students consider that learning is fun. For example, the use of board games encourages them to engage in learning. The element of competition through the reward system is capable of increasing the students' excitement. Their motivation to compete with colleagues is high to obtain better score, hence, increased their involvement in LTfH. Papp (2017) also supports the study conducted by Turan et al. (2016) stated that when the students' motivation level is high, their involvement in LTfH also increased whilst increased their academic performance.

Gressick & Langston (2017) in turn used a different approach from Papp (2017) and Turan et al. (2016). According to them, without gamification or board games, collaborative learning also increased students' level of motivation and their involvement in LTfH. This can be seen when the number of students attending morning class increased even though no marks were given. The students also participate actively during discussions in the LTfH class. They are eager to communicate with each other to complete the tasks assigned to them. They also do not feel stressed because their focus is more on learning and seeking knowledge, rather than finding faults among them in completing a given task.

### **Teaching and Learning from Home (LTfH)**

Teaching and Learning from Home (LTfH) has been implemented in universities to avoid the spread of the COVID-19 virus, especially among students. Holmes (2017) stated that the LTfH approach is different from traditional learning environments. First, the LTfH environment depends on the use of the internet, gadgets and smartphone applications. Second, new pedagogies such as online classes or pre-recording sessions for lectures replace the traditional face-to-face lectures. Third, students are given many assignments to ensure their involvement in learning. Kaufmann & Vallade (2020) also stated that in the LTfH environment, these students must learn from home rather than on campus. This causes them to feel isolated because their lecturers and peers do not physically present.

Generally, there are a handful of students who are unable to adapt themselves to the new norms of this transitional education system. This can be seen when there is an increase in cases such as students choosing to apply for special leave or stop studying from the Higher Learning Institutions (HLI). This shows that the involvement of HLI students in LTfH learning is at a low level. For instance, at UiTM, there is an increasing trend in the number of students applying for special leave, dropping out of studies, and postponement of studies in the 20202, 20204, and 20212 academic sessions as illustrated in Table 1.

**Table 1 Number of UiTM Pahang Branch Students Applying for Special Leave, Stop Studying and Postponement of Studies**

Academic Session	Applying for Special Leave	Stop Studies	Postponement of Studies	Total
20202	5	8	4	17
20204	3	24	4	31
20212	3	9	6	18

Source: Office of Academic Affairs, UiTM Pahang Branch Raub Campus (2021)

Among the factors causing this increase are personal problems, poor internet connection, absence of laptops or desktops, inability of students to adapt to LTfH methods and unstable family economic situation due to the COVID-19 pandemic. During 20204 academic sessions, the total cases of students applying for special leave have decreased perhaps, due to the small number of new students enrolled because of the postponement of the Sijil Pelajaran Malaysia (SPM) examination, and due to the number of final semester students who canceled their special leave applications. However, compared to 20202, the increased number of students dropping out of studies in the 20204, and postponement of studies in the 20212 academic sessions indicates the need to investigate what factors effects the students' motivational level during the LTfH.

### **The Theory of Self-Determination**

According to the study done by Ryan & Deci (2000), the Theory of Self-Determination is the ability of individuals to make choices and manage their own lives. This theory is related to the motivation level that drives individuals to make choices. This intended motivation may consist of intrinsic and extrinsic motivations. Intrinsic motivation is an impulse that comes from within the individual himself which contains core values such as morality, self-pleasure, interest and curiosity. Adversely, extrinsic motivation is the encouragement that comes from outside of the individual such as the desire to be appreciated, respected or admired by someone.

Further, the study of Ryan and Deci (2017) found that intrinsic motivation is positively associated with academic achievement and increase the students' satisfaction in learning. According to them, students are driven by contextual factors such as lecturers, peers and environment. Therefore, the LTfH education needs to build strong student engagement and optimize the learning environment because if students lack of self-motivation, they will feel unhappy, they will become irresponsible and will likely act out of bounds.

The study done by Chiu (2021) also found that motivational support from teachers (lecturers) is important in helping students psychological needs during online learning. The more motivational support they get from their lecturers, the students' involvement in LTfH will increase, and this situation will help them achieve good academic results.

