Students' Perceptions of Online Learning During the COVID-19 Pandemic: A Study of Undergraduate Students from an International University, Thailand

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Abstract

The outbreak of COVID-19 had an impact on educational systems worldwide. This study aimed to investigate the perceptions of students towards online learning during the COVID-19 pandemic. Two hundred fifty-five undergraduate students from a private international university in Thailand participated in this study. Data were collected by this researcher using the adapted version of Students' Perception Questionnaire (SPQ) items from Bączek et al. through a Google Forms online survey. The research objective was examined by basic descriptive statistics (percentage, means and standard deviations). Results showed that student participants prefer both online and onsite learning. The strongest advantage of online learning is allowing participants to stay at home (72.15%) whereas the participants chose technical problems (73.33%) and lack of interactions with friends (71.37%) as the major disadvantages. The participants perceived that online learning was effective that helped increase knowledge (35.29%), active classroom activities (33.33%) and enjoyable (30.2%). Based on the research findings, suggestions, and recommendations to improve the higher education online learning in the future and pedagogical implications are provided.

1. Introduction

In 2019, an infectious respiratory disease known as coronavirus disease (COVID19) firstly emerged in Wuhan, China and has an impact on every corner of the world up till now (World Health Organization [WHO], 2021). In Thailand, the prime minister on March 24, 2020 declared a nation-wide state of emergency to fight coronavirus outbreak (Bangkok Post, 2020). According to OECD report (2020), the coronavirus disease outbreak has affected education as it has forced the school and university closure in nearly all countries. Teaching and learning process has been changed from physical to virtual classroom mode. The Ministry of Higher Education, Science, Research and Innovation (MHESRI), a Thai government body, has overseen and monitored closely on higher education teaching and learning activities and issues during this critical situation. With the current situation for the university context that the researcher conducted this study, it was reported in the University's Self-Assessment Report 2020 that the COVID-19 outbreak gravely impacted the university operations and student services. Many activities, events and projects were cancelled and were organized virtually. From April 2020- October 2021, the Office of

Academic Affairs announced that all teaching-learning activities were to be performed via the online teaching mode. The online learning has been conducted in this university by this researcher for one and a half year. Not only teachers but also students are bound to face with challenges of the disruption and setback of the unceasing widespread of this disease. This study aims to examine the undergraduate students' perceptions towards online learning.

2. Literature Review

2.1. Online Education/Online Learning

Online education is defined as "a flexible instructional delivery system that encompasses any kind of learning that takes place via the Internet" (encyclopedia.com). This term can be used interchangeably with distance education, distance learning, e-learning, remote learning and virtual learning. Perveen (2016) stated that online learning environments can be classified into a triad of asynchronous, synchronous and hybrid learning environments. Asynchronous online learning environments involve learning occurring both in different locations and

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times, such as Learning Management System (LMS), Massively Open Online Courses (MOOCs) or other modes of the sort. Whereas synchronous online learning environments deal with learning that takes place at the same time, yet not in the same place. For instance, educational video conferences, interactive webinars, chat-based online discussions, and online lectures via different online teaching platforms such as Zoom, Microsoft Teams, Google Hangouts Meet, Skype, TeamViewer, etc. The last type of online learning environments is blended or hybrid as it applies both synchronous and asynchronous modes when teaching.

2.2. Previous studies on students' perception towards online learning during COVID-19 pandemic

The term "perception" refers to the act of perceiving, or understanding by means of the senses or of the mind (dictionary.com). In other words, the word 'perception' is synonymous to the word "attitude" which is a fixed way of feeling or thinking about someone or something. A number of literatures on various perspectives of online learning can be found since it was first introduced in the 1990s along with the internet creation. However, during these two years (2020-2021), studies on students' online learning perceptions during coronavirus pandemic were increased and conducted in different educational settings of various countries. For example, research on students' perceptions on online learning in Bangladesh (Sakar et.al., 2021), India (Agarwal & Kaushik, 2020; Bast, 2021), Japan (Ishimaru et al., 2021), Poland (Bączek et al.,2020), and Slovania (Gosak et al., 2021). Bast (2021) conducted a comprehensive study in this area by investigating 1,318 Indian students' perceptions towards online learning focusing on eight variables: age, educational institution, electronic device used, gender, religiosity, socio-economic background, and technology-receptiveness. Findings revealed several facets of students' perceptions towards online learning. Another study on online learning perceptions of both faculty and students was carried out by Zrkayia et al. in 2021 exploring the advantages, effectiveness, and challenges of online learning in Jordan. To the best of the researcher's knowledge, there was only one study conducting about online learning during COVID-19 situation in Thai public university context. Imsa-ard (2020) examined 310 Thai public university students by using mixed method. Findings showed that most students

preferred onsite to online learning and they also do not want to learn online in the future.

