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ELECTRONIC EVIDENCE IN CIVIL LAW PROCEDURE OF VIETNAM

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Abstract. Electronic communication at home and abroad through the internet has become more popular, where people can do business anytime, anywhere, without borders and electronic devices are increasingly replacing paper documents in transactions in Vietnam. With great progress in the field of information technology which has affected every field and ways of communication, there have been more or less changes in the assessment method of evidence at the court when electronic communication becomes an inevitable trend. The current law of Vietnam recognizes the evidence validity of data messages. However, there are certain hidden risks arising with almost all transactions taking place over the internet. Therefore, completing and ensuring the correct implementation of the provisions of legislation on electronic evidence becomes increasingly necessary.

Keywords: Data messages; Electronic evidence; Electronic transactions; Electronic data.

1. Overview of Electronic Evidence

According to Article 94.1 of the Civil Procedure Code 2015, the electronic data are among the sources of evidence. This is one of the new points, advancing the development of the 4.0 technological period.

According to the provisions of Article 4.5 of the Law on E-Transaction 2005, data are information in the form of symbols, scripts, numerals, images, sounds or similar forms. If " electronic data" is considered evidence or called the electronic evidence, the electronic data shall be collected according to the order and procedures prescribed by the civil procedure code.

The Characteristics of Electronic Evidence[1]

In addition to traditional evidence, electronic evidence has some specific characteristics:

First, electronic evidence (E-Evidence) cannot be seen by naked eyes: E-evidence is searched through commands, sometimes found in places where experts can find it or in places that can only be accessible with special tools.

Second, E-evidence is easy to hide or disappear as follows: In certain devices and certain computer memory conditions, data evidence may be overwritten (or altered) by a function or normal operation of the devices. This may be due to an abrupt shutdown of the system or new information overwrites the old information due to the lack of memory capacity or environmental factors such as high temperature and humidity that damage the storage memory

Third, E-evidence can be changed or destroyed as follows: During normal use, electronic devices always change their memory status at the request of the user during the update of the data or the automatic data update process.

Fourth, E-evidence has its originality: Electronic data can be reproduced indefinitely the same as the original ones, which means a copy can still be considered evidence because they have fully characteristics of the original.

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[1] Nigel Jones and authors (2020), *Electronic Evidence Guide: A basis guide for police officers, prosecutors and judges,* CyberCrime@IPA project of the European Union and Council of Europe (Version 2.0), tr.12.

2. Electronic evidence under the laws of Vietnam

2.1. Authentication of Electronic Evidence

Authentication for collected electronic data to be valued as E-evidence is done when it is clear, not being lost or hidden, and does not violate the copyrights or privacy of individuals or organizations or infringing national security. The question is whether the collected electronic data are reliable and accurate or not. Is the integrity of the evidence guaranteed?

A typical example of this is Judgment No. 735/2019/DS-PT dated August 21st, 2019 on the dispute of compensation for non-contractual damage due to infringing honor, dignity and reputation issued by the People's Court of Ho Chi Minh City. The plaintiff is Kindergarten H that provided the evidence of the Bailiff No.425/2016/VB-TPLLQ.TĐ dated July 12th, 2016 by Thu Duc District Attorney's Office about the Facebook account "H N". It was considered to belong to the defendant Mr. Nguyen Huy H who wrote, "Who has children studying at Kindergarten H should be careful that the school is using water near the cemetery for the children to use". Although Kindergarten H considered Mr. Nguyen Huy H the creator the Facebook account "H N", the plaintiff of Kindergarten H could not prove that it was created and used by Mr. Nguyen Huy H. Therefore, the Court of Appeal did not accept the plaintiff's claim because the authenticity of the E-evidence was not reliable and accurate.

Another example related to the authentication of E-evidence was the Judgment No. 20/2019/KDTM-PT dated August 12th, 2019 on the dispute - purchase contract of the People's Court of Binh Duong province, in which the Court of Appeal did not accepted E-evidence. Specifically, the plaintiff Company B delivered the paint goods with defectives and poor quality for Company DN - the defendant. After that, Company DN exported them to a foreign partner who asked Company DN for compensation and fines. Therefore, Company DN provided the evidence as e-mails with invoice dated January 01st, 2018 – 30th, 2018; January 1st, 2018 – May 1st, 2018; January 1st, 2018 – 30th, 2018 that for the Court about the cause they couldn't pay for B Company. However, these sources of evidence were sent via emails and had their content in a foreign language, not translated into Vietnamese. Besides, the emails did not show a clear relationship between the sender and the defendant. So, the Court believes that the emails could have been forged and the defendant did not prove the legitimacy of the evidence. The Court of Appeal, therefore, did not consider these emails as evidence.

2.2. Collection of Electronic Evidence

Collecting E-evidence in cyberspace has got many problems because it relates to privacy, and sometimes it is impossible to collect the electronic data without being authenticated by the creators such as Cloud storage tools (Cloud Computing) or accounts on social networks of Facebook, Zalo, Instagram, etc. "Login" is required before someone can access the accounts, but they are controlled by the account owner.

In Judgment No. 02/2020/DS-ST dated May 14th, 2020 on the dispute of compensation for non-contractual damage due to infringing honor, dignity and reputation of the People's Court of Thanh Sơn district, Phu Tho province, the defendant is Ms. Nguyen Thi H who has the nickname Nguyen H on the social network Facebook. This nickname posted a photo of Ms. Nguyen Thi Thu T (the plaintiff) at 20:05 on March 22sd, 2019 with the content "Today I'm bothering everyone....Thank you all for reading and giving me some trouble". This post has, indeed, affected the honor, dignity and reputation of Ms. Nguyen Thi Thu T. The Facebook account Nguyen H belongs to Ms. Nguyen Thi H. However, even though Ms. Nguyen Thi Thu T suggested Ms. Nguyen Thi H remove that information, she did not remove it. Thus, Ms. Nguyen Thi Thu T must request the Court to resolve and force Ms. Nguyen Thi H to remove that information.

In addition, in the process of collecting evidence, the originality, integrity and completeness of the evidence may not be guaranteed when it may be destroyed or changed by the creators without leaving a trace. In Judgment no. 80/209/DS-PT dated April 11th, 2019 on the dispute of compensation for non-contractual damage due to infringing honor, dignity and reputation of the People's Court of Tay Ninh province, the defendant is Ms. Do Thi O who provided the exchanged messages between her and the plaintiff – Mr. Do Thanh N. However, he did not admit these messages and Ms. Do Thi O could not prove that the messages was sent by Mr. Do Thanh N. So the Court of Appeal did not accept the evidence provided by Ms. Do Thi O.

Therefore, if E-evidence is not collected in accordance with regulation of the legal civil proceedings, that will affect the integrity, completeness and accuracy of the evidence, and it will not be acceptable.

2.3. Use of Electronic Evidence

Information security concerns a fundamental issue where information is stored in the form of electronic data that cannot be exploited and it is difficult to guarantee the integrity and completeness of all electronic data in collection process. This has affected the authenticity of electronic evidence and relevant legal document has not included regulations on standards for E-evidence, which causes the use of E-evidence not to be objective.

For example, in the Judgment No. 735/2019/DS-PT dated August 21st, 2019 on the dispute of compensation for non-contractual damage due to infringing honor, dignity and reputation of the People's Court of Ho Chi Minh City mentioned above, the Court did not accept the E-evidence because Facebook account information is personal and private, so the court cannot infringe the privacy of the Facebook account with the name "HN". The Facebook account holder is not identified, and the completeness of the evidence cannot be guaranteed. Therefore, the Court of Appeal has reasons to reject the plaintiff's claim because the authenticity of the E-evidence did not guarantee the completeness and integrity.

In the Judgment No.20/2019/ KDTM-PT of August 12th, 2019 on the dispute - purchase contract of the People's Court of Binh Duong province, the Court of Appeal did not accepted E-evidence. Although the respondent provides evidence that is written in emails with invoices dated January 01st, 2018 – 30th,2018; January 1st, 2018 – May 1st, 2018; January 1st, 2018 – 30th, 2018. However, the evidence in emails have the content of foreign language, which was not translated into Vietnamese and the emails did not show a clear the relationship between the sender and the defendant. So, the emails could have been forged and the respondent did not prove the legitimacy of the evidence, leading to the Court of Appeal not considering these emails as evidence

From the above analysis, we can see that information security concerns a fundamental issue where information is stored in the form of electronic data that cannot be exploited and and it is difficult to guarantee the integrity and completeness of all electronic data in collection process. This has affected the authenticity of electronic evidence and relevant legal document has not included regulations on standards for E-evidence, which causes the use of E-evidence not to be objective. ***Following by:***

First, establishing legal value for E-evidence such as electronic documents and electronic signatures is difficult for the procedures of data processing and proceeding. This difficulty is due to the lack of appropriate regulations and there is no legal regulation on the procedures for electronic data processing.

Second, in the collection, preservation and use of E-evidence, the data may be lost or changed, especially E-evidence related to the State's secrets or private ones. That leads to the fact that E-evidence that does not guarantee integrity.

Third, proof of the originator of E-evidence is a major challenge in the network environment, because the network is both intangible and tangible and particularly, it is difficult to determine the originator of E-evidence. We can see that in the nature of electronic evidence, the initiation of trace recording and confirmation of traces have important influence in the collection, using and preservation of E-evidence.

3. The Solutions for Electronic Evidence under the laws of Vietnam

Firstly, new technologies are invented and developed very quickly. So, the procedures and techniques applied to them also need to be continually reviewed and updated. Each type of electronic device has its own specific characteristic that required the application processing to be accurate and complete. Therefore, compliance with E-evidence procedures is important to ensure the integrity and completeness of E-evidence.

Secondly, the cost of recovering, verifying and collecting electronic data is sometimes too high, making it difficult for the parties in the process of providing evidence. In this case, it will affect the completeness of the evidence as well as the objectivity of the case. The Judge is sometimes quite passive in the case of requesting authentication and collection of these data, although the Judge has the right to request authentication and collection for examination and evaluation of evidence to ensure objectivity of the case if necessary. However, the law does not stipulate what is necessary. Therefore, to solve this problem, the law needs to stipulate that specialized agencies in the field of information technology are obliged to assist

the process of checking and considering the necessity of data, and they also have the rights to access and search the National Data Portal for free. In addition, these specialized agencies can only cite the data relevant to the case for the Court.

Thirdly, in order to authenticate E-evidence, the competent authority, when considering and evaluating evidence, should consider all electronic data related to the case and should review any changes in the data, including the reasons for the modification. In addition, it is necessary to review and check the appropriateness of any techniques and methods of electronic data collection, security and processing to ensure the integrity and completeness of E-evidence. Besides, the Standing Committee of the National Assembly and the Supreme People's Court need to have guidance on authentication and collection of electronic evidence, and the Government needs to complete the national data on population, tax codes, phone numbers, etc. to easily authenticate information of individuals, organizations and agencies.

4. Conclusion

Vietnam as well as other countries in the world have been living in the information technology era. Electronic communications have become a suitable means of doing business, and it can be seen that nowadays domestic and foreign transactions via the Internet are becoming commonplace, where people can do business all the time everywhere, without borders. With great progress in the field of information technology affecting all areas and modes of communication, this more or less changed the assessment of evidence in court when electronic communication is trending. The State must renew thinking on economic and social management to build institutions accordingly, which proposes the policies of the legal system in general and the law on E-evidence in particular in order for Vietnam to rapidly develop based on the digital technology, Internet and cyberspace.

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FACTORS AFFECTING STUDENTS' SATISFACTION WITH EMERGENCY REMOTE TEACHING (ERT) DURING THE COVID-19 PANDEMIC: A STUDY OF UNDERGRADUATE STUDENTS IN BINH DUONG PROVINCE, VIETNAM

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Abstract. This study aims to investigate 5 factors of characteristics that affect students' satisfaction with emergency remote teaching (ERT) during the COVID-19 pandemic. A correlational cross-sectional design was utilized using convenience sampling to include 240 undergraduate students studying in Binh Duong using an online self-administered questionnaire. Descriptive statistics, Cronbach's alpha test, Exploratory factor analysis, Pearson correlation coefficient and multiple regression analysis were used to analyse the data. The participants are interviewed about their thoughts and attitudes toward satisfaction with online learning during COVID-19 pandemic. The findings of this study reveal that the undergraduate in Binh Duong perceived learner-instructor interaction also comprises content of course, so that these 2 variables are combined into "Learner-instructor interaction". Otherwise, the result also shows that there is a combination of 3 measurement items to create the "online environment acceptance" indicating the level of acceptance and adapting to the new and emergent online learning environment. Learner-instructor interactions, self-regulated learning, learner-learner interaction, Internet self-efficacy, and online environment acceptance were positively associated with students' satisfaction in ERT environment. Learner–instructor interaction and self-regulated learning were the most significant predictors of students' satisfaction. To the best of the knowledge, this study is among the first group of studies in Vietnam that explore the multi-dimensional factors affecting students' satisfaction with ERT during the COVID-19 pandemic. Otherwise, a new model with 5 factors including Learner-instructor interactions, self-regulated learning, learner-learner interaction, Internet self-efficacy affecting students' satisfaction, that is appropriate to Vietnam demographic characteristics has been proposed. In conclusion, the results suggest that improvements in learner–instructor interaction yield the most promise in enhancing students' satisfaction and motivating students' enthusiasm for online learning.

Keywords. Online learning, emergency remote learning, students' satisfaction, Covid-19 pandemic, transactional distance theory

1. INTRODUCTION

In late 2019, the COVID-19 outbreak was initially reported in Wuhan (China) and quickly spread worldwide, including Vietnam (Marinoni, Van't Land, & Jensen, 2020). Lockdown occurs worldwide and all offline schools are momentarily shut down. 191 nations shuttered all schools and institutes, interrupting the education of 1.57 billion pupils, accounting for 91% of global enrolled students (Anh, 2020). Since the first Coronavirus outbreak in Vietnam, the Minister of Education Training decided to "halt school, not stop learning" utilising online platforms such as Teams, Google Classroom, Google Meet, and Zoom (Moet, 2020b). However, online classes are considerably different from traditional classrooms in the way students interact with their peers, instructors, and contents, as well as their ability to use the internet for learning and self-regulate their learning.

The purpose of this study is to investigate students' satisfaction with the emergency remote learning experience of undergraduate students in Binh Duong, who had studied online emergently during the lockdown of Covid-19 pandemic. During the pandemic, there have been much comparative research studying about factors affecting students' satisfactions, learning outcome, engagement, social present, (Gopal et al., 2021; Basuony, EmadEldeen, Farghaly, El-Bassiouny, & Mohamed, 2020; Giray, 2021;

Almusharraf and Khahro, 2020; Natarajan & Joseph, 2021). Since the first Covid-19 outbreak, Vietnamese students have had to witness many problems that occurred during the transition from traditional class-based education to online learning. Therefore, it is reasonable for educators, instructors, and educational managers to capture the current situations to know what adjustments should be made, and appropriate time phases. Otherwise, currently in Vietnam, there is a limited number of paper studies about ERT and students' satisfaction towards ERT. Otherwise, most of them are carried out as descriptive research with students at big cities like Ho Chi Minh City, Can Tho, Danang (Tran et al., 2021), so this paper will provide quantitative evidence about how learner-learner interaction, learner-content interaction, learner-instructor interaction, Internet self-efficacy, and self-regulated learning affect students' satisfaction of students studying at universities in Binh Duong province.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Students' satisfaction with online education

Recent evidence suggests that student viewpoints are a valid source of quality information. Students' satisfaction is a key indicator of a course's effectiveness and the success of online programs. Low-satisfaction students are less persistent and effective online. High satisfaction boosts course completion rates, student learning commitment, and motivation to take more online courses and lower drop-out rates (Yukselturk & Yildirim, 2008). Students' satisfaction is a crucial factor in university course and degree program excellence (Kou, 2014) and students who find satisfaction have higher potential to succeed (Noel-Levitz, 2011). Online learning has become the most effective way to give higher education, therefore understanding student happiness is crucial (Parahoo, Santally, Rajabalee, & Harvey, 2015). Online learning gives students more freedom to participate or connect with classmates. Their ability to self-regulate and assess learning is crucial. Online learners who can't govern their learning process may be dissatisfied and less engaged (Kou, 2014).

The interaction between learners and instructors, learners and peers, ability to use the Internet, and the quality of content were proven to directly affect students' satisfaction (Pham et al, 2021; Kou, 2014). Another research indicates that ease of use, enthusiastic faculty, and up-to-date learning resources are the most valuable factors affecting students' satisfaction that should be integrated into e-learning systems (Vu & Nguyen, 2013). Otherwise, there are many other factors affecting students' online learning satisfaction like used platforms, learning community, content and personalization, quality of instructor, course design, instructors' prompt feedback, students' expectations (Gopal, Singh, & Aggarwal, 2021 ;Vu and Nguyen, 2013). The study of Bolliger (2004) summarised from the study of Astin (1993) and Bean and Bradley (1986) that contact time with faculty members and administrators, availability of career advisors, student social life on campus, and overall relationships with faculty and administrators are important elements shaping students satisfaction in case of traditional classroom environment. According to the scale developed by Walker & Fraser (2005), there are 6 factors of online learning affecting students' satisfaction including instructor support, student interaction & collaboration, personal relevance, authentic learning, achievement learning, student autonomy. Moore's interaction model still predominates and leads future research on interaction in distance learning environments (Moore, 1989; Kou, 2004). This study will thus adopt Moore's three categories of interaction.

2.2. Learner-learner interaction

Learner-learner interaction refers to two-way interaction between students who communicate knowledge, thoughts or perspectives (Moore, 1989). Learner-learner interaction is pivotal in distance education which creates the environment for students to reflect on ideas, discuss, and examine the lesson. Social networking technologies facilitate learner collaboration in sharing points of view and experiences (Gameel, 2017). The absence of learner-learner interaction has been identified as a key issue in distance education. Students feel separated from others when they have less opportunities to collaborate on tasks with other students or receive peer-feedback. The interaction in a fully online learning situation has been proven to be a crucial factor affecting the extent to which students are satisfied with their online education Moreover, learners' learning outcomes are partly shaped by learning activities involving interaction (Giray, 2021; Gopal et al., 2021; She et al., 2021). Hollenbeck, Mason, and Song (2011) revealed, in a qualitative study of marketing students, that student-to-student interactions lowered the perceived danger of poor performance in their

courses. Einarson and Matier (2005) utilised multiple linear regression to determine that students with a sense of belonging and who benefited from social involvement were more likely to feel satisfied with their educational experience.

H1: learner-learner interaction has positive relationship with students satisfaction.

2.3. Learner-instructor interaction

Learner-instructor interaction involves student-teacher communication. The teacher may provide information, encouragement, or comments. Students may interact with the teacher by asking questions or discussing course activities (Moore, 1989). The students who just interact with the content presented might need help at the point of application. Even if the digital age has offered students more access to knowledge, teachers are still needed to help them comprehend it (Gameel, 2017). According to Bolliger (2004), instruction is the main variable predicting students' satisfaction, especially their availability and in-time response. In contrast, the absence of interaction often leads to deficient engagement amongst students and lowers their satisfaction (She et al., 2021). As instructors support students more, students can have greater motivation to learn and enhance their experience with the lesson no matter online or traditional offline. Especially the COVID-19 pandemic has limited the ability of students to interact with others for help or instruction, so instructors' support will take effect in this situation. In most of the literature, learner-instructor contact is preferred as the most reliable predictor of satisfaction with a course (Bolliger & Martindale, 2004; Thurmond, Wambach, Connors, & Frey, 2002). Therefore, in this study, the author hypothesised that learner-instructor interaction positively correlates with students' satisfaction.

H2: Learner-instructor interaction has a positive relationship with students satisfaction.

2.4. Learner-content interaction

Students must comprehend their own knowledge by incorporating new information into their already-existing understandings. Their understanding and viewpoints shift as their cognitive systems develop. The engagement of learners with the content creates an internal accumulation, when learners discuss or think to themselves about the information, knowledge, or concepts received as part of a course experience. It is essential for education that students engage with information on an intellectual level (Moore, 1989; Moore & Kearsley, 1996). The ease of obtaining e-content is a critical factor of students' satisfaction in online learning. Bervell et al. (2019) even claim that student-content interaction is the most important factor influencing student happiness in online learning. As a result, the creation of interactive e-content that includes infographics, video clips, forums, and quizzes is critical in providing learners with a high-quality online learning experience (Chen, Peng, Jing, Wu, Yang, Cong, 2020).

H3: Learner-content interaction has positive relationship with students satisfaction.

2.5. Internet self-efficacy

Internet self-efficacy refers to "the idea that one is capable of organizing and executing the Internet actions necessary to achieve specified goals" (Eastin & LaRose, 2000). People with positive attitudes toward computers have greater Internet self-efficacy than those with negative ones (Torkzadeh et al., 2006). When technical issues with the internet and other relevant technologies arise when participating in online education, students become dissatisfied, which leads to student dissatisfaction. There has been very little research that looks at the association between Internet self-efficacy and satisfaction (Kuo, 2010). Chu and Chu (2010) discovered that Internet self-efficacy is positively connected to students' satisfaction. Another study published in 2021 by Hamdan et al. reveals that Internet self-efficacy is a strong predictor of students' satisfaction with online learning.

H4: Internet self-efficacy has a positive relationship with students' satisfaction.

2.6. Self-regulated learning

To successfully complete distance courses, students need to be able to self-monitor and self-evaluate at various phases of the learning process. Students who cannot keep up with the class schedule or manage their own learning processes frequently fail. Self-regulation skills may be taught before or during a distance course (Kou, 2010). A self-sufficient student will have more aspiration, excitement, perseverance, and effort to complete tasks. High self-efficacy students are more engaged in learning, which increases their performance. Poor self-efficacy leads to poor performance, lowering self-efficacy for following activities

(Bandura, 1988). Prior research has indicated that the higher level of independence and autonomy students are, the more probability of success they gain (Carver 2014; Seiver and Troja, 2014). Additionally, the study of Barnard, Paton, & Lan (2008) indicated that time management is an important factor in self-regulated learning. Time management is not a single feature, aptitude, or skill, but rather a multifaceted process by which students control when, where, and how long they participate in academic activity. As a result, time management can be seen as an expression of pupils' ability to control their own behavior (Wolters, Won, & Hussain, 2016).

H5: Learner self-regulation has positive relationship with students' satisfaction.

This research follows the research of Kou (2014) "Interaction, Internet self-efficacy, and self-regulated learning as predictors of students' satisfaction in online education courses", adopting the theory of transactional distance (Moore, 1993) and the self-efficacy theory of Bandura (1977) model with 5 independent variables and 1 dependent variable as below:

Figure 1. The relationship between learner-learner interaction, learner-instructor interaction, learner-content interaction, internet self-efficacy, self-regulated learning and students' satisfaction
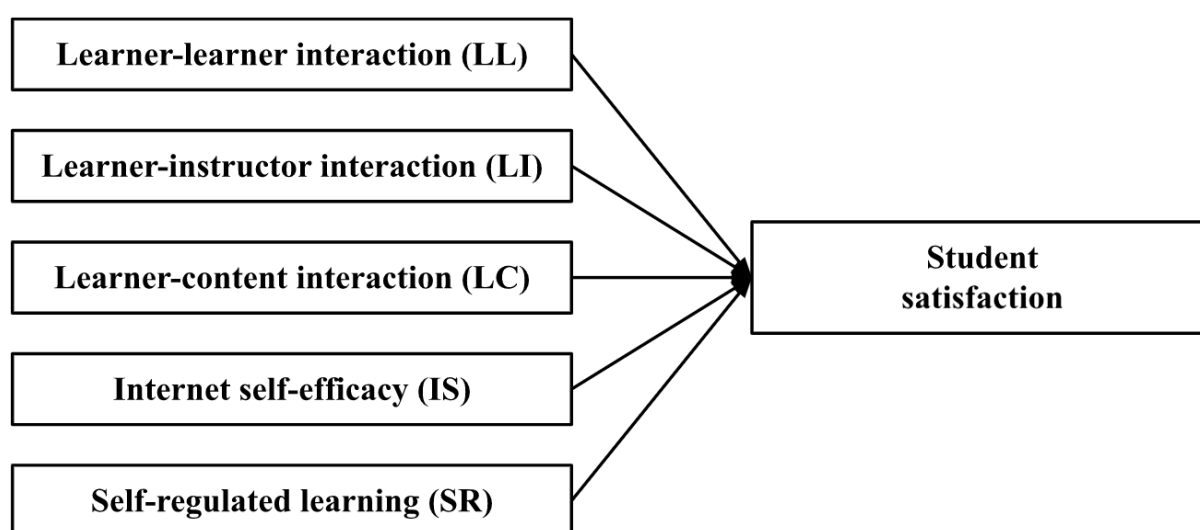
3. METHODOLOGY

3.1. Study design

A cross-sectional descriptive correlational study design was utilised in this study. The correlational design tries to understand natural correlations between variables. It is used to efficiently collect data for understanding and solving problems. The data were collected at once, a cross-sectional method was best. It is a realistic technique to describe variable relationships at a set period (Zikmund, Carr, & Griffin, 2013).

3.2. Settings

The participants of this study are the undergraduate students in the universities located in Binh Duong, Vietnam. The sample of this study included both private and public universities. Undergraduate students studying at universities in Binh Duong were invited to fill out a questionnaire online through Google Form platform in July 2022.

3.3. Population frame and sample

The convenience sampling design was used to include 250 undergraduate students from different universities in Binh Duong. According to Hoang & Chu (2005), the sample size must be at least 4 or 5 times the number of variables in the EFA factor analysis. From there it can be seen that the minimum sample size should be: 4*45=180 (or 5*45= 225). Therefore, the study proposes to select an initial minimum sample of 180 students and the ideal sample size is above 225 students.

Full-time undergraduate university students engaged in at least one online course during the Covid-19 epidemic and willing to participate were included in the study. The students fulfilling the questionnaire were given clear information about the objective of the study prior to fill. It was made clear that the collected empirical data would be used only for academic purposes and anonymous.

Various methods were employed to identify and encourage students to participate due to the low response of online survey. First, students were sent a QR code announcement to participate in the study through their online course instructors. Second, networking and social media including Facebook and Instagram were also used to contact students.

3.4. Data collection

Online self-administered questionnaires were used to collect data. The questionnaire was structured using Google Forms (https://drive.google.com). Students were provided with a link/ a QR code to access and complete the questionnaire. The students were instructed that the questionnaire would take 15–20 min to be completed. Data collection took place from June to July 2022. After all, 240 participant's information sheets were included to explain the purpose of the study and what participation entails.

3.5. Variable measurement

A pre-validated and trustworthy questionnaire was adapted from Kou (2014) following author's permission. Expert researchers analyzed each item of the questionnaire to determine content validity for this study.

For ease of survey, the questionnaire was translated into Vietnamese with a review of experts. After the surveying period ended, the results were translated back into English for analysis and research purposes. No items were modified from the original tool. However, literature review shows that time management is a key determinant of students' self-regulation in learning (Barnard et al., 2008), so the scale was updated to add 3 measurement items from the scale of Barnard et al. (2008) about how time management affects students' self-regulation in learning. Therefore, finally, the measurement of factors of ERT affecting students' satisfaction includes 45 measurement items allocated into 5 independent variables (Learner-learner interaction (LL1-LL7), learner-instructor interaction (LI1-LI6), learner-content interaction (LC1-LC4), Internet self-efficacy (IS1-IS8), Self-regulated learning (SR)) and 1 dependent variable students' satisfaction (SA1-SA5).

The questionnaire is constructed including 3 parts:

Part 1: Filter questions _ It asks whether the participant is a student at one of the universities in Binh Duong; and whether they have experienced at least one online course during Covid-19 pandemic.

Part 2: The questionnaire used a 5-point Likert scale with the anchors being "strongly disagree" and "strongly agree," the answers are coded from "1" to "5" to gather opinions about 45 questions of 6 dimensions above.

Part 3: Respondents' demographic information. It comprises gender and the current level of education.

3.6. Data analysis

The Statistical Package for Social Science (SPSS) version 21 was used for Data analysis (IBM corporation, 2012) after data entry, data cleaning, and audit for accuracy. A probability of <0.05 was considered statistically significant for all tests. Cronbach's alpha was used to test reliability. Exploratory factor analysis (EFA) was carried out to explore independent and dependent variables in order to adjust the research model and scales. The correlation between the various perceived students' satisfaction was analyzed using Pearson r. Multiple regression analyses were performed to identify predictors of students' satisfaction. All hypotheses were tested as two-sided at a significance level of $p \leq 0.05$ and 95% confidence intervals.

4. RESULTS

4.1. Demographic

240 participants completed the questionnaire. 3.3% of the participants were first-year students (n=8), 8.8% were second-year students (n = 21), 22.9% were third-year students (n = 55), and 48.3% were fourth-year students (n = 116), and 16.7% (n=40) were above four years. While 79% of the participants were enrolled in private universities, the rest were enrolled in public universities. 65% of the participants are female and the remaining are males.

4.2. Reliability and validity test

Cronbach's alpha was used to test the reliability and measure internal consistency. Cronbach's alpha may take on values between 0 and 1, with the scale's proximity to 1 indicating more reliability (Glen, 2021). Reliability analysis results show that all scales have good quality with alpha value >0.8 showing good reliability, except for variable SR1.