## Method

This study uses purposive sampling method that consists of fourth semester Diploma in Accountancy (AC110) students, taking Macroeconomics Course (ECO211). Out of the total population of 245 students, 113 students responded to the survey. The response rate of 46.12% is considered adequate. This supported the study done by Aaker, Kumar & Day (2001) which stated that an effective response rate is 24%.

The survey was conducted by distributing online questionnaires based on the study done by Tuan, Chin & Shieh (2005) through Google Forms. Several items in the questionnaire were modified to meet the objective of the study. This questionnaire consists of two parts. The first part focused on the students' demographics, and the second part contained six motivational factors which identify the students' motivation level as illustrated in Table 2. The students were asked to express their opinions using a five-point Likert scale, starting with 1 (strongly disagree) and 5 (strongly agree).

**Table 2 Summary of the Motivational Factors**

Motivational Factors	Definition	Number of Items
Self-Efficacies	Students believe their own ability to achieve good performance in learning	7
Active Learning Strategies	Students take an active role in using various learning strategies to build knowledge based on their understanding	8
Learning Values of Macroeconomics Course	The value of learning Macroeconomics Course is to allow students to acquire and to be competent in solving problems, and through experiencing this process of self-inquiry, it will stimulate the students' thinking so that they can connect between macroeconomics and daily life	5
Performance Goals	The goal of the students is to compete with their peers to get better marks, in addition, gaining their lecturers' attention	4
Achievement Goals	The students are satisfied if they can improve their achievement and understanding during learning	5
Environment Learning Stimulation	The learning environment which will stimuli the students learning like the courses' syllabus, curriculum, teaching as well as their interaction with lecturers	6

Source: Adapted from Tuan, Chin & Shieh (2005)

The data were analyzed using the Statistical Package for Social Sciences (SPSS) software version 23. The variables were analyzed using descriptive analysis involves frequency, mean and standard deviation. According to Tuan, Chin & Shieh (2005), if the score (in mean) is less than or equal to 2, the level of motivation experienced is low. Scores between 2.01 to 3.00 (equal to or less than) represent a moderate level of motivation. Finally, a score above 3.01 indicates high level of motivation. The higher the students' motivation level, the higher would be their involvement in LTfH.

## Results and Discussion

### Respondents' Demographic

Table 3 shows the demographics of the respondents. Majority of the respondents consisted of female students (60.18%) compared to male students (39.82%). Most of them (85.84%) are between 20 to 23 years old. 41 of the students (36.28%) earn a Cumulative Grade Point Average (CGPA) between 3.01 to 3.49.

**Table 3 Respondents' Demographic**

Items	Respondent (Number)	Percentage (%)	
Gender	Male	45	39.82
	Female	68	60.18
Age	20 to 23 years	97	85.84
	More than 23 years	16	14.16
Cumulative Grade Point Average (CGPA)	2.00 to 2.49	21	18.58
	2.50 to 3.00	13	11.50
	3.01 to 3.49	41	36.28
	3.50 and above	27	23.89
	Others	11	9.75

### Reliability Analysis

Table 4 shows the Cronbach's Alpha coefficients for each motivational factor. According to Hair et al. (2007), these factors are reliable if the value of Cronbach's Alpha coefficient is more than 0.60. The finding of this study shows that the value of coefficient for self-efficacies is 0.853, followed by active learning strategies 0.815, the coefficient value for Macroeconomics Course learning values is 0.807, performance goals 0.802, achievement goals 0.656, and finally, the environment learning stimulation showed a coefficient value of 0.767.

**Table 4 Cronbach's Alpha Coefficients**

Motivational Factors	Number of Items	Coefficient's Value
Self-Efficacies	7	0.853
Active Learning Strategies	8	0.815
Learning Values of Macroeconomics Course	5	0.807
Performance Goals	4	0.802
Achievement Goals	5	0.656
Environment Learning Stimulation	6	0.767

The findings showed that the measurement of the Cronbach's Alpha coefficients for each motivational factor was high and more than 0.60. Therefore, all items used in this study are reliable for further testing.

