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The Effects of Online Learning Attitude and Engagement on MFL Learners' Performance during COVID-19 Pandemic

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Abstract

The COVID-19 outbreak has significantly affected various activities worldwide, including education, leading to a major crisis of transferring all institutions to online learning via various educational platforms. When this happens, countless issues have arisen as everybody is adapting to the transitional phase of the traditional classroom to online teaching and learning. In Islamic Science University of Malaysia (USIM) all students are expected to use the online platform offered by the institution such as Microsoft Teams and Zoom to continue their studies. The purpose of this research is to assess students' early experiences with these new platforms. It also investigates the relationship between students' engagement and attitudes of remote learning and their course performance, especially in foreign language learning. Students' attitudes towards Mandarin as a foreign language by using e-learning, engagement with platforms, and performance with online courses are analyzed quantitatively using the statistical program for the social sciences (SPSS). Although the findings indicate that distance learning is still in its early stages, most students' positive attitudes and willingness to participate in distance learning classes in the post-COVID19 pandemic indicate that e-learning platforms in higher education institutions have a bright future. Some guidelines to inspire foreign language learners to engage in and enjoy learning foreign languages online are by preparing a course with comprehensible texts, audio-visual resources, and a proper level of difficulties.

Keywords: Online Learning, Engagement, Attitude, Performance, COVID-19

Introduction

COVID-19, a new coronavirus identified in 2019 (Huang et al.2020), quickly spread around the world. Following a study of the fatal virus's rapid global spread and intensity, the World Health Organization (WHO) declared Covid-19 as a pandemic in March 2020 (WHO, 2020), with an added declaration of social separation as a way of reducing the pandemic's spread. This pandemic has pushed the physical shutdown of businesses, athletic events, and even institutions worldwide to move their teaching and learning to an online platform. Institutions, instructors, and students at all levels have been influenced by the challenge to shift quickly to

electronic learning or e-learning settings. There are more than 1.37 billion learners (80 percent of the worldwide student population) affected by this crisis. (UNESCO, 2020). Students express conflicting feelings of anxiety, loneliness, and uncertainty about how their classes, exams, and other activities that influence their studies. However, the pandemic has forced institutions to rapidly implement unprecedented techniques together with efforts and guidelines to make online learning practicable to assist their learners in continuing their education.

Established in 1990, with great demand because of its capability for reaching global audiences, unique functionality, availability, and flexibility, online learning is not new in Malaysian higher institutions (Azhari & Ming, 2015). In keeping with the educational developments in this field, the Malaysian Ministers of Education (Malaysian Education Blueprint 2015–2025) have worked on making online learning an essential aspect of higher education and lifelong learning.

The Ministry of Education Malaysia has recognized online learning as an essential element of higher education and lifelong education in keeping with educational reform (Malaysian Education Blueprint 2015–2025) (Higher Education). Although the issue of online learning accessibility was brought up in Malaysia (Lau & Shaikh, 2012) due to the disruption of formal education and training in campus closures and restricted mobility controls, the best alternative means of continuing education is through online teaching and learning.

This article discusses the correlation of attitude and engagement of online learning and their course performance among foreign language learners at a public university in Malaysia during the pandemic. It adds value to the current literature on online teaching and learning in foreign languages via a full understanding of how universities, faculties and students migrate to the 'new' educational system. To achieve the aim, the current study intends to answer the following research questions:

1. What are the attitudes and engagement of students toward online Mandarin Chinese foreign language?
2. Is there any significant relationship between online learning attitudes, engagement, and Mandarin Chinese course performance?
3. Is there any difference in online learning attitudes and engagement among Mandarin Chinese foreign language learners?

Literature Review

Foreign language online education in higher institutions

With fast revolution of the internet, online learning has become a popular tool for learning online in recent years. It has become a more popular way of offering alternatives to traditional face-to-face teaching. (Douglas & Van Der Vyver, 2004). According to Keengwe and Kidd (2010), online learning offers many opportunities for various student groups to expand the learning environment.

