

Gender Discrepancies in Online English Learning in Vietnam Amidst the COVID-19 Pandemic

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Abstract

This study was conducted to investigate the impact of gender in learning English online in Vietnam under the impact of COVID-19 pandemic. 1118 students from nine universities and twelve high schools in the Mekong Delta joined in the research. The study indicated gender equality in online education by revealing few discrepancies in the two genders' perceptions about barriers to online learning, excepting for problems about technical skills, cost, and access to the Internet. The results of the mixed-method study which focuses more on quantitative approach also revealed the impacts of perceived barriers on their future online learning readiness through Discriminant Analysis and Chi-square Tests, in which gender had no impact on students' online learning decisions. Qualitative analysis also revealed the influences of economic conditions and regions as additional barriers in addition to the six factors being confirmed from Berge's framework (2005) including (1) Administrative issues, (2) Social interaction, (3) Academic skill, (4) Technical skills, (5) Learners' motivation, and (6) Cost and access to the Internet.

Keywords: COVID-19 pandemic, gender discrepancies, online English learning, online learning, online learning barriers

As a primary solution for education worldwide in the early time of the COVID-19 pandemic, online learning proved its prominent features in supporting the continuity of the human learning mindset (Anh, 2020; Anh & Duc, 2020). As a report by UNESCO, the pandemic had imposed the greatest interruption in educational history worldwide, leaving its adverse effects on 1.6 billion learners (equivalent to 94% learners on Earth) from more than 190 institutions of different levels (Toshiyuki, 2020). The application of online learning in that era helps to solve learning needs while ensuring time of training and graduation. Being on the mainstream of education in the world, Vietnam has an enormous impetus in applying online education throughout the country during quarantine periods. (Nha, 2020) quotes a compliment of UNICEF about “efforts by the Vietnamese education sector in prevention and response to COVID-19 set great examples for many other countries.”

To a large number of city students, accessing online learning becomes the best way for education in the context of “stay-at-home isolation”, but it is an extreme barrier for the ones living in remote areas, where the infrastructure and Internet access seem to be limited (Anh, 2020). From another perspective, gender has also caused a lot of challenges for online learning implementations, especially because females often lack confidence and experience with it (Grundy & Grundy, 1996). Similarly, a lot of researchers reported women’s disadvantages in computing classrooms (McSporran & Young, 2001), quoting (Cole et al., 1994), Spender (1997) said: “males dominate the classrooms and male priorities have shaped the subject’s image.”

The Mekong Delta, where the three main ethnics Kinh – Chinese – Khmer live together, is one of the regions which has been affected invasions from China for centuries, and the successive rules of France, Japan, and the U.S until 1975. Those brought the locals a diversity of cultural influences in addition to the conserved cultural identity of Vietnamese people. Among them, Confucianism had imposed a strong impact. Historians recorded the effect of Confucianism doctrines on women’s restriction, leading them to have an inferior social status and having their whole lives depended on male family members (Vu & Yamada, 2020). According to Rosenlee (2006), women were banned from taking imperial examinations (p.129); and therefore, literary learning was only a reservation for male privilege. Since the famous proclaim of Mao Zedong in the 1920s: “women hold up half of the sky”, the status of women in the society in Vietnam and other Confucianism-affected countries had only been improved (Vu & Yamada, 2020).

To deal with the urgent call for switching to online education due to the pandemic, the Mekong Delta, with those above-mentioned geographical features and demographics, has had to confront a plethora of challenges to fulfill the educational mission. Questions about which obstacles, as well as gender issues, provoke our curiosity the most. Based on that foundation, the research has been done to determine their answers, in addition to bridging the reflection to the reality between what has been existing in the home country to the present status of women’s educational rights. To the scope of our research, the only concentration is placed on universities and high school students in the Mekong Delta of Vietnam, who are learning English as a school subject during the spreading time of Coronavirus in the early of the year 2020.

Literature Review

Online Learning

Online learning is also well-known as web-based learning, Internet-based learning, virtual learning, cyber learning, net-based learning, and is also a subset of distance learning (Urduan & Weggen, 2000). It is an educational system in which the Internet facilitates teaching and

learning in a new learning condition, where teachers and learners are physically separated (Newby et al., 2000). According to Allen and Seaman (2007), online learning is defined based on 80%+ of learning content delivered online. Smart and Cappel (2006) have a similar definition while considering online learning as instructions distributed to learners electronically via the Internet, Intranet or multimedia platforms like CD or DVDs. The concepts of synchronous and asynchronous online learning are used to refer to the two different types of learning, in which synchronous refers to a must of learning where teachers and students are asked to work together at the same time, and asynchronous provides online learning opportunities with no time restriction and teachers and learners are not required to be online simultaneously (Hrastinski, 2008).

Regarding strengths of online learning, Dabbagh and Bannan-Ritland (2005) reported its existence with all dynamic, unbound, and the practice of diversity pedagogical active learning and learner-centered approach in comparison to practices of physical classrooms with fixed time and face-to-face interactions between teachers and learners (Barker, 2003; Browne, 2005). Online learning is also highlighted by its flexibilities (Attack, 2003; Fish, 2016; Horspool & Lange, 2012; Platt et al., 2014; Sargeant et al., 2004; Wyatt, 2005) and convenience for disadvantaged learners with problems in family and health issues (Dyrbye et al., 2009; Kokko et al., 2015), and also the proliferation and popularity (Landrum et al., 2020).

While leaving those impressive outstanding perspectives, much research also reports a wide range of challenges stakeholders face with this virtual learning. Muilenburg and Berge (2005) pointed out the lack of social interaction as the most decisive student barrier to online learning, followed by administrative and instructor issues and time and support for the study. Learner motivation came closely, and the minor impacts belong to technical problems and cost-related issues. Mullen and Tallent-Runnels (2006), otherwise, found that affective supports – “communication from instructors to students that the students are important and valued individuals”, cause the most extreme barriers (p. 258).

Online Learning in Vietnam Amidst the COVID-19 Pandemic

Online learning existed in Vietnam since the arrival of the Internet in the 20th century. Its popularity among students, however, has just become wildly visible in recent years under the enforcement of Ministry of Education and Training (MOET) in Vietnam about online education (Ha, 2020). Also under Ha’s statement, many universities and high schools started deploying this style of learning variously in accordance with their educational purposes. When Vietnam and the whole world confronted the widespread infection of Coronavirus, the spirit of “continuing to learn despite school closure” (Nha, 2020) inspired educators and learners to encounter online learning while simultaneously fighting the COVID-19 pandemic. It can be considered that the quarantine time during the first quarter of the year 2020 in the South of Vietnam was the first time all learners in the Mekong Delta have experienced online education. This is primarily a way to confront the disease; and yet, it opened the new door for Vietnamese education after all. Employing online learning becomes the more significant since it provides the practical reasons for all stakeholders to have in-time implementations, especially to foster online learning in our digital era.

