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Students' Perception Of Online Learning During Covid-19 Pandemic In Vietnam - A Case Study On The Students Of Banking University Of Ho Chi Minh City

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ABSTRACT

"Stop going to school but don't stop learning." is the motto by the Ministry of Education and Training in Vietnam that requires schools and educational institutes nationwide to implement and deliver online classes to learners during the pandemic outbreak of Coronavirus disease. This is indeed not an easy to perform mission for institutes and individuals working in educating sector in developing countries like Vietnam. Not only the technical infrastructure but the readiness, the capabilities of the whole systems, the effectiveness as well as the perception of learners and teaching workforce on this new learning method are questioned by all parties in the process. This study aim to address some main factors that affect students' perception of online learning and discuss its potential to make it more inclusive and comprehensive. A sample of 119 students at Banking University of Ho Chi Minh City have participated in this study. The respondents' answers were tested through the use of Cronbach's Alpha and Exploratory Factor Analysis (EFA). Finally, regression analysis was used on data in order to test hypotheses of study. The results show that Motivation, Perceived Usefulness, Interaction and Academic Integrity are factors affecting online learning perception, in which Motivation has the most influence. The insights from this study can be useful for both learners and teachers to acquire the most effectiveness of online learning.

Keywords: COVID-19, online learning, perception, motivation, interaction, academic integrity

1. Introduction

The year 2019 saw an outbreak of Coronavirus disease (COVID-19), which led to the deadly pandemic that threatened the whole of humanity. In an attempt to reduce the transmission of COVID-19, restrictive policies have been implemented to prevent crowding, including social-distancing, self-isolation and the shutdown of almost factories, restaurants, stores, schools and even public areas. In February 2020, as part of the quarantine measures, Vietnamese Ministry of Education and Training issued an order to suspend all school operations nationwide. As the Covid-19 pandemic became more complicated, the closure of schools nationwide has been continuingly sustained. The extension of school closures challenged the education system across the country. It forced many institutions to switch from traditional approach of black-board-white-chalk classrooms to online teaching and learning method. With the motto "Stop going to school but don't stop learning", the Ministry of Education and Training has provided guidance on implementing online

teaching and learning for the entire education system towards IT application. Universities instantly develop their digital tools and platforms to provide the ongoing learning for their students. Furthermore, many online learning platforms open free access to their services to users in response to the significant demands of the society. Just like other teaching and learning method, online learning also has its own positive and negative aspects to consider.

COVID-19 while posing a danger to mankind, has urged organizations to invest in online learning to keep their paces and movements towards future. Until the traditional, onsite learning takes back its prominence to online studying programs, universities can make use of this crisis as an opportunity to facilitate the implementation of new digital learning tools and platforms and how to best leverage them. Addressing these issues could contribute to creating strategies for delivering lessons more effectively and expanding online learning programs in the post-crisis period. Due to the inevitability of online learning in the future, there is an urgent need to investigate students' perception of online learning during COVID-19 pandemic.

This study aims to address main factors that affect students' perception of online learning and discuss the potentialities to make it more inclusive and comprehensive. Particularly, it determine the factors affecting the perception of online learning of students of Banking University of Ho Chi Minh City, evaluate the influence of each factor and propose implications for the success of online mode of learning.

Specifically, this study sought answers to the following questions:

1. What factors affect the perception of online learning through the view of Banking University students?
2. The degree of influence of factors on the perception of online learning?
3. What are the implications that help Banking University to increase the quality of online learning platforms and services?

2. Literature review

Nowadays, the technological advancements enable us to diversify the design and content of online courses to suit the majority needs and expectation of both institutions and learners. It is therefore critical to consider the learners' perceptions on online learning to make the learning process effective and productive. The learnings from the review of related literature will be summarized in the following section.