Incorporating online Foreign Language (FL) education into higher education includes both remote education and personal language instruction as well as ICT-based learning that

incorporates synchronous or asynchronous activities. The pioneering use of synchronous learning methods instantaneously enhanced communication between students in remote foreign language education when the interaction between teachers and co-workers had been delayed in asynchronous learning. Some studies (Gacs et al., 2020; Felix, 2008) discovered that the online approach enhances flexibility and customization of language education and learning. It is based on realistic materials which can enhance the attendance and involvement of learners. The benefits of online language learning are obvious, but research shows that its positive effects may be limited by technical and personal problems such as the lack of autonomy for online learning or computer usage by students and teachers (Artino, 2010), and low active participation or dominance among learners (Hampel, 2003).

According to Grass et al. (2020b), researchers have also identified problems with the selection and appropriate integration of all language skills and the online usage of education resources. According to a recent study (Islam et al., 2020), students prefer educational resources which are available for a long time on the e-learning platform (e.g., preparation of video lectures, recorded lecturers) which they can view at their own leisure time throughout the semester.

Attitude and Language Learning

Gardner (1985) defined attitude as a conclusion based on a collection of people's attitudes. It is the combination of people's instructions and feelings, prejudice or bias, fears, and approaches to any given situation. According to Brown (1994), attitude, like other aspects of cognitive and emotional development in humans, begins in childhood. According to him, attitude is the result of one's parents' and peers' attitudes, interaction with others who are different in some way and interacting effective elements in the human experience. Several factors affect one's positive or negative attitude.

Before the 1960s, few linguists paid much attention to attitudes. At the time, language attitudes were gaining prominence in the field of psychology. The findings of psychological studies on the functions of attitudes in language learning have drawn the attention of many language acquisition researchers to the importance of this internal construct in influencing language learning. Attitude can be positive or negative, but it can also be confusing at times. Language and attitude cannot exist in isolation. They cannot be separated since each plays a unique function in usage. In sociolinguistics, the attitude has assumed the position of an element that humans should have to communicate with one another. Some linguistic research focuses entirely on attitudes about the language itself. Attitudes toward speakers of a certain language, on the other hand, are usually included in the concept of linguistic attitudes.

Previous studies (Csizér, 2007; Dörnyei, 2009) found a link between attitude and motivation. A positive attitude can increase motivation, which can lead to better performance. According to Pavlenko (2005), attitudes and motivation can "change throughout time and are inextricably linked to actual social, political, and socio-historical settings and power dynamics" (p. 31).

Engagement and Language Learning

The relationship that exists between students' learning and the time, effort, and resources that they devote to their education is referred to as the basis of student engagement. The study on student involvement was often derived from Astin's (1985) "Student Involvement Theory" and dubbed "students' engagement theory." Astin (1984) defines student engagement as "the amount of physical and psychological energy that students give to the academic experience" (p. 518). In other regards, an active student devotes a substantial amount of time and effort to regular active study in schools or institutions, as well as engages and communicates with his or her classmates and professors. According to Astin's theory, student engagement, both physically and cognitively, is determined not just by teaching practice or topic, but also by individual student behavior. As a result, Astin's concept of student involvement serves as the cornerstone for the engagement foundation design.

According to Harper and Quaye (2014), engagement includes not just involvement and participation, but also feelings of belonging and sense-making, as well as activities. Students' engagement is measured by how actively they participate in their learning process, their willingness and desire to participate in academic activities, interact and connect with their instructors and classmates, and other factors.

Students see the benefits of engagement in their learning, according to Bensimon (2009, as quoted in Trowler, 2010 (p36), and they "must devote time and effort into academic practices ... that correlate highly with excellent educational outcomes". Many studies have demonstrated that learner engagement has a substantial impact on academic success (Quaye & Harper, 2014; Lee, 2013). Learner engagement is one of the factors in the field of foreign language education. Learners who disengage from learning, according to Rudman and Gustavsson (2011), may have a detrimental influence on their level of function and performance at university, as well as their future work-related wellbeing. Learners who are more interested in their learning, according to Law (2007), may be able to deal with their course work. Therefore, they excelled academically, allowing them to gain more knowledge and skills for the future.