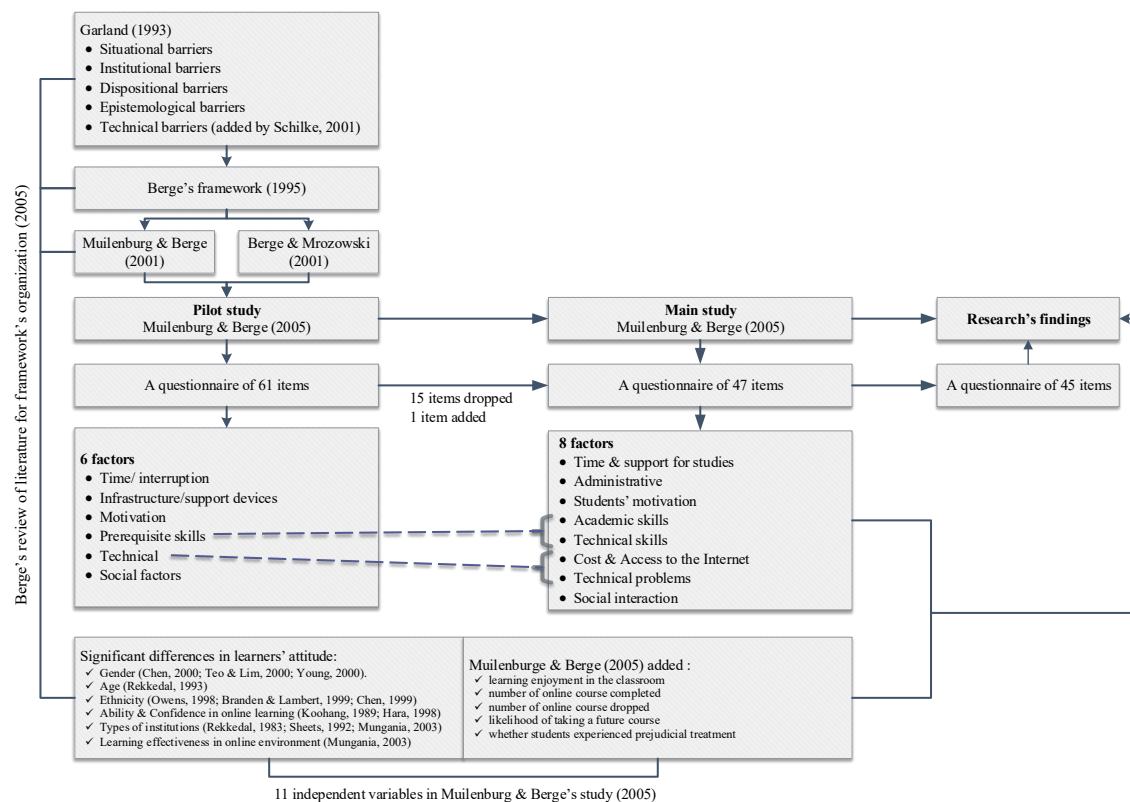
Measurements of Online Learning Difficulties – Berge’s Theoretical Framework (2005)

Inheriting previous studies of Garland (1993), Muilenburg and Berge (2001), and Schilke (2001), the study of Muilenburg and Berge (2005) was conducted to investigate student barriers to online learning in the United States. In that study, the authors revealed 45 items being used in the questionnaire as their research instrument. These were categorized into the seven groups

of barriers, directly causing difficulties for distance learners at different levels and ages. Details about them will be presented in Figure 1 as below.

Figure 1

Berge's Review of Literature Framework (2005)



Aims of this Study

This study was done in order to find the discrepancies between university male and female students in Vietnam when learning English as a Foreign Language (EFL) online amidst the COVID-19 pandemic. Specifically, we clarified the differences about online learning obstacles perceived by the two genders; secondly, efforts were made to point out whether gender makes differences in students' readiness to take future online English courses. As a point of departure, we used previous literature about online education and its discrepancies in terms of gender to reveal the results of this study which are expected to reflect the reality of online learning and its gender-related issues in Vietnam.

To address these purposes, the following research questions are:

- What differences are there between male and female EFL learners' perceptions toward barriers in learning English online?
- To what extent do these perceived barriers affect male and female EFL students' readiness of taking future English online courses?
- Does gender matter in students' readiness of taking future English online courses?

Research Methodologies

A mixed-method study which focused primarily on a quantitative approach would be applied in our context. The mixed-method orientation helps provide a more profound and broader understanding of the phenomenon than the research being done with only a quantitative or qualitative approach (Hurmerinta-Peltomäki & Nummela, 2006). Additionally, O’Cathain et al. (2010) believe that integration helps persuade readers to be more confident in the finding and conclusions researchers draw in the study.

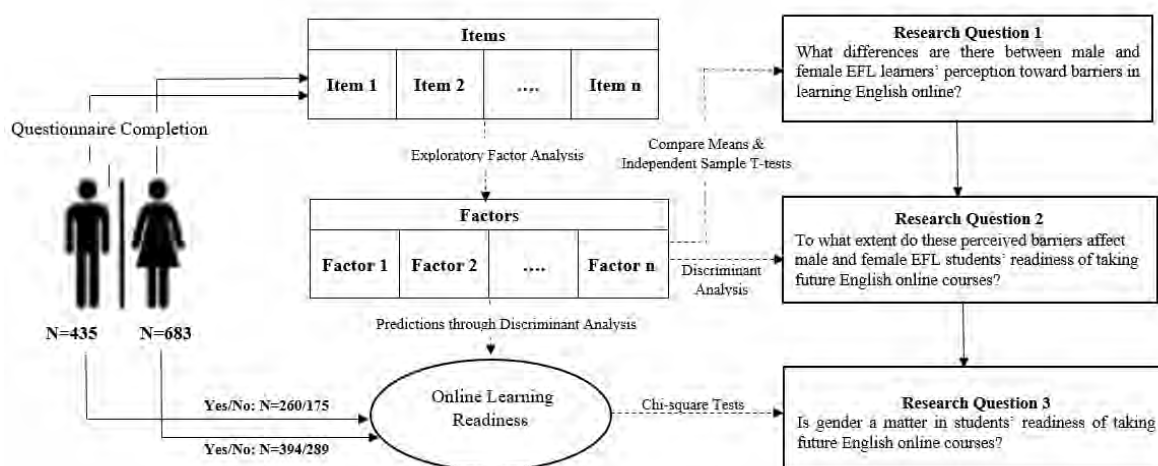
In this study, the first focus would be addressing online learning barriers and how they are perceived by male and female learners. An adaptation of Berge’s framework (2005) would be applied to confirm the obstacles that Vietnamese students face when learning online; especially with their answers from the interviews, extra barriers are hoped to be discovered after qualitatively analyzing. To raise the appropriateness of Berge’s framework in 2005, an Exploratory Factor Analysis with Principle Axis Factoring and Promax rotation method would be run.

The first research question was to evaluate the discrepancies between males’ and females’ perceptions toward online learning barriers. Means for each factor were processed by SPSS. An independent sample T-test was then run to compare means of each between male and female learners.