3. Research Methods and Materials

This research used a quantitative research approach. A random sampling of a total of 255 participants (24.71% male and 75.29% female) in this study were undergraduate students of different years of study (1st-4th) at a private international university in Thailand. They were asked to answer a three-part Google Forms online survey consisting of demographic information, two closed-ended questions, three Likert-scale question items, and an open-ended question. The online questionnaire was administered by the researcher online on September 29, 2021 after 15 weeks of online learning in semester 1/2021 (June 7-September 29, 2021). All participants were informed about the aims of the study and agreed to attend this study on the voluntarily basis. They are allowed to do the questionnaire once. To assure the quality of research instruments, the Index of Item-Objective Congruence (IOC) was utilized so as to confirm the content validity. In this process, the questionnaire was checked by three experts. All questionnaire items that had scores higher than 0.5. Also, the no. 3-5 question item in Likert-scale (Part II) were analyzed and calculated Cronbach's Alpha Coefficient to confirm the reliability of a survey. The Cronbach's Alpha value was 0.862. The research instruments consisted of three parts. First, Part I was the general information of the participants. Second, Part II was the Students' Perception Questionnaire (SPQ) adapted from Bączek et al. (2021) which consist of five questions asking about students' perceptions towards online learning in terms of its advantages, disadvantages, comparison between onsite and online learning in terms of ability to acquire knowledge, description of class activities during online learning, and rate of enjoyment towards online classes during pandemic. The sub-questions no. 3-5 were Likert scale; the Lastly, Part III was suggestions and recommendations to improve online learning. The collected data were analyzed using descriptive statistics.

4. Results and Discussion

In this part, the findings are discussed based on 3 major parts of the questionnaire: General information, Students' perceptions towards online learning, and Student's suggestions and recommendations to improve online learning.

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4.1 Findings of Part I: General Information

Table 1

General Information	Number	Percentage
Age		
18	1	.39
19	31	12.16
20	46	18.04
21	78	30.59
22	31	12.16
23	31	12.16
24	24	9.41
25	6	2.35
26	6	2.35
27	1	.39
Gender		
Male	63	24.71
Female	192	75.29
Year of Study		
Year 1	3	1.18
Year 2	49	19.22
Year 3	78	30.59
Year 4	84	32.94
Other	41	16.08

As shown in Table 1, most participants were 21 years old (30.59%) while only one student was 18 and 27 years old (039%). Most of them were female (63%) whereas there were 25.71% male students. Concerning the study level, more than half were in the fourth year (32.94%) and the third year (30.59%) while the rest studied in the second year (19,22%), above the fourth year (32.94%), and the first year (1.18) respectively.

4.2 Findings of Part II: Students' Perceptions on Online Learning

4.2.1 Advantages of Online Learning

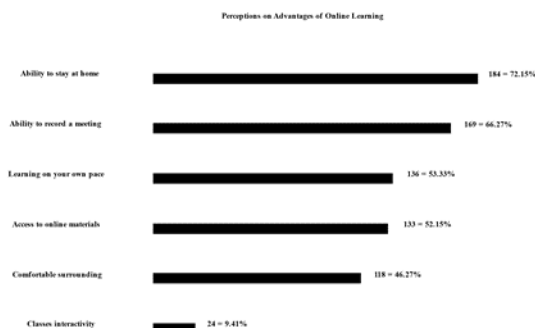Figure 1 below depicts the major benefits of online learning.

Figure 1 Perceptions on Advantages of Online Learning

As shown in Figure 1, the most common advantages of online learning selected by participants were the ability to stay at home (72.15%), ability to record a meeting (66.2%), learning on your own pace (53.33%), access to online materials (52.15%), comfortable surrounding (46.2%), and classes interactivity (9.41%).
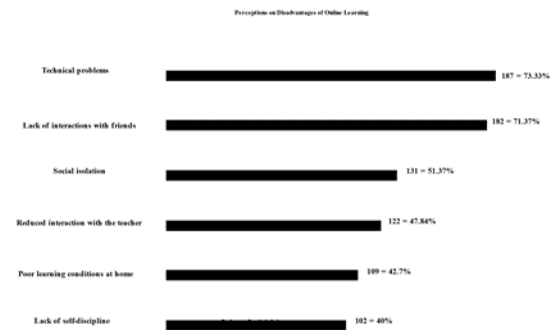
4.2.2 Disadvantages of Online Learning

Figure 2 Perceptions on Disadvantages of Online Learning

As seen from Figure 2, the respondents selected technical problems (73.33%) and lack of interactions with friends (71.37%) as the key disadvantages followed by social isolation (51.37%), reduced interaction with the teacher (47.84%), poor learning conditions at home (42.7%), and lack of self-discipline or responsibility (40%).

4.2.3 Online Learning in terms of Ability to Acquire Knowledge

This questionnaire item was to determine the ability of participants to acquire language via online learning. Table 2 depicts the mean score, standard deviation, number of respondents, and percent of respondents.

$M = 3.64$ $SD = 1.01$	Ability to Acquire Knowledge via Online Learning				
	Extremely ineffective	**2**	**3**	**4**	**Extremely effective**
Number of students responded	7	24	79	90	55
Percent of students responded	2.75	9.41	30.98	35.29	21.57

Table 2 Perceptions Towards Online Learning in terms of Ability to Acquire Knowledge

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As indicated in Table 2, most of participants (35.29%) perceived that online learning mode can be considered effectively to increase knowledge. Only 2.75% of student participants felt that online learning is extremely ineffective. The overall mean score of this item was M = 3.64, which is interpreted by the researcher as being effective. Thus, it can be said that undergraduate students in this international university are effectively able to acquire knowledge via online learning.