Online Foreign Language Learning: Attitude and Engagement

Learner engagement is an essential factor to consider when developing a successful course, especially when aiming to improve learning outcomes. However, previous research (e.g., Sun, 2014) found that there are difficulties and challenges faced by learners when learning a language fully online such as ensuring constant engagement with class, stay self-motivated. In the Malaysian context, Selvanathan et al (2020) investigated the Malaysian higher institution students' experience of adoption of online learning during the pandemic.

Oraif and Elyas (2021) conducted a study among high school English as foreign language learners to examine the engagement of learning in an online course during Covid-19 in Saudi Arabia. The study discovered that there was a high level of engagement of online foreign learning whereby the authors argued that online learning environment can be implemented to national or international level to improve the English as a Foreign Language (EFL) practice.

Researchers (Gobert et al., 2015; Greene, 2015) have lately highlighted the need of utilizing a variety of methods to assess engagement.

Methodology

Research Design

This quantitative research employed a questionnaire survey to collect data from 309 students enrolled in three diverse levels of Mandarin courses at Islamic Science University of Malaysia (USIM). Participants voluntarily participated in this study which used the purposive sampling. The participants were undergraduate students taking Mandarin courses from several faculties at USIM.

Participants

Participants consisted of 83.6 percent (n=259) females and 16.2 percent (n=50) males. Among the total of 309, 28.2 percent of respondents (n=87) were first-year students, 25 percent (n=65) were second-year students, 45.6 percent (n=141) were third-year students, and 5.2 percent (n=16) were final-year students.

Instrument

The questionnaire consisted of two parts: (1) participants' personal information: course, year, faculty, grade and (2) items related to online learning attitude and engagement scale.

The researchers measured students' behavioral engagement using attendance data from online classes conducted through Microsoft Teams, online logins to the GOALS platform, and completed online self-assessments in Quizizz.com.

The online learning attitude and engagement were assessed objectively throughout the self-reported survey which was adapted and modified from Reeve & Tseng's (2011) Mandarin language classroom engagement and reported strong reliability (Cronbach's $\alpha=.82$). The researchers adjusted some of the original instrument items to suit the participants, and to ensure relevance to Mandarin as a foreign language online learning context.

The original scale of Mandarin foreign language online learning attitude consisted of 20 items and online learning engagement comprised Mandarin foreign language learning consisted of 20 and 22 items. After the pilot test, some of the items have been deleted due to the low Cronbach's alpha. The total items utilized for data analysis are online learning attitude (13 items) and online learning engagement (22 items).

The questionnaire was distributed towards the end of the semester. To identify any confusing items, the questionnaire was reviewed and evaluated by an expert. Consequently, a pilot study was conducted, and the questionnaire was distributed to collect data. Approximately 309 (96.6 percent) of the 320 online surveys issued for data collection replied to the survey. However, 20 surveys were discarded because they were incomplete, thus about 284 (85.41 percent) of the surveys were declared valid.

To assess the questionnaire's reliability, an internal consistency, a test was performed on the complete questionnaire using SPSS software. Cronbach's alpha was reported for online learning attitude range from .847 to .868 and for online learning, engagement range from .891 to .901 which surpassed the suggested rate .70 by Hair et al. (2009) as

cited in Hong et al., 2018). It shows that the items had a statistically significant relationship (a level of significance is 0.01) with the dimension to which they belonged. With regard to the survey sample's responses to the tool, 30 students took part in a pilot study. These responses matched the characteristics of the research sample.

To evaluate Mandarin as a foreign language performance, we utilized the actual semester course grade obtained at the end of the semester. All letter grades were transformed to a standard grade point average (GPA) scale (i.e., F = 0.00 to A+ = 4.00).

The collected data were utilized to address the primary goal of this research, which was to evaluate the relationship of online learning attitude and engagement during Malaysia's Covid-19 lockdown period.

Data Analysis

To conduct the statistical descriptive analysis necessary, IBM Social Science Package (SPSS) 24.0 was used to analyze all the variables. The examination between Mandarin foreign language performance among Malay novice learners and several variables, such as the online learning attitude and engagement have been analyzed by using correlation and multiple linear regression (MLR).