In line with the second research aim, we provided predictions about the readiness of taking future online courses between male and female learners, under the impact of perceived barriers. Discriminant analysis, therefore, has been applied twice, separately on each gender. Next, Chi-square Tests would be employed to provide the first confirmation about the relation between genders and online learning readiness based on the students’ answers: “Yes” or “No” for the question: “Are you be ready to take future online courses?” Details about the research model will be presented in Figure 2.

Figure 2

Research Model of the Quantitative Approach

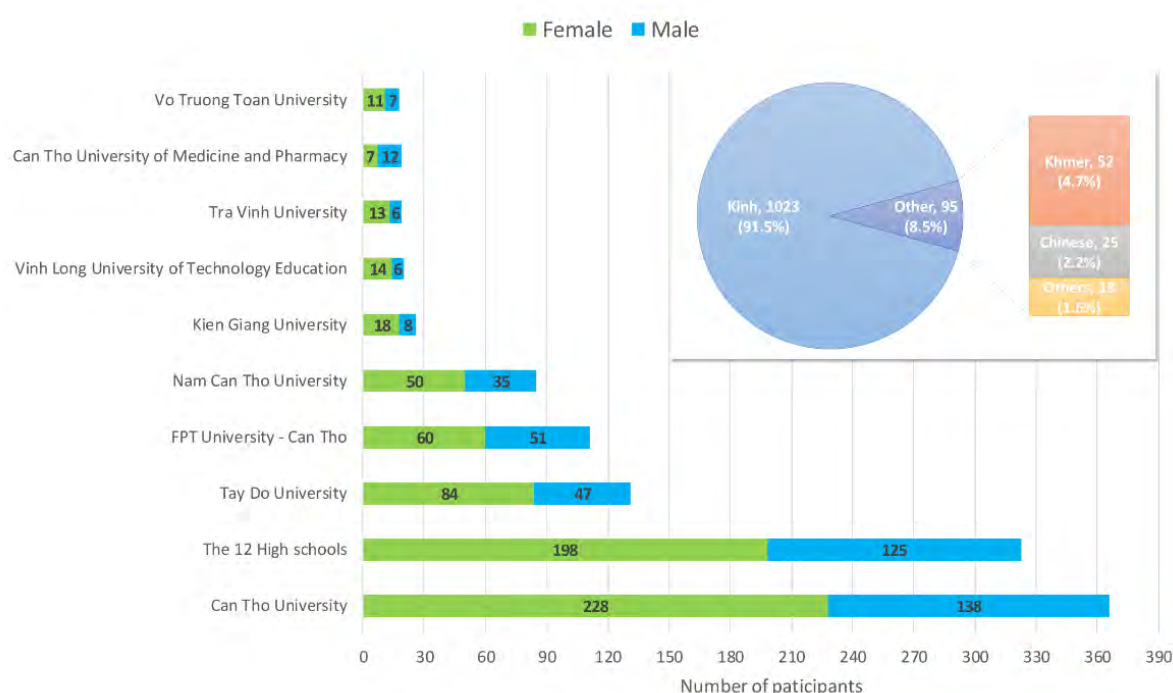


Participants

1118 students studying English as a Foreign Language at nine universities and twelve high schools in the Mekong Delta, participated in the research. While being invited to complete the questionnaire launched on Google Form from April to July 2020, the students were learning English as a compulsory subject online synchronically to meet requirements of MOET in Vietnam due to the impact of the COVID-19 pandemic. Among them, there are 683 female students (61.1%) and 435 male students (38.9%). Proportions of gender and participants contributed by universities and high schools as well as their ethics would be illustrated in Figure 3.

Figure 3

A Description of Participants According to their Institutions and Ethics (N=1118)



Research Instruments

Berge's theoretical framework (2005) about student online learning barriers is used as the research instrument in our study, with some minor adjustments to fit our context. Basically, the number of 45 items in the questionnaire received the deletion of four issues; in which, three of them are related to technical issues because they are widely discussed and become predictable in many research. Therefore, we reserved our concerns on other factors and made efforts in seeking new ones. Furthermore, when almost participants are at the age of 15 to 22, the item "fear family life will be disrupted" has been removed due to its inappropriateness. The remaining 41 items were translated and a Vietnamese version was formed to ease online learners' reading and understanding. They were asked to rate all statements in their right feelings in the 1-5 Likert Scale, ranging from completely agree to completely disagree.

Cronbach Alpha was used to check the reliability of the 41-item questionnaire. Table 1 shows that all values are over 0.6 and the Correlated Item-Total Correlations are over 0.3. According to Nunnally and Bernstein (2007), the questionnaire is qualified to be studied in our context.

Table 1
Cronbach Alpha of Each Cluster in the Questionnaire

Clusters	Number of items	Cronbach Alpha
Administrative/Instructors' issues	11	0.89
Social interaction	06	0.86
Academic skills	06	0.91
Technical skills	06	0.92
Learners' motivation	05	0.76
Time and support for study	04	0.76
Cost and access to the Internet	03	0.80

Findings

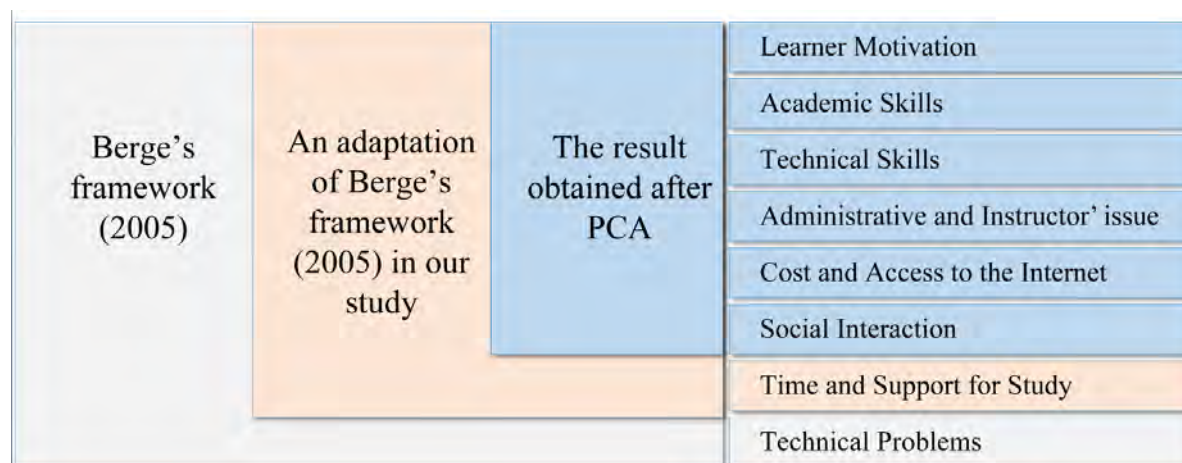
This section firstly reported an overview of EFL learners' perception toward online learning barriers in terms of gender. Its following sections revealed the results of Discriminant Analysis as the impact of those perceived barriers on male and female students' readiness of taking future English online courses. In search of finding the effect of gender, once again, the prediction of this matter would be presented through the result of Chi-square Tests. Combining with content analysis of qualitative data from answers of the interviews, the findings would provide significance of the whole research.