4.3. Exploratory factor analysis (EFA)

After obtaining 39 independent items and 5 dependent items, it is reliable to explain the impact on the model, the study conducted factor analysis to explore independent and dependent variables in order to adjust the research model and scales.

According to the Eigenvalue standard greater than 1, and the table 3 shows there are 5 factors drawn and the Rotation Sums of Squared Loadings coefficient of the first 5 factors can explain 56% of the variation of the data, which means that 56% of the variation of the factors is explained by the observed variables within the composition of the factors. In conclusion, this result is satisfactory.

Table 1. Total Variance Results Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.052	33.467	33.467	13.052	33.467	33.467	6.541	16.772	16.772
2	2.982	7.647	41.114	2.982	7.647	41.114	4.945	12.679	29.452
3	2.462	6.312	47.426	2.462	6.312	47.426	4.574	11.727	41.179
4	1.901	4.875	52.301	1.901	4.875	52.301	3.250	8.334	49.513
5	1.446	3.707	56.008	1.446	3.707	56.008	2.533	6.495	56.008
6	1.196	3.068	59.075						
7	1.147	2.940	62.015						
8	1.038	2.661	64.677						
9	.914	2.343	67.020						
39	.127	.325	100.000						

From the above analysis results, 39 observed items all met the conditions and reached the level of statistical significance. Therefore, it is eligible to continue using the Varimax Procedure method to Rotated Component: original rotation of factors to minimise the number of variables with large coefficients at the same factor, thereby enhancing the explanatory ability factors.

Table 2. Result Rotated Component Matrix

	Component				
	1	2	3	4	5
LL1				.572	

LL2			.688	
LL4			.641	
LL5			.705	
LI3		.647		
LI4		.688		
LI5		.568		
LI6		.761		
LC1		.603		
LC2		.692		
LC3		.670		
IS1			.800	
IS2			.786	
IS3			.846	
IS4			.827	
IS5			.754	
IS6				.738
IS8				.582
LL3				.631
SR2	.586			
SR3	.627			
SR4	.678			
SR5	.641			
SR6	.599			
SR7	.634			
SR10	.571			
SR11	.580			
SR12	.681			
SR13	.694			
SR14	.709			
SR15	.579			

Table 2 shows that the convergence factors of independent variables namely Learner-learner interactions (LL), Internet self-efficacy (IS), Self-Regulated Learning (SR) do not change compared to the theoretical model. However, the result also creates 2 new factors, the first is the combination of the Learner-instructor interactions (LI) variable with the Learner-content interactions (LC) variable and the second is the combination of the "Using the Internet to gather data (IS6)", item "Turning to an online discussion group when help is needed (IS8)" with the item "I communicate with my classmates about the course content through different electronic means, such as email, discussion boards, instant messaging tools, etc (LL3)".

Based on table 2, the first new variable with the combination of 2 variables (LI) and (LC) has a link in the interaction between learners and instructors and the content in which students perceive the interaction between students and instructors also includes the content of the course that instructors deliver to them. Therefore, under the guidance of the instructor and experts' opinions, the new variable was renamed with a more comprehensive, inclusive and appropriate meaning "Learner-instructor interactions". The second new variable is the combination of 3 items (IS6), (IS8), (LL3) with general meaning about the acceptance and adaptation of students in an emergency online learning environment, so named "Online environment acceptance".

After conducting exploratory factor analysis (EFA), the results show that KMO and extracted variance both meet the theory, the component scales of the dependent variable explain 56% of the significance of the dependent factor's convergence. Convergence factors show that 2 new variables are created from the combination of 2 variables (LI) with (LC) renamed as "Learner-instructor interaction" and 3 measurement items (IS6), (IS8), (LL3) formed a new variable and were named "online environment acceptance". On the other hand, the converging factors of the dependent variable remained unchanged from the theoretical model. Therefore, the initial model is reasonable, satisfying the research conditions. The empirical research model has a change in the number of factors as well as the names of the factors compared with the theoretical model. The research model of independent variables affecting the model "EOL factors affect students' satisfaction in Binh Duong during Covid-19" has been modified and this model continues to be used to perform correlation analysis and model testing regression and other tests.

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The new model with the new name is redrawn as follows:
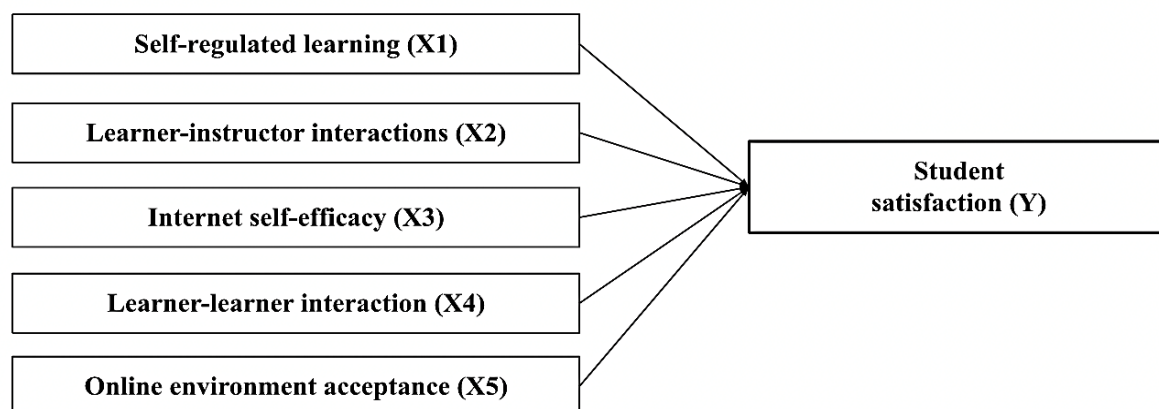
Figure 2. Factors affecting students' satisfaction in ERT

4.4. Regression analysis

The linear correlation relationships between the dependent variable and each independent variable has been examined through Pearson correlation analysis. The results are shown in table 3 below:

Table 3. Pearson Correlations analysis

		Y	X1	X2	X3	X4	X5
Y	Pearson Correlation	1	.397**	.563**	.204**	.313**	.179**
	Sig. (2-tailed)		.000	.000	.002	.000	.005
	N	240	240	240	240	240	240
X1	Pearson Correlation	.397**	1	.000	.000	.000	.000
	Sig. (2-tailed)	.000		1.000	1.000	1.000	1.000
	N	240	240	240	240	240	240
X2	Pearson Correlation	.563**	.000	1	.000	.000	.000
	Sig. (2-tailed)	.000	1.000		1.000	1.000	1.000
	N	240	240	240	240	240	240
X3	Pearson Correlation	.204**	.000	.000	1	.000	.000
	Sig. (2-tailed)	.002	1.000	1.000		1.000	1.000
	N	240	240	240	240	240	240
X4	Pearson Correlation	.313**	.000	.000	.000	1	.000
	Sig. (2-tailed)	.000	1.000	1.000	1.000		1.000
	N	240	240	240	240	240	240
X5	Pearson Correlation	.179**	.000	.000	.000	.000	1
	Sig. (2-tailed)	.005	1.000	1.000	1.000	1.000	
	N	240	240	240	240	240	240

Based on the results of Pearson correlation analysis, the Sig value < 0.05, therefore the result is highly significant. Thus, it can be concluded that there is a linear relationship between these independent variables and the dependent variable. There is a high correlation between the variable "learner-instructor interaction (X2)" and the model, with a correlation of 0.563; and the lowest correlation level with the model is the variable "Online environment acceptance (X5)", with a correlation of 0.179. All the coefficients of correlations are positive meaning that learner-instructor interactions, learner-learner interaction, internet self-efficacy and self-regulated learning have a positive significant relationship with students' satisfaction. The independent variables have a relatively weak correlation with each other. Thus, there will be no multicollinearity phenomenon.

After identifying the variables that ensure statistical significance through the regression coefficient test, the research proceeds to the next step, which is to test the model's relevance through analysis of the level of explanation and model fit, and get the following results:

Table 4. Summary of the regression model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.804ᵃ	.646	.639	.60115926	2.085

The results of table 4 show that multiple correlations "R" is 0.804, which indicates that there is a strong joint association between the interaction and students' satisfaction. Adjusted R Square is smaller and using this index to evaluate the model fit is safer because it does not inflate the model fit. Thus, with the Adjusted R square of 0.639, it shows that the compatibility of the model with the observed variable is appropriate and significant, 63.9% of the change in the dependent variable "students' satisfaction" is explained by 5 independent variables in the model. Durbin-Watson test statistic is 2.085, which is very close to 2.5 and between 1.5 and 2.5. Therefore, residuals are independent and the model is valid. Regression ANOVA is given in table 8.

Table 5. Regression ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	154.434	5	30.887	85.466	.000[b]
	Residual	84.566	234	.361		
	Total	239.000	239			

Based on table 5 it shows that the F statistic calculated from the R square value of the model has a very small Sig value (Sig = 0.000 < 0.05), the confidence level of 99%, so the theoretical model fits the actual data. In general, the independent variables have a linear correlation (a relationship) with the dependent variable and explain the change of the dependent variable.

Through a test system consisting of 5 parts: regression coefficient test, model fit test, multicollinearity test, autocorrelation test. In conclusion, it can be concluded that 5 factors have an impact on the dependent variable "students' satisfaction".

The above analysis results establish favourable conditions for forming a regression model for impact assessment. Through the coefficient table of the regression model, the linear relationship between the independent and dependent variables of the model is shown in the following equation:

$Y = 0.397 X_1 + 0.563 X_2 + 0.204 X_3 + 0.313 X_4 + 0.179 X_5$

Which means: **Y: Students' satisfaction**

X_1: Self-regulated learning

X_2: Learner-instructor interactions

X_3: Internet Self-efficacy

X_4: Learner-learner interaction

X_5: Online environment acceptance

In general, all standardised Beta coefficients are greater than 0 showing that the independent variables positively affect the model EOL factors affecting students' satisfaction in Binh Duong during Covid-19.

Putting the adjusted 5-factor model into multivariate regression analysis and the obtained results were statistically significant. Therefore, it has a positive influence on the model of EOL factors affecting students' satisfaction. The degree of influence of the independent variables is arranged in ascending order of effects on the dependent variable, from the most influence to the least, as follows:
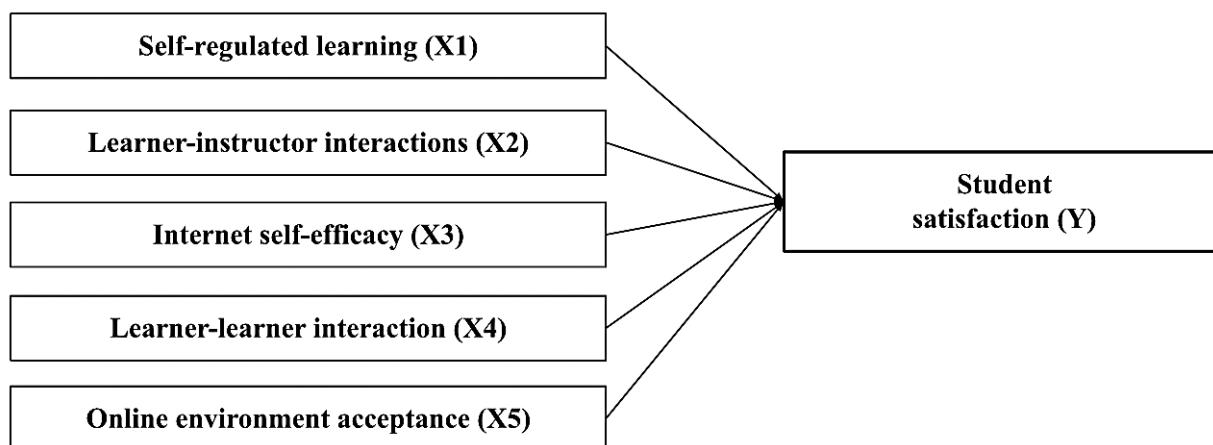
Figure 3. Regression coefficient results

Source: aggregated data from survey results

According to the above statistical results, all factors with hypotheses from H1 to H5 are accepted and positively affect the model EOL factors affecting students' satisfaction in Binh Duong during Covid-19.

5. DISCUSSION

In the present study, different factors directly impact students' satisfaction with online classes during Covid-19 were examined. Through the process of testing Cronbach's Alpha scale and EFA exploratory factor model, it shows that experimental research has a change in the number of factors as well as the names of factors compared with the theoretical model. This study uses the convenient non-probability sampling method. Extracting research results using quantitative research methods with the construction and testing of regression models with SPSS software shows that a new model has been created with 5 independent variables (Self-Regulated Learning (X1), Learner-instructor interactions (X2), Internet self-efficacy (X3), Learner-learner interactions (X4), and Online environment acceptance (X5)) and 1 dependent variables (Students' satisfaction), which are different from the original model of Kou (2014). Research results have shown that 5 independent variables have a positive impact on the ERL factors affecting students' satisfaction in Binh Duong model during Covid-19 at the new statistical significance level of 95%. In the study of the impact of factors on the model factors affect students' satisfaction in ERT of undergraduate students in Binh Duong during Covid-19 includes 05 factors with statistical significance of 95%.

Learner-instructor ($r = .563$, $p < .05$) correlated strongest with students' satisfaction. In contrast to the study of Biyiri & DMMI (2021), Student-instructors had the strongest effect on students' satisfaction. This result is consistent with (Bolliger, 2004; Barbera et al., 2013; Croxton, 2014; Sebastianelli et al., 2015). Interaction between the instructor and learner is a fundamental part of online courses and can affect learner outcomes and satisfaction.

As for self-regulated learning ($r = .397$, $p < .01$), it revealed a relatively high correlation with students' satisfaction. This result was consistent with the findings of Peterson (2011), Puzziferro (2006), and Handam (2021). Students in online education are typically more self-regulated than students in traditional education. In contrast to the findings of Kuo et al. (2014), our investigation revealed that students have high self-regulation scores. Self-regulation was also an excellent predictor of students' satisfaction. Similar findings were obtained in the studies of (Biyiri & DMMI, 2021; Peterson, 2011). In-class face-to-face education is heavily dependent on and governed by teachers, minimising the involvement of students in regulating themselves. Students in this study have a strong sense of self-regulation since they are at the undergraduate level and they have to self-regulate their learning and social activities to be successful.

Learner-learner interaction (*r = .313, p < .05*) correlated least with students' satisfaction among three types of interaction which is consistent with results of Hamdan, et al., 2021; She et al., 2021). However, there is relatively high correlation, which is inconsistent with research of Handam (2021).

Internet self-efficacy ($r = .204$, $p < .05$) showed a low correlation with students' satisfaction, even though it was significant. Consistent with the findings of Puzziferro, 2006; Rodriguez Robles, 2006; Kou, 2014; Handam et al., 2021), Internet self-efficacy was not a strong predictor of students' satisfaction, despite a

positive correlation. This non-significant result may have been caused by the fact that the majority of the students in this study were frequent online learners with a certain level of Internet proficiency. All of them have used Internet for a long time to serve as a facilitator for their studying by searching information for course projects, using Internet resources, taking advantage of social networking sites.

Online environment acceptance ($r=.179$, $p=0.05$) showed the lowest correlation with students' satisfaction. It could be understood that all of the students in the survey had used at least one type of online learning environment to some extent for example the Moodle site, registering courses on the Academic Affairs Office website, as well as using an online environment to search and fulfill their homework and project. Therefore, they did not find much difficulty in adapting to the online environment though it is emergent and unprepared.

Overall, the students agreed that online teaching was valuable for them even though the online mode of classes was the first experience during the pandemic period of Covid-19.

Through the study of influencing variables, the study has made some recommendations to help teachers and educational administrators identify the factors. Factors affecting the model "EOL factors affect students' satisfaction in Binh Duong during Covid-19", are grounds to propose appropriate solutions to improve the quality of online teaching, attract and boost enthusiasm in online learning among undergraduate students in Binh Duong. The topic serves as a reference for the concept of factors and their influence on the model of improving the quality of emergency online teaching activities for higher education in Binh Duong. Otherwise, the study also paves the way for further research on the quality model of online teaching for university curriculum.

6. CONCLUSION AND RECOMMENDATION

This study's findings have several practical implications for instructors, educational experts, students, and researchers. Furthermore, it contributes to the body of knowledge by demonstrating that several factors are responsible for students' satisfaction in the context of online classrooms during the COVID-19 epidemic.

It contributes to the body of knowledge by demonstrating that several factors are responsible for students' satisfaction in the context of online learning environment during the COVID-19 epidemic. This study was different from the previous studies Kou (2014), (Hamdan, et al., 2021), (She et al., 2021). None of the studies had examined the level of acceptance of students for the new online learning environments. Previous empirical findings of Kou (2014), Moore & Kearsley (1996), Biyiri & DMMI (2021), and Handam (2021) have highlighted the importance of examining the factors affecting students' satisfaction (Maqableh & Jaradat, 2021; Yunusa & Umar, 2021). Hence, none of the studies has examined the effect of learner-instructor interaction, learner-learner interaction, Internet self-efficacy, self-regulation, and online environment acceptance on students' satisfaction all together with emergent online courses during the Covid-19 pandemic. The study of Kou (2014) and Biyiri & DMMI (2021) also used the transactional distance theory of Moore (1989), but this study is the first to realize the inter-conception between learner-instructor interaction and learner-content interaction, as well as the inclusive meaning of learner-instructor interaction. The present study tries to fill this research gap.

Interaction with instructors is one of the prominent factors affecting students' satisfaction during the online learning period. Institutes and teachers should support shared and reflective online learning. Learning assistance, learning tasks, and learning resources promote higher levels of reflection. Encourage conversations using breakout rooms, group assignments, role plays, writing projects, and provide learning resources such as books, papers, articles, online links, case studies, lectures, and tutorials to enhance reflective learning in tech-based environments. Learner–instructor interaction's impact on students' satisfaction depends on its intensity and frequency. If the instructor acknowledges student expectations and customises the course, students might do better on exams. Instructors should take into account more about students' feedback as well as teaching methodology (Giray, 2021). It assists future strategies Feedback is the genuine image of course material and must be improved. Design influences students' satisfaction last. Course content should be simply understood by students. If the instructor arranges the course so students comprehend it easily, they will be satisfied and do better on tests. Some course content is difficult to present online, including recipes or lab demonstrations. In this case, the instructor must be creative in planning and delivering course content to improve students' happiness with online classes. Therefore, the supporting, and existence of teachers plays an important role in students' satisfaction in emergency online learning, so the

teachers and educational experts should focus more on methodology to develop more effective ways of approaching students. Online teachers must eagerly create authentic educational resources that link learners and inspire them to do well. Both teachers and students must improve academic performance. When a student has trouble understanding concepts, he should ask the instructor for help (Gopal et al., 2004) This is the most impactful feature of the online learning environment that can enhance students' satisfaction.

This study also indicates that students found studying online more satisfying if they could regulate themselves more. Online education pushes pupils to be more self-reliant and independent. Self-efficacy predicts academic performance and course satisfaction in traditional face-to-face courses. Self-efficacy views were linked to academic success (Kou, 2010). Therefore, to be successful in learning, remote learners must be more active participants and self-regulate their learning through psychological processes and associated learning approaches than normal classroom learners (Artino, 2007).

7. LIMITATIONS

Due to the cross-sectional nature of the data obtained in this study, it is hard to establish the causal relationship between the variables. Longitudinal design is recommended for further research on this topic to overcome the limitations. The scope of the current study is limited to theory classes; consequently, it can be utilised to evaluate students' performance in practical classes. This study is limited to monitoring the effectiveness of students; in the future, the performance of teachers can be evaluated under comparable circumstances. The study focuses just on students in Binh Duong, a developing province in Vietnam; therefore, the more variety of data demographic will be easier to understand the student's perspective. The respondents were undergraduate students only. Consequently, the study's findings cannot be applied to other samples. Future study can also incorporate the opinions of educators and policymakers to increase the generalizability of its findings. There may be concerns and problems encountered by the students, such as limited Internet connectivity or signal disturbances. Therefore, these features can also be taken into consideration for future research.

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THE DYNAMICS OF POVERTY IN VIETNAM: AN ADJUSTED CATEGORIZATION AND THE MULTINOMIAL LOGIT REGRESSION APPROACH

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Abstract. This article explores the multinomial logit regression to investigate the dynamic poverty in Vietnam, using the Vietnamese Household Living Standard Survey in 2016. The study characterizes a novel category called the "re-poor" group in terms of four discrete unordered categories of a household's poverty status and argues about the necessity of paying attention to this group in the anti-poverty strategy. The study has found that educational attainment and economic sectors of the household's head substantially influence the probability of being poor or re-poor of a household. The study suggests further policy targeting poor households to eliminate poverty should prudently examine each poverty category of households as the difference in demographic, socioeconomic, and geographic characteristics among them can significantly influence the effectiveness of the policy.

Keywords. Dynamic of poverty, multinomial logit

1. INTRODUCTION

Eliminating poverty is one of the biggest goals of many developing countries worldwide in an effort to improve the living standard and well-being of vulnerable people. In recent years, researchers have changed the conceptual scope of poverty and applied more sophisticated research on the methodological approach, which is the consideration of poverty a dynamic phenomenon. Several studies in literature investigating poverty simply observe the poverty indicator for households at a specific point of time. Recent studies, instead, trace the poverty status of individual or household over time, for instance, Kimsun (2012); Garza-Rodriguez et al. (2015), Achdut et al. (2015); Kiliç & Sahin (2021). The studies that consider poverty a dynamic phenomenon appear to fit well with the reality, as the poverty status of a household during a time reflect their difficulties in breaking the poverty cycle.

In 1993, the poverty rate in Vietnam was extremely high and accounted for 58.1% of the total population. The country has established many supported programs which follow the Poverty Reduction Strategy Paper. The largest supported program in Vietnam is the Program 135[1] targeting to the poor with the aim to eliminate poverty and improve household living standard for poor people in the long-term (Nguyen et al., 2006). Under this condition, Vietnam has experienced a remarkable reduction in poverty rate over decades. The rate initially decreased relatively fast and help the country to obtain the UN Millennium Development Goal 6 years faster than the benchmark strategy. The poverty rate in Vietnam has dropped 39% within eleven years since 1993. However, the decrease of poverty rate has become slower recently, which shows a signal that the policies applied to reduce poverty during time has not been appropriate with the new context. The multidimensional poverty index of the country in 2016 was still high at 9.8% according to the World Bank. One potential explanation for this phenomenon is that although households are identified in the poverty status, the households that are always poor or usually in poor situation display demographic, socioeconomic characteristics, different from the households that are in transitory poverty or classified as never poor. The variety of characteristics among households requires the distinct policy attitudes and

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[1]: 135 Program is a supported program which was established and launched by Vietnamese government in 1998, which targets the most vulnerable communes, promoting production and access to basis infrastructure, improving education, training local officials and raising the awareness of people for better living standards and quality of life.

responses. This suggests that the investigation of household's poverty status nowadays requires separated policies targeting different groups.

Empirical studies that worked on the dynamic poverty across countries so far mostly adopted the poverty categorization of Hulme & Shepherd (2003) or developed this categorization for a new classification. Hulme & Shepherd (2003) initially defined five discrete poverty statuses, which then can be aggregated into three main ones including "chronic poor", "transient poor", and "nonpoor". Achdut et al. (2015), for instance, replace the "transient poor" category by the two new poverty statuses for household that are "fell into poor" and "managed to escape from poverty". Some other studies also did adjustment in categorization including Sadiq, (2010); Garza-Rodriguez et al. (2015); Saczewska-Piotrowska (2018). However, literature has ignored the households with poverty status of being poor in the past, then managed to successfully escape out of poverty, but after that they fell into poverty again. This is evidence presented the hidden difficulties that prevent the poor from breaking poverty cycle. This article argues about the necessity of a prudent investigation on this household group to identify what is the core drives that make them fall into poverty again. Helping the poor to escape poverty situation is crucial; however, an appropriate policy that helps them to maintain the nonpoor economic status is more important.

This article adopts the poverty categorizations of Hulme & Shepherd (2003), Garza- Rodriguez et al. (2015), Achdut et al. (2015) and makes an adjustment in defining a new category called "re-poor" for the poverty status of the households in Vietnam. The article argues that the new poverty categorization variable fits well with the transition of household's poverty status. The author aims to determine characteristics that connect with the higher or less probability of household to enter, escape, or maintain a specific poverty category, then suggest appropriate mechanisms to improve the poverty status for the poor in an effective way. The article explores the multinomial logit regression approach with the dependent variable of interest which is the poverty status of a Vietnamese household.

This article contributes to the literature by implementing an adjusted categorization for the poverty status of household, which can describe better the transition of the household's poverty situation. The study also specifies the core characteristics of each poverty category in the new categorization. The results of this article suggest that government should construct separate policies targeting different vulnerable groups with different demographic, socioeconomic, and geographic characteristics correspondingly. Understanding the distinction among the household groups results in the effective establishment of policies against poverty.

This article is structured as follows: Section 1 is the introduction. A general look of the poverty situation in Vietnam over time is briefly discussed in Section 2. Section 3 summarizes the literature review regarding dynamic poverty so far. Section 4 describes the empirical strategy, which includes the data selection and empirical framework. The results of this article are shown in Section 5. The discussion is in Section 6, and the conclusion is ultimately presented in Section 7. The article also contains an appendix section that presents the additive results and necessary information.

2. BACKGROUND

Vietnam's consumption-based poverty rate was extremely high in the beginning of the 90s decade, in which the poverty head count rate measured by the monetary expenditure was 58.1% in 1993. The country has then exhibited a remarkable reduction over time, in which the rate was reduced to 23% in 2002 and 9.8% in 2016. The number of people living under the poverty line in 2016 also decreased significantly, only 2% of the population living in extreme poverty[12] (Nguyen et al., 2006).

Although experiencing a remarkable decrease of poverty rate over time, the reduction of poverty rate was gradually slowed down recently. This presents a signal of a less effective reduction poverty strategy. One potential explanation is that policy targeting the poor in general may not be suitable for all objects due to their different characteristics. In other words, each poverty category requires a separate policy.

According to WHO Country Statistic, Vietnam is the 13th most populous country in the world with more than 95 million people. 9.8% of the poor households in 2016 is equivalent to about 9 million people that are determined to live in poverty.

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[1] The extreme poverty is defined by living with less than 2011 Purchase Power Parity $1.9 per day

Figure 1 depicts the number of poor households (in all poverty statuses) during period 2010-2016 using the Vietnam Housing Living Standard Survey 2016. Regarding 46,995 households that are interviewed in this survey, around 5,000 households are living under poverty condition. Note that the households in the sample are interviewed in 2016; however, all the households were asked to provide information about their poverty status during period 2010-2016. The graph shows that the number of households that are living in poverty dramatically decreased in 2015, then sharply increased in 2016. The trend shows evidence of a large proportion of households in the survey that might not be poor in 2015 but fell into poverty situation in 2016. These "new" poor households in 2016 can be either the new households that are never being poverty before, or the "old" households that were in poverty in several years before, then managed to successfully get out of poverty in 2015, but ultimately being re-poor in 2016. It is more important to distinguish the new poor households in 2016 (they were poor for the first time in 2016) with the households that escaped poverty but again falling into poverty in 2016. A household escaped poverty before but then being poor again show the failure of either the household or government in maintaining a nonpoor economic status. It is necessary to understand the characteristics of a re-poor household, which help to prevent an escaped-poverty households from being back to poverty cycles. Additionally, there is always a demand for the government to prevent the occur of "new" poor households that have never been in poverty situation before.