Finding and Discussion

The demographic information of participants is displayed in Table 1. The majority of participants were female (82.7%) and less male (17.3%). There were 28.2% first-year students, followed by second-year students (21.5%), third-year students (44.7%), and fourth-year students (5.6%) The majority of participants were Mandarin I students (59.2%), followed by an equal number of students in Mandarin II(20.4%) and Mandarin III (20.4%). In terms of faculty, the majority were from the Faculty of Major language studies students (71.1%) followed by the Faculty of Science and Technology students (20.8%), Faculty of Economics, and Muamalat (4.6%). There were not many participants from the Faculty of Quran and Sunnah (1.4%), Faculty of Leadership and Management (0.4%), Faculty of Shariah and Law (2.1%)

Table 1. Demographic Information of Participants

		Frequency	Percentage %
Gender	Male	49	17.3
	Female	235	82.7
Year of study	First year	80	28.2
	Second year	67	21.5
	Third year	127	44.7
	Fourth Year	16	5.6
Course	Mandarin I	168	59.2
	Mandarin II	58	20.4
	Mandarin III	58	20.4
Faculty	Faculty of Major Language Studies	202	71.1
	Faculty of Economics and Muamalat	12	4.2
	Faculty of Quran and Sunnah	4	1.4
	Faculty of Leadership and Management	1	0.4
	Faculty of Syariah and Law	6	2.1
	Faculty of Science and Technology	59	20.8

The mean scores (M) and corresponding standard deviations (SD) for online Mandarin learning attitude engagement are presented in Table 2. The overall mean score for Mandarin online learning attitude was 4.22(SD = 0.42) indicating that students' Mandarin online learning attitude was positive. Inspection on the individual questionnaire items for Mandarin online learning attitude revealed that students were keen on Learning Mandarin during COVID-19 pandemic although they were facing technical and internet problems. The majority of them agreed that learning Mandarin foreign language online is fun and enjoyable during the online class activities given by instructors. Students tend to invest more time to improve their Mandarin knowledge by completing the online tasks given and contact instructors for help via online communication when having difficulties understanding the topics taught.

Similarly, Mandarin online learning engagement clarified that students confirmed to the high level of engagement, as their mean scores were 4.09 (SD=0.43). They prepared themselves before the online class took place by studying and reviewing the notes and recorded lectures. During the online class, they tried to listen carefully and took notes, at the same time they were not afraid to answer and ask questions during the lessons. Majority of them agreed that although Mandarin foreign language is a very difficult subject, they put a lot of effort to study. Students were interested in learning new things in Mandarin foreign language online courses.

Table 2. Mean score and standard deviation values

	Mean (M)	Std. Deviation Statistic
Attitude towards online Mandarin course	4.42	0.42
Mandarin online course engagement	4.09	0.43

Table 3. indicates the Pearson correlation coefficients run to evaluate the relationship between attitude towards Mandarin online course and Mandarin online course engagement, attitude towards Mandarin online course, online engagement, and course performance. There was a strong and significant positive relationship between attitude towards Mandarin online course and Mandarin online course engagement ($r(284) = 0.735^{**}$, $p < 0.01$). It indicated that students who show a positive attitude towards Mandarin foreign language online courses were more engaged. Mandarin online course attitude ($r(284) = 0.26$, $p < 0.01$) and engagement ($r(284) = 0.286$, $p < 0.01$) were found to be moderately positively correlated to course performance.

To determine if engagement and attitude towards Mandarin online course on-course performance, multiple linear regression was employed. (Table 4)

Table 3. Correlations

		Grade	Attitude	Engagement
Grade	Pearson Correlation	1	0.226	0.286
	Sig.(2-tailed)		.000	.000
	N	284	284	284
Attitude	Pearson Correlation	0.226	1	.735**
	Sig.(2-tailed)	.000		.000
	N	284	284	284
Engagement	Pearson Correlation	0.286	.735**	
	Sig.(2-tailed)	.000	.000	1
	N	284	284	284

** . Correlation is significant at the 0.01 level (2-tailed).

To determine if Mandarin course performance is influenced by engagement and attitude towards Mandarin online courses, multiple linear regression was employed. Mandarin online course performance was the dependent variable with engagement and attitude towards Mandarin online course as independent variables (predictor) in the regression model. The full model (both predictors included in the model) summary of the fitted regression model is presented in Table 5. The multiple correlation coefficient (R) value of .87 indicated a high degree of correlation between the observed and predicted values of Mandarin course performance, while multiple coefficient of determination (R^2) value revealed that 38 % of total variation in Mandarin Online course performance can be explained by engagement and attitude towards Mandarin online course.