2.1. Online learning

Along with the rapid advancement of technology, online learning is becoming an increasingly significant trend. Even before the sudden appearance of Covid, the online learning system has already been implemented here and there. The number of online courses continues to escalate steadily and accelerate with the unexpected presence of the pandemic. In the literature, online learning does not have a generic definition because of the overloading explanations and descriptions developed by researchers and authors. According to Retnoningsih (2017), online learning is defined as a study process that is facilitated and supported by taking advantage of information and communication technology. Saifuddin (2017) also describes online learning as a distance learning that connects students with their learning resources as well as others through the use of the internet. Among many authors, Solomon Negash and Marelene V. Wilcox (2008) offered the most complete explanation of online learning, as is a real-time presence where the

instructor and learner are both present at the time of learning content delivery. The applications in online learning can be different and diverse depending on each place. As stated by Fauzi & Khusuma (2020), universities are required to adapt online teaching by carrying out the implementation of various offered applications, such as the zoom application. According to Dewi (2020), various applications can be utilized to support the interaction in online learning, including classroom, video conference, zoom and so on. In brief, online learning can be defined as a learning approach that exploits the potential of the Internet and technology in order to provide and receive educational content.

2.2. **Perception**

Similar to online learning, perception is also a term that carries many explanations from many authors. As reported by Hermawan & Tyas (2018), perception is the stage of knowing the environment such as objects, people, and symbols or signs that requires the recognition process. Kreitner and Kinicki (1992) explain perception as "a mental and cognitive process that enables people to interpret and understand the surroundings". However, the most popular and widely accepted definition of perception is given by Schacter & Daniel (2011), in which perception is described as the organization, identification and interpretation of sensory information for the purpose of figuring out the information presented or the environment.

Constructivist theory assumes that perception is an active process of extracting sensory stimuli, evaluating, interpreting then organizing them backwards. It is the end product of the interaction between stimuli and internal hypotheses, observer's expectation and knowledge, and most importantly their motivation and emotion. Therefore perception is influenced by various individual factors which may lead to insufficient interpretation (Eysenck and Keane, 2008). According to Bergh and Gelgenhuys (2013), factors influencing perception are belonging to three sources – the perceiver, the perceived object and the environment. The environmental factors refer to the time and setting context in which the objects are observed. Factors in the perceiver relate to the attitudes, motivation, interests, experience and expectations whilst factors in the perceived object include the motion, novelty, sounds, proximity, size and its background.

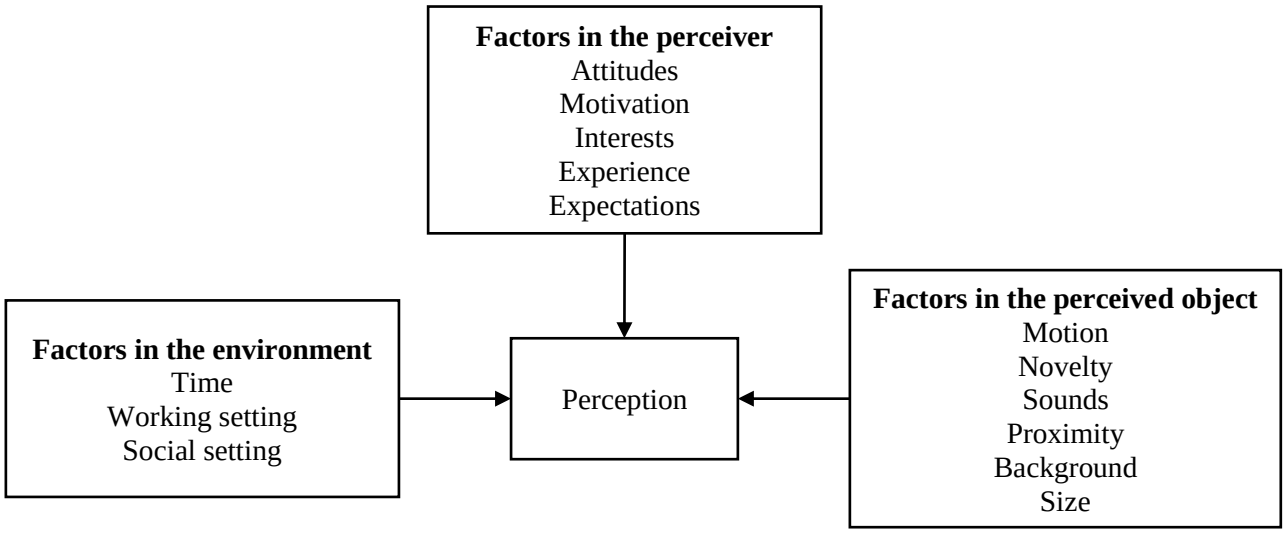

Figure 1: Factors that influence perception (adapted from Robbins, 2001, by Bergh and Geldenhuys, 2013)

