

ESL Students' Online Learning Satisfaction in Malaysian Higher Education Institutions: Post-COVID-19 Review

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ABSTRACT

The Covid-19 pandemic that spread to the worldwide in early 2020 has affected conventional educational delivery in most countries. With higher education institutions and universities across Malaysia turning to online learning during the pandemic, many universities and instructors started to concern about the quality of instruction of English learning. Most ESL students are grappling with the online environment and access to technology. Therefore, the survey aimed to examine the ESL students' online learning satisfaction during the pandemic. A survey method was employed in this study. An online questionnaire was disseminated to the respondents. A total of 236 ESL students from several selected higher learning institutions participated and responded to the online questionnaires. Data was analyzed statistically using SPSS version 28. The results revealed that the ESL students have discovered that online learning did not impede them from learning English. Conversely, learning through an online environment can increase positivity among students in language learning. Moreover, students have constructive feedback towards online learning. Hence, the students' satisfaction towards online learning adoption is satisfactory. However, the problem of technological services needs to be resolved and improved for a better online learning environment. The empirical findings of the study may provide constructive insights for universities and policymakers in developing effective strategies to equip students for online learning and distance education.

Keywords: satisfaction, online learning, ESL students, higher education

INTRODUCTION

The Covid-19 pandemic has wreaked havoc on education systems around the world, affecting learners and teachers from pre-primary to secondary schools, technical and vocational education, and training (TVET) institutions, universities, adult learning, and skills development institutions. As a response to Malaysia's "new normal," new substitutes must be developed to cope with the new environment, such as widespread e-learning implementation. As a means of preventing the virus from spreading, most education sectors have chosen to undertake e-learning. In addition, the conducive environment for online learning such as the ambience, the infrastructure and the ergonomics of the setting is critical (Chedi & Mustapha, 2020). The pandemic's effects are volatile, and it has an influence on education; most countries have had to adjust to new teaching and learning methods (Shahzad et al., 2020). The fast changes of the Covid-19 pandemic have had a significant impact on students and instructors in higher education institutions (Chung et al., 2020). For both students and instructors, online education is the ideal option, especially during the lengthy MCO stages but the management of these institutions must examine several critical issues impacting the deployment of online learning technology, including internet speed, coverage, and the time restrictions encountered by both educators and students (Yusuf, 2020). The sudden emergence of the pandemic has led to numerous issues in the academic system. Online learning has its onset in what was conventionally known as distance education (Chisadza, 2021). Online learning is still regarded as one of the most important approaches to be used, particularly during the pre-and post-Covid-19 pandemic phases (Mardiah, 2020). There are numerous issues regarding the

challenges of ESL teaching and learning through online learning during the pandemic not only in Malaysia but also in other regions worldwide. This sudden change has also resulted in the adoption of a new method of online learning for ESL students. Students are under more pressure when participating in online learning. They need to overcome the typical challenges and the various barriers of the online learning environment. Learning English as a second language is not a simple task, it necessitates a great deal of dedication, motivation and determination. With regards to online mode of learning, learners face difficulties such as lack of experience, poor and unstable internet network, unconducive learning environment and lack of motivation (Barrot et al., 2021). Therefore, this study focused on the ESL students' online learning satisfaction during pandemic at higher learning institutions in Malaysia. The findings of this study are expected to provide some insights about ESL students' perceptions of online learning adoption and their satisfaction towards learning English via online.

Verawardina et al. (2020) believed that e-learning provides instructors and learners to undertake teaching and learning in and out of the classroom using the internet. Due to accessibility to mobile phones and Internet connectivity, the university instructors also keep on encouraging their students to use mobile devices extensively for the online teaching and learning process besides using the PC or laptop. Lecturers who were previously unwilling to adapt their traditional pedagogical approach now have little choice but to move entirely to e-learning (Dhawan, 2020). Author (2022) also identified that online learning via mind map could aid in the development of learning skills and nurturing creativity and design thinking in the students' learning course. As a result of this exceptional situation, various educational applications have been introduced as a solution to these issues. Thus, there are numerous issues regarding the challenges of ESL teaching and learning through online learning during the pandemic not only in Malaysia but also in other regions.