Discrepancies between Male and Female Students' Perceptions Toward Online Learning Barriers

An Exploratory Factor Analysis with Principal Axis Factoring extraction and Promax rotation was used in the study. After deleting all items being loaded into more than one item or items with loadings of 0.5 and greater, the remaining 28 out of 41 items were loaded into six groups of barriers to online learning (see Figure 4). Noticeably, while the study of Muilenburg and Berge (2005) admitted the classification of the seven groups of factors, the same framework applied to the Vietnamese context figured out the existence of six groups and eliminated all four items in time and support for the study.

Figure 4

A Description of Factors Affecting Online Learning Barriers from Berge's Framework (2005) to the Current Study



To investigate the differences between male and female students' perceptions about online learning barriers, independent sample T-tests were run to analyze and compare the means of each factor between the two genders. At first glance, female learners perceived more extreme levels of difficulties than their male counterparts. The chart also indicated that both genders ranked all hindrance factors similarly through their ratings on the questionnaire. Specifically, Figure 5 shows that cost and access to the Internet caused the most difficulties, where the highest means of 3.29 and 3.13 for schoolboys and schoolgirls, showed respectively. As can be seen from the chart, social interaction closely stands for the second position with 3.13 for females and 3.07 for male learners.

Regarding the two genders' perception, the results of the Independent Sample T-test pointed out the two groups of factors, namely, cost and access to the Internet ($p=0.003$) and technical issues ($p=0.001$), had created light discrepancies, but statistically significance between male and female learners toward online learning barriers. These two factors had caused greater impacts on females' virtual learning than that of the counterpart, which figures correspondingly stood at 3.29 and 2.58 for females: and 3.13 and 2.42 for males.

Figure 5

Mean Scores of Perceived Barriers Between Male and Female EFL Learners

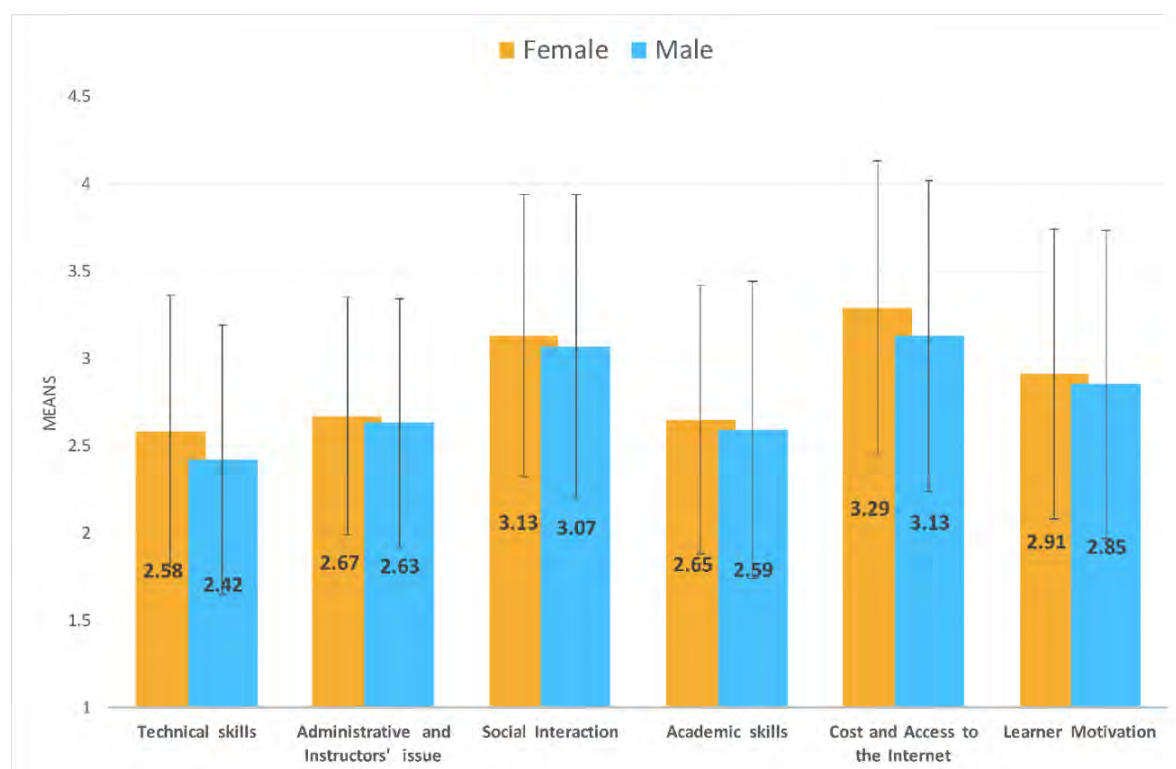


Table 2

Discrepancies Between Male and Female EFL Learners' Perception Toward Online Learning Barriers

		Means	SD	t-values	Sig (2-tailed)	df
Technical skills	Female	2.58	0.78	3.23	0.001	925.7
	Male	2.42	0.77			
Administrative and instructors' issues	Female	2.67	0.68	0.98	0.331	892.8
	Male	2.63	0.71			
Social interaction	Female	3.13	0.81	1.11	0.277	874.5
	Male	3.07	0.87			
Academic skills	Female	2.65	0.77	1.19	0.233	1116
	Male	2.59	0.85			
Cost & Access to the Internet	Female	3.29	0.84	3.05	0.003	884.8
	Male	3.13	0.89			
Learner Motivation	Female	2.91	0.83	1.13	0.264	886.028
	Male	2.85	0.88			

Qualitative Reports on Males and Females' Perceptions about Learning English Online in Connection with Perceived Barriers

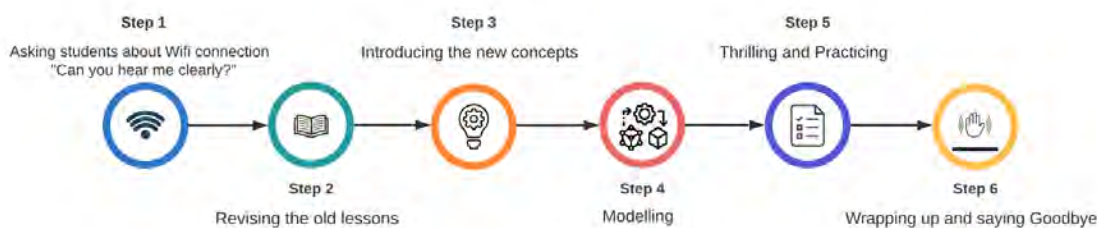
Informal interviews were done on the sixty-seven volunteers of the total of 1118 who filled out the questionnaire. 20/67 of them were male (29.9%) and 47 were female (70.1%). They were ready to support the research with qualitative questions by chatting online in the average time of fifteen minutes per student. The whole process took five weeks for collecting data from their answers. The discussed issues fundamentally were based on students' insights of their judgments about online learning barriers, in addition to sharing about their perceptions that a check on the 1-5 Likert Scale seems to be unable to expose perfectly. Moreover, students were also invited to state their opinions about online lessons in learning English. To start with the results, it was relatively surprising with the longer and stronger explanations that most female students expressed their barriers on the items related to technical issues, cost, and access to the Internet. Male students voiced lighter attitudes toward similar concerns. It logically supports the females' quantitatively high ratings from the questionnaire.