With the aim to have pioneer investigation on re-poor household group, this study started to examine the proportion of this group in the dataset. Figure 2 presents the proportion of three different household groups with various poverty statuses. There are 87.76% of the households in the VHLSS 2016 which are in the poor status in both years 2015 and 2016, about 7.038% of the households were poor in 2015 but successfully escaped the poverty in 2016. Ultimately, the figure show approximately 5.2% households in the total of the poor are in the re-poor group. The re-poor group accounts for a significant share in the data of VHLSS 2016, which means that there is a large number of re-poor households in the population. This study contributes to literature as it is pioneering in analyzing characteristics for this group of vulnerable households.
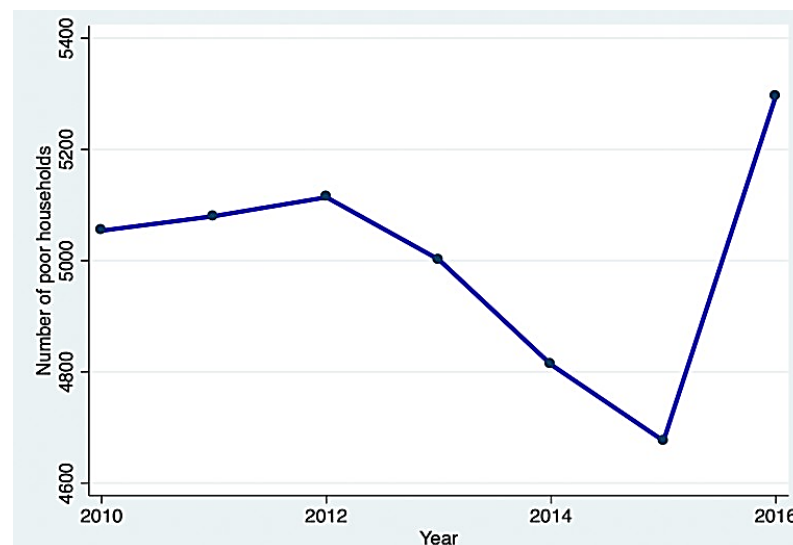
Figure 1: Number of poor households (all categories) during period 2010 – 2016

Source: Author's calculation based on VHLSS 2016.
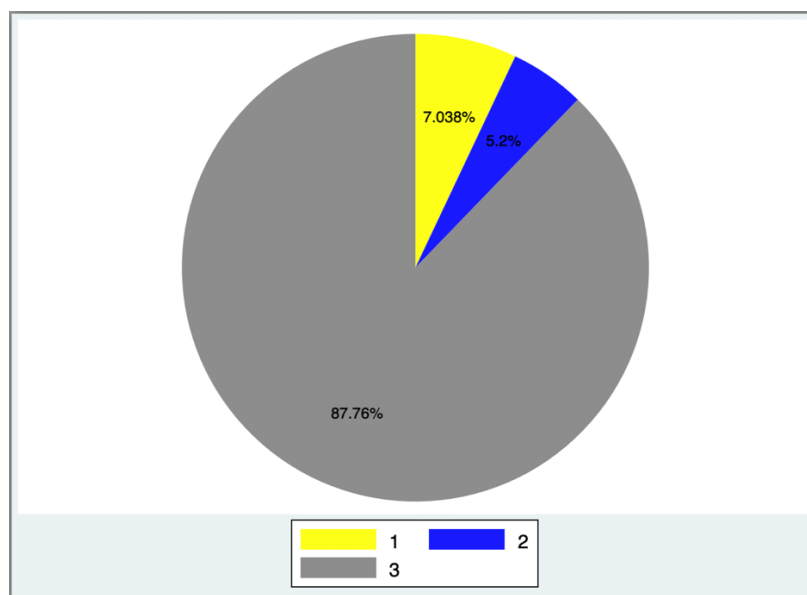
Figure 2: Proportion of households with different poverty statuses[1] in 2016s

Source: Author's calculation based on VHLSS 2016.

3. LITERATURE REVIEW

3.1. The measurement of poverty

Poverty is a complex phenomenon that is affected by many factors and can be studied by many different approaches. Lok-Dessallien (1999) asserted that poverty can be measured in either *absolute* –means that a person is considered poor if the individual's basic needs are not covered; in other word, there is a lack of basis goods and services such as food, housing, and clothes; or in *relative terms* – the comparison of income of the lower deciles of the population with those of the higher deciles. The relative poverty concept is closely connected to the inequality. Hulme & Shepherd (2003) arguede that the measurement of poverty can be in terms of income, expenditure, consumption, using indicators or combination of indicators. Yaqub (2002) distinguished between spells and component approaches in measuring chronic and transient poverty, in which the spell method indicates a person to be poor based on the number of times he/she is in poverty, while the component method identifies the poorness of one specific person by observing whether the permanent income located below the poverty line.

There is another concept called multidimensional deprivation. The definition links to social exclusion and related to deprivation of the lack of access to certain goods and services that are necessary for society regardless it is basis need or not. Before 2015, Vietnam adopted the unidimensional poverty measure of income poverty, in which the poverty line is the per capita monthly income of the household that ensures for a person 2,100-2,300 Kcal per day in addition to some other non-food consumption (UNDP, 2018). However, income or expenditure may not be a good proxy to indicate poverty and reflect the life aspects. Basically, several households have income per capita or expenditure exceed the poverty line, but they cannot access the vital infrastructure or basic sanitation including clean water, hygienic latrines, schooling and healthcare (UNDP, 2018). In 2015, Vietnam promulgated the multidimensional approach in measuring poverty that accounts for five basic social services, including healthcare, education, housing, water and sanitation, and access to information. A household is identified to be poor with deprivation in three or more indicators out of a total ten indicators. Accordingly, the country became one of the pioneering countries in eliminating poverty in all its dimensions.

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[1] : category 1 presents the households that were in poverty in 2015 but managed to escape poverty in 2016; category 2 presents the households that were nonpoor in 2015 but fell into poverty in 2016 (re-poor); and category 3 presents the households that were poor in both 2015 and 2016.

3.2. Poverty categorization: traditional to modern approaches

The traditional method simply categorizes poverty into two states: poor and nonpoor. The modern method recognizes poverty as a dynamic process. Dynamic poverty implies the intra- or inter-annual changes in welfare that causes households to cross a fixed poverty line between one time period and the next (Baulch, 2013). In recent years, it is more popular in literature that researchers have considered movements between several poverty's states. Accordingly, poverty is categorized into more than two states. Most empirical studies on dynamic poverty have adopted the categorization of Hulme & Shepherd (2003) and developed or adjusted this classification to obtain the new categorization.

Hulme & Shepherd (2003) specified that poverty can be five categories including always poor, usually poor, churning poor, occasionally poor, and never poor. The classification is based on the poverty line. Specifically, the above five categories are respectively always below the poverty line; four, three, two, or one quarter below the poverty line; and always above the poverty line. The five categories can be aggregated into three main aspects including *chronic poor, transient poor* and *nonpoor*. Several other authors adopted this categorization and develop novel classifications of poverty. For instance, Sadiq (2010) divided the population of Pakistan into four categories: nonpoor, vulnerable, poor, and extremely poor and discussed the characteristics within each category. SAczewska-Piotrowska (2018) analyzed the three states of poverty, including poverty, near poverty, and above near poverty. Garza-Rodriguez at al. (2015), and Achdut et al. (2015) defined poverty status based on the household's status in two years with four categories including remaining persistently poor, managed to escape from poverty, fell into poverty, and remaining persistently non-poor.

Identifying poverty status into categories are more important because it allows to make separate policy targeting vulnerable households with specific characteristics. For instance, the chronically poor need more opportunities, protection, and support; in contrast, the transient poverty can be alleviated by mechanisms that can smooth their consumption over time such as informal insurance, preferential credit, or income stabilization programs (Kimsun, 2012).

This article adopts the categorization of poverty status from Hulme & Shepherd (2003), Garza-Rodriguez et al. (2015), and Achdut et al. (2015) with an adjustment and creates one novel category of poverty status. In detail, the author constructed a dependent variable representing the poverty status of a household with four categories, including nonpoor, poor escaping, re-poor, and poor. A household is considered *(i) nonpoor* if it was nonpoor in both years 2015 and 2016, *(ii) poor escaping* if it was poor in 2015 and managed to escape from poverty in 2016, *(iii) re-poor* if it was poor at least one year from 2010-2014, nonpoor in 2015, and fell into poverty in 2016, and ultimately, *(iv) poor* if it is not among the three cases above[1].

Compared to the study of Garza-Rodriguez et al. (2015), this article observes the poverty status of households in a longer period (from 2010 to 2016) and define a new category of poverty that is the *re-poor* status. Mostly empirical studies have not paid attention to the households that were poor in the past, then managed to escape poverty, but finally fell into poverty again. This phenomenon shows a common fact in reality that is the poor households find it difficult to completely escape the poverty, they are stuck in poverty cycle even when they escaped poverty in some periods of life. Several reasons can explain for this phenomenon, such as the low educational attainment or the lack of necessary skills that prevent poor households from either finding a job with payment or maintaining nonpoor status for a long time.

3.3. Determinants of dynamic poverty

Most empirical studies about poverty have found that the household's poverty status significantly depends on the household-level and village-level characteristics. Some other studies also present a strong correlation between the government factors and poverty. Education, health, unemployment, household type, age, and marital status are the most common factors of poverty in studies across different countries (Precupetu et al., 2015). Kimsun (2012) claimed that although the determinants of chronic and transient poverty differ slightly among countries, it is commonly noted that health, education, asset redistribution and infrastructure development are likely to reduce the chronic poverty. Recently, according to UNDP (2018), the determinant

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[1] : A house is considered "poor" if it is neither nonpoor, poor escaping, or re-poor. Specifically, a poor household can be poor in only 2016, or be poor in both years 2015-2016, or be poor in 2015-2016 and at least one year from 2010- 2014.

that characterize the poor is large household size, low educational attainment or low skills, dependency on agriculture, remoteness in rural or mountain area, and the lack of vital infrastructure.

This article adopts the results from several studies that investigated poverty in the Vietnam context including Nguyen et al. (2006); Imai et al. (2011); Vo (2018); Nguyen (2020) and characterized the explanatory variables for household's poverty status consisting of two main groups including (i) household characteristics and (ii) commune characteristics. In detail, the two groups are as follow:

(i) The household characteristics include age of head, gender of head, the ethnic of head, the employment status of head, the number of people in family (household's size), educational attainment of head, marital status of head, economic sector that the head is working on, the status of having a credit from bank, the urban/rural area of the household, and the geographical region that household is located in.

(ii) The commune characteristics include whether the commune has a car road, a health center, a primary and a secondary school, whether the commune is in Program 135, and whether the commune is determined as a remote commune by Vietnamese government.

4. EMPIRICAL STRATEGY

4.1. Data selection

Data available and rich information are crucial conditions to investigate the poverty and its determinants. Hulme & Shepherd (2003) suggest that an individual life cycle lasting five years with the same status of chronic poverty is more likely to be observed as chronic poverty for the remaining of their lifetime; therefore, it is necessary to see the dynamics of poverty status of households at least five years. This article explores the Vietnam Household Living Standard Survey (VHLSS) conducted by the Vietnamese General Statistics Office (GSO) in 2016 for the analysis. This paper does not use a longitudinal but the cross-sectional data with a large number of observations. In 2016, the survey was conducted with a sample size of 46,995 households in 3,133 communes/wards which were representative at national, regional, urban, rural and provincial level (GSO, 2016). Despite using only the survey VHLSS 2016, the dataset has a module in poverty that contains the information on the poverty status of households from 2010 to 2016, which is suitable for an analysis of the transition of household's poverty status without the demand for collecting the longitudinal data.

Several poverty assessments in Vietnam explore VHLSS dataset (For a review, see Imai et al. (2011); Vo, (2018); Nguyen, (2020)). VHLSS is a survey conducted every two years since 2002 and covers a large sample of households across the country. The survey consists of two large modules that are the household module and the commune module. The household module collects household data about household members, their education, healthcare status, employment, income, expenditure, property, and housing. The commune module contains geographic and socioeconomic characteristics at communes/wards level.

This article extracts data from both household and commune modules with the final dataset includes of 46,395 observations. The samples include mostly important demographic, geographic, and socioeconomic characteristics required for the investigation of household's poverty status in Vietnam.

4.2. Empirical framework

There are two main directions in methodological approaches to deal with dynamic poverty. The first methodological approach includes studies that calculate a *priori* probability of the poverty's categories and determine the characteristics that mainly impact each category of poverty. Recent typical evidences are the studies of Garza-Rodriguez et al. (2015); Achdut et al. (2015); Goncalves & Machado (2015); Albuquerque & Goncalves (2020); Kiliç & Sahin (2021). The second direction is a combination between the first approach and the seeking of breaking down the transitory poverty's chronic dimension (Goncalves & Machado, 2015). This article follows the first approach, applies the multinomial logit model to investigate the household's dynamic poverty status and their characteristics correspondingly.

Multinomial logit is a model of discrete choices, in which the dependent variable is required to have more than two unordered categories. The model describes the probability of a household belonging to one of the categories. This study investigates the four poverty status categories (nonpoor, poor escaping, re-poor, and poor) in which they are independent each other and non-ordering. A multinomial logistics regression

approach is appropriate to examine the dynamics of poverty. The dependent variable in this article presents four values and the chosen base category can be arbitrary. In this paper, the author chooses category *nonpoor* as the base. Y = 2,3,4 correspondingly to the individual whose poverty status is *poor escaping, re-poor,* or *poor*, respectively. The values selected to represent the categories are arbitrary, the ordering 1< 2 < 3 < 4 does not have any interpretation.

Let $y_{ij} = 1$ if the household i^{th} chooses the alternative j^{th} , and $y_{ij} = 0$ otherwise. The probability of a specific household i^{th} is in the poverty status (j^{th}) is captured by the formula:

$$P_{ij} = \frac{\exp(X\beta_j)}{\exp(X\beta_1) + \exp(X\beta_2) + \exp(X\beta_3) + \exp(X\beta_4)} \quad (1)$$

Where j = 1, 2, 3, 4 which are the fourth unordered categories of the dependent variable poverty status.
X is a vector of explanatory variables included in the research.
Firstly, the model is not identified because there is more than one set of coefficients ($\beta_1, \beta_2, \beta_3, \beta_4$) giving the same probabilities for y = 1, y = 2, y = 3, and y = 4. It is necessary to pick one of the categories for which the coefficients $\beta_j = 0$. In this article, the nonpoor (y = 1) is the base category; therefore, we have $\beta_1 = 0$. The estimation of coefficients now will present the change relative to the group with y = 1. Because $\beta_1 = 0$, we have a transformation of formula (1) to the probabilities for each category of the dependent variables as follow:

$$\Pr(y = 1) = \frac{1}{1 + \exp(X\beta_2) + \exp(X\beta_3) + \exp(X\beta_4)} \quad (2)$$

$$\Pr(y = 2) = \frac{\exp(X\beta_2)}{1 + \exp(X\beta_2) + \exp(X\beta_3) + \exp(X\beta_4)} \quad (3)$$

$$\Pr(y = 3) = \frac{\exp(X\beta_3)}{1 + \exp(X\beta_2) + \exp(X\beta_3) + \exp(X\beta_4)} \quad (4)$$

$$\Pr(y = 4) = \frac{\exp(X\beta_4)}{1 + \exp(X\beta_2) + \exp(X\beta_3) + \exp(X\beta_4)} \quad (5)$$

The relative probability of belonging to two different categories (relative risk), for instance y = 2 and y = 1, is computed by:

$$\frac{\Pr(y=2)}{\Pr(y=1)} = \exp(X\beta_2) \quad (6)$$

Multinomial logistics is a non-linear model; therefore, the interpretation of the coefficient estimates is different from the traditional multiple regression. It is better to interpret the coefficient estimates by using the marginal effect. A positive estimated coefficient shows that an increase in the independent variable, the probability that household chooses or falls into one of the poverty categories will change an amount as follows (Cameron & Trivedi, 2005):

$$\frac{dp_{ij}}{dx_{rik}} = \begin{cases} p_{ij}(1 - p_{ij})\beta_r & \text{if } j = k \\ -p_{ij}p_{ik}\beta_r & \text{of } j \neq k \end{cases} \quad (7)$$

The multinomial logit regression is also applied in the research of Sadiq (2010); Garza- Rodriguez et al. (2015); Achdut et al. (2015); Precupetu et al. (2015); Goncalves & Machado (2015); and Albuquerque & Goncalves (2020) to investigate dynamic poverty.

This study defines the dependent variable named P2016, which has four categories and four unordered values. The variable receives value 1 if household is identified as nonpoor (*Npoor*), value 2 if household is in poor escaping group (*Epoor*), value 3 if household is determined re-poor (*Rpoor*), and value 4 if household is a poor agent (*Poor*).

A huge amount of literature identifies the important role of household and commune characteristics in characterizing the economic status. In this study, the model consists a set of explanatory variables, including the *household characteristics* and *commune characteristics* which are described in Section 3. Household characteristics include the age of the *household's head* (hereafter the head), the gender of the head, the ethnic of the head, the employment status of the head, the size of household, the educational attainment of the head, the marital status of the head, the economic sector that the head is working on, the geographical region that household is located, the status of household that has a credit or not. The commune characteristics are the remote property of the commune, whether the commune belongs to the 135 Program, whether the commune has infrastructure including a car road, a primary school, a secondary school, a health center, and whether the commune is in rural/urban area.

This article examines two specifications of the multinominal logistic regression, in which the first specification includes mostly the household and commune characteristics, except for ethnic, employment status, and the region of rural/urban. The author excludes the three variables out of the first specification because the presence of too many category variables in the same model causes problems for the perfect multicollinearity. The second specification applies the same method, in which the three excluded variables are used as the explanatory variables. Some other explanatory variables are also added into the second specification to control unobservable impacts.

5. EMPIRICAL RESULTS

Table A1 and Table A2 in the Appendices describe the explanatory variables included in this study and their basis statistics using the VHLSS dataset in 2016. To control the multicollinearity due to the presence of too many category variables in the analysis, the author used two specifications of Multinomial logistic regression, in which the first specification contains most explanatory variables. The result of the first specification is presented in Table 1. The second specification yields the results in Table 2. The brief results are divided into two main strands, in which the first strand consists the results that are in line with literature, the second strand consists of few controversial results.

(1) The first main strand coincides with results from empirical studies in literature:

The influence of characteristics on the probability of **poor escaping** status: A credit from bank and the Program 135 contribute to help households to escape the poverty status. In contrast, working in sectors owned by the State and the household's head being married or divorced in the marital status prevent the households from escaping the poverty situation. A male head and obtaining high school level education help households maintain the nonpoor status. These results are in line with the finding from the studies of Garza-Rodriguez et al. (2015).

The influence of characteristics on the probability of **re-poor** status: The results from the first specification in Table 1 present significantly influence of age, education background under college level, the married status, working sectors of either individual business or owned by the State, and the presence of a secondary school in the commune. These factors contribute to the decrease of probability of re-poor for households. However, living in low or high mountain regions increases the possibility of household to be re-poor. This is suitable with the reality that households living in mountainous regions get troubles in transportation, which affects all their activities, including the chance and the accessibility to a more active labor market.

The influence of characteristics on the probability of **poor** status: The results from Table 1 and Table 2 indicate that poor status is the category impacted the most by a set of characteristics, in which age, male-gender head, educational attainment maximum at high school level, working in individual or State-owed business, or private sectors, living in delta or hill/midlands regions. These characteristics substantially prevent household from falling into poverty. These results are in line with Goncalves & Machado (2015). In contrast, living in mountain regions pushes household into a more vulnerable situation that can lead them to poverty. This conclusion can also be found in the study of Albuquerque & Goncalves (2020)

Remarkably, households that are Kinh ethnic (the majority of the population) and households living in urban area show a high probability to maintain the same poverty status, which is nonpoor. This is interpreted from the negative coefficients of variables Ethnic and Urban to all three categories including poor escaping, re-poor, and poor statuses. These findings coincide with Garza-Rodriguez et al. (2015) and Precupetu et al. (2015)

(2) The controversial results from Multinomial logit regression:

The estimation has yielded a few unexpected results including the fact that having a loan from bank can increase the probability of a household to be re-poor or poor. A potential explanation for this phenomenon is that for a poor household or nonpoor household with low educational attainment and skills, despite receiving a loan, they cannot use the amount in an effective way, such as buying live stocks or investing into small business but are more likely to use it for smoothing consumption. Therefore, neither gain nor added value is created from the loan, but the pressure of payment responsibility that the household faces makes them be more vulnerable and more likely to fall into poverty. Another controversial result is that a head with upper college educational attainment has higher probability to fall into poverty. There is no reasonable explanation for this result.

Table 1: Multinomial logistic regression (1)

Explanatory Variables	Dependent Variables		
	Epoor	Rpoor	Poor
1. Household characteristics			
Age	-.00821891	-.02481453***	-.02343565***
Hhsize	.03565902	-.01464825	-.02772753
Gender	-.31171259	-.16971987	-.20676423*
Credit	.7166168***	.61760953***	.21637541***
Education			
Primary level	-.18338193	-.56133468**	-.62195105***
Secondary level	-.36809907	-.97955113***	-1.0248844***
High school level	-1.2505985**	-1.7616202***	-1.4195372***
Upper college	-.17443956	.14478321	.29880632***
Marital			
Married	-1.1059356*	-.98570726*	-1.7282446***
Widowed	-.43275841	-.68816098	-.70960929***
Divorced	-2.2975747*	-.9698254	-.73926934***
Separated	-.99221654	-.69184738	-.46458859
Econ-sectors			
Individual business	-.08900822	-.67807154**	-.60046473***
Collective	.40542254	-14.212968	-.26489713
Private	.26172532	-1.0757096	-.66300498***
Owned state	-1.6594508*	-1.6712253**	-2.6000333***
Foreign investment	-14.502617	-14.560071	-.62413132
Regions			
Inland delta	.32197467	.31372966	-.41812761***
Hills/midlands	-1.3658287	-.02019077	-.61986131*
Low mountains	.68098838	1.0612469*	.35899004**
High mountains	.48887528	1.5001367**	.86969492***
2. Commune characteristics			

Commune135	.92440457***	.22791176	1.135938***
Remote commune	-.23856411	.27490022*	.17968491***
Car road	-.01761665	-.33827222	-.34634858***
Primary	-.14562738	.6715963	.5755217**
Secondary	.42510785	-.48433364*	-.11076302
Health center	14.723775	-.61486184	-.12383251
Hhsize	.03565902	-.01464825	-.02772753
_cons	-18.300917	-1.9300238	.99914485*

Legend: * p<.05; ** p<.01; *** p<.001

Source: Author's calculation based on VHLSS 2016.

Table 2: Multinomial logistic regression (2)

Explanatory Variables	Dependent Variables		
	Epoor	**Rpoor**	**Poor**
Age	.00382685	-.00442698	-.00809123***
Ethnic	-1.2475136***	-1.9312692***	-2.0558429***
Employ	-.05249398	.16193377	-.61055752***
Urban	-.7531552***	-1.3205005***	-1.364687***
Gender	-.72727565***	-.28036044	-.72123644***
Credit	.7492134***	.5899084***	.27701028***
_cons	-3.3018266***	-3.2147094***	.96096006***

Legend: * p<.05; ** p<.01; *** p<.001

Source: Author's calculation based on VHLSS 2016

6. DISCUSSIONS

The results from multinomial logit model find evidence that such factors as Age, Ethnic, urban/rural area, Gender, Marital status, Having credit, Educational attainment, Geographical regions, Economic sectors, Being communes of 135 Program, and Commune infrastructure (car road, primary school, secondary school) significantly influence the poverty status of household. However, the existence and magnitude of the impact are different across the four poverty states. The educational attainment of the household's head is observed to be the most substantial factor that contributes to reduce the probability of being poor or re-poor for household. Accordingly, by obtaining at least primary education level, households decrease their probability to transit to poor or re-poor states. The reduction is more substantial when the educational attainment of the head increases up to high school level. This result fits with the reality that people with higher education present a higher possibility of having a job with payment or can accumulate enough necessary skills to sustain their life above the poverty line. These findings are in line with Garza-Rodriguez et al. (2015). The *economic sectors* significantly reduce the likelihood of household to transit to poor or re-poor states. Specifically, working in individual business or owned state enterprises of the household's head helps the household to be far away from the the poor or re-poor states. This suggests a potential policy that supports creating jobs for the poor in these sectors to improve their quality of life.

The paper so far has identified the two most important characteristics of the re-poor group, which are educational attainment and economic sectors. Policies focusing on these two factors are expected to substantially prevent poor-escaping households back to poverty situation.

In both specifications, the *age* of the household's head shows positive influence in keeping household in the better economic status. The older the household's head is, the better he can manage to decrease probability of being poor or re-poor. Another explanation for this impact comes from Precupetu et al. (2015) who argued that the older person usually has a steady source of income provided by retirement pensions, which can buffer against the risks of poverty and vulnerability. *Receiving a credit from bank* shows a clear negative impact on household by transiting them closer to poor or re-poor states. Many supported programs recently worldwide are cash transfer programs or the provision of preferential credit to the poor. Several of these programs have shown very modest results and cannot meet the initial objectives. Instead, they help households to smooth the consumption over time. The cash transfer programs and the provision of preferential credit are found to be not effective unless they are combined with changing perception/knowledge programs. (For a review, see Evans et al. (2014), Ahmed et al. (2009), Paxson & Schady (2010) and Maluccio (2005)). In this article, it can be the case that having loan only help household to improve their life contemporarily through smoothing consumption. After that, the payment responsibility pressure pushes these households closer to the poor or re-poor situation because their limited educational level and skills can restrict them from escaping poverty. This result implies further policy targeting the poor such as the preferential credit should be prudent investigated because many other factors can significantly impact the effectiveness of the policy.

7. CONCLUSIONS

This article explores the multinomial logit regression to investigate the dynamic poverty in Vietnam using the Vietnamese Household Living Standard Survey in 2016. The poverty status of a specific household is defined as a discrete variable with four unordered categories including nonpoor, poor escaping, re-poor, and poor statuses. The study contributes to the literature by adjusting the dynamic poverty categorization of Hulme & Shepherd (2003) and obtaining a new category variable that fits better to the household's poverty status of Vietnamese households over time. Specifically, the article claims the importance of investigating the re-poor group and the characteristics that make these households fall into poverty again even though they managed to escape the poverty situation successfully before. It is more important to understand what is the characteristics of this phenomenon so that the policy targeting this specific poor household group can significantly impact the household outcomes and therefore prevent them from being back in the poverty situation. The incentives of the paper are not only determining the core characteristics for the re-poor group but also the characteristics for the remaining three groups (nonpoor, poor escaping, and poor households) to keep the nonpoor households to maintain their economic status, and motivate the poor group to transit to the poor escaping state.

Briefly, the results from model estimation show that several demographic, socioeconomic, and geographical characteristics have effects on the poverty status of households, in which the determinants are different across the four poverty categories. Educational attainment is observed as the most influenced characteristic that contributes to reduce the possibility of the household being poor or re-poor; next comes the economic sectors that the household's head is working in. The results from this article imply that the anti-poverty policy of the Vietnamese government should investigate vulnerable households separately based on their specific poverty situation, as each group have their specific characteristics; therefore, they will differently be affected by the policies.

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APPENDICES

Table A1. The descriptive of explanatory variables used in this study

Hhsize	The number of people in the household
Ethnic population) Urban	The ethnic of head, equal 1 if ethnic is Kinh (majority of Indicator variable, equal 1 if household is in urban
Credit at bank Employ	Indicator variable, equal 1 if household has a loan Indicator variable, equal 1 if head has a job
Econ-sectors	Category variable with 6 economic sectors, with agricultural, forestry and aquacultural is base
Educ is base Marital married is base Age	Category variable with 5 educational levels, no degree Category variable with 5 categories, with never The age of head
Gender	The gender of head, equal 1 if head is male
Health center center Secondary school Primary school Car road car road	Indicator variable, equal 1 if commune has health Indicator variable, equal 1 if commune has primary Indicator variable, equal 1 if commune has secondary Indicator variable, equal 1 if commune has at least a
Remote commune	Indicator variable, equal 1 if commune is identified as remote commune
Commune 135 Region	Indicator variable, equal 1 if commune is identified to be in 135 Program Category variable with 6 different geographical regions, coastal is base

Table A2. Summary statistics of explanatory variables used in this study

	N	Mean	Std. Dev.	min	max
Hhsize	46350	3.779	1.621	1	16
Ethnic	46395	.822	0.383	0	1
Urban	46350	.299	0.458	0	1
Credit	46381	.195	0.396	0	1
Employ	46380	.844	0.363	0	1
Econ-sectors	39142	1.936	1.370	1	6
Educ	46395	1.804	1.267	0	4
Marital	46380	2.189	0.544	1	5
Age	46380	51.824	13.919	14	111
Gender	46380	.746	0.435	0	1
Health center	22409	.997	0.058	0	1
Secondary	22409	.904	0.295	0	1
Primary	22409	.985	0.120	0	1
Car road	22409	.947	0.224	0	1
Remote commune	22409	.226	0.472	0	1
Commune 135	22409	.182	0.386	0	1
Region	22409	2.892	1.307	1	6

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"DIGITAL ASSET" IN VIRTUAL ENVIRONMENT AND ITS LEGAL RECOGNITION IN VIETNAM AND SOME COUNTRIES - DEVELOPMENT TRENDS OF THE FUTURE

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Abstract. Metaverse is also known as a virtual environment which is created from different aspects combined such as: social media, blockchain technology, NFTs, online gaming, virtual reality, and crypto currencies to allow users to interact with each other and the virtual world. "Merriam-Webster Dictionary" defines the concept of metaverse as a highly immersive virtual world where users gather to socialize, play, and work[1]. The term "metaverse" was first used by American science fiction writer (Neal Stephenson) in his novel "Snow Crash", published in 1982[2], and the word "metaverse" became popular when the largest companies of the world (such as Meta, Google, Microsoft, Tencent and Binance) would focus on entering the virtual universe. With their own platforms, these "Tech giants" have begun to develop their own creative content and policies within the metaverse. Space of virtual environment, as metaverse, can create "intangible things" (items) which are also known as digital assets or virtual assets. It is likely that development investment for digital assets will be the trend of the future. However, there are many legal issues raised by the digital assets from virtual environment as metaverse, how are digital assets regulated by Vietnam and some countries? And for answering this legal problem, the study will be conducted by the author on the basis of comparative analysis and evaluation of the regulatory regimes of several countries and Vietnam in order to clarify legal problems arising from digital assets, and propose the appropriate legal framework for recognizing them in Vietnam.