Problem Statement

The pandemic has resulted in higher learning institutions being shut across the world. Thus, education has changed dramatically, with the distinctive rise of online learning, whereby teaching and learning is undertaken remotely and on digital platforms. ESL undergraduates in the universities need to use various virtual platforms based on their lecturers and the universities' requirements. Due to the pandemic, the ESL students in the Malaysia universities must shift their learning mode from face-to-face learning to online learning. Online learning is a type of instructional learning design that allows for distance interaction by utilizing technological sophistication. However, most universities students are not prepared for the online learning experience. For example, students felt unfamiliar with online learning and struggled with poor or no internet connection, while teachers' technology readiness and competence was one of the main challenges (Lukas & Yunus, 2021). During the pandemic, ESL undergraduates have also faced various difficulties and challenges due to abrupt changes of learning style. They need to cope with the virtual learning to learn English. Furthermore, they came from different backgrounds that also contribute towards the challenges of remote learning. To provide guidance to institutions and assist them in deciding on, designing, and implementing a relevant and fulfilling approach to education, it is critical to assess the current adoption of remote learning as well as students' experiences with and preferences for online education. Thus, the current study was undertaken to investigate the ESL undergraduates' perceptions of online learning adoption and their satisfaction of learning English through online.

Purpose of the Study

The purpose of this study was to examine the ESL students' online learning satisfaction during the COVID-19 pandemic. This study was guided by the following specific objectives:

1. To identify ESL students' perceptions of online learning adoption during pandemic
2. To identify ESL students' online learning satisfaction during pandemic
3. To determine the relationship between ESL students' perceptions of online learning adoption and the online learning satisfaction
4. To explore factors that facilitate and inhibit the ESL students' online learning

LITERATURE REVIEW

The Covid-19 pandemic has prompted new methods of learning. Educational institutions all over the world are turning to online learning platforms to help them continue the process of educating students. The new normal now is a transformed concept of education, with online learning at its heart. Online learning, like most teaching methods, has advantages and disadvantages. Decoding and comprehending these positives and negatives will assist institutes in developing strategies for more efficiently delivering lessons, ensuring students have an uninterrupted learning journey. Various online learning methods are being adapted to fit the current situation during pandemics (Author, 2023). Online learning can be described as learning experiences in synchronous or asynchronous environments using various devices with internet access such as mobile phones and laptops. Students can be anywhere and independent in these environments to learn and interact with instructors and other students (Singh & Thurman, 2019). Verawardina et al. (2020) believed that e-learning provides instructors and learners to undertake teaching and learning in and out of the classroom using the internet. Online learning is done remotely using electronic devices such as tablets, smart phones, laptops, and computers that require an internet connection (Seresirikachorn et al., 2022). During the pandemic, ESL students were forced to adapt to online learning, and English teachers were forced to adapt to using a variety of online platforms such as Zooms and Google Meet for giving online classes, tasks, and quizzes (Soon & Aziz, 2022). Even though online learning is the best solution during a pandemic, the use of technology in education is a challenge, if not a threat, for institutions that are not used to using technology. There are some advantages and disadvantages of online learning. Several benefits of online learning include global accessibility, time, money, and effort savings. The three most difficult challenges for online teaching are distance, scale, and personalized teaching and learning. Institutional innovation can only help us deal with this pandemic (Liguori & Winkler, 2020). Specifically, some difficulties were encountered in English language skills and other English courses, such as writing, speaking, and reading challenges (Mahyoob, 2020). Moreover, the findings revealed a positive correlation between academic self-efficacy and online learning anxiety during the pandemic crisis (Chaleila et al. 2024).