2.3. **Technology Acceptance Model – TAM**

There exist many theories about the explanation of user behavior toward technology-based products and services. The Technology Acceptance Model (TAM), developed by Davis (1989), is definitely the most prominent among others. TAM was designed to predict the usage and adoption of new technology. It helps developers to evaluate the level of user-friendliness of the product and assess the potential of users. In this model, the two components as perceived usefulness and perceived ease of use hold a certain influence on the users' adoption of a new technology system. However, TAM only provides general information about the technology adoption by users. As a result, further information is required when applying TAM in specific fields, so that the progression of technology can be navigated in the right direction (Mathieson, 1991). In recent years, the TAM model has been expanded by a number of researchers and has been applied to many different technologies including e-learning (Cheung & Vogel, 2013). Many other studies also discovered that perceived usefulness and perceived ease of use have a significant impact on students' acceptance of e-learning (Bures et al. 2002, Selim 2003, Ong et al. 2004, Drennan et al. 2005, Saade & Bahli 2005).

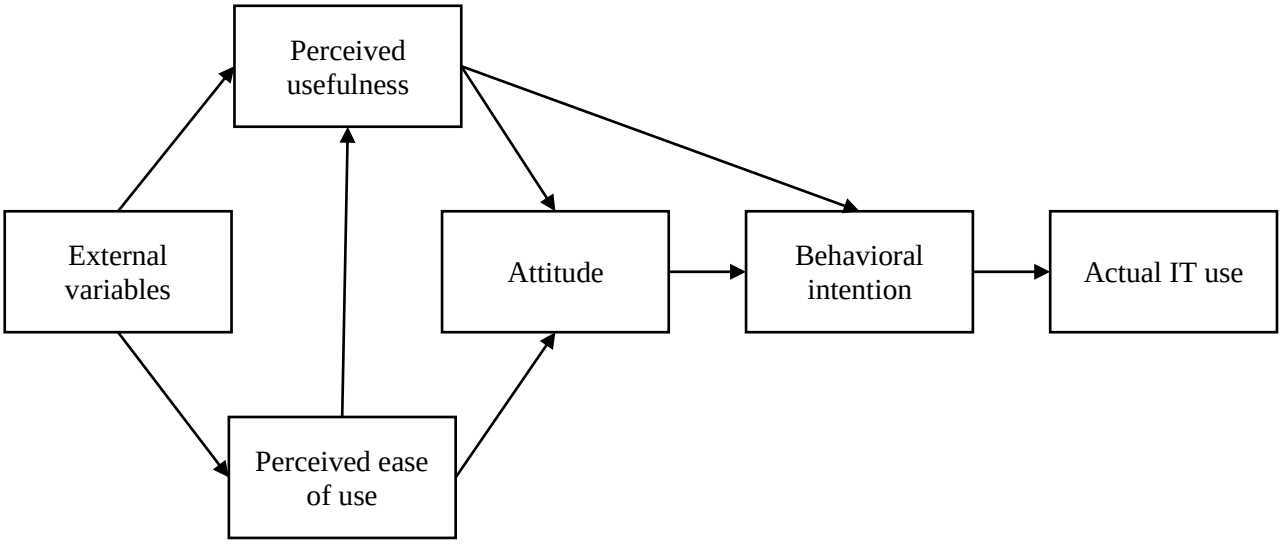

Figure 2: TAM - Technology Acceptance Model (Davis, 1989)

2.4. **Hypothesis**

2.4.1. Motivation

As reported by Golladay et al. (2000) and Serwatka (2003), online learning requires a significant amount of discipline and self-motivation. In addition, Allen & Seaman (2013) suggest that the success of online learning requires commitment from both sides, students must possess greater discipline, and teachers have to put more effort into delivering instructions. Many researchers also report that learner motivation is the critical factor affecting students performing and playing an important role leading to the success of online learning (Cole, Field & Harris, 2004; Ryan, 2001). However, it is noted that self-discipline, self-motivation; and the time commitment to learning are some of the most obvious problems of online learning (Golladay, Prybutok, & Huff, 2000). Many studies yield mixed results, Kearsley (1998) reports that student motivation and self-esteem increase, while Maltby & Whittle (2020) states that it decreases.