Keywords. digital assets, virtual environment, metaverse, NFTs, virtual currencies, block chain, crypto currencies, commodities/goods, ownership, virtual assets

1. INTRODUCTION

The world is changing towards modernization in the period of the strong development of The Fourth Industrial Revolution (Industry 4.0) due to increasing interconnectivity, advanced technology and intelligent automation. When rational and effective application of science and technology will create material and non-material values to serve the needs of people's lives. In particular, a remarkable characteristic of the Industry 4.0 is to bring us non-physical assets which can be seen with the naked eye through their form of expression or cannot be recognized by the naked eye. This assets also exist in special non-physical environment, but they are of great commercial value to owners or holders, such non-physical environment can be called "virtual environment". There is still no precise concept of virtual environment or its legal definition, but we can understand virtual environment as networked application that allows the user(s) to interact with both the computing environment and other users through network-connected electronic devices in a narrow sense. The applications like email, outlook, web chat, network social, web-based document sharing, or others are considered as examples of virtual environment[3]. By another definition, the term "virtual environment" consists of the "metaverse" (as mentioned in the abstract), in games world, video games (such as Fortnite, Minecraft or Roblox) give us the basic versions of the

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[1] Merriam-Webster Dictionary. (2021). What is the "metaverse"? Retrieved 15/05/2022 from https://www.merriam-webster.com/words-at-play/meaning-of-metaverse
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"metaverse"[1] which helps players to interact in the virtual world with each other and augment virtual reality by increasing digital adoption.

The growth of "metaverse" can partly be attributed to the rise of blockchain technology and digital assets, such as crypto currencies. In a few countries, their governments don't prohibit transaction payment with crypto currencies, which is made through blockchain technology in digital environment and of course, this payment method is considered as mean of payment legally. Through encryption, anything can be stored on a blockchain-based ledger (as artworks, object games, music songs, property… can be encrypted). Typically, in 2021, a digital image (in JPG format), created by Mike Winkelmann (Beeple), was sold for a record price – over $69.3 million, this image titled "*Everyday: The First 5.000 Days*" is known as the first NFT artwork (non-fungible tok–n - J–G - 21,069 x 21,069 pixe–s - 319,168,313 bytes, minted on 16 February 2021), auctioned by Christie's[2]. There has been strong development of virtual currencies such as Bitcoin or Ethereum, which are legally recognized in a number of countries as digital assets. Virtual assets, as example virtual real estate (virtual lands, virtual houses and other virtual buildings) and virtual currencies from games world (metaverse) are exchanged through buying and selling between the game players. In fact, one game player bought an island in virtual environment for US $26,500 in 2004 from the MMORPG - Massively Multiplayer Online Role-Playing Game owned by Mind Ark - Entropia Universe[3]. These are just some typical examples of digital asset transactions, and besides, there are many digital assets which have been successfully sold at high prices. And it's certain that the number of transactions on virtual assets will be increasing more and more, because the development of digital assets is happening at a rapid pace and will be the inevitable trend of the future.

However, many countries haven't still do not have regulations for them. Or even if the legal frameworks are promulgated, their contents are still limited, ineffective and inadequate. Thus, a correct assessment of the positive impacts and economic benefits that can be brought from digital assets in virtual environment will give us an overview of development potential of digital asset market in order to describe the political orientations and codify them into the national laws. Simultaneously, governments of countries need to consider the negative factors which can arise if they intend to recognize digital assets as legal assets or goods/commodities or means of payment.

2. DEFINIION OF DIGITAL ASSET AND ITS RECOGNITION OF SOME COUNTRIES IN THE WORLD

[1]. Concept of digital asset and legal recognition: "Digital asset" is anything that can be expressed in a digital form in the usual sense, not being represented physically, but it's an unorthodox concept of a digital asset. The term "digital asset" depends on the laws of each country, and we still do not have a common unified concept of digital asset. Therefore, the understanding of digital asset will be presented through the comparative analysis of the regulations of several countries. In the previous period, we still think that digital assets must be digital currencies like crypto currencies or electronic currencies. But nowadays, digital assets not limited to digital currencies only also means digital coins (crypto token), also known as digital tokens (digital products or services)[4]. According to the interpretation of the European Law Institute, "*digital assets include a wide variety of assets, such as crypto-currencies, stable coins, social media profiles and online gaming accounts*"[5].

(i) In the United States of America: the US government has advanced science and technology and has recognized the legal status of digital assets, and "*any asset that is purely digital, or is a digital representation of a physical asset*"[6]. On the other hand, the term digital assets "*refers to all central bank*

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[1] The Sun. (2022). *How to enter the metaverse TODAY – Roblox, Minecraft, Fortnite, Decentraland, Oculus and more*. Retrieved 11/05/2022 from https://www.thesun.co.uk/tech/17909475/how-to-enter-metaverse-oculus-minecraft-roblox-fortnite-decentraland/

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digital currencies (CBDCs), regardless of the technology used, and to other representations of value, financial assets and instruments, or claims that are used to make payments or investments, or to transmit or exchange funds or the equivalent thereof, that are issued or represented in digital form through the use of distributed ledger technology" - under provisions of Executive Order on Ensuring Responsible Development of Digital Assets[1]. Besides regulating digital assets issued by competent authorities (administration functionality of US), US law also recognizes digital assets created by individuals or organizations through distributed ledger technology (DLT[2]). Crypto currencies[3], stable coins[4], and CBDCs are just the types of digital assets as for example. Particularly, "central bank digital currency" (also called digital fiat currency) is a digital form of fiat currency issued and regulated by the central bank, which is also denominated in the national unit of account.

Furthermore, at the beginning of April 2021, the term "*non-fungible tokens – NFTs*" started to appear in many countries and states, NFTs that are known as a type of digital assets represents real-world objects like artworks, songs, in-game items, videos[5], and collectibles, even virtual real estate, such as virtual lands, virtual houses, virtual buildings or virtual offices. Every NFT is unique cryptographic token that is stored on a blockchain, a form of distributed ledger. NFTs may be bought and sold online by virtual market or by virtual community groups, frequently with crypto currencies. However, the legal recognition of NFTs depends on the regulations of each country and territory.

As explained by the U.S. Government Accountability Office (GAO), an NFT or non-fungible token refers to a digital certificate of ownership that represents a digital or physical asset. NFT is a term used mainly for digital artwork, but the U.S. Government don't still promulgate any statutory and regulatory framework that is explicitly applicable to them[6]. Digital collectibles, art, music, gaming or property ownership are considered as examples of NFTs (see figure 1). Although the GAO predicts that NFTs revenue could exceed $130 billion by 2030[7], up to now, US law hasn't recognized NFTs as a form of digital assets, but their transactions are still carried out in reality.
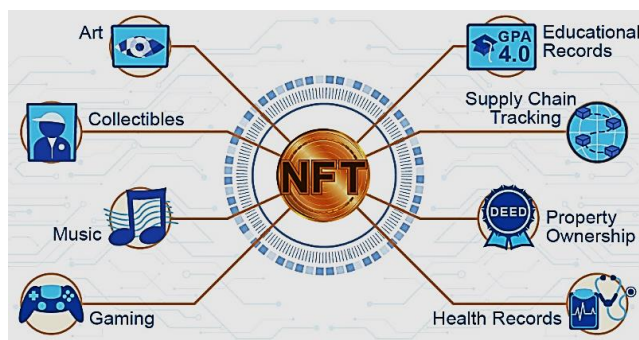
Figure 1. Examples of NFT assets

Source: https://www.gao.gov/assets/gao-22-105990.pdf

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[1] The White House - The United States of America. (2022). Executive Order on Ensuring Responsible Development of Digital Assets. Retrieved 16/06/2022 from https://www.whitehouse.gov/briefing-room/presidential-actions/2022/03/09/executive-order-on-ensuring-responsible-development-of-digital-assets/

[2] See more at the link: The World Bank. (2018). *Blockchain & Distributed Ledger Technology (DLT)*. Retrieved 16/06/2022 from https://www.worldbank.org/en/topic/financialsector/brief/blockchain-dlt

[3] See more the term "crypto currencies": Section 09 (c), Executive Order on Ensuring Responsible Development of Digital Assets of the United States of America":
"*The term "cryptocurrencies" refers to a digital asset, which may be a medium of exchange, for which generation or ownership records are supported through a distributed ledger technology that relies on cryptography, such as a blockchain*".

[4] See more the term "stable coins": Section 09 (e), Executive Order on Ensuring Responsible Development of Digital Assets of the United States of America

[5] Forbes (2022), *What Is An NFT? Non-Fungible Tokens Explained.* Retrieved 11/04/2022 from https://www.forbes.com/advisor/investing/cryptocurrency/nft-non-fungible-token/

[6] U.S. Government Accountability Office. (2022). Science & Tech Spotlight: Non-Fungible Tokens (NFTs). Retrieved 15/06/2022 from https://www.gao.gov/products/gao-22-105990

[7] U.S. Government Accountability Office. (2022). Science & Tech Spotlight: Non-Fungible Tokens (NFTs). Retrieved 15/06/2022 from https://www.gao.gov/products/gao-22-105990

(ii) Under French regulations: by adopting the Pacte law in 2019[1], France became one of the first countries that has defined the term of "digital asset" and have regulated certain essential subjects related to the ecosystem of blockchain technology and digital assets. As a result, the term "digital asset" refers to an asset constituted by digital data that is issued and assigned or transferred through a shared electronic recording device to a participant in that device. Ownership or right of use of digital assets is an element of the heritage of a natural or legal person. For example, a digital asset can be multimedia content, software or its license, or a cyberjeton (*"cyberjeton" is a French term that refers to coin, crypto asset, token*)[2]. For digital assets in the form of NFTs, when the law n°2022-267 of February 28, 2022 aimed at modernizing the regulation of the art market[3] is adopted by the Senate of France, French auctioneers are notably able to organize voluntary sales of intangible assets similar to NFTs, which is prescribed in the provisions of article L320-1 of Commercial Code: "public auctions of movables are governed by general provisions of law, complying with the special provisions for the sale of certain incorporeal movables"[4]. In fact, the first ever auction of NFT in France was organized by the Fauve Paris auction house since the promulgation of this law published in the Official Journal on March 1, 2022, and auction of NFTs was previously forbidden[5]. Moreover, the provisions of the Monetary and Financial Code (Code Monétaire et Financier) prescribe that any individual or organization would to provide in France digital asset custody services (DACS), purchase or sale of digital assets in legal tender, exchange of digital assets are subject to prior registration requirement with the AMF (Autorité des Marchés Financiers - Public authority of France which is directly responsible for ensuring the protection of savings, investors' information and the proper functioning of financial markets)[6]. It's certain that registration requirements provided by the Monetary and Financial Code is aimed at combating money laundering and financing of terrorism. This regulation of the Monetary and Financial Code allows to limit the risks raising from transactions of digital assets which are connected to money laundering and financing of terrorism.

(iii) Digital asset regulations in Japan: Japan soon became known as the country with advanced technology in the world, therefore the issue of legalizing the regulation for virtual assets was soon implemented by the Japanese government, but there are still certain restrictions on legal recognition for virtual assets. Japanese law does not introduce the concept of digital assets, the Japanese government only defines the term "crypto assets" instead. Under provisions of the Payment Services Act (PSA), this Act determines two types of crypto assets: crypto assets (1) are defined as property value is recorded on an electronic device or any other object by electronic (excluded the Japanese currency, foreign currencies, and currency-denominated assets), which can be used in relation to unspecified persons for purchasing goods or services, purchased from and sold to unspecified persons acting as counterparties, and transferred electronically[7]; crypto assets (2) are property values (that can be mutually exchanged with crypto assets (1) with unspecified persons acting as counterparties and transferred by means of an electronic data processing system[8]. Compared to other countries, Japan's understanding of digital assets is in a sense narrow, non-fungible tokens, bitcoin and stable coins are also excluded from recognition as digital assets or crypto assets. Legal status of NFTs is not directly recognized by the Japanese government, NFTs have no economic function (such as payment instrument), and therefore it does not satisfy the condition of definition of "crypto asset" or "prepaid payment instrument" under article 2.5 or article 3.1 of the Payment Services Act. In fact, by bitcoin

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[1] The legal regime of digital asset service providers - PSAN (Le régime juridique des prestataires de services sur actifs numériques (PSAN), créé par la loi PACTE du 22 mai 2019, a évolué à la suite de l'adoption de l'ordonnance n° 2020-1544 du 9 décembre 2020, renforçant le cadre de la lutte contre le blanchiment de capitaux et le financement du terrorisme (LCB-FT)).

[2] Légisfrance - French Gouvernement. (2021). Vocabulaire des actifs numériques (liste de termes, expressions et définitions adoptés). Retrieved 15/06/2022 from https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000042981848

[3] La loi n°2022-267 du 28 février 2022 visant à moderniser la régulation du marché de l'art.

[4] Assemblée Nationale de la France. (2022). Code de commerce - Version en vigueur depuis le 02 mars 2022. Retrieved 11/06/2022 from https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000024385180

[5] Le Figaro Journal. (2022). NFT, première vente aux enchères de collection en France. Retrieved 11/06/2022 from https://www.lefigaro.fr/culture/encheres/nft-premiere-vente-aux-encheres-de-collection-en-france-20220307#:~:text=Depuis%20le%201er%20mars%20dernier,le%20monde%20de%20l'art.

[6] Autorité des marchés financiers – France. (2021). Actifs numériques : l'AMF modifie son règlement général et met à jour sa doctrine sur les PSAN. Retrieved 11/06/2022 from https://www.amf-france.org/fr/actualites-publications/actualites/actifs-numeriques-lamf-modifie-son-reglement-general-et-met-jour-sa-doctrine-sur-les-psan

[7] Ministry of Justice - Japan. Article 2 (5) (i) Payment Services Act (Act No. 59 of 2009). Retrieved 11/06/2022 from https://www.japaneselawtranslation.go.jp/en/laws/view/3965

[8] Ministry of Justice - Japan. Article 2 (5) (ii) Payment Services Act (Act No. 59 of 2009). Retrieved 11/06/2022 from https://www.japaneselawtranslation.go.jp/en/laws/view/3965

transactions, bitcoins or NFTs are still purchased and exchanged, but the Tokyo District Court decision of 5 August 2015 declared that bitcoins are not objects of ownership because they aren't tangible thing, as being tokens on blockchain technology[1]. Under Article 85 of the Civil Code of Japan, while the "thing" that is considered as the object of ownership must be a tangible object, and the NFTs and bitcoins are intangible digital data. Evidently, they don't be able to become the object of ownership.

Under provisions of Thai law: Concept of digital asset is simply defined by the Emergency Decree on Digital Asset Business B.E. 2561 (Emergency Decree): "*digital asset means crypto currency and digital token*"[2], and they must be fungible things[3]. Thus, NFTs asset are excluded from the definition of digital asset provided by the Emergency Decree. In addition, Thailand's Security and Exchange Commission (SEC) has prohibited the trading of NFTs, but the issuance, purchase or sale activities of NFTs are still permitted in transactions being ensured in compliance with the regulations of SEC[4].

In conclusion, through studying and analyzing the legal regulations of some countries for digital assets, which shows that each country or state has its own legal approach to the concept of digital assets, limiting or expanding the scope of the definition of digital assets depends on the points of view of economic policies and commercial laws prescribed by each country. And so, it can be generalized that digital asset refers to something represented in digital form existing in non-physical environment. These can be bought and sold through transactions in accordance with the provisions of the law of each country. Furthermore, digital asset must be intangible thing.

 [2]. Basic characteristics of digital assets: in general, types of digital assets have the following basic common characteristics:

(i) Most digital assets don't have the physical characteristic to be considered as real objects because they are intangible and encoded in digital form: Different from traditional assets types, they can be perceived by basic human senses, which are mainly hearing, sight or touch. Meanwhile, the majority of digital assets can't be perceived by these three senses due to their digitized form of existence. With a few exceptions, some digital assets that are presented in form of graphics or images or multimedia can be seen with the eye naked (as digital images, multimedia mark or digital logo), and others which are any sound or song can be heard (music or video).

(ii) Digital assets exist in the non-physical environment, in other words, they are located in the virtual world environment: It can be said that this is the most significant difference of digital assets compared to traditional assets because digital assets are created on the digital platform (especially through block chain) and stored on databases on computers or other storage devices, so they are present in virtual environment, which is completely different from the real environment of traditional assets. In addition, images of certain types of digital assets can be viewed directly on electronic devices or are printed on paper, however such printing does not properly reflect the important characteristic of digital assets, and this printed images are considered as copies from the original and become real objects or other assets (traditional assets), as they are represented by physical form, not by digital form.

(iii) Transactions of digital assets are limited to some virtual community groups: Obviously, the fact that one or more countries don't accept transactions for digital assets will become a barrier to them. Even transactions of buying and selling digital assets can be considered as illegal behavior in the territory of any country if that country bans such transactions. Thus, the purchase and sale of digital assets can only be conducted between individuals or organizations belonging to one or more virtual community groups that accept any form of digital assets as an object of transaction. Maybe it's done unlawful.

(iv) Fundamental value of digital assets in the form of NFT lies in their ownership of holders: Each NFT, recorded on blockchain, is uniquely identifiable and not interchangeable with others. NFTs differ from

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[1] Professor Megumi Hara, Gakushuin University; Professor Charles Mooney, University of Pennsylvania; Professor Louise Gullifer, University of Oxford. Tokyo District Court, Heisei 26 (Year of 2014), (Wa) 33320 Judgement of Civil Division 28 of 5th August 2015 (Year of Heisei 27) Date of conclusion of oral argument; 10th June 2015. Retrieved 11/06/2022 from https://www.law.ox.ac.uk/sites/files/oxlaw/mtgox_judgment_final.pdf

[2] Section 3, Emergency Decree on Digital Asset Business B.E. 2561 (2018) ("Digital Asset Decree"), effective as of 14 May 2018. Retrieved 17/06/2022 from https://www.sec.or.th/EN/Documents/EnforcementIntroduction/digitalasset_decree_2561_EN.pdf

[3] Section 6, Chapter 1, Emergency Decree on Digital Asset Business B.E. 2561 (2018) ("Digital Asset Decree"), effective as of 14 May 2018. Retrieved 17/06/2022 from https://www.sec.or.th/EN/Documents/EnforcementIntroduction/digitalasset_decree_2561_EN.pdf

[4] Security and Exchange Commission (SEC) of Thailand. (2021). SEC Board approves rules governing digital asset exchanges regarding service provision related to utility tokens and certain types of crypto currencies. Retrieved 20/06/2022 from https://www.sec.or.th/EN/Pages/News_Detail.aspx?SECID=8994

many digital currencies, such as Bitcoins which are fungible, NFT's ownership can't be faked. Back to the example of Beeple's digital image - "Everyday: The First 5.000 Days", it can be asserted that any user can also see Beeple's digital image or download it from the internet to their personal device, and print this image out then. However, only the user who bought Beeple's digital image with over $69.3 million has its ownership right, and this user can trade his/hers Beeple's digital image's ownership for a better price. For some people, holding an NFT is to satisfy their passion for collecting, or simply to consider NFT as an investment with the expectation of reselling at a higher price.

3. ASSESSMENT OF DEVELOPMENT TREND FOR DIGITAL ASSETS IN VIRTUAL ENVIRONMENT

The big change in the development trend of digital assets of today's world can be rooted in two basic reasons: (i) the strong growth of new technology platforms, such as blockchain, facilitate rapidly the popularization of digital assets to the community; (ii) as of 2020, the outbreak of the Covid-19 pandemic that has caused social distancing and blockades all over the world increase significantly in the number of internet users. Consequently, the understanding and development trend of digital assets are no longer limited to the content of virtual money or crypto currencies, which are assessed on the following aspects:

 (1) Firstly, the concept of digital assets will be expanded in terms of their understanding, especially virtual assets (virtual products) in virtual environment such as metaverse: metaverse's NFT products can be traded, which will support expansion from traditional business to digital business. In fact, many transactions of virtual land or game characters are carried out with transaction value in millions of dollars. Or artwork NFTs are also sold for record prices[1]. And certainly, investors of technologically advanced countries will further take advantage of exploitation for digital assets in the form of NFT in the coming time. As an example, the fact that some large companies (such as Google, Facebook, Tencent, Microsoft, Epic Games) have changed their policies and started to take an interest in digital assets from the metaverse. And in 2021, Facebook changed its name to Meta in order to focus on metaverse's products and services, which is considered as one of the typical events of 2021. Additionally, the host governments of these companies will facilitate transactions and commercialization by codifying into national regulations on the recognition of digital assets in virtual environment. It can be affirmed that the policy of legal recognition for digital assets will be general trend of the world 4.0, more and more countries around the world will accept digital assets and codify its issues into national regulations. And so, legal framework for digital assets will create favorable conditions for businesses to develop and trade in digital assets, and it's also a legal basis for settling disputes arising from transactions of digital assets.

(2) Secondly, the strong development trend of NFTs based on block chain technology will take place in many fields: NFTs have been around since 2014, but the word "NFT" began gaining popularity starting in 2021 due to the increase in number of purchase and sale transactions of digital artwork[2], and NFT assets are growing explosively at the current stage. Collins Dictionary, the world's prestigious English dictionary with more than 4.5 billion words, has chosen "NFT" being as the word of year 2021[3], and its frequency of usage increased by 11,000% compared to the previous year[4]. Popular words, appeared in Collins Dictionary's annual list, reflect the trends and interest rate of internet users around the world. Moreover, according to statistics, the total value of NFTs transactions in NFT sales market reach at least 44.2 billion dollars in 2021, while the figures for 2020 and 2019 are about 106.5 million dollars and 15.2 million dollars respectively[5].

 On the other hand, in addition to the rapid increase of the number of NFT users and their total value of transactions, the development scope of NFT digital assets is gradually expanding in many sectors, which is demonstrated through the following events of year 2021: (i) Lay's potatoes brand of PepsiCo teamed up

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[1] Dau Tu Journal - Ministry of Planning and Investment of Vietnam. (2022). *Tương lai của tài sản số và các ứng dụng thực tiễn*. Retrieved 06/05/2022 from https://baodautu.vn/tuong-lai-cua-tai-san-so-va-cac-ung-dung-thuc-tien-d158906.html

[2] Forbes Media LLC. (2022). What Is An NFT? Non-Fungible Tokens Explained. Retrieved 15/06/2022 from https://www.forbes.com/uk/advisor/investing/cryptocurrency/nft-non-fungible-token/

[3] Collins Dictionary. (2021). Get your crypto at the ready: NFTs are big in 2021. Retrieved 20/06/2022 from https://blog.collinsdictionary.com/language-lovers/get-your-crypto-at-the-ready-nfts-are-big-in-2021/

[4] The Guardian. (2021). NFT beats cheugy to be Collins Dictionary's word of the year. Retrieved 20/06/2022 from https://www.theguardian.com/books/2021/nov/24/nft-is-collins-dictionary-word-of-the-year

[5] VietNamnet - Ministry of Information and Communications of Vietnam. (2022). Cơn sốt NFT: Triển vọng và nguy cơ tiềm ẩn. Retrieved 17/06/2022 from https://vietnamnet.vn/con-sot-nft-trien-vong-va-nguy-co-tiem-an-821434.html

with the digital platform Project Ark to launch an NFT painting which is made up of more than 3,000 smiling photos of 3,000 people around the world; (ii) Coca-Cola also released NFT collectibles for auction on digital marketplace OpenSea and donated the proceeds to an international sporting event for people with intellectual disabilities; (iii) Italian Luxury Fashion House Dolce & Gabbana has launched an NFT collection which was sold via the digital platform; (iv).Nike has acquired RTFKT (known as a company for developing digital shoe) and this acquisition aims to accelerate Nike's digital transformation[1];…. These events reflect the fact that the blossoming of NFT digital assets is inevitable in the future.

However, since types of NFT assets are created from a new technology platform, they don't face border barriers. In addition, the legitimacy of the NFTs should also be taken into account, many countries around the world still don't recognize digital assets like crypto currencies. Meanwhile, NFTs are usually bought and sold via the digital asset market, NFTs transactions are paying with digital currencies or crypto currencies. Moreover, any internet user can freely create NFTs with blockchain technology, which could lead to infringement of the moral rights of individuals, for example, NFT artworks are made up from images of famous people or politicians or any person without their permission.

(3) Thirdly, the growth of Crypto Game (also known as Block chain Game) sets the stage for the increase in the number of users (players) and virtual assets: according to the statistics of App Annie's Game IQ in 2021, a record 3.8 trillion hours were spent on mobile devices, the average user taken about 4.8 hours per day to surf the internet on mobile devices.Mobile games are in high demand with 83 billion downloads[2]. The figures of statistics shows that the development potential and expansion of Crypto Game applications can be the trend of investors and players in order to take advantage of their free time for profit. Through Crypto Game's virtual environment, players can directly or indirectly create virtual assets (NFTs) that they own, because the block chain game is built on block chain platform with a database that will be distributed on a large network, not concentrated on a certain server. So, decentralization is the most prominent feature of block chain games. On the contrary, all database users in the traditional game are centralized on common server who's the publisher has full control and use them. Moreover, most blockchain game applications of publishers in the world today will introduce policy's "*play to earn - (P2E)*" into the game's mechanism of action. By playing games provided by the publishers, the player will receive rewards in the form of items or tokens (as types of digital assets) which are referred to as the unique currency of each blockchain game. Then, players can trade virtual assets with other players or with publisher in exchange for money or real assets by agreement between the parties. After all, although the items or tokens are just virtual assets, the economic benefits brought by them are real value.

From a positive perspective, in the near future, it can be predicted that new ideas and projects on blockchain games attract the attention of gamers and investors, thereby boosting the number of users and the popularity of crypto games to the community, which will become possible. However, on the negative side, there are still some blockchain game applications in the form of "*play to earn*" with signs of crime, the activities of some game publishers aim at attracting many players and cheating them in order to sell tools and virtual assets to support the players for earning money, and these blockchain game applications will disappear without notice. Therefore, investors should pay attention to the creation of reputable and reliable game platforms to fully exploit the potential of blockchain technology.

(4) Fourthly, the trend of young investors towards investing in digital assets is increasing, specifically in crypto currencies: In terms of positive effects, digital asset investors, including young people, will tend to find ways to ensure the safety and stability of source of profit and return on their investments. Thus, investors prefer high-yield savings products, such as crypto currencies, they will be paid a fixed interest rate and get a refund of their original investment after a certain period of time, which are completely different from traditional investment products that are affected by inflation and interest rates. According to Pew Research Center survey, in 2021, 16% of Americans confirm that they have invested, traded or used crypto currencies like Bitcoin or Ether and Americans ages 18 to 29 account for 31%[3]. Whereas in France, by a study of the KPMG International Limited (known as the Association for the Development of Digital Assets of France) in 2022, 8% of French people have invested in crypto currencies and under age of 35

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[1] Nhan Dan Journal. (2021). "Cơn sốt" NFT. Retrieved 18/06/2022 from https://nhandan.vn/baothoinay-hosotulieu/con-sot-nft-679677/
[2] Data.ai. (2022). Capturing a budding new genre of games, App Annie adds "Play-to-Earn" (P2E) tagging to its robust Game IQ categorization. Retrieved 17/06/2022 from https://www.data.ai/en/insights/mobile-gaming/play-to-earn-mobile-gaming-emerges/
[3] Pew Research Center – US. (2021). 16% of Americans say they have ever invested in, traded or used crypto currency. Retrieved 17/06/2022 from https://www.pewresearch.org/fact-tank/2021/11/11/16-of-americans-say-they-have-ever-invested-in-traded-or-used-cryptocurrency/

accounts for 12%[1]. In the United Kingdom, 51% of investors aged between 18 and 37 traded or owned crypto currencies through a survey[2]. The figures show that virtual currency market is currently an attractive investment environment for young people of developed countries, and it is possible that this investment trend maybe expand and thrive in many countries around the world in the near future. Although the risk of investing in virtual currencies is predictable and measurable, investors are willing to take risks to achieve high returns quickly. Young investors understand that it is difficult to have an investment opportunity to both generate significant profits and take little risks, so the option for investment in digital assets is inevitable - According to some points of view of today's young people.

4. LEGAL ISSUES ARISING IN THE CONTEXT OF DIGITAL ASSETS AND ITS RECOGNITION OF VIETNAMESE LAWS

[1]. Legal problems raised by digital assets: Actually, there aren't many countries in the world that recognize digital assets in a virtual environment, or have restrictions on the application of regulations to some types of digital assets. Thus, when building the legal framework for digital assets, legislatures of each country should pay attention to legal issues arising from them, specifically as follows:

(i) Ownership of the copyright is the intellectual property right to artworks (paintings, photographs, pictures and image), songs, videos and others being digitized in the form of NFTs?: It is well known that traditional literary and artistic works (artworks) are protected by copyright under provisions of each country's intellectual property law, copyright includes economic rights and moral rights. However, copyright for NFT artworks and others in form of NFT raise a controversial legal issue in ownership rights. Each NFT refers to an original attestation or certificate of the digitized artwork. Artwork in the form of NFTs (such as digital visual artwork, or musical work), the author is the person who converts them from pre-existing artwork in physical form. Naturally, this person owns this NFTs artworks and has the intellectual property rights to them. However, if an owner of NFT artwork who isn't the author created it, the owner has no copyright for the NFT work, unless there is a contractual agreement to legally transfer copyright in accordance with the regulations of each country. As explained by the U.S. Government Accountability Office (GAO), an NFT is simply a certificate of ownership to a digitized physical asset (physical artwork), not being considered as a new digitized asset (new physical artwork). For that reason, the owner of NFT artwork can request that anyone must stop using it without their permission.