Conceptual Framework

The conceptual framework of the study as in Figure 1 illustrates two main concepts: (a) online learning adoption, (b) satisfaction towards online learning, and (c) demographic factors. Based on the framework, the online learning adoption is an independent variable whereas the ESL students' online learning satisfaction is a dependent variable. The moderator variables are demographic factors. The concept of online learning adoption, namely, the Technology Acceptance Model (TAM) is an information systems concept that describes how people happen to accept and use technology. This model is projected by Venkatesh & David (2000). The key components in the online digital adoption were perceived usefulness, perceived ease of use, and user satisfaction. For the second concept, we used Students' Satisfaction in Online Courses Model developed by Bollinger & Matilde (2004) which described satisfaction towards online learning. In this concept, there are four main components: instructor dimensions, digital technology, cybergogy, and interactivity. Online learning adoption was selected as an independent variable and ESL students' online learning satisfaction was selected as a dependent variable. The moderator variable consists of age, gender, location of hometown, socio-economic Status (SES) and the attitude towards online teaching and learning. Thus, we designed and developed this conceptual framework to examine the ESL students' online learning satisfaction during the COVID-19 pandemic.

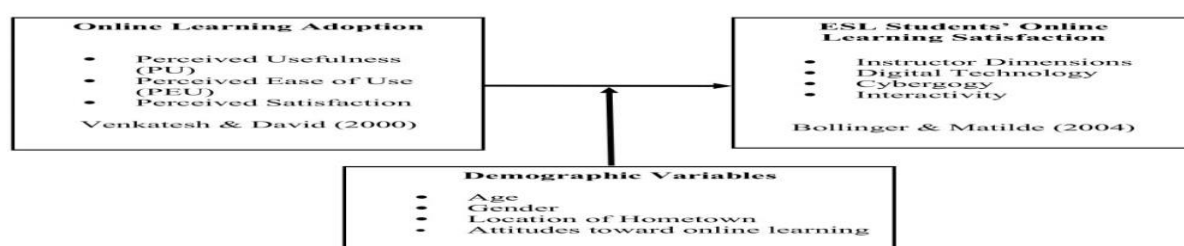


Figure 1: Conceptual Framework of ESL Students' Online Learning Satisfaction

METHODOLOGY

In this study, we employed a survey method to examine the ESL students' online learning satisfaction during the pandemic. Survey designs are methods used in quantitative research, according to Creswell (2012), whereby researchers give a survey to a sample or the complete population to describe the attitudes, opinions, behaviors, or features of the population. The students came from several higher learning institutions in Malaysia. For this study, the researchers adapted and designed an online questionnaire item adapted from two models: Technology Acceptance Model (TAM) (Venkatesh & Davis, 2000) and Student Satisfaction in Online Courses Model (Bolliger & Martindale, 2004). Based on the first model, the questionnaire items included three main sections; perceived usefulness (PU), perceived ease of use (PEU), and perceived satisfaction (PS) that measured online learning adoption among respondents. For the second model, the researchers included four main sections: (1) instructor dimensions, (2) digital technology, (3) cybergogy and (4) interactivity to evaluate the satisfaction towards online learning among respondents during the pandemic. We designed and developed a set of online questionnaires to examine the ESL students' online learning satisfaction. The researchers designed five main sections of questionnaire: (A) ESL student profile (9 items), (B) Perception of online learning adoption (18 items), (C) Online learning satisfaction (24 items). The three open-ended items were also included in this questionnaire in section D to measure qualitative responses of respondents about the factors that facilitate and impede their English learning via online learning. The respondents were also asked about their online learning satisfaction when English learning. Overall, the questionnaire consists of a total of 54 items. This questionnaire used 5-point Likert scale (i) strongly agree (5), agree (4), uncertain (3), disagree (2) and strongly disagree (1). The survey was created using Google forms and disseminated to the ESL students through the online platform including the social networking apps (WhatsApp). The survey was reviewed by three experts qualified in the field. The reliability of the instrument was high (Cronbach Alpha coefficient, $\alpha = 0.948$). The study was conducted on 236 ESL students from selected higher learning institutions. The students' ages range from 17 to 26 years old. They were from diploma and degree level who are studying various majors at the higher learning institutions. For this study, the respondents were the undergraduates who have taken English courses as a compulsory course in their institutions. Thus, the online survey was treated in English, and it was easy to understand.