(a) Learning English Online: The Reception from Students

When being asked to describe a process of an online English lesson and present their own opinions about whether students are experiencing a traditional or modern learning method, surprisingly, all respondents described a similar motif (Figure 6). They believed to a certain degree that they were studying in a traditional way, and there were not as many differences compared to their on-campus lessons. 31/67 participants revealed that this was the first time they have encountered online learning and so have their teachers. They continually started by repeating the same phrases: "Can you hear me clearly?" until all students say they are OK with the Internet connection. Students have carefully revised the previous lessons with teachers' instructions before moving on to the new ones. Being similar to learning in the physical classroom, students are guided to practice the new structure with friends and teachers, with limited time and cyber-space interaction. They also felt it hard to have group and paired works for free practices like they did at school. The lessons normally end by teachers' wrapping up and the saying goodbye time for everybody.

Figure 6

A typical Online English Lesson in the Mekong Delta in the Context of COVID-19 Pandemic



43/67 students said they were learning traditionally but with a lack of social interaction between teachers and students as well as among other students. 22/67 respondents said they were not motivated while learning English online because they could not interact with their teachers or their friends. Sometimes they could not ask teachers anything which lead them to misunderstand, and subsequently, they fell behind the others and became lost afterward. Respondent #891 said:

...It seems that my teacher uses less spoken English than she teaches in the classroom. My friends often said they did not understand their teachers and they needed a lot of translation. Personally, I am not in their favor. I still prefer learning English by hearing English regularly, especially from my teacher's instructions...

In contrast, some students claimed that learning English online was a modern learning style since they had to study with technology, computers, and especially learning from a distance. 16/67 students welcome online learning by stating that technology will be a must in the future, so getting acquainted with them right now is ideal enough.

(b) Cost and Access to the Internet

The invited 67 volunteers had strong arguments both “for” and “against” online learning under the effects of cost-related issues and Internet connection in their learning process. Both genders complained about the interruption or the lag in Wi-Fi as well as money spent on 3G for online learning. Male students paid attention to the cost of Internet payment as strongly as the female students. When asked specifically about how much money they spent, only one male respondent #259 said he had to pay VND 200.000 a month (approximately \$10), while there were seven female students specified the number of VND 30.000 a month, VND 210.000 a month, and VND 15.000 a day. Similarly, respondent #413 living in the countryside has the same problem: “My town does not have the Internet. I have to use 3G, and hence, its signal is not good enough”.

...There were two lessons when there was power outage. My phone did not connect with 3G and I had to register for the new package. It took VND 40.000 for an online lesson. My teacher forced us to be present if we did not want to be punished. I was bored actually. (Female respondent #655)

...I am living in remote area; therefore, the Wi-Fi connection is not strong enough. Can you pay attention to the lesson well if you have to log in Zoom five times for a forty-five-minute lesson? I missed at least 10 to 15% the content for each lesson. (Female respondent #478)

...Students have to pay a lot, and some students even pay for the new installation fee.
(Female respondent #215)

(c) Technical Problems

Both male and female students who supported online learning believed in the vital existence of technology, and they awarded their recognitions by accepting all technical challenges. The male respondent #103 strongly opposed all barriers related to technical issues. He stated that:

...Today, IT comes to secondary students as a compulsory subject. Some are even professional in the uses of Offices, including some online skills through social networks like Zalo and Facebook. Assisted functions for searching by voices and images, which benefits users a lot whenever there are problems. All barriers can be surpassed easily if everyone gives it a try.

In addition to the expert students in technology, who were keen on learning with the online system, 15/67 students admitted that they lack understanding in ICT and were totally technophobic. Being blind with technology was not only the confession of the female students – as common sense of human bias – but also of male students. They both confessed that they had a strict limitation in learning new things, especially for technological aspects. However, the results showed that more females voiced concerns about technical problems than males, which numbers are 20 and seven respectively.

(d) Academic Skills

When being asked about difficulties in learning English online, a majority of students said they found it hard to understand their teachers' instructions; and a lack of confidence in answering everything in English existed as well. Participant #625 noted:

"I totally agree with I am not good at listening, speaking, and writing. When my teacher asked me, I was confused a lot and I turn off my camera quickly as a way to escape; to be honest, I sometimes blamed it on technical problems or the Wi-Fi was lag."

Similarly, there are other ten participants said they felt the more convenient with learning English reading online.

Regarding interactive activities, half of the participants felt it hard to be engaged in a lively atmosphere of the English class as they experienced in physical classrooms. Some joined live games such as Quizzex, Kahoot, and Quizlet with less excitement than when they have had face-to-face competition with other classmates. Problems with interaction also lead to difficulties in the efficiency of learning English online. The 67 informants of the qualitative research said they were not able to send their facial expressions to their teachers on time. Respondent #676 shared:

...When we studied in the classrooms, just by observing our facial expressions, our teachers would immediately repeat their lessons until we felt happier with it. When we were in this virtual environment, sometimes any of us could not hear the teachers due to Internet connection issues; no one dared to ask. We were too shy. And we were afraid of being laughed by the other.

Conversely, 17/67 informants said they felt happy with learning English online where they could hear the teacher clearer because no one turned on the microphones. Moreover, informant #176 judged there was no discrepancies in terms of learning English offline or online; and their language skills were enough to accept and respond to the new concepts from their teachers.

It can be concluded that English learning and online instructions has further areas that need to be researched. The current findings provided certainty of learners' language proficiency and learners' styles affect their "mood" in joining online classrooms. It is also inconvincible to conclude the preferences between male and female learners in learning English online. Those who made a great contribution or those who had developed gaps in learning should be studied in further research.

(e) Other Extra-factors from the Qualitative Approach

By taking the content analysis, the results showed that there was a great repetition of the following terms: "remote areas", "countryside", and "economic condition". A discovery of new factors influencing online learning of Vietnamese students, therefore, was recorded.

As regards geographical features, with not many big cities in the Mekong Delta, the region has a lot of remote areas where Internet has a long way to go to provide reliable service. Many towns have only just gotten electricity within the last decade, which helps people imagine how poor the conditions of these students have for learning in this region. Most universities are located in the city center, with facilities that are almost fully equipped. Therefore, some students living in the countryside feel a big gap in learning conditions in the urgent call for online learning throughout the country. 35/67 respondents said not all students have already possessed smartphones, laptops, and Wi-Fi for their study.

- ...*Economic status is different among people.* (respondent #398)
- ...*Finding a stable network in rural areas is a big challenge.* (respondent #634)
- ...*Not everyone has enough condition to study online. If the game station does not open on the day I study, how can I study?*" (respondent #1088)

Online Learning Barriers versus Male and Female EFL Students' Online Learning Readiness

To clarify the influential degree of perceived barriers to the readiness of taking future distance courses of male and female learners, Discriminant Analyses were run separately for each gender. Table 3 provides the number of male and female participants with statistics on the frequency of "Yes" or "No" answers for the question "Would you like to take future online courses?". Due to these two options, there is only a canonical discriminant function being used in the analysis. In this study, the function of both male and female students accounts for 100% discriminating ability of the discriminating variables, in which eigenvalues of the male result is 0.314 with its canonical correlation is 0.489. It helps to explain the 23.9% variance of dependent variables. Figures for females are presented as 0.268, 0.46, and 21.2% correspondingly.