In essence, copyright of NFT artwork is similar to the regulation on copyright under provisions of intellectual property rights law which are applied to artwork in physical form. The creator automatically becomes author of NFT artwork according to the laws of each country, such as the United States, Vietnam or France. Regarding the Intellectual Property Code: "*the author of a work of the mind automatically enjoys in this work, by the mere fact of its creation, exclusive intangible property rights, which are enforceable against all persons*"[3]. Therefore, no formalities, such as registration, are required for an author to benefit from intellectual property right protection. The Code protects two types of intellectual property rights for an author: moral rights and economic rights[4].

(ii) Money laundering risks and terrorist financing in transactions related to digital assets: Digital assets, especially crypto currencies, which are anonymous and easily exchangeable on a global scale, are considered as an effective means for criminals using it to launder money and finance transnational terrorism. Because of the anonymous nature of virtual currency, it's difficult to know the information of the parties in the transactions. Thus, the safety of money laundering activities with digital assets is very high. For example, a large number of virtual currencies can be quickly transferred between parties of different countries, and it's important that there is no public authority or organization controlling and managing

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[1] Ouest-France. (2022). 8 % des Français ont déjà investi dans les crypto monnaies, selon une enquête. Retrieved 17/06/2022 from https://www.ouest-france.fr/economie/8-des-francais-ont-deja-investi-dans-les-cryptomonnaies-selon-une-enquete-a5e072f6-8dbc-11ec-a6c9-d7629bbac447

[2] Reuter. (2021). Young UK investors choose crypto currencies over stocks – survey. Retrieved 17/06/2022 from https://www.reuters.com/technology/young-uk-investors-choose-cryptocurrencies-over-stocks-survey-2021-04-22/

[3] Paragraph 1, Article L111-1 of the Intellectual Property Code of France. Retrieved 20/06/2022 from https://www.legifrance.gouv.fr/codes/section_lc/LEGITEXT000006069414/LEGISCTA000006161633/?anchor=LEGIARTI000042814694#LEGIARTI000042814694

[4] Paragraph 2, Article L111-1 of the Intellectual Property Code of France. Retrieved 20/06/2022 from https://www.legifrance.gouv.fr/codes/section_lc/LEGITEXT000006069414/LEGISCTA000006161633/?anchor=LEGIARTI000042814694#LEGIARTI000042814694

virtual currencies transactions. In fact, criminals may use illegal money to buy virtual currencies which are publicly offered through online selling sites or marketplaces. "Dirty money" is under the guise of virtual money and then it can be cleaned by exchange transactions due to selling to others or reselling to the virtual currency market. And the criminals can freely commit crimes without fear of punishment because they aren't subject to the supervision of any public authority

As an example: US authorities have charged a former OpenSea employee with wire fraud and money laundering in the first NFT insider trading case. In detail, Nathaniel Chastain (31 years old) who was responsible for selecting NFTs to be featured on OpenSea's homepage, secretly bought dozens of NFTs before they were featured. And then Chastain resold them for two- to five-times the initial price. The information of NFTs must be kept confidential until they appeared on OpenSea's homepage[1].

(iii) Considering digital assets in the name of commodities (goods) or as means of payment in transactions: Digital assets that will be legally admitted as payment instruments or commodities depend on decisions of the Governments of countries, which must be carefully considered and evaluated. As example, digital assets that are virtual currencies would be appropriate to become non-cash payment instruments, and others in the form of NFTs (such as artworks, images, music or real estate) are similar to the role of commodities (goods) being exchanged in transactions. The Governments should build strictly legal frameworks to avoid arising problems, such as money laundering, illegal overseas transfer assets, gambling with digital assets, etc. On the other hand, for some countries, when recognizing digital assets as commodities, it is necessary to change the concept of commodity, because most understandings of commodities refer only to tangible assets. Therefore, the definition of commodity should be extended to its interpretation according to the provisions of national law of each country.

Typically, in the United States, under the Commodity Exchange Act – US ("CEA"), virtual currencies have been determined to be commodities, such as bitcoin. On September 26, 2018, US federal court for the District of Massachusetts found that virtual currencies are considered as commodities, and bitcoin is the subject of futures trading[2]. But there are regulatory restrictions to commodity cash markets. The Commodity Futures Trading Commission (CFTC) has general enforcement authority to fight against on fraud and manipulation in the virtual currency cash markets[3]. On the contrary, the Government of Thailand doesn't accept digital assets as means of payment, so as to protect the public from any negative impact arising from the usage of digital assets as means of payment, such as money laundering, terrorist financing, gambling, etc. Consequently, the Securities and Exchange Commission of Thailand (SEC) officially announced that the usage of digital assets as a means of payment for goods and services, such as crypto currencies or digital tokens, is prohibited, the new regulation has taken effect on 01 April 2022[4]. However, crypto currencies or digital tokens are still objects of transactions from a legal perspective, as a result, they are considered as commodities in virtual environment.

[2]. Legal status of digital assets in Vietnam: Along with the growing trend of digital asset markets of the world, in Vietnam, the commercial transactions and activities of raising capital related to digital assets (such as NFTs, virtual currencies or crypto- currencies) are still being carried out in public or secret between individuals or organizations. Especially, in 2021, buying and selling NFTs are growing rapidly in Vietnam. According to research from Finder, countries have the most NFT owners: the Philippines has the most NFT owners (32.2%), followed by Thailand (26.6%), Malaysia (23.9%), the United Arab Emirates (23.4%) and Vietnam (17.4%)[5]. And unexpectedly, Vietnam is in the top 5 of countries of the world which owns the most NFT assets. However, the exchange, purchase and sale of digital assets still aren't regulated by Vietnamese law, individuals or organizations aren't prohibited in transactions of buying or selling digital assets and digital assets aren't also considered as commodities/goods. Nevertheless, the usage of some types

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[1] Department of Justice - U.S. Attorney's Office - Southern District of New York. (2022). Former Employee Of NFT Marketplace Charged In First Ever Digital Asset Insider Trading Scheme. Retrieved 21/06/2022 from https://www.justice.gov/usao-sdny/pr/former-employee-nft-marketplace-charged-first-ever-digital-asset-insider-trading-scheme

[2] The Commodity Futures Trading Commission (CFTC) – US. (2018). Federal Court Finds that Virtual Currencies Are Commodities. Retrieved 21/06/2022 from https://www.cftc.gov/PressRoom/PressReleases/7820-18

[3] The Commodity Futures Trading Commission (CFTC) – US. An introduction to virtual currency. Retrieved 21/06/2022 from https://www.cftc.gov/sites/default/files/2019-12/oceo_aivc0218.pdf

[4] The Securities and Exchange Commission of Thailand (SEC). (2022). The Notification of the SEC no. KorThor 5/2565 re: regulations, conditions and methods of providing services by the digital asset business operator that must not be in the manner of supporting the usage of digital assets as means of payment for goods and services. Retrieved 21/06/2022 from https://www.sec.or.th/EN/Pages/News_Detail.aspx?SECID=9337

[5] Finder. (2021). NFT statistics. Retrieved 21/06/2022 from https://www.finder.com/nft-statistics

of digital assets as means of payment in transactions are completely banned by Vietnamese law. In fact, in 2017, FPT University of Vietnam issued a notice to accept tuition fees in "bitcoin", but "payment for services" in this virtual currency isn't permitted according to the Vietnamese provisions[1]. The Vietnamese government doesn't promulgate any legal document to regulate the issuance, trading, and exchange of virtual currencies or virtual assets. And most importantly, transactional payments with digital assets are illegal in Vietnam.

In Vietnamese legal system, there is no legal concept of digital assets, but the term "digital assets" can be informally understood and interpreted on the basis of the concept of 'asset' under the civil law and regulations on electronic transactions of Vietnam. Under provisions of the Vietnamese Civil Code 2015, the term "asset" comprises objects/things, money, valuable papers and asset rights[2], which may be tangible or intangible, specifically as follows: (i) "object/thing" must exist objectively in the physical world that people can perceive this object with their senses and possess it. Any object may exist or will be formed in the future and bring certain benefits to its possessor. So, an "intangible object" can't meet the condition to become an object under the provisions of Vietnamese law, because the existing form of the intangible object is the digital form in virtual environment; (ii) "fiat money" is issued and regulated by an agency of the Vietnamese government, known as the State Bank of Vietnam with right to issue fiat money. The fiat money is used as an unrestricted means of payment in the territory of Vietnam. And at the present time in Vietnam, paper money and polymer banknotes are being circulated in parallel; (iii) "valuable papers" refer to documents which are valued in money and can be transferred in civil transactions. Valuable papers currently exist in many different forms such as checks, stocks, bills, return bills, promissory notes, etc., according to the form prescribed by Vietnamese law; (iv) "asset rights" comprises rights with monetary value, intellectual property rights and land use rights are admitted as examples of asset rights. Definitely, all of these types of assets which are provided by Code Civil of Vietnam must be fungible, only "fiat money" may be digitized and stored on e-wallets or ATM cards through organizations or banking institutions which are authorized to issue bank cards in order to legally pay for any transaction and other types of assets can't exist in digital form. This storage way of fiat money of Viet Nam is similar to the characteristic of electronic money[3], known as a form of digital assets and the Vietnamese government recognizes the electronic money for transactions payment, which means that Vietnamese law accepts tacitly the understanding of the term "digital assets" in narrow sense. Although the legal documents of Vietnam don't introduce any legal term of digital assets, this term can be interpreted on the basis of storage of digital assets.

However, according to legal issues analyzed such as money laundering, terrorist financing, illegal transfer of assets abroad arising from digital assets, all of these legal issues can happen in Vietnam, and the negative effects from these issues are considered to be the reasons why Vietnam still doesn't legally recognize digital assets. And so, it is very unlikely that Vietnamese law will accept some types of digital assets like means of payment, because their negative impact is completely measurable and predictable by the evaluation of economic experts. Even accepting digital assets as commodities would be difficult to legislate it into Vietnamese law. Or, in the case of recognition of digital assets, the Vietnamese government may admit some types of digital assets being considered as good/commodity or asset with consideration to their positive and negative effects. NFTs or Bitcoin are examples of digital assets. Specifically, the Vietnamese government may promulgate a legal document (such as Decree) to further explain the content of article 105 of Civil Code 2015 that some digital assets should be considered in the name of objects or money or valuable papers or asset rights or goods. And then, on the basis of this provision, the Vietnamese competent authority may implement the appropriate legal status to them[4]. In addition, a reason that needs to be evaluated for recognition problem of digital assets is the modernity of Vietnam's technical system. This system is used to manage and control all transactions related to digital assets, because all kinds of digital

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[1] Vietnam Financial Times - Ministry of Finance - Vietnam. (2022). *Bài cuối: Việt Nam không thể đứng ngoài rìa cuộc chơi*. Retrieved 11/06/2022 from https://thoibaotaichinhvietnam.vn/bai-cuoi-viet-nam-khong-the-dung-ngoai-ria-cuoc-choi-103792.html

[2] Vietnam National Assembly. (2015). Clause 01, Article 105, Civil Code 2015 of Vietnam.

[3] See more the term "electronic money" provided by Article 2(2) of Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions:

"Electronic money" means "electronically, including magnetically, stored monetary value as represented by a claim on the issuer which is issued on receipt of funds for the purpose of making payment transactions [...], and which is accepted by a natural or legal person other than the electronic money issuer".

[4] Nguyen The Anh (2022), *Taxation des revenus tirés de la vente d'actifs numériques en vertu des droits de la Thaïlande et de la France – Expériences pour le régime fiscal vietnamien.* VNUHCM Journal of Economics, Business and Law. p.13

assets are created using smart and high-tech applications[1]. Finally, it can be concluded that the recognition of Vietnam for some types of digital assets in the future is completely consistent with the general trend of countries around the world.

5. CONCLUSION

Metaverse, NFTs, crypto currencies and digital assets will remain unchanged as buzzwords in the coming time. Blockchain technology is gradually breaking the limit of the legal concept of assets of countries and investment perspectives in the Industry 4.0. Digital asset market is expected to offer a lot of opportunities and potential investments for investors. And so, more and more individuals and organizations enter this incredibly profitable market. Nevertheless, risks and negative impacts may be arisen from digital assets, therefore, the intervention of the regulatory authority will inevitably be required in order to manage the digital asset market and deal with these risks. Finally, in the context of digital asset market continuing to grow and be expanded in many new sectors, governments of countries should give legal decisions whether some types of digital assets are considered as means of payment or commodities/goods, aiming at build trust and safety in the investment environment for investors, because there is clearly legal framework to protect them.

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IMPROVING STUDENTS' CIVIL RESPONSIBILITIES TO THE STATE AND SOCIALITY IN VIETNAM TODAY – SITUATION STUDY OF INDUSTRIAL UNIVERSITY OF HO CHI MINH CITY AND HONG BANG INTERNATIONAL UNIVERSITY OF HO CHI MINH CITY

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Abstract. The article clarifies some theoretical issues about students' sense of civic responsibility. Analyzing the current state of students' sense of civic responsibility towards the State and society in our country today through the study of a number of public and non-public universities in Ho Chi Minh City in order to point out some results, limitations, and causes in the implementation of students' civic responsibility towards the State and society. On that basis, some basic solutions are proposed to raise students' sense of civic responsibility towards the State and society in our country today.

Keywords. Citizenship; student; state and society

1. INTRODUCTION

During his lifetime, President Ho Chi Minh once affirmed: "Youth is the future master of the country... The country is prosperous or weak, weak or strong, largely because of the youth " (Ho Chi Minh, 2002). P. 185). The Resolution of the 7th Party Central Committee (Term X) on strengthening the leadership of the Party over youth work in the period of industrialization and modernization of the country also continues to affirm: "Youth is the backbone of the country, the future owner of the country, a shock force in the construction and defense of the Fatherland, and one of the factors determining the success or failure of industrialization and modernization of the country and building socialism. Association" (Central Executive Committee, 2008*)*. Much domestic and foreign research has been conducted on Youth's responsibility and civic duty. In our country, civic obligations are stipulated right in the Constitution (2013), such as performing military service; participating in the construction of national defense of the whole people; respecting and protecting state property and public interests; participating in the protection of national security, social order, and safety, etc; paying taxes; and doing public work as prescribed. However, the issue of students' civic responsibility toward the State and society is still open. The article raises the students' sense of civic responsibility toward the State and society in our country today based on a survey of 533 students from the Industrial University of Ho Chi Minh City and the Hong Bang International University. Moreover, it analyzes the current situation and proposes some basic solutions to improve students' sense of civic responsibility towards the State and society in our country today.

2. RESEARCH METHODS

The article uses the research methodology of dialectical materialism and historical materialism. On that basis, the author exploited and searched for domestic and foreign sources of documents on students' sense of civic responsibility towards the State and society in magazines, books, newspapers, theses and dissertations, scientific topics, etc. with the purpose of analyzing and drawing out the necessary secondary data information for the research topic. At the same time, to clarify the practicality of the article as well as collect primary data, the author designed a questionnaire and used the survey method to survey 533 students of Industrial University of Ho Chi Minh City and Hong Bang International University. After the survey, the author used statistical methods, analyzed and evaluated the survey results to find the achievements as

well as the limitations in the implementation of the students' civic responsibility to the State and society association in Vietnam today. On that basis, the author initially proposed some basic solutions to raise the sense of civic responsibility of students towards the State and society in Vietnam today.

3. RESEARCH CONTENT

3.1. Some theoretical issues about students' sense of civic responsibility

3.1.1. Some basic concepts

- Student concept

According to the Dictionary of Education: Students are those who study at colleges and universities (Bui, 2001).
According to the Law on Higher Education: A student is a person who is studying and doing scientific research at a higher education institution, studying a college training program or a university training program (National Assembly, 2012).
According to author Trinh Thi Thoa, students are a quintessential part that plays an important role in Vietnamese youth, a core force to succeed and promote the country's intellectual resources, and a key resource in this era. The modern knowledge-based economy of science and technology, students play a key role in the development of the country, and are a great force in preserving and promoting the national cultural identity (Tha, 2020).
From the above points of view, according to the author, students are those who are currently studying at intermediate schools, colleges and universities. There learners are equipped with in-depth knowledge about a major, or a field, to prepare for future work. They are evaluated and recognized by society through the degrees and certificates received during their studies at the school.

- The concept of responsibility
Responsibility is always one of the most important factors in the quality of each of us. Therefore, what is responsibility? To answer this question, there are different concepts of responsibility.
According to the Vietnamese Dictionary, responsibility is the part assigned to or considered to be assigned, which must be completed; if the results are not good, they must bear the consequences. It is a bond to one's words and actions to ensure that it is correct. If it is wrong, one must bear the consequences (Phe, 1997).
In English, two terms are "responsibility" and "accountability." However, these terms can be used interchangeably, and there is still a fundamental difference between them. At the same time, "responsibility" is often understood as a must-do.
Thus, responsibility is something that each person must do, must perform, and must be conscious of those actions. Each of us is trying to fulfill our duties and responsibilities, and this is a very heavy job but also has great significance, which will help us a lot in the development process. Responsible people are always respected by everyone and are bound to succeed.

- Citizenship
A citizen is understood as an individual. A specific person has the country's nationality, rights, and obligations as prescribed by law.
In the current period, citizenship issues, as well as citizenship rights, are increasingly focused on and protected. This is also the basis for determining a country's citizen, that is, that person's nationality.
According to the 2013 Constitution, the citizens of the Socialist Republic of Vietnam are Vietnamese nationals. The citizens of Vietnam abroad are protected by the State of the Socialist Republic of Vietnam (National Assembly, 2013).
Accordingly, civic responsibility is considered the sense and responsibility of oneself about the relationship of "duty" between citizens and the State, and the self-consciousness of performing personal obligations towards society. Citizenship obligations are also the basis for citizens to fulfill their responsibilities (Luyen, 2021).

3.1.2. Student's civic responsibility toward the State and society

According to the 2020 Youth Law, passed by the XIV National Assembly at the 9th session on June 16, 2020, young people have the following responsibilities:

Firstly, for the Fatherland, the Youth are responsible for promoting the nation's tradition of nation building and defense; being proactive and creative; as well as taking the lead in the renovation, construction, and defense of the socialist Vietnamese Fatherland. At the same time, the Youth has the responsibility to be ready to defend the Fatherland, to defend independence, to maintain sovereignty, national security, unity, and territorial integrity. In addition, they have the responsibility to take on difficult, arduous, and urgent jobs at the request of the Fatherland and to fight against conspiracies and activities that are detrimental to the national interests.

Second, for the State and society, young people are responsible for modeling compliance with policies and laws and, fulfilling their civic obligations, participating in maintaining social order and safety, national defense, and security. In addition, young people need to know how to actively propose ideas and initiatives in formulating policies and laws; participate in state and social management; and actively participate in propagating and mobilizing the people to implement the Constitution and the law. Young people must actively build production and business models to create jobs, participate in environmental protection and activities for the benefit of the community and society, and actively participate in child care, education, and protection activities.

Third, for the family, the Youth have the responsibility to take care of the family's happiness; preserve and promote the fine traditions of Vietnamese families. Young people must respect and be respectful to their grandparents and parents and respect other family members; take care of and educate children in the family and actively prevent and combat domestic violence, abolish outdated customs and practices on marriage and family.

Fourth, for themselves, young people are responsible for training morality, personality, cultural lifestyle, and civilized behavior; having civic responsibility, a sense of law observance; preventing and combating negativity, social evils, illegal acts, and social ethics. Young people must actively study and improve their qualifications, knowledge, and skills; approach, research and apply science and technology. At the same time, you must know how to learn about the labor market actively; choose suitable occupations and jobs; train a sense of responsibility, discipline, and professional manners, creativity, and technical improvement to improve labor productivity.

Young people must actively train, protect, care for and improve their health, develop physically and mentally; be equipped with the knowledge, life skills, reproductive health care, sexual health, disease prevention, and control; not abuse alcohol or beer; limit tobacco use; not use drugs, addictive substances and other stimulants that are prohibited by law; prevent and combat harmful effects from cyberspace and actively participate in healthy cultural, physical training and sports activities and movements; protect, preserve and promote the national cultural identity; absorb the quintessence of human culture.

Thus, the Youth Law 2020 has fully covered the civic responsibility of young people towards the Fatherland, the country, society, family, and themselves, including 17 clauses and four articles. According to Article 8, Clause 3 of the Education Law 2019, students are considered a part of qualified Youth who have been trained at the college and university levels. According to the education law, students not only have the role of Youth, representing the young force of society, but also represent the nation's most elite and young force.

According to author Trinh Thi Thoa (2020), students are a quintessential and important part of Vietnamese Youth, a great force in preserving and promoting the national cultural identity, and an important force in preserving and promoting the national cultural identity as well as continuing and promoting the intellectual resources of the country. In the current period, as the society develops more and more, it requires citizens to live responsibly, consciously and harmoniously combining personal and social interests (Thoa, 2020).

According to author Nguyen Thi Luyen, students' civic responsibility towards the State and society includes 18 criteria: Obey the law and the provisions of the law; Pay taxes honestly and regularly; Be interested in socio-economic and locality; Participate in building local government; Actively build the local economy; Actively build local culture; Actively maintain local security and order; Share and help people in difficult circumstances; Contribute ideas to the authorities and people for local development; Propagate and mobilize relatives and people to observe the Constitution and laws; Build production and business models to create

jobs; Participate in environmental protection and activities for the benefit of the community and society; Actively participate in social activities; Respect teachers; Actively participate in child care, education and protection activities; Actively participate in gratitude activities; Contribute to the construction of the homeland by practical and suitable jobs; Actively participate in local defense and security activities (Luyen, 2021).

3.2. The current State of students' sense of civic responsibility toward the State and society in our country today

To find out the current State of students' sense of civic responsibility towards the State and society in our country, the author has built a questionnaire and surveyed 533 students of the two universities. There are 297 students from Industrial University of Ho Chi Minh City, a public university, and 236 students from Hong Bang International University, a non-public university based in Ho Chi Minh City.

Among 297 Ho Chi Minh City University of Industry students, 157 are the first-year students, accounting for 52.9%; 122 are the second-year students, accounting for 41.1%; 8 are the 3rd-year students, accounting for 2.7%; 10 students are the fourth-year students, accounting for 3.4%. Among these, there are 188 male students, accounting for 63.3%, and 109 female students, accounting for 36.7% (Table 1); there are 163 students majoring in engineering and technology, accounting for 54.9%; there are 120 students majoring in economics, accounting for 40.4%; there are six students majoring in social sciences, accounting for 2%; There are eight students majoring in languages, accounting for 2.7%.

Among 236 Hong Bang International University students, 234 were the first-year students, accounting for 99.2%, and two the third-year students, accounting for 0.8%. Among these, there are 87 male students, accounting for 36.9%, and 149 female students, accounting for 63.1% (Table 1); there are 194 students majoring in economics, accounting for 82.2%; 7 students majoring in social sciences, accounting for 3% and 35 students in the medical and nursing majors.

Table 1. Number of students surveyed by sex

School students		Male		Female	General	
	Amount	Ratio %	Amount	Ratio %	Amount	Ratio %
The Ho Chi Minh City University of Technology. Ho Chi Minh City	188	35.3%	109	20.4%	297	50%
Hong Bang International University	eighty-seven	16.3%	149	28%	236	50%
Sum	275	51.6%	258	48.4%	533	100%

Source: synthetic study author, 2022

Regarding the set of questions the author built to survey the Student's sense of civic responsibility towards the State and society in our country today, they are divided into two groups. The first set of questions is to assess the status of students' sense of civic responsibility toward the State and the group. The second question is to assess the status of students' sense of civic responsibility towards society.

Through conducting the survey, the author obtained the following results:

3.2.1. The reality of students' sense of civic responsibility toward the State and society through a survey at the Industrial University of Ho Chi Minh City

- About the Student's civic responsibility toward the State

To find out the civic responsibility of students toward the State in public schools in Ho Chi Minh City, the author surveyed six groups of criteria and obtained the following results:

The first question: in your opinion, have students in our country today complied with the Party's guidelines and policies, the State's regulations and the law on traffic order and safety, environmental protection, and disease prevention? The survey results have 136/297 students rated as good, accounting for 45.8%. There are 116/297 students rated at a good level, accounting for 39.1%; 39/297 students rated at the average level,

accounting for 13.1%; 4/297 students rated at a weak level, accounting for 1.3%; 2 of 297 students rated at a poor level, accounting for 0.7%.

The second question: Do you think students in our country today have a sense of responsibility and perform their tax obligations honestly and regularly? The survey results have 126/297 students rated as good, accounting for 42.4%; There are 117/297 students rated at a good level, accounting for 39.4%; 46/297 students rated at the average level, accounting for 15.5%; 6/297 students rated it at a weak level, accounting for 2%; 2 of 297 students rated at a poor level, accounting for 0.7%.

The third question: According to you, how are students in our country today aware of their responsibility for constructing the economy - society, culture and government in the locality and the country? The survey results have 131/297 students rated as good, accounting for 44.1%; 130/297 students rated at a good level, accounting for 43.8%; 32/297 students rated at the average level, accounting for 10.8%; 4/297 students rated weak, accounting for 1.3%; no students rated at a low level.

The fourth question: According to you, how are students in our country actively participating in national security and defense activities, social order, and safety in the locality and the country? The survey results have 147/297 students rated as good, accounting for 49.5%; There are 112/297 students rated at a good level, accounting for 37.7%; 35/297 students rated at the average level, accounting for 11.8%; 3/297 students rated as weak, accounting for 1%; no students rated at a low level.

The fifth question: according to you, how do students in our country today contribute ideas to the state government apparatus for local development? The survey results show that there are 98/297 students with a good rating, accounting for 33%; 126/297 students rated it as well, accounting for 42.4%; 56/297 students rated at the average level, accounting for 18.9%; 13/297 students rated at a weak level, accounting for 4.4%; 4/297 students rated at a poor level, accounting for 1.3%.

The sixth question: in your opinion, how do students in our country today actively propagate and mobilize their relatives and families to obey the Constitution and the law? There were 139/297 students rated at a good level, accounting for 46.8%; 110/297 students rated at a good level, accounting for 37%; 44/297 students rated at the average level, accounting for 14.8%; 4/297 students rated weak, accounting for 1.3%; no students rated at a low level.

Table 2. Survey results at the Ho Chi Minh City University of Technology on civic responsibility of students to the State

Number of students surveyed: 297 **Survey question**	Good		Fairly		Normal		Bad		Terrible	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
1. Comply with policies and laws	136	45.8	116	39.1	39	13.1	4	1.3	2	0.7
2. Sense of responsibility and fulfillment of tax obligations	126	42.4	117	39.4	46	15.5	6	2.0	2	0.7
3. Sense of responsibility to build the local economy, society, and culture	131	44.1	130	43.8	32	10.8	4	1.3	0	0
4. Participating in security and defense activities, social order, and safety	147	49.5	112	37.7	35	11.8	3	1.0	0	0
5. Contributing ideas to state government apparatuses	89	33	126	42.4	56	18.9	13	4.4	4	1.3
6. Propagating and mobilizing relatives and families to observe the Constitution and laws	139	46.8	110	37	44	14.8	4	1.3	0	0

(Source: synthetic study author, 2022)

- About the Student's civic responsibility toward society

The first question: according to you, have students in our country today shared and helped people in difficult circumstances, lonely people, people experiencing natural disasters, fire, orphans, etc There are 171/297 students rated at a good level, accounting for 57.6%; there are 98/297 students rated at a good level, accounting for 33%; 23/297 students rated at the average level, accounting for 7.7%; 4/297 students rated weak, accounting for 1.3%; 1/297 has students rated at a poor level, accounting for 0.3%.

The second question: according to you, how do students in our country currently participate in environmental protection and activities for the benefit of the community and society? There are 142/297 students rated at a good level, accounting for 47.8%; 119/297 students rated it as well, accounting for 40.1%; 31/297 students rated at the average level, accounting for 10.4%; 4/297 students rated weak, accounting for 1.3%; 1/297 has students rated at a poor level, accounting for 0.3%.

The third question: how do you think students in our country actively participate in gratitude activities? There are 166/297 students rated at a good level, accounting for 55.9%; 105/297 students rated at a good level, accounting for 35.4%; 24/297 students rated at the average level, accounting for 8.1%; 2 of 297 students rated it at a weak level, accounting for 0.7%.

The fourth question: in your opinion, how do students in our country today have practical jobs that contribute to building a fair, democratic, and civilized society? There were 134/297 students rated at a good level, accounting for 45.1%; 128/297 students rated at a good level, accounting for 43.1%; 32/297 students rated at the average level, accounting for 10.8%; 3/297 students rated as weak, accounting for 1%; no students rated at a low level.

Table 3. Survey results at Ho Chi Minh City University of Technology for citizenship of students to society

Several students surveyed: Survey question	Good		Fairly		Normal		Bad		Terrible	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
1. Share and help those in need	171	57.6	98	33	23	7.7	4	1.3	1	0.3
2. Participating in environmental protection and community and social activities	142	47.8	119	40.1	31	10.4	4	1.3	1	0.3
3. Participate in gratitude activities	166	55.9	105	35.4	24	8.1	2	0.7	0	0
4. There are practical works	134	45.1	128	43.1	32	10.8	3	1.0	0	0

Source: synthetic study author, 2022

3.2.2. The reality of students' sense of civic responsibility toward the State and society through a survey at Hong Bang International University

- About the Student's civic responsibility toward the State

The first question: in your opinion, have students in our country today complied with the Party's guidelines and policies, the State's regulations and the law on traffic order and safety, environmental protection, and disease prevention? In the survey results, 105/236 students rated at a good level, accounting for 44.5%; 103/236 students rated it as well, accounting for 43.6%; 26/236 students rated at the average level, accounting for 11%; 1/236 students rated at a weak level, accounting for 0.4%; 1/236 students rated at a poor level, -accounting for 0.4%.