RESULTS AND DISCUSSION

Student Profile

The ESL student profile in Table 1 showed a total of 236 respondents comprised of 53 male (22.5%) and 183 female (77.5%) undergraduates. The age of the respondents mostly was between 17-19 years old (77.5%) followed by the respondents' age between 20-22 years old (17.4%). Only 7% of the respondents' ages were between 23- 25 years old followed by 5% of the respondents aged between 26 years and above had responded to the online questionnaire. Most of respondents live in the city (53%) whereas 25% of the respondents live in the rural area. Only 22 % of the respondents answered that they live in the suburban area. The respondents were also asked about their device used for online learning. Based on the table, it displayed that the most popular device used by the respondents was laptop (75%) followed by mobile phone (19.9%). Not many respondents chose personal computers (3.0%) and tablets (1.3%) for their online learning. No respondents answered for other devices. For online learning platforms that the respondents usually use for learning, the Learning Management System (LMS) had the highest percentage (56.4%). It is followed by video conferencing (27.5%) as a platform that the respondents mostly use for their online learning. The respondents mostly answered that social media (15.3%) is a platform for their online learning. Only 0.8% used blogs platforms as for their online learning platform. From the table, it showed that the respondents enjoyed studies through online learning (56.8%) and about 43.2 % did not enjoy studies through online. The respondents mostly said that they like to learn English through online learning and only 23.7% said that they did not like learning English through online. The same result was supported by Jiang et al. (2021) which found out that the students enjoy having the pleasure of time and space when they learn English via online.

Table 1. Student Profile

Characteristics	Frequency	Percentage (%)
Gender		
Male	53	22.5
Female	183	77.5
Age		
17- 19 years old	183	77.5
20 - 22 years old	41	17.4
23 – 25 years old	7	3.0
26 years and above	5	2.1
Location of Hometown		
City	125	53.0
Suburban	52	22.0
Rural	59	25.0
Like learning English		
Yes	227	96.2
No	9	3.8
Device usually use for online learning		
Personal computer	7	3.0
Laptop	178	75.8
Mobile Phone	47	19.9
Tablet	3	1.3
Other	0	0
Platform of online learning usually use for learning		
Learning Management System (LMS)	133	56.4
Social media	36	15.3
Video Conferencing	65	27.5
Blogs	2	0.8

Enjoy studies through online learning		
Yes	134	56.8
No	102	43.2
Like to learn English through online learning		
Yes	180	76.3
No	56	23.7

The next section displayed the results of mean and standard deviation for ESL students' perceptions of online learning adoption. The results were arranged based on the parts in the questionnaire. The interpretation for the mean values in this study was distributed into five sections: Strongly Agree (4.21-5.00), Agree (3.41- 4.20), Uncertain (2.61-3.40), Disagree (1.81-2.60) and Strongly Disagree (1.00-1.80). For these results of the study, we discussed the three highest mean and the three lowest mean values of the items as shown in the tables.

Students' Perceptions of Online Learning Adoption

Table 2 showed the results of mean and the standard deviation for the ESL students' perceptions of online learning adoption for answering Research Question 1. The total of 18 items were divided into three main parts (i) Perceived Usefulness (PU) (6 items), (ii) Perceive Ease of Use (PEU) (6 items) and Perceived Satisfaction (PS) (6 items). In term of Perceived of Usefulness, the table described the three highest means for online learning adoption perceived by the respondents was using online improves my digital skills ($M=4.13$; $SD = 0.75$) in item 3. Then, it observed by the item 4 that stated using online makes it easier to do my tasks and assignments ($M=3.65$; $SD = 0.94$). For item 6, the respondents mostly agreed with the item which said they find online learning is useful for learning English. However, this finding is difference with the results of the study done by

Okyar (2023) who found that most of the students prefer face-to-face English learning in a classroom. The lowest means ($M = 3.11$; $SD = 0.92$) in item 5 showed that the respondents barely agreed that the online learning helps them to understand the subject matter. It is followed by item 1 which the respondents were undecided that using online for their English learning helps them to learn better ($M=3.36$; $SD=0.84$). Finally, the item 2 also had the lowest means which was using online can improve their English language performance ($M=3.38$; $SD = 0.84$).