Regarding the Wilk's Lambda of both male and female analyses, figures for males are written with 0.761 and $p = .000$, and the ones for females are 0.789 and $p = .000$. These help to confirm the statistical significance of these analyses in our context.

Table 3

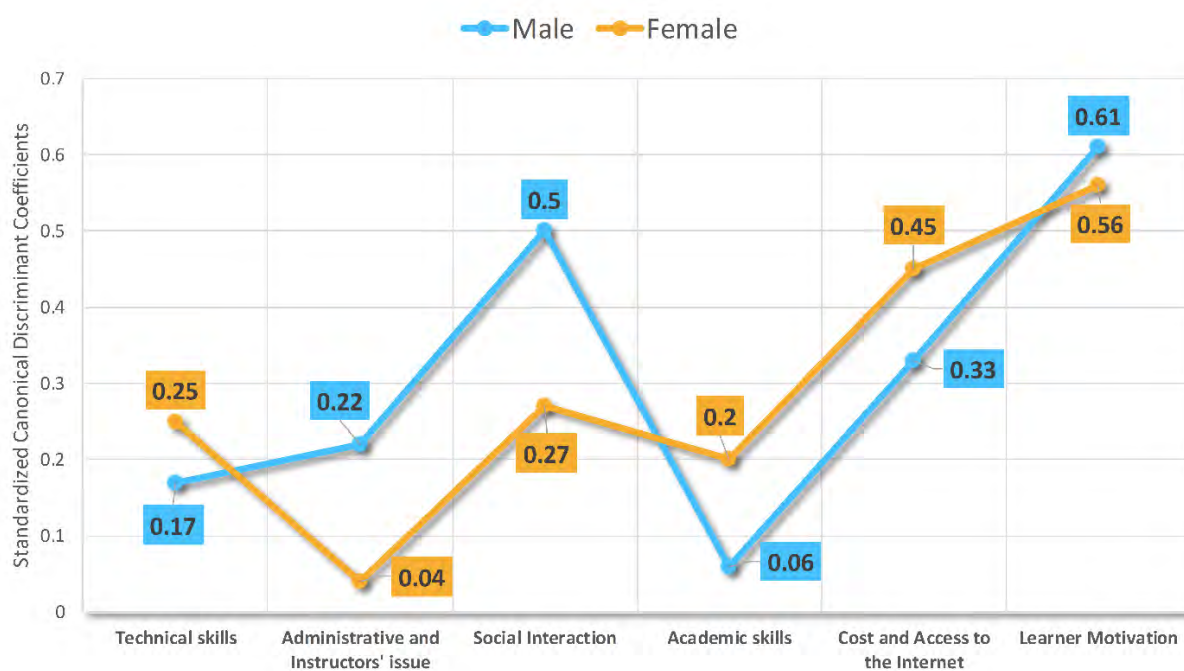
Frequencies of “Yes” and “No” answers for online learning readiness (N=1118)

	Yes	No
Male (n=435)	260	175
Female (n=683)	394	298

It in-line with the impacts found in the hindrance factors between male and female learners who are ready to continue studying future online courses and those who are unready. As can be seen from Figure 7, it is obvious to conclude that learner motivation has the most impact on both males’ and females’ decisions, with Discriminant Scores (DS) presented at 0.61 and 0.56, respectively. Following this factor, Social Interaction (DS=0.5) becomes the second influential factor for male students while the counterpart finds it a problem to continue learning online due to Cost and Access to the Internet (DS=0.45), before admitting the impact of Social interaction as the third influential factor (DS=0.27). Having the least impact on causing discrepancies between the two decisions, female students put the influence of Administrative and instructors’ issues to the back of the list of barriers while males’ readiness does not depend really much on Academic Skills (DS=0.06)

Figure 7

Standardized Canonical Discriminant Function Coefficients



Regarding 435 male participants, 175 students (40.2%) answered “No” for the questions about online readiness; and the other 260 (59.8%) said “Yes”. As a result of Classification tables, it is knowledgeable that:

- Among 175 students who said “No”, 121 of them are predicted unready for future distance courses.
- Among 260 students who said “Yes”, 197 of them are predicted to be ready for future distance courses.

- The percentage of original grouped cases correctly classified is 72.2%.

In terms of female learners, there is a total of 684 participants and 289 “No” answers (42.2%), and 394 “Yes” answers (57.6%).

- Among 289 females who said “No”, 212 of them are predicted to be unready for future distance courses.
- Among 394 females who said “Yes”, 280 of them are predicted to be ready for future distance courses.
- The percentage of original grouped cases correctly classified is 72.0%.

Gender versus Online Learning Readiness

To examine whether gender has an impact on online learning readiness, Chi-square Tests were run based on statistics of numbers of male and female students and their judges on being ready or unready to take future online courses. Its details being shown in Table 4 revealed that the Asymptotic Significance (2-sided) is 0.491, greater than 0.05, so the null hypothesis was accepted. It means that gender has no influence on EFL students’ online learning readiness.

Table 4

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.475 ^a	1	.491
Continuity Correction ^b	.393	1	.531
Likelihood Ratio	.476	1	.490
Fisher's Exact Test			
Linear-by-Linear Association	.475	1	.491
N of Valid Cases	1118		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 180.54.

Discussion

Learning online during the COVID-19 pandemic has created a great impetus for students throughout the nation and worldwide to receive a mainstream of education. Learning English online on a large scale at this time, with its own distinguished features, had already received early judgments from their learners. In addition to students’ responses to online learning obstacles on a range of items of Berge’s framework (2005) regarding cost and access to the Internet, technical problems, learner motivation, social interaction, administrative or instructors’ issues, and academic skills; qualitative findings, on the one hand, reveal the impact of economic condition and geographical features as additional barriers; on the other hand, it exposes students’ perception toward their teachers’ teaching techniques. Through the comprehensive reflections of learners both on qualitative and quantitative aspects, it positively provides for the educator an overview about what and how to do to realize online learning in Vietnamese context.

Gender Discrepancies in Students’ Perception Toward Online Learning Barriers

The findings provided a comparison between males’ and females’ perceptions toward online learning barriers. There are two out of six factors remaining after EFA which propose the discrepancies between the two genders, namely technical problems and cost and access to the

Internet. For these factors, female students tend to perceive more levels of difficulties than males. It can be concluded that females in our circumstances have higher evaluations on the issues related to Internet access, fee, and problems about online learning techniques. A confirmation of McSporran and Young (2001) is in this study with reports on women's disadvantages are present in learning with computers. However, the current study recorded similarities when a lot of men are given the same statements about ICT lack of knowledge as the women. It is a discovery that helps strengthen a balanced attitude between the two genders when learning English online. With regards to the other barriers, namely learner motivation, administrative or instructors' issues, academic skills, and social interaction, there are no discrepancies in perceptions between the two genders. It is quite different from studies of Ashong et al. (2012), which admitted to a higher level of women's positive perceptions on teacher support and student interaction. Yet, it is in agreement with Price (2006) which testified to the effect of "women's access to technology and enrolment on the online version of the course was comparable to men's" (p.353).