Table 5. Model summary

R	R square	Adjusted R Square	Std. Error of the Estimate
0.87	0.38	0.76	1.53

Table 6. indicates the summary of analysis of variance (ANOVA) corresponding to the fitted regression model. The Mandarin online engagement were significant ($F(2,281)=12.648$, predictor of Mandarin Chinese course performance while attitude towards Mandarin online course was not. ($p=.687 > 0.05$)

Table 6. ANOVA.

Model	Sum of squares	df	Mean square	F	Sig.
Regression	57.17	2	28.55	12.648	0
Residual	634.49	281	2.258		
Total	691.61	283			

Table 7. is presented to indicate the coefficients of the fitted regression model. Online course engagement was an explanatory variable to explain students' Mandarin online course performance. ($p < 0.05$). It can be explained that compared to attitude towards Mandarin, engagement has a greater influence on Mandarin online course performance for Mandarin Chinese as foreign language learners.

Table 7 Coefficients ^a

Model	Under standardized Coefficient (B)	standardized Coefficient (Beta)	t	sig.
(Constant)	7.67		8.59	0
Attitude	0.114	0.16	0.404	0.687
Engagement	0.936	0.34	3.14	0.002

Conclusion and Implementation

This study aimed to investigate the influence of engagement and attitude towards Mandarin Chinese as a foreign language online course among undergraduate novice learners in a public university in Malaysia. Based on the correlation coefficients, it can be explained that Mandarin online course engagement and attitude were both positively related to course performance. Multiple linear regression analysis indicated that engagement is a greater factor to predict the Mandarin online course performance during the Covid-19 pandemic. 38% of the variance in Mandarin online course performance was accounted for by engagement in the online course. Hence, engaging students in the online class will help them to perform better in the Mandarin online courses. In practice, emotional engagement was highly influenced by course performance. The findings were also aligned to previous studies (e.g., Crisp, 2018; Hewson, 2018) that there were impacts of emotional engagement on learning.

Findings from the descriptive analysis discovered that students have a positive attitude towards Mandarin online courses, and they are engaged and able to complete the tasks and follow the online course. For instance, during the Covid-19 pandemic, remote learning was the only possibility for all institutions including universities all around the world to restart classes. Students were confused, lonely, and unsure about what would happen with classes,

examinations, graduation, and other key events influencing their academic matters, regardless of their everyday challenges with limited access to resources. (Ismaili, 2021). As emotional engagement is a crucial aspect of online teaching effectiveness, (Reyes-Fournier et al., 2020) educators, rather than only focusing on online course content and design, should also facilitate learners' social and collaborative integration to ensure learners are emotionally connected within the course. Educators should play their role to identify the ways to connect with their students, and with their peers, help students to increase their retention, and involve them fully in the academic courses by offering encouraging message, interacting with students online via video-calls, telegram, video- conferences. It is very important for instructors to also organize platforms clearly and logically to make students easily assess the course material, content, and activities online. Instructors also need to make students aware that they care about the students' progress by providing feedback and comments on the tasks and activities they have accomplished. Instructors can utilize all kinds of online management tools to check learners' progress and guide them properly on what they should do next. By doing this, students feel that the teachers really care about their progress and in return, they will be more engaged in the course.

The authors recommend that designers and instructors of foreign language courses get familiar with distance learning theories and practices. To ensure course quality, course designers and instructors should carefully prepare the course in terms of utilizing understandable texts and audio-visual resources, assuring an acceptable level of difficulty, and applying quality techniques, interactions, and assessments. Contact students regularly to ensure the opportunity for emotional interaction within their course to help students engage in their learning, especially during this Covid-19 pandemic.

The study contributes to the present literature on online teaching and learning in foreign languages by providing a thorough knowledge of how universities, faculties, and students transition to the 'new' educational system. In this context, the findings of this study have the potential to contribute to a new information perspective of online teaching and learning for future Mandarin learners, academics, researchers, program coordinators, and university policymakers.

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