Table 2. Perceptions of Online Learning Adoption

Item		M	SD	Interpretation
Perceived Usefulness (PU)				
1	Using online for my learning helps me to learn better	3.36	0.84	Uncertain
2	Using online improves my language performance	3.38	0.84	Uncertain
3	Using online improves my digital skills	4.13	0.75	Agree
4	Using online makes it easier to do my tasks and assignments	3.65	0.94	Agree
5	Using online helps me to understand better my subject	3.11	0.92	Uncertain

6	Generally, I find online learning is useful for English language learning	3.54	0.82	Agree
Perceive Ease of Use (PEU)				
7	I find online learning is easy for me	3.05	0.98	Uncertain
8	I learn through online without any difficulty	2.75	1.01	Uncertain
9	I find online learning makes my learning more flexible	3.38	1.00	Uncertain
10	It is easy for me to interact with my instructors and friends through online learning	2.96	1.02	Uncertain
11	I understand my instructors' materials and directions easily through online learning	3.36	0.91	Uncertain
12	I find learning through online makes my language learning easier	3.37	0.84	Uncertain
Perceived Satisfaction (PS)				
13	By online learning, I am motivated to learn English language	3.41	0.87	Agree
14	I learnt with more flexibility in time and space through online learning	3.57	0.93	Agree
15	I accessed my study resources easier and effective in completing my tasks and assignments	3.69	0.83	Agree
16	I improved collaboration and interactivity with my friends	3.28	0.94	Uncertain
17	I found that my online experience has increased my digital skills.	4.06	0.76	Agree
18	I have more opportunities to enhance my language skills through online learning	3.57	0.79	Agree
	Total average	3.42	0.63	Agree

Based on the table, the items for the part of Perceived Ease of Use showed the three highest mean as identified by the respondents. Among the three highest means indicated that the respondents find online learning makes their learning more flexible ($M = 3.38$; $SD = 1.00$) in item 9. For item 12, the respondents agreed ($M = 3.37$; $SD = 0.84$) that they find online learning makes their language learning easier. Next, the respondents were also agreed ($M = 3.36$; $SD = 0.91$) with item 11 that stated they can understand their instructors' materials and directions easily through online learning. On the other hand, the three lowest means presented that the respondents barely agreed ($M = 2.75$; $SD = 1.01$) that they can learn through online without any difficulty. Next, they were hardly agreed ($M = 2.96$; $SD = 1.02$) with item 10 that said it is easy for them to interact with their instructors and friends through online learning. The third lowest mean was ($M = 3.05$; $SD = 0.98$) in item 7 showed that the respondents were not so agreed that online learning is easy for them.

Regarding to Perceived Satisfaction (PS) part, it indicated the three highest means as illustrated by the table.

The results of the first highest mean denoted that the respondents agreed ($M = 4.06$; $SD = 0.76$) that they found the online experience has increased their digital skills 9 item 17). Next, the respondents were mostly believed

that ($M=3.69$; $SD=0.83$) they accessed their study resources easier and effective in completing their tasks and assignments (item 15). The third highest mean was ($M = 3.57$; $SD = 0.93$) revealed that the respondents agreed that they learnt with more flexibility in time and space through online learning (item14). Similarly, the respondents also agreed ($M =3.57$; $SD = 0.79$) that they have more opportunities to enhance their English language skills through online learning (item 18). It was said that the use of *Blackboard* as an effective online learning platform in Saudi universities contributed the positive impacts among the university students (Almekhlafy, 2020). For the lowest means, the respondents were hardly agreed that ($M=3.28$; $SD=0.94$) they improved collaboration and interactivity with their friends. Finally, the respondents were also said that they were not so agree ($M=3.41$; $SD=0.87$) that they are motivated to learn English by online learning (item 13).