H1: Motivation has influence on student' perception of online learning

2.4.2. Perceived Usefulness

Perceived usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis 1989). As confirmed by Saga & Zmud (1994), technology will be adopted if it is regarded as convenient, useful and socially desirable even though the using process is not enjoyable.

Because of the close attachment between technology application and online learning, the TAM model plays a major role contributing to the success of online learning. It implies that students will be more likely to have positive feelings about online learning when they find the system useful to boost their productivity as well as effectiveness.

In the context of this study, online learning has been promoted as being more cost effective, convenient, and flexible. For example, it has been proved that online learning allows students time to reflect on the learning materials, which encourages them to work at their own pace (Richardson & Swan, 2003; Swan et al., 2000). In fact, perceived usefulness was already studied as the measurement of e-learning systems' success by Joo et al. (2011), and Hsieh and Cho (2011). The studies above clearly make evident that perceived usefulness is a valid factor to measure the attitude toward online learning.

H2: Perceived Usefulness has influence on student' perception of online learning.

2.4.3. Perceived Ease of Use

Perceived Ease of Use is defined by Davis (1989) as "the degree to which a person believes that using a technology will be free from effort". Liu et al. claims that perceived ease of use has a direct positive effect on the intention to use the system. Other researchers, such as Chiu & Wang, (2008) also point out perceived ease of use is positively associated with the intention of continuing Web-based learning. In the context of this study, perceived ease of use refers to the extent to which students believe that their continued use of online learning is free of effort.

H3: Perceived Ease of Use has influence on student' perception of online learning.

2.4.4. Instructors

According to Finaly-Neumann (1994) and Williams & Ceci (1997), instructors are the main predictor in student satisfaction. Differ from face-to-face classes, an online learning environment requires instructors to play many roles in order to guide students to success. Goodyear, Salmon, Spector, Steeples, and Tickner (2001) suggest a model including eight roles for the online instructor, those of content facilitator, technologist, designer, manager/administrator, process facilitator, adviser/counselor, assessor and researcher. Moreover, DeBourgh (1999) and Hiltz (1993) claim that student satisfaction has a strong positive correlation with the performance of the instructor, specifically with his or her availability and response time. Moore & Kearsley (1996) state that instructors must be flexible and available when students have questions. Hara & Kling (1999) and Vonderwell (2003) also emphasize that feedback is a key factor that heavily influences students' satisfaction with online courses and they will feel stressed and frustrated when the feedback is delayed. Not only to avoid frustration, on-time feedback can also keep learners involved and motivated (Smith & Dillon, 1999).

H4: Instructors have influence on student' perception of online learning.

2.4.5. Interaction

It is confirmed that interaction is a pivotal variable affecting student satisfaction toward distance learning environments (Bray, Aoki, & Dlugosh, 2008; Kuo, Walker, Schroder, & Belland, 2014; Rodriguez Robles, 2006). Other researchers, such as Offir, Lev, and Bezalel (2008), also indicate that interaction level can be applied to anticipate the effectiveness of online classes. Wegegrif, (1998) specifically points out that only when students feel being part of a learner community, they will be more likely to succeed in studying online. Richardson et al., (2015) further proves that students will feel more connected in the transactional learning space if they are able to maintain the interaction with the instructor.

H5: Interaction has influence on student' perception of online learning.

2.4.6. Academic Integrity

Most students assumed cheating is more common online but most pointed out that they never cheated (Lanier, 2006). The result of Lanier' survey also reveals that approximately 40% of online students admitted helping others with exams, and many good students felt they had to cheat in order to be competitive with others who they felt were cheating.