The second question: do you think students in our country today know *their responsibility and obligation*

to pay taxes honestly and regularly?
The survey results have 94/236 students rated as good, accounting for 39.8%; 107/236 students rated at a good level, accounting for 45.3%; 29/236 students rated at the average level, accounting for 12.3%; 5/236 students rated at a weak level, accounting for 2.1%; 1/236 students rated at a poor level, accounting for 0.4%.

The third question: According to you, how are students in our country today aware of their responsibility for constructing the economy - society, culture and government in the locality and the country? The survey results state 105/236 students rated at a good level, accounting for 44.5%; There are 113/236 students rated at a good level, accounting for 47.9%; 16/236 students rated at the average level, accounting for 6.8%; 2/236 students rated weak, accounting for 0.8%; no students rated at a low level.

The fourth question: how are students in our country actively participating in national security and defense activities, social order, and safety in the locality and the country?
There are 117/236 students rated at a good level, accounting for 49.6%; 95/236 students rated at a good level, accounting for 40.3%; 23/236 students rated at the average level, accounting for 9.7%; 1/236 students rated at a weak level, accounting for 0.4%; no students rated at a low level.

The fifth question: according to you, how do students in our country today contribute ideas to the state government apparatus for local development?
There were 87/236 students rated at a good level, accounting for 37.2%; 99/236 students rated at a good level, accounting for 42.3%; 40/236 students rated at the average level, accounting for 17.1%; 8/236 students rated at a weak level, accounting for 3.4%; no students rated at a low level.

The sixth question: in your opinion, how do students in our country today actively propagate and mobilize their relatives and families to obey the Constitution and the law?
There are 126/236 students rated at a good level, accounting for 53.4%; There are 82/236 students rated at a good level, accounting for 34.7%; 26/236 students rated at the average level, accounting for 11%; 2/236 students rated weak, accounting for 0.8%; no students rated at a low level.

Table 4. Survey results at Hong Bang International University on civic responsibility
of students to the State

Number of students surveyed: 236 **Survey question**	**Good**		**Fairly**		**Normal**		**Bad**		**Terrible**	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
1. Obey the guidelines, policies, and laws	105	44.5	103	43.6	26	11	1	0.4	1	0.4
2. Sense of responsibility and fulfillment of tax obligations	nine ty- four	39.8	107	45.3	29	12.3	5	2.1	1	0.4
3. Sense of responsibility for local socio-economic and cultural construction	105	44.5	113	47.9	16	6.8	2	0.8	0	0
4.Participate in national defense and security activities, social order and safety	117	49.6	95	40.3	23	9.7	1	0.4	0	0
5. Contributing ideas to the state government apparatus	87	37.2	99	42.3	40	17.1	8	3.4	0	0

6.Propaganda and mobilization of relatives and families to observe the Constitution and laws	126	53.4	82	34.7	26	11	2	0.8	0	0

Source: synthetic study author, 2022

- About the Student's civic responsibility toward society

The first question: according to you, have current students in our country shared and helped people in difficult circumstances, lonely people, people experiencing natural disasters, fire, orphans, etc?
There are 174/236 students rated at a good level, accounting for 73.7%; 54/236 students rated at a good level, accounting for 22.9%; 7/236 students rated at the average level, accounting for 3%; 1/236 students rated at a poor level, accounting for 0.4%.

The second question: in your opinion, how do students in our country today participate in environmental protection and activities for the benefit of the community and society?
There are 128/236 students rated at a good level, accounting for 54.2%; 88/236 students rated at a good level, accounting for 37.3%; 19/236 students rated at the average level, accounting for 8.1%; 1/236 students rated at a poor level, accounting for 0.4%; no students rated at a weak level.

The third question: according to you, do students in our country today actively participate in gratitude activities? There are 160/236 students rated at a good level, accounting for 67.8%; There are 68/236 students rated at a good level, accounting for 28.8%; 7/236 students rated at the average level, accounting for 3%; 1/236 students rated at a weak level, accounting for 0.4%; no students rated at a low level.

The fourth question: in your opinion, how do students in our country today have practical jobs that contribute to building a fair, democratic, and civilized society?
There are 121/236 students rated at a good level, accounting for 51.3%; 90/236 students rated at a good level, accounting for 38.1%; 24/236 students rated at the average level, accounting for 10.2%; 1/236 students rated at a poor level, accounting for 0.4%; no students rated at a weak level.

Table 5. Survey results at Hong Bang International University on citizenship of students to society

The number of students surveyed: **Survey question**	**Good**		**Fairly**		**Normal**		**Bad**		**Terrible**	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
1. Share to help those in difficult circumstances	174	73.7	54	22.9	7	3	0	0	1	0.4
2. Participate in environmental protection and community and social activities	128	54.2	88	37.3	19	8.1	0	0	1	0.4
3. Participate in gratitude activities	160	67.8	68	28.8	7	3	first	0.4	0	0
4. There are practical jobs	121	51.3	90	38.1	24	10.2	0	0	1	0.4

Source: synthetic study author, 2022

3.2.3 . *The reality of students' sense of civic responsibility toward the State and society through a synthesis of surveys at the Industrial University of Ho Chi Minh City and Hong Bang International University*

- About the Student's civic responsibility toward the State
The survey results of 6 groups of criteria on Student's civic responsibility to the State (Table 6) show that students are somewhat aware of their responsibilities towards the State. The percentage of surveyed students who recognized criterion number 6 on *" Propaganda and mobilization of relatives and families to observe the Constitution and the law"* recorded a higher level than other criteria, accounting for 49 percent. .7% and no students recorded a poor rating. Next is criterion number *4, " Participating in security and defense activities, social order and safety,"* with 49.5% rating as good and no students rating it as poor. Criterion No. 1, *Compliance with guidelines, policies, and laws,* is rated well at 45.2%; Criterion No. 3, *"Sense of responsibility to build the local economy, society and culture,"* has a good rate of 44.3%, no students recorded a poor rating; Criterion No. 2, *" Sense of responsibility and fulfillment of tax obligations"* has 41.3% rated good and the lowest evaluation criterion is criterion 5, *"Contributions to the state government apparatus,"* only 33% of students rated it as well, 3.9% rated it weak, and 0.8% rated it bad.

Table 6. Survey results of students' civic responsibility towards the State

Number of students surveyed: 533 **Survey question**	**Good**		**Fairly**		**Normal**		**Bad**		**Terrible**	
	Amount	Percentage	Amount	TL %	Amount	Percentage	Amount	TL %	Amount	TL %
1. Obey the guidelines, policies and laws	241	45.2	219	41	65	12.2	5	0.9	3	0.6
2. Sense of responsibility and fulfillment of tax obligations	220	41.3	224	42.0	75	14.1	11	2.0	3	0.6
3. Sense of responsibility for local socio-economic and cultural construction	236	44.3	243	45.6	48	9.0	6	1.1	0	0
4.Participate in national defense and security activities, social order and safety	264	49.5	207	38.8	58	10.9	4	0.8	0	0
5. Contributing ideas to the state government apparatus	176	33.0	225	42.2	96	18	21	3.9	4	0.8
6.Propaganda and mobilization of relatives and families to observe the Constitution and laws	265	49.7	192	36	70	13.1	6	1.1	0	0

Source: synthetic study author, 2022

- About the Student's civic responsibility toward society
The survey results **on** students' civic responsibility towards society on four groups of criteria (Table 7) show that students were somewhat aware of their responsibilities towards society. The criterion rated the best by students is criterion number 1, *" Share and help those in difficult circumstances," accounting for 64.7 %,* and criterion number *3," Participate in activities." repay the gratitude,"* the percentage of students who recorded good assessment was 61.1%. The criterion rated by students with the lowest level of good is the second criterion, *" Participating in environmental protection and community and social activities,"* only 14.2%.

Table 7. Survey results of students' civic responsibility towards society

Number of students surveyed: 533 Survey question	Good		Fairly		Normal		Bad		Terrible	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
1. Share and help those in difficult circumstances	345	64.7	152	28.5	30	5.6	4	0.8	2	0.4
2. Participate in environmental protection and community and social activities	270	50.7	207	38.8	50	9.4	4	0.8	2	0.4
3.Participate in gratitude activities	326	61.1	173	32.4	31	5.8	3	0.6	0	0
4. There are practical jobs	255	47.8	218	41	56	10.5	3	0.6	1	0.2

Source: synthetic study author, 2022

3.3. Some results and limitations

3.3.1. Some results

- Students in our country now know how to obey the guidelines and policies of the Party, the State's regulations, and the law on traffic order and safety, environmental protection, and disease prevention. The survey of students' civic responsibility to the State on six groups of criteria of students from 2 schools, public schools, and non-public schools, gave nearly the same results. Students assessed students' sense of responsibility to the State at a good level and much more than the average, weak, and poor. For example, in criterion No. 1, *" Acceptance of policies and laws,"* students of the Industrial University of Ho Chi Minh City had 45.8% rated good, 39.1% good, only 13.1% rated average, 1.3% rated weak; 0.7% rated the poor level (Table 2), and students of Hong Bang International University also had 44.5% rated good and 43.6% good; 11% of the average; 0.4% rated the weak level; 0.4% rated it as poor (Table 4).
- Students in our country now have a sense of responsibility and perform their tax obligations honestly and regularly, with 41.3% giving good reviews (Table 6); they have a sense of responsibility for the construction of the economy - society, culture, and government in the locality and the country, with 44.3% rating it well (Table 6);
- Students in our country now have seen their responsibilities and have actively participated in national defense and security activities, social order, and safety in the locality and the country. Among the six groups of survey criteria on Student's civic responsibility to the State, criterion 4 *" Participate in security and defense activities, social order and safety"* and criterion 6 *" Propaganda, mobilizing relatives and families to abide by the Constitution and the law"* was rated at a higher level than other criteria by students, with no students rating it as weak. Criterion 4 has 49.5% of students rated good, and criterion 6 is 49.7% (table 7).
- Students in our country now know how to share and help those in difficult circumstances, the lonely, those experiencing natural disasters, fire, and orphans. Up to 64.7% of students recorded getting good reviews; Students also actively participated in gratitude activities, and up to 61.1% of students recorded good evaluations (Table 7). This shows that students have realized that each individual living is responsible for himself, his family, the State, and society.

3.3.2. Some limitations

- The survey results of students' civic responsibility towards the State on six criteria: Compliance with guidelines, policies, and laws; Sense of responsibility and fulfillment of tax payment obligations; Sense of

responsibility for local socio-economic and cultural construction; Participating in security and defense activities, social order and safety; Contributing ideas to state government apparatuses; Propagating and mobilizing relatives and families to abide by the Constitution and laws. However, the results of the good assessment are not high, and there is no criterion to evaluate the good level above 50%.
- The survey results of students' civic responsibility towards the State in criteria No. 1 "Acceptance of guidelines, policies, and laws"; Criterion No. 2 "Sense of responsibility and fulfillment of tax obligations," and criterion No. 3 "Contribute comments to state government apparatus" still have a poor rating from students (table 6).
- Students sharing and helping those in difficult circumstances, participating in environmental protection and community and social activities, and having practical jobs are not high, and still have a weak and poor rating (table 7).

3.4. Some basic solutions to raise students' sense of civic responsibility toward the State and society in our country today

- The awareness for students about their sense of civic responsibility towards the State and society should be raised. Students must abide by the Party's guidelines and policies, the State's regulations and laws on traffic order and safety, environmental protection, and disease prevention. Students must be aware of their responsibilities and fulfill their tax obligations honestly and regularly. They must have a sense of responsibility for constructing the economy - society, culture and government in the locality and the country. Besides, they actively participate in national defense and security activities, social order, and safety in the locality and the country; actively contribute ideas to state government apparatus for local development; actively propagate and mobilize relatives and families to observe the Constitution and laws. Students need to know how to share and help those in difficult circumstances, the lonely, those experiencing natural disasters, fire, and orphans; participate in environmental protection and activities for the benefit of the community and society; actively participate in gratitude activities; have practical jobs that contribute to building a just, democratic and civilized society.
- The school should consider the education of ideology, morality, lifestyle, culture, behavior, and civic responsibility through the integration into teaching specialized subjects, political theory, law and other subjects. To do this, each lecturer must first be a shining example, spreading love and fire to students.
- The school actively coordinates with the school's youth union and student union to actively participate in calling and raising students' sense of responsibility to the State and society. Youth Union as well as Student Union is one of the best environments to foster and exercise political bravery for students. Activities of the Youth Union and Student Union need to launch many practical programs and movements associated with social life, study, and research activities to raise the youth union's civic responsibility
- It is necessary to attach importance to the work of summarizing practice, awarding prizes, encouraging and motivating good students, good people, and good deeds, and setting examples of typical students to perform well in their civic responsibility to the State and society.

4. CONCLUSION

Citizenship is considered the sense and responsibility of oneself about the relationship of "duty" between citizens and the State, voluntarily performing personal obligations towards society. In the current period, when society develops more and more in the direction of civilization, progress requires citizens, each student as well as each person is responsible not only for themselves and their families but also for their responsibility. The State and society must know how to combine harmoniously individual and community interests. The article contributes to clarifying some theoretical issues about civic responsibility. The survey of 533 students of Industrial University of Ho Chi Minh City and Hong Bang International University clarifies the current status of students' civic responsibility towards the State and society in our country today. On that basis, some basic solutions are proposed to raise the students' sense of civic responsibility toward the State and society in our country today.

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STUDENT SATISFACTION WITH ONLINE CLASSES DURING THE COVID-19 PANDEMIC IN VIETNAM

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Abstract. Online learning has become the best alternative channel to maintain teaching and learning activities during COVID-19 tight lockdown and school closures in Vietnam. There is concern regarding the quality of online teaching and learning outcomes as well as student satisfaction with online classroom environment. This research determines factors influencing student satisfaction with online classes during the COVID-19 pandemic in Vietnam. Our quantitative design employs the questionnaire-based survey instrument and convenient sampling technique for data collection. Data was gathered from 388 valid responses from participants through both paper-based and online surveys who experienced online classes during the situation of the COVID-19 pandemic. Five different hypotheses related to key factors influencing student satisfaction were tested. The research findings highlighted that instructor quality, course design, and technology quality had positive relationships with student satisfaction at different levels. This research will provide useful information for schools, universities, and other educational institutions to improve their teaching system and strengthen student satisfaction with the new virtual learning method that continues growing tremendously in the future.

Key words. Online learning, student satisfaction

1. INTRODUCTION

Online learning has become one of the fastest-growing aspects of the overall education system due to the advancements in Internet-based information technology and communication (Nair, 2019). Online courses are now being offered by many schools and universities all around the world to provide students with effective, efficient, and sufficient learning (Caliskan, 2009). Online learning is considered a flexible and inexpensive choice for schools and universities and is expected to develop and expand their educational services globally in the future (Casey, 2008). The negative impacts of the COVID-19 pandemic have required the closure of most schools and universities around the world in order to stop the pandemic from spreading widely (Jena, 2020). However, this period provided a great opportunity for online learning to develop vigorously. In Vietnam, approximately 22 million students throughout the country have experienced various class interruptions and have been forced to switch to online learning over a two-year period since 2020 (Duong, 2021). Online education is no longer an option anymore but has become a necessary requirement (Dhawan, 2020) or the best solution for maintaining the operation of education systems during the COVID-19 pandemic (Jena, 2020).

Student satisfaction is an important indicator in the field of education, especially for online learning because it reveals online learning systems' quality and student performance (Harsasi & Sutawijaya, 2018). Many previous research papers focused on studying the factors influencing student satisfaction with online learning over the world. To be specific, Sun et al. (2008) showed that students, instructors, technology, course, design, and environment were critical factors affecting students satisfaction in the online learning environment. Ke and Kwak (2013) studied the effects of diversity in age and ethnicity on the perception, participation, and satisfaction of students in online learning. However, limited research papers have assessed factors affecting student satisfaction towards online classes during the COVID-19 pandemic, especially in the context of Vietnam although there is a greater concern of the whole society about student satisfaction with online classes during the COVID-19 pandemic in Vietnam. Though the studies of Baber (2020) and Gopal et al. (2021) examined factors affecting student satisfaction with online classes during

the COVID-19 pandemic, these studies were conducted in two countries, namely India and South Korea, and none of these studies considered the effect of technology quality on student satisfaction with online classes. The scant research findings in the context of Asian countries left a significant gap for this study to fill in. Thus, primary objectives of conducting this research are (1) to examine determinants influencing student satisfaction towards online classes during the COVID-19 pandemic in Vietnam, and (2) to identify the most noteworthy factor impacting student satisfaction.

2. LITERATURE REVIEW

2.1. Concepts of online learning and student satisfaction

Online learning has currently been one of the most ubiquitous sorts of learning because of the significant contributions of rapid development in technology (Castro & Tumibay, 2019). Within the broadest sense, online learning implies all kinds of learning methods that occur via computers (Carliner, 2004). According to Anderson (2008), many alternative terminologies are used for implying online learning like e-learning, virtual learning, distance learning, web-based learning, and so on; these terms indicate their similar capability that enables people to study anytime and anywhere by using computers with a connected network (Cojocariu et al., 2014). One of the common definitions of online learning is the use of the Internet for accessing learning resources, interacting with subjects, teachers, and other learners, seeking assistance during the learning process, and gaining knowledge and learning experience (Anderson, 2008). In the study of Singh and Thurman (2019), online learning is described as learning that takes place over the Internet or on computers in a synchronous classroom in which students interact with teachers and other students, and it is not reliant on their physical location. However, Castro and Tumibay (2019) argued in their study that online learning refered to the delivery of learning materials via any electronic means such as extranets, satellite broadcast, audio/videotapes, CDs, and video conferencing, besides the Internet.

Many previous studies have attempted to discover whether online learning can be more effective compared to traditional classroom learning in terms of quality and student satisfaction (Kauffman, 2015). Lockman and Schirmer (2020) and Ryan et al. (2015) revealed that online learning produced better results than traditional learning approaches, and the evidence for those better results of online learning was based on growing course completion rates, student satisfaction, as well as levels of motivation to gain more knowledge through online classes (Bernard et al., 2014). Recent studies by Popovici and Mironov (2015) and Vitoria et al. (2018) have shown that online learning is more successful than traditional or face-to-face learning because of its advantages related to minimizing obstacles for students to access education by removing time and distance constraints (Rajeh et al., 2021). This learning technique can also attract a large number of students in various locations (Harsasi & Sutawijaya, 2018). Finch and Jacobs (2012) stated other advantages of online learning, including a reduction in time and costs for travel to physical schools and universities, boosting access to and collaboration with professionals on a global scale, supporting students with flexibility to access courses and learning materials at their ease, and allowing adjustments to subjects and content when needed. Nevertheless, Adams et al. (2015) argued that online students studied less effectively compared to the ones who had face-to-face classes, as seen by student satisfaction, motivation, and participation. Maheshwari et al. (2015) and Harsasi and Sutawijaya (2018) disclosed in their studies that online learning still had several downsides associated with network or technological barriers, social isolation, and obstacles to interaction and communication among students, instructors, and others.

The literature has emphasized the significance of assessing student satisfaction because it can be seen as a critical indicator that reflects the outcome or quality of the educational systems (Weerasinghe et al., 2017). Student satisfaction is the key to achieve the success of online learning systems (Dziuban et al., 2015). Perceiving student satisfaction helps schools and universities better understand their strengths and weaknesses in providing learning programs (Noel-Levitz, 2011). As a result, these educational institutions can improve their educational curriculums and systems to adapt to changing student needs as well as to create a method for regularly assessing how well they meet or surpass those expectations (Elliott & Shin, 2002). Similar to customer satisfaction, student satisfaction is a quite complex phenomenon (Appleton-Knapp & Krentler, 2006). The term "satisfaction" refers to a feeling of having someone's expectations or fulfilling expected results (Hom, 2002), and customer satisfaction is obtained when the service meets their expectations (Petruzzellis, et al., 2006). According to the studies of Elliot and Shin (2002), student

satisfaction refers to a short-term attitude or favorability of students based on their subjective assessment of the various educational results and experiences, services, and facilities provided. Lo (2010) and Kuo et al. (2013) pinpointed that student satisfaction alluded to the perceptions or impressions of students of how effectively a learning environment supported academic success and how valuable the courses are for them. Student satisfaction is the outcome of the affecting process by many complicated factors, and there is a large volume of published studies investigating student satisfaction and its different influencing factors. The work of Appleton-Knapp and Krentler (2006) formulated that there were two main categories of factors influencing student satisfaction, including personal factors and institutional factors. Walker-Marshall and Hudson (1999) stated that the student's grade point average was the most personal factor influencing the satisfaction of students, and other personal factors included gender, employment, age, and preferred learning style; clarity of expectations, teaching style, instructor quality, and instructor's feedbacks are institutional factors affecting student satisfaction (Weerasinghe et al., 2017). Numerous prior studies conducted by Johnston et al. (2005), Kuo et al. (2013), and Dziuban et al. (2015) focused on evaluating the satisfaction of students towards online learning. Much research has also been conducted to make comparisons of the student satisfaction level between online classes and traditional ones (Johnson, et al., 2000; Mahmood, 2012). There are several research studies by Bolliger & Martindale (2004), Gray and DiLoreto (2016), and Muzammil et al. (2020) that examined the determinants affecting student satisfaction in online learning environment. However, not much research has examined factors influencing student satisfaction with online learning during the COVID-19 pandemic, especially in the context of Vietnam. Thus, this research will propose the conceptual framework based on the research models in the studies of Eom et al. (2006), and Harsasi Sutawijaya (2018), and Gopal et al. (2021) which examined determinants influencing student satisfaction in different countries and contexts. Accordingly, this study can investigate and highlight how the proposed factors influence student satisfaction in online classes during the COVID-19 pandemic in the situation of Vietnam. The conceptual framework includes five factors as the explanatory variables, namely instructor quality, course design, instructor feedback, student expectation, and technology quality. Moreover, the dependent variable is student satisfaction.

2.2. Hypotheses development

Instructor quality can be considered a key indicator of student satisfaction. The quality of instructors has paramount importance in influencing students' behaviors and satisfaction with online learning (Cheng, 2012) as well as resulting in the outcomes of education progress (Gopal et al., 2021). Sun et al. (2008) and Cheng (2014) defined instructor quality as the level of students' perception of instructors' attitudes associated with teaching approach and support for students through online learning settings. Instructor quality refers to how well the instructors organize the class, emotionally support, and clearly deliver subject content to students (Colaianne, 2021). Students' enthusiasm, involvement, and satisfaction with online learning can be influenced by instructor quality, which is related to instructors' attitudes, caring, help, kindness, and teaching style (Ozkan & Koseler, 2009). Kauffman (2015) stated that evaluating how students felt about instructor quality could help ensure the satisfaction level of students. Accordingly, instructor quality and student satisfaction are significantly related, so the first hypothesis can be formulated as follows:
H1: Instructor quality has a positive relationship with student satisfaction.
Course design is considerably boosting students' learning and satisfaction (Lin, et al., 2008) as well as bolstering students' academic engagement and accomplishment (Khan & Hemsley-Brown, 2021). Course design contributes to creating a favorable environment for high-quality learning and student satisfaction with online classes (Eom et al., 2006; Gray & DiLoreto, 2016). Course design indicates the structure of the course that includes clarification of learning objectives, teaching materials, learning instructions as well as case studies (Gunawardena et al., 2010). Online course design refers to the layout of online learning scenarios that determines the overall structure of the course, instructional approaches, and learning resources in an online learning environment platform (Lin, 2010; Khan & Hemsley-Brown, 2021). Hartman and Schmidt (1995), Sun et al. (2008), and Eom et al. (2006) found a direct relationship between course design and the satisfaction of students. Other researchers revealed that structuring online courses effectively helped stimulate students' acceptance of online systems and performances (Mtebe & Raisamo, 2014) as well as facilitate their success (Jenkins, 2015). Therefore, the second hypothesis that supposes a positive relationship between course design and student satisfaction is stated in this research.

H2: Course design has a positive relationship with student satisfaction.

The instructor's feedback has significant importance to student satisfaction with online learning (Thurmond et al., 2002; Bolliger & Martindale, 2004). The instructor's feedback is any message given directly from the instructor in response to students related to the classes' activities that students join in (Getzlaf, et al., 2009). Feedback from instructors can be transferred to students in both verbal and writing ways, and it can be used to help students fix errors, provide notes, and explain or clarify misunderstandings (Gallien & Oomen-Early, 2008). The studies of Chang (2011) and Simsek et al. (2017) stated that feedback from instructors revealed students' performance in the class activities, the learning efforts (Ladyshewsky, 2013) as well as their learning progress (Thurmond et al., 2002), which indicated that instant feedback from instructors helped students to improve their performance (Ackerman & Gross, 2010), stimulated the learning experience of students (Brownlee et al., 2009), and bolstered student satisfaction (O'Donovan, 2017). Ahea et al. (2016) found that the instructors' feedback supported improvement in students' learning experience, future performance, and the enhancement of student learning. Thus, the third hypothesis formulated in this research assumes a significantly positive relationship between instructors' feedback and student satisfaction.

H3: The instructor's feedback has a positive relationship with student satisfaction.

Student expectation is supposed to be a noteworthy factor that has a positive influence on student satisfaction. Student expectation refers to the result of students' perception of prior interactions with academic and non-academic services (Turkyilmaz et al., 2016). Student expectation is also considered as a student's assessment of educational service quality, academic achievement, graduation, future job opportunities, and social recognition (Sembiring, 2013). Several previous studies found a negligible or weak relationship between student expectations and student satisfaction; however, other researches pinpointed that student satisfaction was positively and significantly affected by student expectation (Militaru et al., 2015; Gopal et al., 2021). Student satisfaction is based on the fit of student expectation and reality regarding quality (Lestari & Khusaini, 2017) or the excess of actual performance compared to student expectation (Minrohayati et al., 2020). According to the study by Militaru et al. (2015), a higher degree in fulfillment of student expectation resulted in a higher level of student satisfaction. Consequently, the fourth hypothesis reflecting a positive relationship between student expectation and student satisfaction will be considered in this research.

H4: Student expectation has a positive relationship with student satisfaction.

Technology quality can be supposed as another considerable factor affecting student satisfaction. Technology quality is defined as the perceptions of students on the quality of information technology means like computers, microphones, earphones, electronic blackboards, etc., which have been used in online learning settings (Sun et al., 2008). Some researchers found that the technology's quality and reliability, as well as the transmission speed of the networks, had an influence on academic performance (Sun et al., 2008) and student satisfaction (Dhanushka et al., 2018). Low quality of technology not only leaded to constraints for universities and schools to set up online learning classes (Harsasi & Sutawijaya, 2018) but also caused difficulties for students that could make them dissatisfied with the online courses and contribute to students' abandonment of learning (Kintu et al., 2017). Student satisfaction would be improved when they faced fewer problems or barriers to using online learning tools or platforms (Dhanushka et al., 2018; Nashaat et al., 2021). Sun et al. (2008) revealed no significant influence of technology quality on student satisfaction; nevertheless, other previous students proved a significantly positive relationship between technology quality and student satisfaction (Webster & Hackley, 1997; Piccoli et al., 2001; Kintu et al., 2017; Harsasi & Sutawijaya, 2018; Nashaat et al., 2021). Hence, the last hypothesis indicating a positive effect of technology quality on student satisfaction will be included in this research.

H5: Technology quality has a positive relationship with student satisfaction.

In short, five hypotheses with proposed relationships between explanatory variables and the dependent variable are summarized respectively in Figure 1 below.
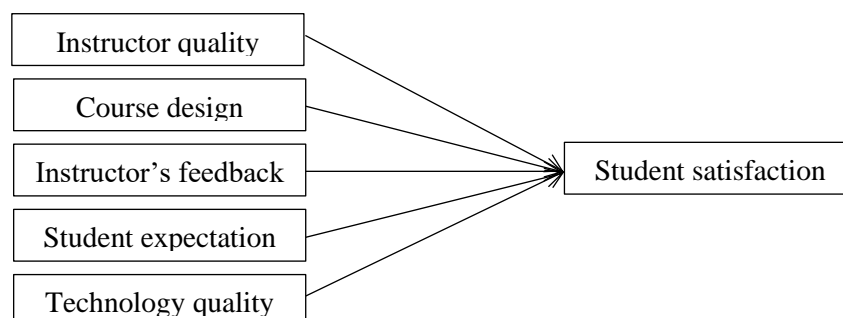
Figure 1: The conceptual framework
Note: Adopted from Eom et al. (2006), Harsasi and Sutawijaya (2018), and Gopal et al. (2021).