Students' Online Learning Satisfaction

Table 3 presented the results of the ESL students' online learning satisfaction during COVID-19 crisis. For responding to Research Question 2, the table illustrated the mean and standard deviation for the items answered by the respondents. For this section, the results of 24 items in this section were divided into four main parts (i) instructor dimensions (6 items) (ii) digital technology (6 items) (iii) cybergogy (6 items) and (iv) interactivity (6 items). Regarding the instructor dimension, the results of the three highest means showed that the respondents agreed ($M=4.11$; $SD=0.76$) that they satisfied with the instructor's preparedness for teaching English through online (item 20). Then, it followed by the item 22 which the respondents considered ($M=4.06$; $SD=0.77$) that they satisfied with the instructors' various online teaching approaches in teaching English language. The respondents also mostly agreed ($M=4.03$; $SD=0.75$) that they satisfied with their instructors' assistance because it made them feel they are part of the class and belong. Most of them were satisfied with the instructor's proficient in using the Web and online platform (item 23). For the lowest mean results, the respondents only just agreed ($M=4.01$; $SD=0.79$) with the item stated that they satisfied when the instructors' giving feedback and evaluation on their test and assignments through online (item 24). For the final lowest mean in this section, the respondents said that they hardly agreed ($M=3.95$; $SD=0.78$) that they satisfied with the accessibility and availability of the instructor in item 19.

Concerning to the digital technology part, the three highest mean was ($M=3.87$; $SD=0.86$) stated that the respondents satisfied with the use of technology during their online learning 9item 27). Next, the second highest mean was ($M=3.86$; $SD=0.84$) which the respondents agreed that they satisfied with the various digital tools they used in online learning (item 28). The respondents also agreed ($M=3.82$; $SD=0.91$) that they satisfied with the digital device used for their online learning in item 26. Students' interest in learning increases and the quality of the educational experience is enhanced when technology is employed effectively. The accessibility and quicker adoption of digital learning has been the development of e-learning systems that are compatible with new smart devices, such phones and tablets (Haleem et al., 2022).

For the first lowest mean, the respondents were barely agreed ($M=3.73$; $SD=0.80$) that they satisfied when they downloaded English learning resources in the Web (item 29). Next, they just agreed ($M=3.57$; $SD=0.86$) that they satisfied with how much they enjoy communicating and collaborating with the instructor and friends using social media (item 30). Lastly, item 25 showed the lowest mean, which showed the respondents just agreed ($M=3.45$; $SD=1.05$) that they satisfied with the internet access during the online learning.

Table 3. Online Learning Satisfaction

Item		M	SD	Interpretation
Instructor dimensions				
19	I am satisfied with the accessibility and availability of the instructor	3.95	0.78	Agree
20	I am satisfied with the instructor's preparedness for teaching English through	4.11	0.76	Agree

	online			
21	I am satisfied with my instructor's assistance because they make me feel that I am part of the class and belong.	4.03	0.75	Agree
22	I am satisfied with the instructor's various online teaching approaches in teaching English language	4.06	0.77	Agree
23	I am satisfied with the instructor's proficient in using the Web and online platform	4.03	0.75	Agree
24	I am satisfied when the instructor's giving feedback and evaluation on my test and assignments through online	4.01	0.79	Agree
Digital Technology				
25	I am satisfied with the internet access during online learning	3.45	1.05	Agree
26	I am satisfied with the digital device used for my online learning	3.82	0.91	Agree
27	I am satisfied with the use of technology during my online learning	3.87	0.86	Agree
28	I am satisfied with various digital tools utilized in online learning	3.86	0.84	Agree
29	I am satisfied with download times of English learning resources in the Web	3.73	0.80	Agree
30	I am satisfied with how much I enjoy communicating and collaborating with the instructor and friends using social media	3.57	0.86	Agree
Cybergogy				
31	I am satisfied with the course contents delivered through online learning	3.75	0.77	Agree
32	I am satisfied with the quality of material and information delivery through online learning	3.87	0.77	Agree
33	I am satisfied with the use of threaded online discussions or forums.	3.71	0.79	Agree
34	I am satisfied with the tests and assignments administered through online assessment	3.68	0.87	Agree