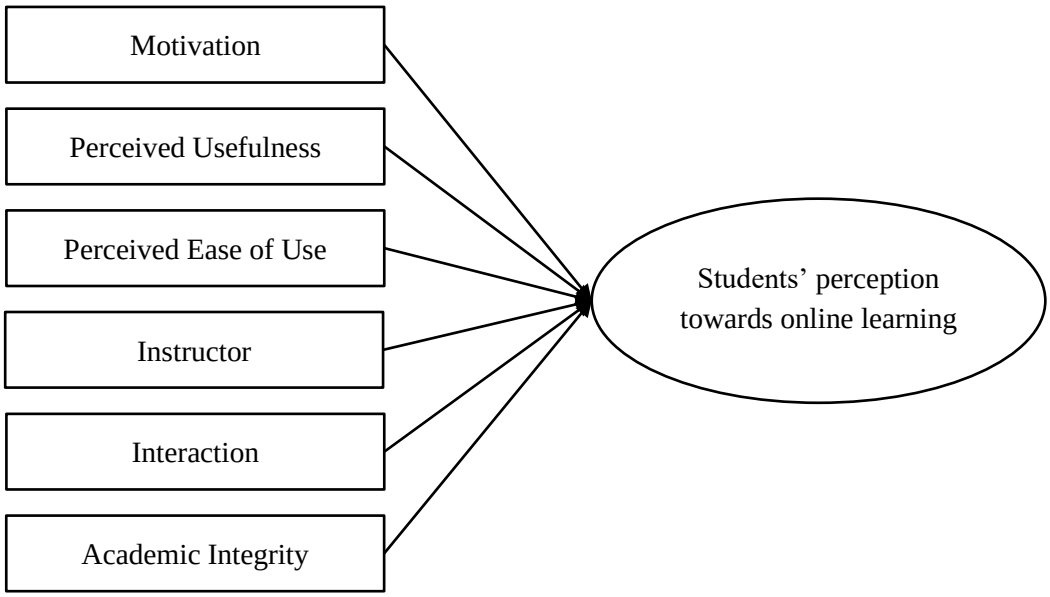

Figure 3: The proposed model of factors impacting on online learning perception

H6: Academic integrity has influence on student' perception of online learning.

2.5. Proposed model

Based on the statement of the six hypotheses, the research model is proposed as below.

3. Methodology

3.1. Research design

The paper has two research objectives related to creating a scale, including measuring characteristics of students participating in the research and asking them to assess the level of agreement with the impact of each factor to online learning perception. The nominal scale was built to distinguish and identify the study subjects, inclusive of Gender, Major, Program, School year and whether they have participated in any online classes. The advantages of this scale are easy to set up as well as high specificity and provide useful information. Hierarchical scales are designed to quantify and arrange problems in order, measuring attitudes, consciousness, opinions, interests and perceptions. The scales and signs observed in the study use the 5-level Likert scale and are described in detail in a table to identify the level of impact of each factor to online learning perception.

The model has six scales of independent factors with 29 observed variables and a dependent factor scale with 5 observed variables built on a theoretical basis. Hypothesis H0 has 6 elements including: (1)

Motivation, (2) Perceived Usefulness, (3) Perceived Ease of Use, (4) Instructor, (5) Interaction and (6) Academic Integrity. The dependent element is the perception of online learning.

3.2. **Data collection**

The data source consists of secondary data and primary data. Primary data was collected by implementing questionnaire surveys via google forms to comply with the locked-down situation nationwide. Secondary data was collected from external sources such as books, journals, research articles and internet databases to provide information on theoretical basis, research models and research methods.

3.3. **Data analysis**

Data collected from questionnaire surveys was encoded and entered into SPSS 20.0 data analysis software to conduct the reliability test of the scale accompanied by other deductive statistics. Cronbach's Alpha coefficient is used to test the reliability of the scale, factor analysis to reduce more or less related variables into groups with fewer factors. ANOVA test shows the relationship between qualitative variables and selection decisions. Furthermore, the analysis also determines the correlation coefficient between the variables in the model to determine the degree of linear association between the independent variable and the dependent seen in the model.

3.4. **Result and Discussion**

Findings from the analysis of quantitative data gathered for this study are presented below.

H1: Motivation (MO) has influence on student' perception of online learning.

MO= -0.500 (t= -7.921, sig.= 0.000 < 0.05). Therefore, Motivation is statistically significant at 100%, or in other words, when other factors remain unchanged, an impact on the Motivation factor will cause a 50% change of online learning perception. Therefore, Motivation is a sensitive factor that has a strong impact on the perception of online learning. In conclusion, accept hypothesis H1: Motivation has influence on students' perception of online learning.

H2: Perceived Usefulness (PU) has influence on student’ perception of online learning.

PU= 0.345 (t= 3.910, sig.= 0.000 < 0.05). Therefore, Perceived Usefulness is statistically significant at 100%, or in other words, when other factors remain unchanged, an impact on the Perceived Usefulness factor will cause a 34.5% change of online learning perception. Therefore, Perceived Usefulness is a sensitive factor that has a strong impact on the perception of online learning. In conclusion, accept hypothesis H2: Perceived usefulness has influence on students' perception of online learning.