### Students' Motivation Level

Table 5 shows the mean and standard deviation for the six motivational factors in Macroeconomics learning among the students. The findings showed that the highest mean score value was performance goals (mean = 4.1691, standard deviation = 0.41189), followed by achievement goals (mean = 4.1350, standard deviation = 0.48761), learning values of Macroeconomics Course (mean = 3.8040, standard deviation = 0.72936) and active learning strategies (mean = 3.7569, standard deviation = 0.57888). These four motivational factors obtained a mean score value greater than the midpoint value which is 3.00. Subsequently, the mean score value for environment learning stimulation (mean value = 2.4967, standard deviation = 0.56372), and self-efficacies (mean value = 2.3808, standard deviation = 0.52257) are less than the midpoint value which is 3.00.

**Table 5 The Mean and Standard Deviation Values**

Items	N	Min	Max	Mean	Standard Deviation
Self-Efficacies	113	2.00	5.00	2.3808	0.52257
Active Learning Strategies	113	3.00	5.00	3.7569	0.57888
Learning Values of Macroeconomics Course	113	3.00	5.00	3.8040	0.72936
Performance Goals	113	1.00	5.00	4.1691	0.41189
Achievement Goals	113	1.00	5.00	4.1350	0.48761
Environment Learning Stimulation	113	1.00	5.00	2.4967	0.56372

The findings of this study show that these students have a high level of motivation in performance goals, achievement goals, learning values of Macroeconomics Course and active learning strategies. However, their level of motivation is moderate in terms of environment learning stimulation and self-efficacies. Perhaps, this is due to them feeling insecure and do not believe in their own abilities during the LTfH session. They are also unable to interact with the lecturers due lacking of two-way communication, unlike face-to-face classes.

## Discussion

From a demographic aspect, majority of the respondents are female compared to male students with an average age between 20 to 23 years. Most of them obtained a CGPA between 3.01 to 3.49. The results of the study further showed that the measurement of Cronbach's Alpha coefficient for each motivational factor was high and more than 0.60. The value of these coefficients supports the study conducted by Hair et al. (2007), thus, they are reliable for further testing.

The objective of this study is to see the students' motivation level in learning Macroeconomics Course during LTfH. The results showed that they have a relatively high motivation in performance goals, achievement goals, learning values of Macroeconomics Course and active learning strategies. Here, the dominant factor which influence the students' motivation level is performance goals. This finding supports the study conducted by Tuan, Chin & Shieh (2005), Ryan & Deci (2017) and Chiu (2021) which stated that the students aim to compete with their peers to obtain high marks, mostly to grab their lecturers' attention. At the same time, they also feel satisfied because they can improve their learning skills, and enhance knowledge efficiency during LTfH. The values of learning Macroeconomics Course also allowed them to be more competent in solving problems. Through experiencing the process of self-inquiry, it stimulates the students' thinking so that they are able to apply macroeconomics theories and concepts with their daily life. They also take an active role in using various learning strategies to build new knowledge based on their understanding.

However, the results showed that the students have a relatively moderate motivation in the learning environment stimulation and self-efficacies. This situation indicates that the students' self-confidence is low. They do not believe in their own ability to achieve good result in the LTfH environment. They also do not know what approach to use to interact with their lecturers openly and freely during the LTfH session. These findings support the study done by Chiu (2021) who stated that motivational support from teachers (lecturers) is important in helping students' psychological needs during online learning. Such support will expand the students' engagement and efficiency to fulfill their desired goals. Thus, these motivational factors need to be explored so that the students' motivation level can be improved, especially during the LTfH environment.

### Conclusion

Overall, the findings of this study support the Theory of Self-Determination by Ryan and Deci (2000) which stated that students are able to understand, plan, adapt, and develop their own learning strategies during LTfH in order to achieve their targeted goals. However, the motivational factors of self-efficacies and learning environment stimulation need to be improved. Lecturers need to increase the effectiveness of teaching and learning during the LTfH session to increase the students' interest and competitiveness. They can combine elements of fun such as gamification, interactive teaching videos or involving students to use their creativity in the LTfH environment. According to Kutty & Joy (2019), if lecturers can develop teaching and learning pedagogy accurately, appropriate to the nature of the course and students' character, inclusive of fun elements, then this will increase the students' motivation level and engagement in the LTfH environment. Finally, the researchers hope that the future studies will be able to examine the relationship of these motivational factors on the students' academic performance.

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