3. METHODOLOGY AND DATA COLLECTION

This research adopts the quantitative research design with cross-sectional survey data to examine the factors influencing student satisfaction in online teaching and learning environment during the COVID-19 pandemic. The research questionnaire consists of 33 items for measuring six variables including student satisfaction, instructor quality, course design, instructor feedback, student expectation, and technology quality. All the variable measurement items shown in Appendix Table 3 are adapted from previous studies by Eom et al. (2006), Harsasi and Sutawijaya (2018), and Gopal et al. (2021). All the items are measured using the five-point Likert scale. To measure the "Instructor quality" variable, there are seven different items used to assess students' perception of instructors' willingness to teach and support students throughout the online courses. For the "course design" variable, three items about the fulfilment of learning objectives and the convenience accessing of learning materials are employed to measure this variable. Four items about students' perspectives on the willingness and timeliness of instructors' feedback are used to assess the "Instructors' feedback" variable. The "Student expectation" variables are measured by five items about students' assessment of different aspects of learning. To evaluate the "Technology quality" variable, there are eight items adopted to analyze how technology can affect or support online learning. Six "Student satisfaction" items are used to evaluate the satisfaction level of students with online classes or whether students perceive online classes as valuable to them.

The research will target respondents who are students experiencing online learning during the COVID-19 pandemic situation using both online and paper-based questionnaires. We use Google form as the tool for online questionnaire distribution and data collection. At the same time, the paper-based questionnaires will be distributed to the targeted respondents at various places such as schools, colleges, and universities, as well as convenience stores and cafeterias nearby. A convenience sampling method will be applied. The survey will be performed in the Vietnamese version in order to target respondents from many different schools and universities in Vietnam. Data will be processed and analyzed by using IBM SPSS Statistics version 26; techniques for data analysis are descriptive statistics, reliability testing, exploratory factor analysis (EFA), correlation, and multiple regression.

4. RESULTS

The paper-based and online surveys were designed and administered to 500 students (including 235 Google form surveys and 265 paper-based questionnaires), in which 482 questionnaires were returned. After processing and checking the collected questionnaires, 94 uncompleted and invalid responses were eliminated. Finally, 388 valid responses were maintained and used for further analysis in this research. Data analysis revealed that 210 responses came from female students representing 54.1% of the sample, and 178 male students completed the questionnaires making up 45.9%. Besides, 254 respondents equivalent to 65.5% of the sample observations were between the ages of 18 and 30, while only 34.5% of the respondents were under 18 years old. It is clear that the difference in the number of responses in gender groups is less than in age groups. The group aged between 18 and 30 is dominant in the sample size with a number of responses that is approximately twice the rest. It can be seen that the majority of responses were from university or college students with 252 responses, representing almost 70% of the total number of valid

responses, while students' responses from high schools, secondary schools, and primary schools are 56, 45, and 35 respectively that all accounted less than 15% of the sample.

The first analysis is the reliability test. Cronbach's alpha is a common indicator in statistics applied to assess the reliability or internal consistency between measurement items. Cronbach's alpha is ranging from zero to one; however, the lowest level for reliability is acceptable when Cronbach's alpha coefficient is larger than 0.6 (Hair et al., 2009). Furthermore, the reliability or internal consistency of variables is evaluated more particularly using the general framework for Cronbach's alpha value as $\alpha \geq 0.9$ - Excellent, $0.8 \leq \alpha < 0.9$ - Good, $0.7 \leq \alpha < 0.8$ - Acceptable, $0.6 \leq \alpha < 0.7$ - Questionable, and $\alpha < 0.6$ - Poor and unacceptable (George & Mallery, 2020). The results of the reliability test are performed in Table 1 below. It can be seen that all six variables achieved an acceptable level of reliability with all Cronbach's alphas that are larger than 0.7, and that pinpoints the good internal consistency between measurement items of all six variables.

Table 1: Reliability analysis

Variables	Cronbach's Alpha	Reliability remarks	Variables	Cronbach's Alpha	Reliability remarks
Instructor quality (IQ)	.844	Good	Student expectation (SE)	.795	Acceptable
Course design (CD)	.779	Acceptable	Technology quality (TQ)	.841	Good
Instructor's feedback (IF)	.807	Good	Student satisfaction (SS)	.901	Excellent

Exploratory factor analysis (EFA) is the second statistical analysis in the research The KMO test and Bartlett's Test of Sphericity are used to assess the multivariate normality and the adequacy of sampling. The result of KMO should be in the range from 0.5 to one, which indicates the adequate of factor analysis, and the significance value of Bartlett's Test of Sphericity should be less than 0.05, which refers that data is multivariate normal and acceptable for factor analysis (George & Mallery, 2020). All independent variables have very high values for the KMO tests, which are 0.914. This emphasizes that independent variables have marvelous sampling accuracy for factor analysis. Additionally, Bartlett's Test of Sphericity for both independent variables has significance values of 0.000 that are less than 0.05; this means data achieves multivariate normality for factor analysis. After three rounds of exploratory factor analysis (EFA) using Varimax rotation for the independent variables, the final result of the rotation component matrix. The item IF06 of the Instructor quality (IQ) variable, items TQ02, TQ06, and TQ07 of the Technology quality (TQ) variable, and item SE03 of the Student expectation variable are removed from the analysis because they all have two loading values located in two different components, and the differences between their two loading values are less than 0.3. Moreover, the Instructor feedback (IF) variable has item IF01 that does not converge with other items and item IF02 that has three loading values in three components and the difference between these three loading values is still less than 0.3, so items IF01 and IF02 are definitely deleted. Therefore, the items are kept for later analysis, including IQ01, IQ02, IQ03, IQ04, IQ05, and IQ07 (Instructor quality), TQ01, TQ03, TQ04, TQ05, and TQ08 (Technology quality), CD01, CD02, and CD03 (Course design), SE01, SE02, SE04, and SE05 (Student expectation), and IF03 and IF04 (Instructor feedback). It is clear that all six items of the Student satisfaction variable are included in one component and their loading values are greater than 0.5. Thus, all six items of the student satisfaction variable will be retained for further analysis. Full results of exploratory factor analysis (EFA) are shown in Appendix Table 4.

The third analysis is the Pearson correlation. A higher absolute Pearson correlation coefficient means the variables are more correlated. If the variables are directly associated, the correlation coefficient is positive; if they are inversely related, it is negative (Zhou et al., 2016). Moreover, the Pearson correlation coefficient has statistical significance only when the significance values are less than 0.05, according to Field (2018). The significance values for all Pearson correlation coefficients are 0.000. According to Appendix Table 5, it is obvious that Instructor quality has the strongest positive correlation with Student satisfaction, particularly with the Pearson correlation coefficient of 0.546, followed by Course design (CD), Technology

quality (TQ), and Student expectation (SE) with Pearson correlation coefficients of 0.529, 0.503, and 0.431 respectively. With the Pearson correlation coefficient of only 0.380, it is evident that the Instructor feedback has the weakest positive correlation with Student satisfaction.

Multiple regression analysis is the statistical tool applied to assess relationships between two more independent variables and a single dependent variable in order to predict how each of the independent variables can explain the dependent variable. The Appendix Table 6 showed that the coefficient of determination (R square) is only 0.426; this means that the dependent variable – Student satisfaction can be explained only 42.6% by all independent variables of this research model. The remaining 57.3% of the student satisfaction is explained by other variables not included in the model or caused by random error. Furthermore, the result of Durbin-Watson is 1.901, which meets the acceptable range, and this indicates this statistical model has no autocorrelation. It can be seen that the VIF values of all five independent variables are less than two, this reveals that the regression model has no multi-collinearity. According to Table 2, regression coefficients of all five independent variables refer to the positive correlations with the Student satisfaction; however, Instructor feedback and Student expectation variables' positive influence on the dependent variable is no statistical significance due to larger significance values than 0.05 (0.825 and 0.766 respectively). Only regression coefficients of three variables – Instructor quality (IQ), Course design (CD), and Technology quality (TQ) have the significance values of 0.000 (less than 0.05). This means these three variables are significantly contributing to predicting and explaining Student satisfaction. Instructor quality has the highest Standardized Beta coefficients (0.303) implies the strongest influence and contribution to predicting Student satisfaction, followed by Course design (0.266) and Technology quality (0.218). As a result, hypotheses 1, 2, and 5 are accepted; the two remaining hypotheses H3 and H4 are rejected.

Table 2: Hypothesis testing

Hypotheses	Standardized Coefficients Beta	Sig.	Hypothesis result	Influence ranking
H1	.303	.000	**ACCEPTED**	**1ˢᵗ**
H2	.266	.000	**ACCEPTED**	**2ⁿᵈ**
H3	.011	.825	**REJECTED**	-
H4	.015	.766	**REJECTED**	-
H5	.218	.000	**ACCEPTED**	**3ʳᵈ**

5. DISCUSSION

Online learning has become increasingly common in the field of education because of the rapid development of information and communication technology. Especially the negative impacts of the global COVID-19 pandemic led to the transition from traditional to online classrooms. Online learning became the best alternative to keep on teaching and learning activities during the COVID-19 lockdown and school closures in Vietnam. It raises a big concern about student satisfaction with online classes in society; therefore, this study evaluated the factors affecting the students' satisfaction with online education during the COVID-19 pandemic situation in Vietnam. It cannot be foreseen how long the pandemic has lasted or what will happen in the future, so preparation and improvement in the online education system are necessary. This research results can support schools, universities, and other educational institutions to provide better online education curriculums to ensure and enhance student satisfaction. In this research, the findings revealed that the quality of instructor, course design, and technology quality had significant positive relationships with student satisfaction towards online classes in Vietnam during the COVID-19 pandemic with the standardized betas (β) of 0.303, 0.266, and 0.218 respectively. On the other hand, the instructor's feedback and student expectation showed no significant influence on student satisfaction; these findings indicated the differences compared to the previous studies of Gallien and Oomen-Early (2008) and Militaru et al. (2015). Especially, these differences were more obvious in comparison to the recent research of Gopal et al. (2021), in which the student expectation and instructor's feedback are the second and the third most noteworthy factors affecting student satisfaction with online classes in the context of the COVID-

19 pandemic in India. The reason for these differences is that this present research explored student satisfaction with online education during the serious situation of the COVID-19 pandemic in Vietnam when the whole society was locked down, and students and instructors both experienced difficulties caused by the pandemic associated with quarantine, infection and even COVID-19 treatment. Accordingly, students could sympathize with a little bit lateness of instructors' feedback or something in the course that could not meet their original expectations. As a result, the instructor's feedback and student expectation would not be the prior factors affecting student satisfaction.

This research pinpointed that the most significant determinant of student satisfaction with online classes during the context of the COVID-19 pandemic in Vietnam was instructor quality, with the greatest standardized beta (β=0.303). This research's results are consistent with previous findings of Eom et al. (2006), Baber (2020), and Gopal et al. (2021) that emphasized the paramount importance of instructor quality, knowledge, and facilitation with student satisfaction in every situation and context. Whether classes are conducted conventionally or online, or whether classes are carried out in any specific country or region, the importance of instructor quality in teaching and supporting students is irrefutable. During classes, instructors play a role as learning facilitators who organize and deliver the content to students and enthusiastically support and readily engage with students in any course discussions. Thus, instructors have to effectively teach, encourage students' learning processes, and give assistance to students with all aspects of learning to ensure and enhance students' performance and satisfaction. Moreover, the quality of instructors in online education is more highly emphasized because switching to online classes requires instructors to change into a new appropriate teaching style and have technical knowledge and skills. That assures instructors to deliver course lectures through technology tools as well as provide instructions on using these tools for students who have not ever experienced online learning. In short, the quality of instructors is a crucial factor contributing to higher students' learning accomplishment and satisfaction extent.

The research revealed that course design is the second significant determinant of student satisfaction with online learning during the COVID-19 pandemic in Vietnam. These findings are in line with the past research findings of Hartman & Schmidt (1995), Eom et al. (2006), Sun et al. (2008), (Harsasi & Sutawijaya, 2018), and Gopal et al. (2021) that emphasized the significant positive relationship between course design and student satisfaction. However, the findings are going against the results in studies of Gray and DiLoreto (2016) and Baber (2020); this difference can be explained that two previous researches considered the course structure of online learning which was designed as in the conventional classes and did not have any adjustments to meet online learning requirements. On the other hand, this research observed that course design was improved and adjusted to be appropriate for technology platforms and online learning, so that is the reason why course design is the critical factor influencing positively on student satisfaction. It can be underlined that upholding flexibility and appropriateness in course design for specific education modes is vitally important. Therefore, course structure has to be designed in the proper and effective manner; especially, courses for online education should be well structured technically so that students can capture the course content and access the course materials easily. Accordingly, effectively designing the course supports students' learning performance and strengthens student satisfaction.

This study also highlighted that the last significant determinant of student satisfaction with online learning during the COVID-19 pandemic in Vietnam was technology quality. These findings favored the research results of Webster and Hackley (1997), Piccoli et al. (2001), Kintu et al. (2017), Harsasi and Sutawijaya (2018), and Nashaat et al. (2021) that showed up the significance of maintaining technology quality in ensuring and boosting student satisfaction. Conversely, these findings were contracting with the findings of Sun et al. (2008), particularly that previous research proved no significant relationship between technology quality and student satisfaction. That opposition is the result of differences in the two studies' research contexts. The research of Sun et al. (2008) was conducted in Taiwan, where online education appling National Information Infrastructure (NII) with an ideal technological and networking environment that was more than students had expected, so technology quality would not be a concern for students' minds that could influence their satisfaction anymore. This present study was carried out in the context of Vietnam during the COVID-19 tight lockdown and school closures; technology quality is quite different among universities and schools across the country, and at that time, ensuring technology quality and handling any problems and difficulties related to technology quality was very hard. Hence, technology quality is also an

indispensable factor influencing student satisfaction with online learning during the COVID-19 pandemic in Vietnam. Technology quality needs to be improved in terms of reliability, ease to use, beneficial functions, and transmission speed of the networks to lower problems for using technology platforms in online learning. Ensuring technology quality allows for boosting the effectiveness of students' academic performance and satisfaction.

6. CONCLUSION

6.1. Implication

This research provides several beneficial and practical implications for universities, schools, other educational service providers, the government, and researchers. This study examined the influence of instructor quality, course design, the instructor's feedback, student expectation, and technology quality on student satisfaction with online classes during the COVID-19 pandemic in Vietnam. That has a significant contribution to the literature by evaluating student satisfaction affected by various factors in a different context compared to previous research papers and attempts to fill the given research gap among prior studies. This research provides researchers with foundations and directions for future research. Moreover, another noticeable implication of this study is the emphasis on the significance of instructors' quality, knowledge, and facilitation in influencing student satisfaction. In online education, instructors are responsible for not only delivering lessons, supporting, and facilitating students' learning progress but also adapting to the new teaching environment, instructing students with technical knowledge, and helping them resolve technical issues. Thus, this suggests instructors change into new appropriate teaching to fit with online education and need to improve their technical skills to utilize the technology tools and platforms for teaching and dealing with technical problems effectively. Besides, that also proposes schools and universities expedite continuous learning for instructors and offer them training programs to help them enhance their specialized competence and technical skills. In short, instructors ensuring their highly specialized knowledge, presence, facilitation, and technical skills during online classes can bolster students' academic achievements and boost their satisfaction.

Furthermore, the next significant implication of this research is the importance of designing courses flexibly, appropriately, and effectively in consolidating student satisfaction. This research emphasizes that course structure needs to be designed clearly and properly in terms of course content, learning objectives, assessments, and learning outcomes; especially for online learning, courses have to be structured for students to approach learning materials easily without any technical barriers and obstacles. Hence, this research offers a suggestion for educators such as schools, universities, and other educational institutions that they have to concentrate on designing courses appropriately to meet online education's requirements. This means the educators need to have continuous adjustments in the course structure throughout the courses to eliminate some unsuitable aspects as well as add in more appropriate and necessary course elements and activities to support and encourage the performance and satisfaction of students. The more appropriate courses are designed for online education, the better students' learning outcomes and a higher level of student satisfaction. In addition, the last critical implication of this present research is pinpointing the momentousness of technology quality in strengthening student satisfaction with online classes. Technology quality is assessed through how well technological learning tools and platforms are applied for online education or how easy and beneficial these learning platforms provide for students during online classes. Therefore, technology quality has to be ensured regarding the dependability, convenience of use, helpful functionalities, and network transmission speed so that students can utilize technology easily for their learning progress without any technical obstacles or hurdles. This research suggests that the Vietnamese government can develop an overall technological learning system with high reliability and good network transmission speed for all schools and universities in Vietnam so that all educators can approach the high-quality learning platform for online education, and this integrated online learning system allows managing and quality ensuring easily and effectively. Besides, this study also raises a suggestion for educators that they can create their own learning system with continuous improvement and have a technical support team to help monitor, check the quality of technology, and immediately combat technical problems during the online learning process. That will result in assisting students' academic accomplishment and satisfaction with online education.

6.2. Limitations and future directions

Firstly, this study applies the convenience sampling technique to obtain the samples, so the findings based on the samples cannot yet be generalized and representative of the whole population. Thus, future research can apply the probability sampling methods to ensure the generalization of research. Secondly, this research applies the cross-sectional design, which means this research only focuses on studying at a specific point in time, so the results of this study cannot show the changes in how the independent variables affect the dependent variable. Therefore, further research can apply the longitudinal design to better reflect the change in causal relationships among variables. Thirdly, this research generally focuses on assessing student satisfaction with online learning during the COVID-19 pandemic in Vietnam, so future research can be conducted in other countries or specific regions in Vietnam to better understand the difference in perspectives and satisfaction levels of students from different contexts and regions. Moreover, there is still a great concern about other aspects of education such as student performance, student motivation related to online learning as well as the quality of online classes during the COVID-19 pandemic in Vietnam. Hence, that creates a significant research gap for filling, so future studies can be worked on these aspects.

APPENDIX

Table 3: Variable measurement items
Note: Adopted from Eom et al. (2006), Harsasi and Sutawijaya (2018), and Gopal et al. (2021).

Variables	Measurement items	Code
Instructor quality	The instructor can communicate effectively with students.	IQ01
	The instructor is passionate about using the internet to teach.	IQ02
	The instructor cares about the student's learning.	IQ03
	The instructor also has respect for the student's learning.	IQ04
	I am able to easily access the instructor outside of the online classes anytime.	IQ05
	The instructor uses technology tools and online platforms to create a supportive learning environment for students.	IQ06
	The instructor can adjust the appropriate interactions with students when needed.	IQ07
Course design	Websites of online classes are useful for learning and accessing materials.	CD01
	The course objectives and techniques are conveyed in a clear and understandable manner.	CD02
	The course materials are structured in a logical and easily understandable way.	CD03
Instructor's feedback	The instructor is willing to respond to all the students' concerns.	IF01
	The instructor has prompt feedback for all students' assignments, projects, and exams.	IF02
	I see all instructors' feedback for all students' assignments, projects, and exams are very beneficial and on time.	IF03
	I had the feeling that the instructor was concerned about my progress in learning.	IF04
Student expectation	Expectations for specific assignments have been explicitly defined by the instructor.	SE01
	The instructor uses appropriate examples to demonstrate concepts.	SE02
	This course's assignments are designed at a reasonable level of difficulty.	SE03
	The instructor provides easily understood instructional materials for students.	SE04
	The instructor is excellent at explaining aspects of learning for students.	SE05
Technology quality	I see that technology tools for online classes are very simple to use.	TQ01
	I find that technology tools used in online classes have many beneficial functions.	TQ02
	I perceive that technology tools are very useful in terms of learning the materials during online classes.	TQ03

	I realize that technology tools make communication among students and instructors easier.	TQ04
	I am able to access online classes from any location.	TQ05
	I have no difficulties when learning online.	TQ06
	I have no trouble responding to the discussion when learning online.	TQ07
	I do not see any issues with task uploading or assignment submitting when learning online.	TQ08
Student satisfaction	I find that online classes are valuable for me.	SS01
	Online classes enhance my interest in learning.	SS02
	I can improve my understanding and knowledge of many subjects thanks to online classes.	SS03
	I have adequate time to comprehend all materials required for online classes.	SS04
	I feel pleased with all the online classes that I have attended.	SS05
	I perceive that online learning is the most beneficial way of learning I have ever engaged.	SS06

Table 4: Exploratory factor analysis (Final)

	Component				
	1	**2**	**3**	**4**	**5**
IQ01	.743				
IQ02	.723				
IQ03	.704				
IQ04	.695				
IQ05	.637				
IQ07	.597				
TQ08		.701			
TQ01		.697			
TQ04		.661			
TQ05		.642			
TQ03		.642			
CD01			.755		
CD02			.754		
CD03			.737		
SE05				.761	
SE01				.692	
SE02				.626	
SE04				.557	
IF04					.825
IF03					.825

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.914
Bartlett's Test of Sphericity	Approx. Chi-Square	2985.711
	Df	190
	Sig.	.000

Table 5: Correlation analysis

		IQ	CD	IF	SE	TQ	SS
IQ	Pearson Correlation	1					
	Sig. (2-tailed)						
CD	Pearson Correlation	.481**	1				
	Sig. (2-tailed)	.000					
IF	Pearson Correlation	.428**	.447**	1			

	Sig. (2-tailed)	.000	.000			
SE	Pearson Correlation	.508**	.517**	.465**	1	
	Sig. (2-tailed)	.000	.000	.000		
TQ	Pearson Correlation	.474**	.482**	.520**	.549**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
SS	Pearson Correlation	**.546****	**.529****	**.380****	**.431****	**.503****	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000

Table 6: Regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		R	R Square	Adjusted R Square	Durbin-Watson
		B	Std. Error	Beta			Tolerance	VIF				
1	Constant	-.165	.244		-.676	.499			.653	.426	.419	1.901
	IQ	.392	.063	.303	6.235	.000	.637	1.571				
	CD	.296	.055	.266	5.404	.000	.622	1.608				
	IF	.011	.049	.011	.221	.825	.647	1.547				
	SE	.019	.065	.015	.298	.766	.565	1.769				
	TQ	.268	.063	.218	4.243	.000	.570	1.754				

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POLICY TO ENSURE INTELLECTUAL FREEDOM IN THE CONTEXT OF THE FOURTH INDUSTRIAL REVOLUTION TO MEET THE REQUIREMENTS OF THE SUSTAINABLE DEVELOPMENT IN VIETNAM

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Abstract. Intellectual freedom is a fundamental right of citizen in the information society, knowledge economy; one of the foundations for the enforcement of basic human rights such as: freedom of expression, freedom of speech, freedom of the press, and academic freedom and fundamental rights of citizens that international conventions and the Constitution of Vietnam in particular have recognized and guaranteed its implementation. In this study, on the basis of systematizing the theory of intellectual freedom, the relationship between intellectual freedom and sustainable development identifying the current situation of policies to ensure intellectual freedom in Vietnam, researching to propose possible solutions to improve these policies in accordance with the requirements of the law as well as the requirements of the fourth industrial revolution and sustainable development. By the method of comparative research on the policies of some countries and international organizations with the current policy in Vietnam on ensuring intellectual freedom and the background of policy assessment tools proposed by the research team, this research points out that: currently, Vietnam has a policy to ensure intellectual freedom, but it is still incomparable with the trend of the fourth industrial revolution and the requirements of sustainable development. This study affirms that the policy to ensure intellectual freedom needs to be adjusted on the basis of liberalizing access to information in the public sector in association with disseminating scientific and technological knowledge to the community.

Keywords. Intellectual freedom, intellectual property, information philosophy, sustainable development, the fourth industrial revolution

1. INTRODUCTION

Humanity is living in a world of constant change, the achievements of the fourth industrial revolution and the trend of digital transformation make the backward process of human scientific knowledge shorter and shorter. A lot of the new knowledge has formed that requires each person to constantly learn. Due to this fact, "lifelong learning" has become one of the mandatory requirements and is considered an important educational philosophy that contributes to the socio-economic development of each country in the context of a smart society filled with information, an economy driven by knowledge and the globalization trends. Among the 17 Sustainable Development Goals (SDGs) of the United Nations, investing in people with vision: to provide quality social protection and services that are equitable, inclusive for all the people living in Vietnam to ensure their health, education, escape poverty and empower them to reach their full potential, especially goal #4: Ensure quality, equitable, and inclusive education and promoting lifelong learning opportunities for all is one of the requirements that the Government of Vietnam focuses on[1].

To realize the set goals related to sustainable development, especially those related to education and lifelong learning, policies on educational innovation, science and technology have been developed. The State promulgates and organizes the implementation of these policies. One of them that is worth mentioning is the policy of ensuring intellectual freedom, which is considered one of the fundamental policies to ensure that people have the opportunity to access information and knowledge for education. Lifelong learning

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[1]Decision No. 622/QD-TTg dated May 10, 2017 of the Prime Minister on promulgating the National Action Plan to implement the 2030 Agenda for Sustainable Development

thereby creates a learning society. In this study, on the basis of an overview of basic theories on policies to ensure intellectual freedom in the context of the fourth industrial revolution, trends in policy formulation in some countries around the globe. This study analyzes and evaluates the compatibility of current policies with the global development trend, thereby suggesting a more effective solution. This study answers the following questions: What are the basic contents of the policy to ensure intellectual freedom? How are these policies institutionalized in Vietnam, and the compatibility of these policies with the trend around the world? By answering these questions, we will come up with potential solutions to improve the current policies so that they can be more suitable with the context of the fourth industrial revolution, meeting the requirements of sustainable development in Vietnam.

2. RESEARCH METHODS

2.1. Research approach

This research uses an interdisciplinary scientific approach including: policy science, legal science, information science, intellectual property science, open science, and science and technology. There are also other approaches such as:
- System approach: when considering the interlinked measures mentioned in the current intellectual freedom policy, through this approach it is possible to identify the unity or conflict between the goals and objectives as well as the means in the policy system, thereby proposing a solution to further improve the entire system.
- Historical logic approach: to identify the process of formation and development of policies, to identify the rules and changing trends of policies.
- Topdown-Bottom up approach: to identify the impacts and influences that the policy brings, approach simultaneously from two directions: from the subject who manages and issues the policy and from the object affected to help the identification and overall assessment of the achievement or non-achievement of policy objectives.
- Globalization approach: ensuring intellectual freedom is one of the most important policies that many countries around the world focus on and institutionalize. compatibility of current policies in Vietnam with the world, thereby proposing solutions to improve the policy.

2.2. Methods of collecting and analyzing documents and data

This study uses secondary data collection methods including: collecting data from monographs, textbooks, articles in scientific journals and research results, science and technology white papers in Vietnam and from other reputable published data sources.

In addition to illustrating the thesis of the study, the authors also use the method of document analysis, which are documents that institutionalize the current policy of ensuring intellectual freedom in Vietnam, including: legal documents, schemes and orientation documents of the National Assembly, the Government, the Prime Minister, relevant ministries, branches and documents of international organizations as well as countries around the world such as the United States, Canada, the EU, China, etc.

3. LITERATURE REVIEW AND POLICY TREND IDENTIFICATION

3.1. Literature Review

Intellectual freedom is considered a fundamental value in library and information studies of the 21st century. In his research, Caitlin Ratcliffe (2020) pointed out the historical origin and development of freedom intellectual property as a cultural value and at the same time carries religious, political and educational elements with the meaning of enlightenment and social and community responsibility (Cailin Ratcliffe, 2020). Since the advent of the internet, "intellectual freedom" has been mentioned in many international documents and is focused. The establishment of the IFLA Committee on Access to Freedom of Information and Freedom of Expression has made intellectual freedom one of the fundamental human rights and at the same time a core responsibility of the librarian profession. However, in the context of digital transformation, the development of the Internet, and the changing information needs of the community, there are problems in ensuring intellectual freedom in the community (Alex Bryne, 2022). From the perspective of professional ethics, intellectual freedom associated with librarian's responsibilities

to the community is also discussed in the studies of Shannon M Oltmann, Toni Samek, Loise Cooke, in relation with social responsibility in three countries USA, Canada and UK (Shannon M Oltmann et al., 2022). Intellectual freedom is also seen as a key factor to remove the constraints of censorship so freedom of information needs to be an issue to allow libraries and the community to access and all information materials of stakeholders to receive information, knowledge, freedom to hold information (Adeyinka Tella et al., 2021) In the handbook on intellectual freedom published by the American Library Association (ALA) (2015), basic perceptions of intellectual freedom, policies to promote intellectual freedom with a focus on the role of libraries in supporting, copyright issues and content regarding intellectual freedom for children and adolescents are discussed (ALA, 2015). Research by the author group Iyal Usman and Ali Muhammed Fakandu (2018) on intellectual freedom and its impacts on electronic information resources in specialized libraries has shown that the emergence of information technology has shaped the boundaries of information resources. However, the problem is to ensure free access to information via the Internet, especially the ability to connect between specialized libraries to serve the needs of the public as part of the community services (Iyal Usman, Aili Muhammed Fakadu, 2018).

From the policy approach, measures to ensure intellectual freedom towards building a learning society and sustainable development are emphasized and adjusted in two basic aspects: (1) ensuring the freedom to access knowledge-based information (scientific and technological information) and (2) the issue of promoting open access associated with knowledge dissemination in the community.