35	I am satisfied with online teaching sessions received through online learning	3.78	0.81	Agree
36	Overall, I am satisfied with English learning experience using online learning	3.83	0.79	Agree
Interactivity				
37	I am satisfied with the use of video conferencing used when communicating with friends	3.67	0.84	Agree
38	I am satisfied with process of collaboration activities during online learning	3.61	0.88	Agree
39	I am satisfied with online environment which makes it easier for me to communicate my instructor	3.44	0.91	Agree
40	I am satisfied with interactive feedback received on my performance from the instructor	3.76	0.79	Agree
41	I am satisfied with the quality of interactivity between me and instructor during online learning	3.72	0.82	Agree
42	Generally, I am satisfied with English interactive activities during online learning	3.72	0.83	Agree
	Total average	3.80	0.61	Agree

From the table, the cybergogy part showed the highest and lowest mean from the items answered by the respondents. For the three highest means, the respondent agreed ($M=3.87$; $SD=0.77$) that they satisfied with the quality of material and information delivery through online learning (item 32). The respondents also agreed that ($M=3.83$; $SD=0.79$) they satisfied with English learning experience using online learning (item 36). For the final highest mean in item 35, the respondents also agreed ($M=3.78$; $SD=0.81$) that they satisfied with online teaching sessions through online. For the lowest mean, the respondents just agreed ($M=3.75$; $SD=0.77$) by saying that they satisfied with the course taught through online (item 31). The lowest mean in the results also displayed that the respondents barely agreed ($M=3.71$; $SD=0.79$) that they satisfied with the use of threaded online discussions or forums (item 33). Finally, the respondents also barely agreed ($M=3.68$; $SD=0.87$) with the item 34 that said they satisfied with the tests and assignments administered by their instructors. For the final part of the satisfactions toward online learning, we also examined about the interactivity. From the results, the three highest means showed that the respondents agreed ($M=3.76$; $SD=0.79$) that they satisfied with interactive feedback received on their performance from their instructors in item 40 followed by the next highest mean which said that the respondents also agreed that ($M=3.72$; $SD=0.82$) they satisfied with the quality of interactive with their instructors during online learning (item 41). Similarly, the respondents also agreed that they satisfied with English interactive activities they received. One of the studies showed that the online student engagement is crucial factor for student learning performance (Baber, 2020).

According to the three lowest means, ($M=3.44$; $SD=0.91$) the respondents just agreed that they satisfied with online environment which makes it easier for communicating with the instructors (item 39). Next, they also hardly agreed ($M=3.61$; $SD=0.88$) that they satisfied with process of collaboration activities (item 38). For the final lowest mean, the respondents just agreed ($M=3.67$; $SD=0.84$) that they satisfied with the use of video conferencing when they used to communicate with their friends (item 37).

Correlation between Students' Perception of Online Learning Adoption and the Online Learning Satisfaction

Table 4 showed the correlations of each sub-construct between student's perceptions of online learning adoption and the online learning satisfaction using the Pearson Correlation statistical analysis. For the sub-construct of Perceived Usefulness (PU), the analysis suggests that Perceived Usefulness (PU) sub-construct was moderately associated ($r = 0.500$; $p < 0.01$) with the instructor dimensions in students' online learning experience. Likewise, the analysis also showed that there is a moderate correlation ($r = 0.568$; $p < 0.01$) between Perceived Usefulness (PU) sub-construct and the digital technology sub-construct. However, the results for the sub-constructs of cybergogy and interactivity in online learning satisfaction describe that there is a significant positive correlation ($r = 0.645$; $p < 0.01$) between Perceived Usefulness (PU) and cybergogy and between Perceived Usefulness (PU) and interactivity sub-constructs ($r = 0.623$; $p < 0.01$); meaning that the students were satisfied with the environment that supports their cognitive, emotional and social learning during the online learning based on cybergogy aspect. Regarding the interactivity, this result suggest that the students agreed that they can communication between people and digital devices or content while online learning.