With respects to students' comments about a model English online lesson, it can be seen that almost all teachers accidentally performed traditionally when teaching, where students wanted to welcome innovative teaching methods like they were gaining on campus. By pointing out a lot of predictable teaching scenarios, students exposed their expectations in more interesting lessons, where they could acquire language more effectively. For some other students, they felt it was difficult because they were not proficient enough in the four skills comprising listening, reading, speaking, and writing, especially with the typing skill included. They believed learning English online to be much more difficult. These concerns would be a problem that the study helps to reflect and expect solutions from educators who want to motivate online teaching in the home country.

Gender Issues and the Readiness of Online English Learning in the Future

Regarding students' online learning readiness, the results re-confirmed the good promise of online education in Vietnam (Van & Thi, 2021) by the approval of both genders, though there are still remarkable numbers of students being in the opposite spectrum. Both males and females in high school and universities in this study are given the same learning opportunities in learning, and they all face similar challenges as well as gaining benefits. The number of 46 students' claims had contributed to enlightening the future of teaching English online in Vietnam; for instance, 30/67 respondents believed in the necessary of joining online learning as an adaptation to the development technology and society. "It is just the matter of time, as well as the matter of earliness or lateness.", said respondent #889. This is also the reasons why they expose a wide range of difficulties, sometimes with extreme positions. Yet in the end, they still would volunteer for online learning in the future.

Gender Equality in Online Learning amidst the COVID-19 Pandemic

Being completely different from the reality of educational rights of women in Vietnam in the past, the result of the study is the best evidence for the improvement of gender inequality, especially in the context of the COVID-19 outbreak. It erases the images of women whose learning rights were restricted by the effect of Confucianism thousand years ago (Vu & Yamada, 2020), which was testified by the readiness of both males and females students in learning in the disadvantaged conditions with positive ratings and comments when being asked about obstacles while learning English online. Moreover, the result of Chi-square tests leading to a conclusion that gender has no impacts on learners' future decisions, help to shorten the bias suspicion of human about women ability in learning with technology (Blum, 1999;

Bostock et al., 1987; Brosnan & Davidson, 1996; Perry & Greber, 1990; Rosen et al., 1987). It also opens the door for online learning to be enhanced with the support of both genders.

Pedagogical Implications

To deal with the urgent call for online learning in the context of the COVID-19 pandemic, the research contributes to the literature about the readiness of learning English online of students in Vietnam in terms of gender. It helps to provide insights into males and females' attitudes toward accepting online education or not. The reflection of both quantitative and qualitative results toward learning English online becomes extremely important for all stakeholders, especially when promoting online learning and other technology-based learning practices into the region. Additionally, it provides implications for researchers, course providers, and course designers (Lowe et al., 2016), who become extended stakeholders when creating the programs that serve the learning needs of female and male students.

References

- Allen, I. E., & Seaman, J. (2007). *Online nation: Five years of growth in online learning*. ERIC. <https://files.eric.ed.gov/fulltext/ED529699.pdf>
- Anh, D. K. (2020). *Việt Nam: COVID-19 và thách thức đối với ngành Giáo Dục*. Friedrich Ebert Stiftung. Accessed October 2, 2021 from <https://www.fes-vietnam.org/vi/vn-news-events-publications-detail/viet-nam-COVID-19-va-thach-thuc-doi-voi-nganh-giao-duc/>
- Anh, N. T. L., & Duc, H. M. (2020). *Đào tạo trực tuyến trong các trường đại học ở Việt Nam hiện nay: Thực trạng và giải pháp nâng cao chất lượng*. Cong Thuong Industry and Trade Magazine. Accessed October 2, 2021 from <https://tapchicongthuong.vn/bai-viet/dao-tao-truc-tuyen-trong-cac-truong-dai-hoc-o-viet-nam-hien-nay-thuc-trang-va-giai-phap-nang-cao-chat-luong-75924.htm>
- Ashong, C. Y., Commander, N. E., & Teaching. (2012). Ethnicity, gender, and perceptions of online learning in higher education. *MERLOT Journal of Online Learning*, 8(2).
- Atack, L. (2003). Becoming a web-based learner: Registered nurses' experiences. *Journal of advanced nursing*, 44(3), 289-297. <https://doi.org/10.1046/j.1365-2648.2003.02804.x>
- Barker, A. (2003). Faculty development for teaching online: Educational and technological issues. *The Journal of Continuing Education in Nursing*, 34(6), 273–278. <https://doi.org/10.3928/0022-0124-20031101-10>
- Blum, K. D. (1999). Gender differences in asynchronous learning in higher education: Learning styles, participation barriers and communication patterns. *Journal of asynchronous learning networks (JALN)*, 3(1), 46-66. Accessed October 2, 2021 from <https://pdfs.semanticscholar.org/66c4/7c2b615d95f3e76ade45da1d0bec3899fb5f.pdf>
- Bostock, S. J., Seifert, R. V., & McArdle, J. (1987). The effects of learning environment and gender on the attainment of computer Literacy. *Studies in the Education of Adults*, 19(1), 37-45. <https://doi.org/10.1080/02660830.1987.11730478>
- Brosnan, M. J., & Davidson, M. J. (1996). Psychological Gender Issues in Computing. *Gender, Work & Organization*, 3(1), 13–25. <https://doi.org/10.1111/j.1468-0432.1996.tb00045.x>
- Browne, E. (2005). Structural and pedagogic change in further and higher education: A case study approach. *Journal of Further and Higher Education*, 29(1), 49–59. <https://doi.org/10.1080/03098770500037754>
- Cole, A., Conlon, T., Jackson, S., & Welch, D. (1994). Information technology and gender: Problems and Proposals. *Gender and Education*, 6(1), 77–86. <https://doi.org/10.1080/0954025940060106>
- Dabbagh, N., & Bannan-Ritland, B. (2005). *Online learning: Concepts, strategies, and application*. Upper Saddle River, New Jersey: Pearson Merrill Prentice Hall.
- Dyrbye, L., Cumyn, A., Day, H., & Heflin, M. (2009). A qualitative study of physicians' experiences with online learning in a masters degree program: Benefits, challenges, and proposed solutions. *Medical Teacher*, 31(2), e40-e46. <https://doi.org/10.1080/01421590802366129>