4.2.4 Class Activities During Online Learning

This item was to explore the participants' attitudes towards classroom activities during online learning. Table 3 displays the results of the mean score, standard deviation, number of respondents, and precent of respondents of their perceptions on class activities via online learning.

M = 3.54 SD = 1.05	Description your Class Activities During Online Learning				
	Extremely inactive	2	3	4	Extremely active
Number of students responded	5	42	71	85	52
Percent of students responded	1.97	16.47	27.84	33.33	20.39

Table 3 Perceptions on Class Activities During Online Learning

4.2.5 Level of Acceptance Towards Online Class

For this questionnaire item, it was to determine the participants' level of acceptance of online class. Table 4 below illustrates the mean score, standard deviation, number of respondents, and percent of student responded about the acceptance of e-learning class.

M = 3.48 SD = 1.20	Level of Acceptance Towards Online Classes During the Pandemic				
	Extremely unenjoyable	2	3	4	Extremely enjoyable
Number of students responded	23	23	77	72	60
Percent of students responded	9.02	9.02	30.2	28.24	23.52

Table 4 Level of Acceptance Towards Online Classes During the Pandemic

As reported in Table 4, a total of 77 (30.2 %) of respondents assessed online learning as somewhat enjoyable. Among these, 72 (28.24%) found it very enjoyable, 60 (23.52%) found it extremely enjoyable, and 23 (9.02%) found it very unenjoyable. A total of 23 (9.02%) students did not enjoy online class.

4.3 Findings of Part III: Suggestions and Recommendations to Improve Online Learning

The findings of an open-ended question item concerned students' voices and reflections. These could be used to improve online learning. Most of student participants suggested that they felt burnout, overwhelmed, and unmotivated due to overloaded assignments and sitting in front of the computer screen for a long period. Some student participants said that they learn better in face-to-face than online mode. Sometimes, they could not understand the instructions and content knowledge of the subjects. The participants also felt that the teachers should be more considerate and empathized more with students. Technical problem was another critical issue that impede online learning such as poor or unstable internet connections,

The following is the verbatim (the exact same words from the original source) of one of student participants in this study which can be considered as one of the insightful feedback to improve the quality of virtual classes:

"All teachers must understand that the onsite materials and assignments are not appropriate for online teaching and learning. As a student, it is true that we can contact via social media at any time, but it doesn't mean we can gather and brainstorm efficiently. Some members are shy or lazy to answer things from the phone. Unlike onsite studying, we can have face-to-face meeting, give and take reaction on time. Therefore, since we are studying alone, accomplishing tasks by ourselves is much better. Apart from types of assignments, quantity of them is a problem as well. Many teachers give more assignments as we are learning at home and don't have to take time go anywhere. But don't forget we still need time to rest and prevent ourselves from stress. Thank you for consideration."

Discussion

This study investigated Thai undergraduate students at an international university in Thailand on their perceptions and attitudes towards e-learning or online

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learning during pandemic. The strongest advantage of online learning among participants in this study was the ability to stay at home. The finding was aligned by the researcher with those of the previous study by Bączek et al. (2021). Most participants did not want to commute to the university. Some also mentioned that they can save transportation cost and other cost of living during online classes. Other advantages of online learning involved the ability to stay at home, to record a lesson, and download class materials. It is more flexible and self-paced learning. This point can be supported by the work of Mukhtar et al. (2020) which found the remote learning advantages in terms of comfort and accessibility.

Regarding its disadvantages of online learning, technical problems were the strongest disadvantage in this research. Even though Thailand was ranked no. 5 for fixed broadband speed (221 Mbps) and no. 50 for mobile broadband speed from around the world according to the monthly report by the Speedtest Global Index on August 2021, some participants still faced these technical issues due to the low bandwidth or weak internet connection during online courses. Other major pitfalls were related to the lack of face-to-face interactions with friends and teachers, Students found difficulties to work with other students in group work. It was reported that most of time misunderstandings among friends always occur. Furthermore, more than half of participants revealed that they felt isolated and could not cope with stress and anxiety after the prolonged time facing with computer screens. Recent findings on by Mhdeily et al. (2020) suggested stress and burnout coping strategies to alleviate the tele-burdens of pandemic. Participants also voiced their diverse opinions to enhance the online learning quality

Limitations were also found by the researcher in this study including time constraint and the number of respondents participating in the survey.

5. Conclusions

To sum up, this study on perceptions of students towards online learning during the coronavirus pandemic has shed the light on how education has changed dramatically. Online education which has both advantages and drawbacks has become the 'new normal' and 'now normal' in Thai educational context. As the educators, we should be well-prepared for the post-pandemic education or the 'next normal' and what the classroom of the future will look like. When it comes to integrating technology in the classroom, it is believed that teachers should consider students' perspectives on how they learn best. Thereby, the teacher, as a learning designer, has to devise the best approach and style for delivering learning.

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