Table 4. Correlation Between Online Learning Adoption and Satisfaction

Variable	Online Learning Satisfaction							
	Instructor dimensions		Digital Technology		Cybergogy		Interactivity	
Online Learning Adoption	r	Sig.	r	Sig.	r	Sig.	r	Sig.
Perceived Usefulness (PU)	0.500	0.000*	0.568	0.000*	0.645	0.000*	0.623	0.000*
Perceive Ease of Use (PEU)	0.391	0.000*	0.559	0.000*	0.624	0.000*	0.621	0.000*
Perceived Satisfaction (PS)	0.582	0.000*	0.649	0.000*	0.712	0.000*	0.715	0.000*

Note: Statistically significant correlation set at $*p < 0.01$

As shown in the table, the sub-construct between Perceive Ease of Use (PEU) and the instructor dimensions is regarded as a weak correlation ($r = 0.391$; $p < 0.01$). This suggests that the students agreed that they have some difficulties in dealing with the technology and the instructors hardly could help them during their online learning. Nevertheless, the Perceive Ease of Use (PEU) sub-construct was strong and positively associated ($r = 0.559$; $p < 0.01$) with the digital technology construct. Similarly, the analysis illustrated that there is a strong and positive correlation between the Perceive Ease of Use (PEU) construct and cybergogy and interactivity constructs. For cybergogy sub-construct, the result of correlation was ($r = 0.624$; $p < 0.01$) whereas the interactivity construct was ($r = 0.621$; $p < 0.01$). Corresponding to the final sub-construct that is Perceived Satisfaction (PS) displayed the significant and positive results primarily. The analysis showed that Perceived Satisfaction (PS) sub-construct was moderately associated ($r = 0.582$; $p < 0.01$) with the instructor dimensions. Next, the analysis showed that the Perceived Satisfaction (PS) sub-construct was strong and positively associated with the digital technology the students use in online learning. Finally, the findings indicated that there is a strong and significant positive correlation ($r = 0.712$; $p < 0.01$) between the Perceived Satisfaction (PS) sub-construct and the cybergogy sub-construct. Likewise, the Perceived Satisfaction (PS) sub-construct was strong and positively associated with the interactivity sub-construct. These results reveal that the students were strongly believed and satisfied with the virtual environment and the activities offered by the online platforms while they experienced online learning in studying English.

Factors Affecting Online Learning Satisfaction

The final section (Section D) required the respondents to answer to the three open-ended items. Table 5 showed the results of the open-ended items analysis. We used a thematic analysis to analyse qualitative data from the open-ended items. The first open-ended item asked the participants to list three main factors that facilitate their online learning. The three emerging themes were digital English resources, instructor's facilitation, and conducive learning environment. Most students agreed that the digital resources for English materials and references supported their online learning followed by their instructors who also facilitated them during online learning. Finally, they also believed that a conducive environment is also one of the main factors support their online learning environment.

Table 5. Themes Emerging from the Open-ended Responses

Open-ended items	Rank	Main themes	Frequency (f)
1. List 3 main factors that facilitate my online learning	1	Digital English resources	93
	2	Instructor's facilitation	55
	3	Conducive learning environment	45
2. List 3 main factors that inhibit my online learning	1	Internet connectivity problem	103
	2	Unconducive surroundings	81
	3	Lack of motivation	43
3. My satisfaction with online learning is:			58
i. High			153
ii. Moderate			6
iii. Low			

For the second open-ended item, the respondents listed the three main factors that inhibited their online learning. The highest rank rated by the respondents was the internet connectivity as the major factor that contributed to the problem. The next factor was the unconducive surroundings followed by their low motivation to learn English online. The final section asked about the level of the respondents' satisfaction with their online learning experience. Most of the respondents stated that their satisfaction was at the moderate level.

CONCLUSION

This study was designed to examine the ESL students' online learning satisfaction during the COVID-19 pandemic. The main finding showed that the ESL students were satisfied regarding the online learning adoption during the pandemic. Furthermore, there was a positive and significant relationship between ESL students' perceptions of online learning adoption and their online learning satisfaction. Significantly, the researchers also found that the digital English resources was the most influential factor that facilitated the ESL students in language learning. However, the internet connectivity was the major factor that suppressed their learning via online. Thus, it can be concluded that the ESL students perceived that learning English through online was satisfactory if the problem of technological services could be solved and enhanced. From these results, the instructors could obtain insights on how to improve the students' online learning satisfaction in future. The policymakers and the higher institutions also should think and find the better solutions to achieve the goals of online learning. In implication, the empirical data in this study could be used to develop a new framework of online pedagogy.

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