- Fish, L. A. (2016). A Preliminary Study of Changes in Online Graduate Business Student Perceptions Over a Course. *Business Education Innovation Journal*, 8(2), 41–50. Accessed October 2, 2021 from http://www.beijournal.com/images/V8N2_85.pdf
- Garland, M. R. (1993). Student perceptions of the situational, institutional, dispositional and epistemological barriers to persistence. *Distance Education*, 14(2), 181–198. <https://doi.org/10.1080/0158791930140203>
- Grundy, A. F., & Grundy, J. (1996). *Women and computers*. Intellect Books, Exeter.
- Ha, C. (2020). 92 Universities Applying Online Learning. VTC News. Accessed October 2, 2021 from <https://vtc.vn/92-truong-dai-hoc-ap-dung-hinh-thuc-day-truc-tuyen-ar535639.html>
- Horspool, A., & Lange, C. (2012). Applying the scholarship of teaching and learning: Student perceptions, behaviours and success online and face-to-face. *Assessment & Evaluation in Higher Education*, 37(1), 73–88. <https://doi.org/10.1080/02602938.2010.496532>
- Hrastinski, S. (2008). Asynchronous and synchronous e-learning. *Educause Quarterly*, 31(4), 51–55.
- Hurmerinta-Peltomäki, L., & Nummela, N. (2006). Mixed methods in international business research: A value-added perspective. *Management International Review*, 46(4), 439–459. <https://doi.org/https://doi.org/10.1007/s11575-006-0100-z>
- Kokko, T., Pesonen, H., Kontu, E., & Pirttimaa, R. (2015). Why study online in upper secondary school? Qualitative analysis of online learning experiences. *Human Technology: An Interdisciplinary Journal on Humans in ICT Environments*, 11(1), 57–70. <https://doi.org/10.17011/ht/urn.201505061740>
- Landrum, B., Bannister, J., Garza, G., & Rhame, S. (2020). A class of one: Students' satisfaction with online learning. *Journal of Education for Business*, 96(2), 82–88. <https://doi.org/10.1080/08832323.2020.1757592>
- Lowes, S., Lin, P., & Kinghorn, B. R. (2016). Gender differences in online high school courses. *Online Learning*, 20(4), 100–117. <https://doi.org/10.24059/olj.v20i4.1049>
- McSporran, M., & Young, S. (2001). Does gender matter in online learning? *ALT-J*, 9(2), 3–15. <https://doi.org/10.1080/0968776010090202>
- Muilenburg, L., & Berge, Z. L. (2001). Barriers to distance education: A factor-analytic study. *American Journal of Distance Education*, 15(2), 7–22. <https://doi.org/10.1080/08923640109527081>
- Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, 26(1), 29–48. <https://doi.org/10.1080/01587910500081269>
- Mullen, G. E., & Tallent-Runnels, M. K. (2006). Student outcomes and perceptions of instructors' demands and support in online and traditional classrooms. *The Internet and Higher Education*, 9(4), 257–266. <https://doi.org/https://doi.org/10.1016/j.iheduc.2006.08.005>
- Newby, T., Stepich, D., Lehman, J., & Russell, J. (2000). *Instructional technology for teaching and learning: Designing instruction, integrating computers, and using media* (2nd ed.). Upper Saddle River, New Jersey: Merrill.

- Nha, P. X. (2020). *Minister of Education and Training Phung Xuan Nha requests UNICEF's support in distance learning*. UNICEF (VietNam). Accessed October 2, 2021 from <https://www.unicef.org/vietnam/stories/minister-education-and-training-phung-xuan-nha-requests-unicefs-support-distance-learning>
- Nunnally, J. C., & Bernstein, C. (2007). *IH (1994). Psychometric theory* (3rd ed.). New York : McGraw-Hill, c1994. Accessed October 2, 2021 from <https://lib.ugent.be/catalog/rug01:000331515>
- O’Cathain, A., Murphy, E., & Nicholl, J. (2010). Three techniques for integrating data in mixed methods studies. *Bmj*, *341*, c4587. <https://doi.org/10.1136/bmj.c4587>
- Perry, R., & Greber, L. (1990). Women and computers: An introduction. *Signs: Journal of women in Culture and Society*, *16*(1), 74–101. <https://doi.org/10.1086/494646>
- Platt, C. A., Raile, A., & Yu, N. (2014). Virtually the same? Student perceptions of the equivalence of online classes vs. face-to-face classes. *Journal of Online Learning and Teaching*, *10*(3), 489–503. Retrieved on Oct 2, 2021 from https://www.researchgate.net/publication/271205198_Virtually_the_same_Student_perceptions_of_the_equivalence_of_online_classes_vs_face-to-face_classes
- Price, L. (2006). Gender differences and similarities in online courses: challenging stereotypical views of women. *22*(5), 349–359. <https://doi.org/https://doi.org/10.1111/j.1365-2729.2006.00181.x>
- Rosen, L. D., Sears, D. C., & Weil, M. M. (1987). Computerphobia. *Behavior Research Methods, Instruments, & Computers*, *19*(2), 167–179. <https://doi.org/10.3758/BF03203781>
- Rosenlee, L. H. L. (2006). *Confucianism and Women: A Philosophical Interpretation*. SUNY Press. Retrieved on Oct 2, 2021 from <https://books.google.com.vn/books?id=W-V0nQEACAAJ>
- Sargeant, J., Curran, V., Jarvis-Selinger, S., Ferrier, S., Allen, M., Kirby, F., & Ho, K. (2004). Interactive on-line continuing medical education: Physicians' perceptions and experiences. *Journal of Continuing Education in the Health Professions*, *24*(4), 227–236. <https://doi.org/10.1002/chp.1340240406>
- Schilke, R. A. (2001). *A case study of attrition in web-based instruction for adults: Updating Garland's model of barriers to persistence in distance education*. Northern Illinois University.
- Smart, K. L., & Cappel, J. J. (2006). Students' perceptions of online learning: A comparative study. *Journal of Information Technology Education: Research*, *5*(1), 201-219. <https://doi.org/10.2139/ssrn.3524610>
- Spender, D. (1997). The position of women in Information Technology-or who got there first and with what consequences? *Current Sociology*, *45*(2), 135–147. <https://doi.org/10.1177/001139297045002008>
- Toshiyuki, M. (2020). *Dịch COVID-19 ảnh hưởng đến gần 1,6 tỉ người học*. Tuoitreonline. Retrieved on Oct 2, 2021 from <https://tuoitre.vn/the-gioi-nhu-toi-thay-ky-2-dich-COVID-19-anh-huong-den-gan-1-6-ti-nguoi-hoc-20200827094736097.htm>
- Urdan, T. A., & Weggen, C. C. (2000). *Corporate E-learning: Exploring a New Frontier*. W.R. Hambrecht.

- Van, D. T. H., & Thi, H. H. Q. (2021). Student barriers to prospects of online learning in Vietnam in the context of Covid-19 Pandemic. *Turkish Online Journal of Distance Education*, 22(3), 110–123. <https://doi.org/10.17718/tojde.961824>
- Vu, T. M., & Yamada, H. (2020). The legacy of Confucianism in gender inequality in Vietnam. *MPRA Paper 101487, University Library of Munich, Germany*. Retrieved October 2, 2021 from <https://mpra.ub.uni-muenchen.de/id/eprint/101487>
- Wyatt, G. (2005). Satisfaction, academic rigor and interaction: Perceptions of online instruction. *Education (Chula Vista)*, 125(3), 460–468.

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