H3: Perceived Ease of Use(PEU) has influence on student’ perception of online learning.

PEU= -0.115 (t= -1.563, sig.= 0.121). Due to significance level > 0.05, Perceived Ease of Use is not statistically significant. Therefore, the study rejects the hypothesis H3: Perceived ease of use has influence on students' perception of online learning.

H4: Instructors (IN) have influence on student’ perception of online learning.

IN= 0.100 (t= 1.016, sig.= 0.312). Due to significance level > 0.05, Instructors are not statistically significant. Therefore, the study rejects the hypothesis H4: Instructors have influence on students' perception of online learning.

H5: Interaction (IR) has influence on student' perception of online learning.

IR= 0.365 (t= 4.560, sig.= 0.000 < 0.05). Therefore, Interaction is statistically significant at 100%, or in other words, when other factors remain unchanged, an impact on the Interaction factor will cause a 36.5% change of online learning perception. Therefore, Interaction is a sensitive factor that has a strong impact on the perception of online learning. In conclusion, accept hypothesis H5: Interaction has influence on students' perception of online learning.

H6: Academic Integrity (AI) has influence on student' perception of online learning.

AI= 0.177 (t= 2.659, sig.= 0.009 < 0.05). Therefore, Academic integrity is statistically significant at 100%, or in other words, when other factors remain unchanged, an impact on the Academic integrity factor will cause a 17.7% change of online learning perception. Therefore, Academic integrity is a sensitive factor that has a strong impact on the perception of online learning. In conclusion, accept hypothesis H6: Academic integrity has influence on students' perception of online learning.

4. Implications and Recommendations

4.1. Implications

The intensity of Covid pandemic combined with the trends of applying technology into the teaching and learning process suggest that online learning will continue to play the central role in the education context. Based on the result of data analysis, some implications toward improving student's perception on online learning have been proposed.

About Motivation

The first solution that can boost students' motivation is to reward them for participating in class discussion. Instructors also can increase the level of engagement by adding quizzes or small tests that require student attention and understanding. Most importantly, to draw student's attention, the instructor must be inspiring, motivating to be able to bring the students back to class from the distractive and disruptive factors from their pools.

About Perceived Usefulness

In order to assist students in time management, instructors can create the calendar of assignments and the schedule of materials to be studied for the course. In this way, students will have the opportunity to schedule their work suitable for their preference and study pace. Giving links to free, easily accessible resources is also important since it makes sure that students will always have accessibility to materials and all the required information. To enhance the perspective of usefulness, the university official must provide detailed information and video tutorial whenever a technology application is involved. Although problems relating to technology are unavoidable, the possible solution for this issue is that students can contact their instructor whenever they encounter technical difficulties. By informing the instructor, students may get assistance from the class instructor and their peers. If the problem cannot be solved, an offer for a video recorded lesson afterwards can sooth the student's frustration and nervousness. In this situation, the university' technical support services are considered to be valuable and critical. Furthermore, the university also can try different applications and platforms available in order to find the most accessible and user-friendly tool.

About Interaction

To increase the interaction level in online classes, instructors may give students tasks and questions to discuss in group. Other internet tools and platforms can also be implemented to encourage student communication. Moreover, instructors must have a certain degree of sensitivity to provide a stress-free online learning environment. Finally, instructors must maintain communicating with students by regularly asking them questions, breaking up the long lecture into small activities, group discussion, and so on.

About Academic Integrity

Cheating in exams is common in online learning environments and there are many ways to avoid this problem. By designing questions that require higher order thinking and deeper understanding, students cannot simply find the correct answer by searching the Internet (Bloom, 1956). The exam can include varied question types to prevent students from asking help from their friends. It is always necessary to continuously remind students of academic integrity policies and consequences if the policies are not followed.

4.2. Limitations and recommendations

This study has several limitations and the most noticeable is the sample size of 119 respondents only due to time constraint. Besides, the result of the study cannot avoid the "structural bias" problem since the chosen sampling method is a convenience method.

This study can be served as a reference for future research. Since the focus of this study is the students' perception, future researchers can give the focus to the instructor's perspective. Other personal factors, such as a student's characteristics and previous experience, can be included in future studies. Online learning also consists of many areas that need to be further explored and investigated.

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