Studies on measures to ensure freedom of access to information and knowledge

Referring to this measure, it is impossible not to mention the concept of "national information policy", one of the important issues to promote freedom of information. Information policy first appeared in the study of Marc Uri Porat (1976) in the work "The Information Economy" in which this researcher pointed out that the foundation of the modern economy is the Information economy, computing, and telecommunications. On the other hand, Brama.S, stated in his research that information policy is a combination of many different fields including information science, economics, law and public policy (Marc Uri Porat, 1976), in which information science is more concerned with technical advances, ways of communicating information to the public, while, from a legal perspective, issues of privacy, and intellectual property need to be be paid attention to. In addition, in their research works, Jong-Han Yoon (2018) and the research group of Paul T Jaeger and Tatelie Greene Taylor (2019) have continued to emphasize the basis of information policy with equality and democracy in access, on the basis of infrastructure, digital, information security associated with human rights, citizenship and professional ethics, on that basis, guide information policy (Braman, Jong-HanYoon, Jeager, Taylor). The research led by UNESCO has outlined somewhat the national information policy model through each period, including the 2009 study by Adrian Rozengart Alenjandra Davidziuk, Daniel Finquelievich (2009) published by the group of authors. The national information policy framework to apply to member countries follows the model below:
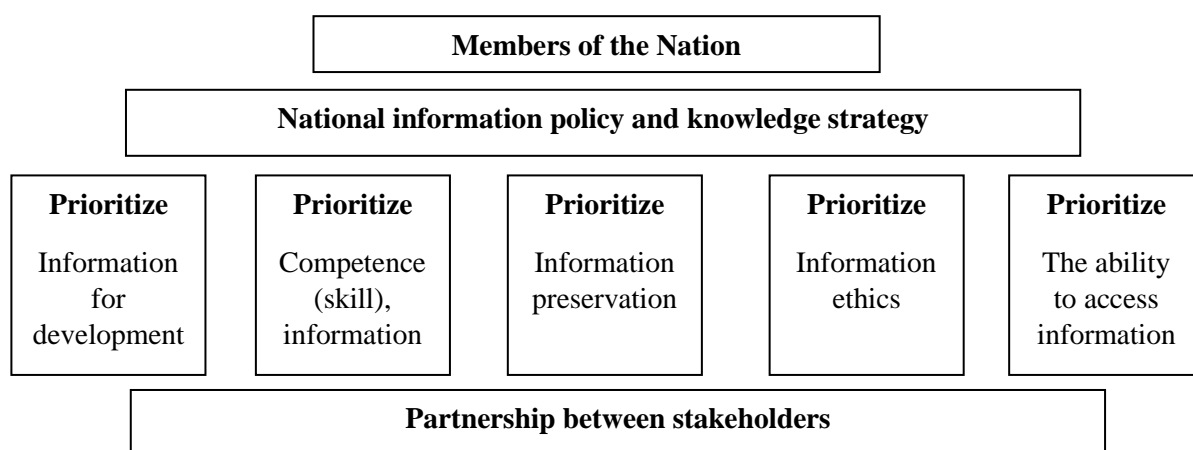

Figure 1.1. Diagram of IFAP's approach to the national information policy framework
Source: Compiled from: Adrian Rozengardt... et.al (2009)

The research team outlined the basic priorities of national information policy, which are information for development, information capacity, information preservation, information ethics and information accessibility. These can be considered as basic pillars of the information policy recommended by UNESCO. The study done by Donald O.Case (2010) has generalized the information policy framework in the US with 03 elements which are technical, legal and human, and at the same time provides a matrix of information policy according to the following table:

Type of infrastructure	Objectives and examples	
	Economy	**Society**
Technology	Market development Create jobs Capacity increase Facilitate transportation	Facilitation of communication Creating conditions in traffic Creating conditions in health and comfort
Juridical	Protect the market, jobs Property protection Promote growth Set up taxes, subsidies	Information dissemination Promote creativity Enhanced security Privacy Guarantee
Human	Information dissemination Promote creativity Enhanced security Protect privacy	Provide education Provide access Provide culture Provide social capital

Figure 1.2. The Matrix of Information Policy in the United States
Source: Compiled from Donald O. Case (2010)

The Finnish Government's report on information policy and artificial intelligence (2018) also identifies the goal: to be one of the leading countries in information policy and application of artificial intelligence (AI). Policy actions that contribute to effective management of information in the public, private and third sectors. The report also points out the key issues which are open data in the public sector, metadata management model and information towards a metadata economy that is available to share for the private sector, especially information ethics in the era of artificial intelligence (Ministry for Foreign Affaris of Finland, 2018).

Iceland has introduced a national information policy with five main objectives: (1) Icelanders will have easy access to the information society; (2) full equality is guaranteed between the public and private sectors in industry, information technology and communication; (3) information and telecommunications technologies will be mobilized to improve the competitiveness of the Icelandic economy; (4) the education system will adapt to the change of a dynamic society and focus on general education, continuing education based on the advantages brought by the information society and preserving the identity language; (5) review the laws, rules and principles related to information, stimulate technological advances and protect the rights of individuals and organizations (Adrian Rozengardt et al., 2009).

Asian countries:

- In Korea: information policy is built on the basis of forming a link between scientific research activities and the production sector, which forms a network of scientific and technological information to serve the public. This network is formed based on four main platforms: supercomputers, advanced information integration, integration of scientific research and technical support and innovation in small and medium enterprises. Korea's science and technology information policy directs science and technology information organizations in this country to create value for customers, serving the information needs of organizations and individuals;

- In Japan: information policy directs scientific and technological information activities with production organizations and companies, in order to put research achievements into production.

- In China: this country's information policy was created to diversify the types of organizations providing information to the people with 03 basic areas: libraries, documents and information with a specific definition. This policy aims towards creating welfare for the community, complying with independent scientific management, developing information products and services on an integrated platform of resources, talents and advantages.

Measures to promote open access associated with the dissemination of knowledge in the community

The term "Open Access" is mentioned in international documents such as Budapest Open Access Initative-2003 (Bethesda Statement on Open Access Publishing) and the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities) (Tran Van Hai, 2017). This term refers to scientific and technological information resources (mainly scientific intellectuals) to promote the dissemination of scientific knowledge to the community.

In 2011, at the Conference on the use of copyright to promote access to information and creative content, WIPO made five basic proposals, which are:

(1) For any model of promoting acsees to and re-use of government information, having rigorous freedom of information laws in place is a sine qua non. There are still numerous countries in the world that have yet to adopt such laws.In those countries that already have such laws in place, public awareness thereof needs to be raied,

(2) Governments should be encouraged to clear the copyright status of public sector information and other intellectual property rights that might restrict the public from accessing and re-using public sector information;

(3) Governments should have the choice among three models: (1) placing all public sector information in the public domain; (2) excluding only official acts from copyright protection and allowing re-use of other types of public sector information under permissive (open) licenses or (3) protecting all public sector information but allowing re-use through copyright waivers or permissive (open) licenses. WIPO could play a dual role here by (a) drafting model laws, and (b) educating lawmakers in member states and/or providing technical assistance;

(4) Governments should be encouraged to set up their own national portals to facilitate the accessibility, dissemination and re-use of public sector information. However, the decision to set up and maintain a governmental portal should be taken following an assessment of the financial sustainability of the model.

(5) In those countries where public sector information is (fully or partially) protected by copyright, this should be released under an open license, either by way of a (standard) Creative Commons license or a tailored-made license. Here again, WIPO could play a role, either by publishing best practices or by developing suitable standard license models. Alternatively, countries might consider setting legal standards by regulatory means, such as laws or guidelines, permitting reutilization of public sector information under generous conditions. (WIPO, 2011)

In the analysis of open science policy in Europe prepared by SPARC Europe in August 2020, a total of 14 countries have open science policies, in which 11 are national policies of EU members, including Cyprus, Czech Republic, Spain, Finland, France, Netherlands, Ireland, Slovenia and Slovakia). In the European study area, 04 non-EU countries have national policies, which are Switzerland, Norway, Serbia and the UK. Most of the national policies studied addressed open access to research publications and data and promotion of open education, open science, open government, open data information (of the Government), open justice, etc. is among the issues mentioned. Exceptions are also mentioned, in which it is necessary to mention privacy, intellectual property rights, and trade secrets.

In 2021, UNESCO's open science recommendation was adopted by the 41st UNESCO Plenary Meeting, and affirmed the role and importance of open science as a vital tool to improve the quality and accessibility of science, especially scientific research results, to fill the gaps in science, technology and innovation among countries around the world[1].

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[1] https://zenodo.org/record/4005612#.YtYalHZBzIU

3.2. Identify trends

Through an overview of research work that mentions the content of ensuring intellectual freedom internationally, the following basic trends can be identified:

- The basic foundation for policy formation is to ensure the right to freedom and access to information of all organizations and individuals, in which freedom, equality and democratization of access are key factors on modern information infrastructure;

- The government plays the role of regulating and creating the driving force for development through promotion policies, and at the same time, civil society organizations and the private sector play an important role in providing information , information products and services to meet society's information access requirements;

- Information provision institutions must be established on the basis of organizations with high community service such as libraries, archives, information centers, museums, etc. and closely associated with research activities, like a bridge to bring scientific and technological knowledge to production and business to serve the needs of society;

- Open access is considered an important and key factor for intellectual freedom, especially in disseminating scientific knowledge to the community without financial, legal and technical barriers.

4. RESEARCH RESULTS

4.1. Theoretical basis of the Policy to ensure intellectual freedom to meet the requirements of sustainable development

4.1.1. The concept of intellectual freedom

According to the Merriam-Webster dictionary, intellectual freedom is defined as *Freedom that allows people to think about or study what they want* [1]. Intellectual freedom is mentioned in the Declaration on Libraries and Intellectual Freedom of the International Federation of Library Associations and Institutions (IFLA) issued by the Commission on the Right to Freedom and Access to Information,drafted and approved by the IFLA/FAIFE on March 25, 1999. In this document, IFLA affirms that human beings have a fundamental right to access knowledge and creative ideas, and at the same time emphasizes that the commitment to Intellectual freedom is the responsibility of information professionals and librarians worldwide. In 2003, with the explosion of the Internet, IFLA issued the Internet Declaration (The Internet Manifesto) which affirms that Intellectual freedom is the right of each individual to reserve and express opinions, be able to search and receive information; that is the basis of democracy; it is also the basic content of the library service (IFLA, 1999).

According to the American Library Association (ALA), intellectual freedom includes the freedom to hold, receive, and disseminate ideas without restriction (ALA, 2007). This is considered as one of the indispensable basic foundations of a democratic society, with intellectual freedom aiming at ensuring that each and everyone in the society has access to intellectual information, which is considered an important foundation for the development of intellectual property. Freedom of expression, freedom of speech, freedom of the press, freedom of information and rights are related to learning, scientific research and the development of human capability . In terms of international law, Article 19 of the 1948 Universal Declaration of Human Rights affirms the rights to freedom of opinion, expression, freedom to seek, receive, and impart information and ideas[2]. In addition, intellectual freedom is also emphasized by ALA in the issue of academic freedom, Internet freedom and open source software in promoting the development of information and knowledge in each country. Intellectual Freedom can exist only where two essential conditions are met: First, that all individuals have the right to hold their belief on any subject and to convey their ideas in any form they deem approriate; and Second, that society makes an equal commitment to the right of unrestricted access to information and ideas regardless of the communication medium used, the content of work, and the viewpoints of both the author and the receiver of information (ALA, 2015).

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[1]: https://www.merriam-webster.com/dictionary/intellectual%20freedom, Access 25/6/2022
[2] Universal Declaration of Human Rights (1948), đường dẫn:
https://www.ohchr.org/sites/default/files/UDHR/Documents/UDHR_Translations/eng.pdf (Article 19), truy cập ngày 15/5/2022

It can be said that intellectual freedom is a very broad subject, covering many different industries and fields. Within the scope of the research, the authors approach and refer to intellectual freedom as a basic right of citizens, in accessing and using intellectual information to support learning, scientific research to realizing the sustainable development goals set by the United Nations regarding education balance.

Intellectual freedom is related to the right to access and use intellectual information, but in terms of national and international law, these rights have limitations, specifically:

The International Covenant on Civil and Political Rights affirms that "The exercise of the rights set forth in paragraph 2 of this Article (freedom of information) comes with special obligations." This may result in certain restrictions, which, however, must be required by law to (a) Respect the rights or reputations of others; (b) Protect national security or public order, public health or morals (Law School, 2011).

In terms of Vietnamese law, Clause 2, Article 14 and Clause 4, Article 15 of the 2013 Constitution stipulate that the exercise of human rights and citizens' rights does not infringe upon the rights and interests of Viet Nam and other nations or the rights of other individuals; Human rights and civil rights can only be restricted according to the provisions of law in case of necessity for reasons of national defense, security, social order and safety, social ethics and public health.

4.1.2. The role of ensuring intellectual freedom associated with sustainable development

a) Policy to ensure intellectual freedom

Emphasizing the role of intellectual freedom in creating a foundation for the implementation of human rights and citizens' fundamental rights in accessing and disseminating information, knowledge, academic freedom, and freedom of speech, thereby realizing the goal of sustainable development, ensuring intellectual freedom is one of the requirements set forth when building a policy system on education, science and technology, information and media of each country.

Regarding the approach of this research, the Policy to ensure intellectual freedom is a set of measures created by the State to affect the process of system formation, innovation and standardization of activities, ensuring resources in promoting the guarantee of people's intellectual freedom-related rights towards the goal of sustainable development (Vu Cao Dam, 2009).

Measures of policy to ensure intellectual freedom are identified in two aspects, which are:

(i) Promoting people's free access to information through the development of a scientific and technological information system to serve the community, such as a system of public libraries, specialized libraries, science and technology information centers, storage systems, etc.

(ii) Promoting open access, open science towards free access to information for science and technology sources, especially those generated from the public sector. This measure aims to overcome financial, physical and especially legal barriers (issues related to intellectual property) related to information access.

In addition to implementation process to assure the aspects above, the policy to ensure intellectual freedom also includes resources such as human resources, financial resources, physical facilities, and technological infrastructure to ensure for citizens to exercise their intellectual freedom-related rights.

b) Ensuring *intellectual freedom with sustainable development*

The concept of "sustainable development" was first mentioned and developed in Europe from the 17th and 18th centuries in the field of sustainable forest management to cope with the challenge of increasingly scarce forest resources in the UK. In his studies, John Evelyn (1662) made the point that "sowing and planting should be the national duty of all landowners to prevent overexploitation from destroying nature" (Ulrich Grober, 2007, John Blewitt, 2015). In 1987, the United Nations World Commission on Environment and Development published the "Our Common Future" report (also known as the Brudland Report) in which the definition was given as follows: Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (United Nations General Assembly, 1987). Sustainable development aims at material and spiritual adequacy, and equality of citizens in accessing cultural values, education and harmony between people and nature, in which it is necessary to mention the areas in sustainable development including (i) sustainable economic development, (ii) sustainable social development; (iii) environmentally sustainable development; (iv) sustainable development in terms of security and defense.

The Sustainable Development Goals (SDGs) consist of 17 goals set by the United Nations General Assembly in 2015 and are expected to be achieved by 2030 (the 2030 agenda). Among them, education for

sustainable development (ESD) is one of the most important content to encourage changes, including knowledge, skills, and attitudes to create a sustainable development a more equitable society for all. ESD aims at the balance, equality as well as integration with the goals in economic, social, environmental development (Alexander Leicht, et al., 2018).

Ensuring intellectual freedom plays an important role in promoting the realization of ESD-related goals. Among them, the following factors should be emphasized:

- Firstly, creating an environment to promote educational activities, especially creating a lifelong learning environment, thereby forming a learning society that meets the development requirements of the information society and the knowledge economy.

- Second, providing equal learning opportunities for people, giving everyone the opportunity to pursue their studies, improve their abilities and improve their lives.

- Third, creating a platform and support tools for people to have the opportunity for lifelong learning. These tools are identified, including (i) a system of institutions for people to access information and for learning such as libraries, archives, scientific information centers and technology and cultural centers, etc.; (ii) a system of scientific and technological information sources for the dissemination of knowledge to the community; (iii) facilities and information technology infrastructure, enabling people to diversify their methods of accessing information, making learning activities possible in all forms and at all times.

4.2 Policies to ensure intellectual freedom in Vietnam

In Vietnam, the Policies to ensure intellectual freedom is institutionalized in many different documents in two aspects: (1) Ensuring free access to intellectual information (scientific and technological information) through the development of a system of information provisioning institutions, infrastructure development, building a data system associated with digital transformation, and (2) Ensuring the freedom of information through creating a platform to encourage open access associated with protection of intellectual property rights (copyright).

4.2.1. Ensuring freedom of access to knowledge and information (science and technology)

a) Current status of the policy

The Constitution of the Socialist Republic of Vietnam has 02 contents institutionalizing the freedom to access scientific and technological information. Article 25 announces that citizens have the right to freely access information[1], Article 39 declares citizens have the right and obligation to study; and Article 40 stipulates that everyone has the right to research science and technology, create literature and art and enjoy benefits from such activities. To concretize these contents, Article 8 of the Law on Access to Information of 2016 stipulates that "citizens have the right to be provided with complete, accurate and timely information; complaints and denunciations of violations of the law on access to information"; related to access to scientific and technological information, Article 32 of Decree 11/2014/ND-CP dated February 18, 2014 of the Government on science and technology information activities (hereinafter referred to as Decree No. 11) also mentions the rights of organizations and individuals to exploit scientific and technological information: (1) To be required to provide scientific and technological information to serve their lawful needs; (2) have access to scientific and technological information generated by the state budget in accordance with the provisions of law.

Corresponding to the recognition of the right to access information, Vietnamese law has provisions to ensure the enforcement of these rights. Article 3 of the Law on Access to Information 2016 has identified basic principles in ensuring the right to access information such as: (1) all citizens are equal, without discrimination in the exercise of the right to access information. believe; (2) Information provided must be accurate and timely; (3) The provision of information must be timely, transparent and convenient for citizens; in accordance with the order and procedures as prescribed by law; (4) the restriction of the right to access to information must be prescribed by law in case of necessity for reasons of national defense, security, social order and safety, social ethics, and public health; (5) the exercise of citizens' right to access information must not infringe upon the national interests, the nation, the legitimate rights and interests of agencies, organizations or other people; (6) The State creates conditions for people with disabilities, people

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[1] Article 25: Citizens have the right to freedom of speech, freedom of the press, access to information, assembly, association, and demonstration. The exercise of these rights is provided for by law.

living in border areas, islands, mountainous areas and areas with extremely difficult socio-economic conditions to exercise their right to access information. Around this principle, the Law on Access to Information has stipulated to ensure the right to access information in general: such as: determining the right exerciser (Article 4), determining the scope of access to information (Article 5 , 6 and 7), scope and responsibility for providing information (Article 9), ways of accessing information (Article 10) and defining measures for information disclosure, providing information upon request and responsibilities of relevant agencies and organizations in ensuring the exercise of citizens' right to access information.

In terms of specialized legislation on scientific and technological information, Decree 11 and documents related to scientific and technological information activities have specified measures to ensure that people have the right to access scientific and technological information. In addition to Decree 11, the 2019 Library Law is also one of the most important documents, creating factors to promote the provision of scientific and technological information to the people. These documents have aimed to ensure the right to access to scientific and technological information in 03 elements (i) standardization of the information supply network; (ii) standardization of professional activities; (iii) securing resources for operations.

(i) Standardizing science and technology information supply network

Clause 1, Article 22 of Decree 11 has defined a network to perform the science and technology information function, including various types of organizations performing the function of national, ministerial, and national scientific and technological information focal points, organizations at the provincial level performing the function of other public scientific and technological information focal points; organizations performing the science and technology information function established by non-state organizations, enterprises and other organizations.
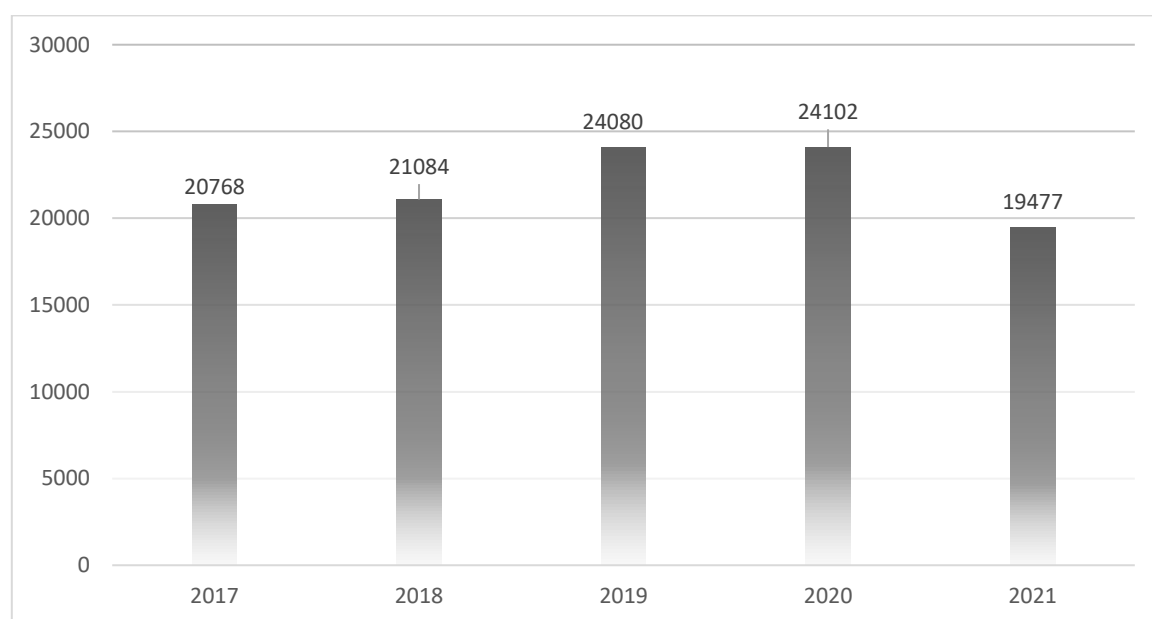
Clause 1, Article 9 of the Library Law also stipulates the library network with 09 types of libraries, including Vietnam National Library, public libraries, specialized libraries; library of the people's armed forces; libraries of higher education institutions; libraries of preschool educational institutions, general education institutions, vocational education institutions and other educational institutions; private public libraries and community libraries; libraries of foreign organizations and individuals serving Vietnamese people.

On the basis of these two important regulations, a network of information supply institutions has been formed in Vietnam in which, for organizations performing the function of scientific and technological information focal point, 01 organization performing the function of national goals regarding scientific and technological information (the Department of Scientific and Technological Information) is established. Besides, there are 30 organizations performing the function of science and technology information focal point at ministerial level1, 63 organizations performing the function of provincial science and technology information focal point, over 400 information organizations are related to science and technology information in universities. In addition, there are scientific and technological information organizations belonging to research institutes and other social agencies and organizations. These organizations exist under different models including department model, department under the Ministry or a part of a research institute. The model is a public non-business unit such as an information center/statistical information center of science and technology or center for application of science and technology informatics.

About the library network (within the research scope, the authors only refer to the library system serving the community), as of 2021, the library network serving the community has about 19,477 libraries, including 01 National Library of Vietnam, 63 provincial/city libraries, 677 district and town libraries, and 2,650 libraries in communes, wards and towns, 16,092 community libraries, reading rooms in communes, villages and hamlets, and 282 private libraries with community service2. The development of the library network in Vietnam in 05 years (2017-2021) (in the 02 years before the Library Law 2019 and 03 years after the promulgation) is shown in the following chart:

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[1] http://www.vista.gov.vn/thong-bao/muc/danh-sach-to-chuc-thuc-hien-chuc- nang-dau-moi-thong-tin-khoa-hoc-va-cong-nghe-2.html (Accessed 23/5/2020)
[2] Source: Statistics of the Ministry of Culture, Sports and Tourism of Vietnam

Graph 4.1. Network of libraries to serve the community to access information

Source: Data of the Ministry of Culture, Sports and Tourism of Vietnam for the period 2017-2021

When we analyze chart 4.1, it can be seen that in 5 years (the period 2017-2021)1, the library network serving the community in Vietnam has had certain changes. If we choose 2019 with the landmark of the Law on Libraries for comparison, the period from 2017-2019 the library network has a slight increase (average increase of 14%/year). Then in the following period (2019-2021), it tends to decrease, especially in 2021 (down 20% compared to 2020 and previous years). One of the reasons that can be easily identified is the impact of the Covid-19 pandemic on the library network in Vietnam (mostly still serving in the traditional form), especially the group of libraries.

(ii) Standardization of professional activities:

Institutions ensure the provision of information to the people through professional and professional activities, thereby ensuring the people's access to information and knowledge. Article 5 of Decree 11 stipulates the types of scientific and technological information activities, including (1) collecting, updating and processing data, data, facts and information in order to create and development of scientific and technological information sources; (2) researching, analyzing and synthesizing scientific and technological information for forecasting, policy making, management leadership, scientific research. (3) Developing information infrastructure, building building databases and websites on science and technology; establishing and deploying scientific and technological information networks; apply information and communication technology, build electronic libraries and digital libraries; (4) searching, looking up instructions, exploiting and using scientific and technological information; (5) providing exchange and sharing of scientific and technological information (6) disseminating scientific and technological information and knowledge.

The Library Law 2019 also specifically stipulates the contents of professional and professional activities of the library, in which, Article 24 of the Law stipulates the basic principles in library activities such as: get library users centered; create a friendly and equal environment; ensure the right to access and use the library of organizations and individuals; information resources are collected, processed, stored, preserved and disseminated in compliance with national standards, technical regulations and relevant professional standards in the field of libraries; regularly innovate in library processes, products and services on the basis

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¹ The authors chose this time period, because in this period, the Ministry of Culture, Sports and Tourism of Vietnam is also implementing the Project on developing reading culture in the community until 2020, with an orientation to 2020. 2030 (Decision No. 329/QD-TTg dated March 15, 2020 of the Prime Minister, in which the establishment of a community library network is also one of the important contents to implement the Project.

of application of advanced scientific and technological achievements; implementation of library interoperability; comply with the provisions of the law on intellectual property, science and technology, information technology, network security and other relevant laws. The Law on Libraries also stipulates professional and library activities corresponding to each Article such as: Building information resources (Article 25), handling information resources and organizing information retrieval systems. (Article 26), Preservation of information resources (Article 27), Creation and provision of library information products and library services (Article 28), Library communication (Article 29), Library communication (Article 33). Regulations on standardization of professional and professional activities make an important contribution to institutions providing information to serve the people. According to statistics of the Ministry of Culture, Sports and Tourism, the total number of people served by the library network in the period from 2017 to 2021 is shown in the following chart:
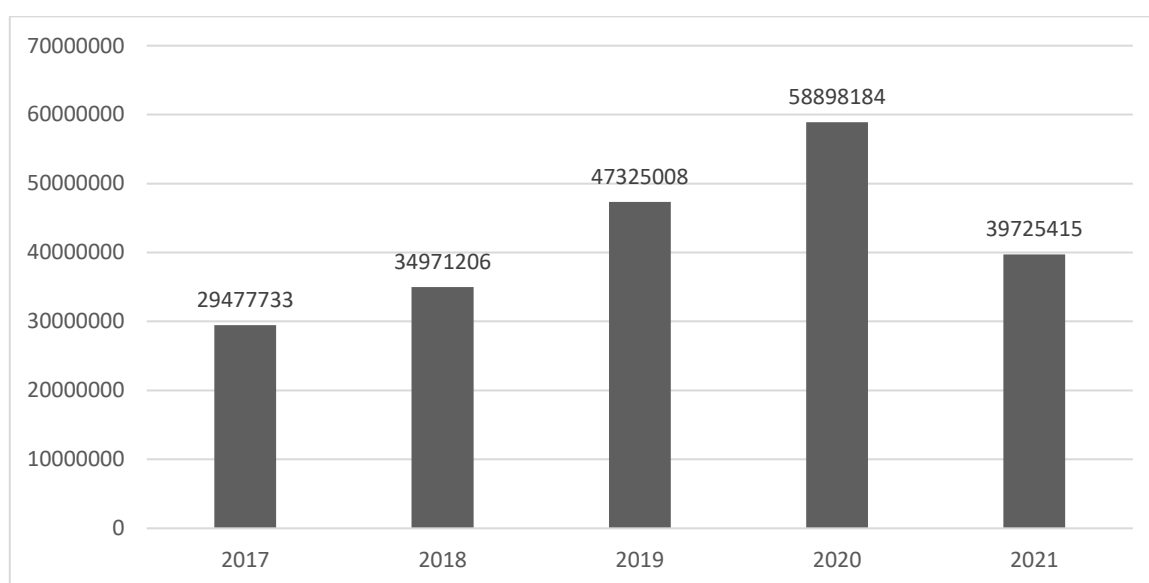
Graph 4.2. The effectiveness of the library system's information supply activities for the community in the period 2017-2021
Source: Data from the Ministry of Culture, Sports and Tourism of Vietnam in the period 2017-2021

When we analyze chart 4.2., it can be seen that in the period 2017-2020, the number of library users has grown significantly in 3 years, increasing by 103%. However, by 2021, due to the impact of the Covid-19 pandemic in Vietnam, the number of library users also has a significant decrease (39 million). It should be emphasized that, at present, the supply of Information in the traditional form is still the main method of the library, so the performance of the library network will be affected by the Covid-19 pandemic in Vietnam in 2020.

(iii) Ensuring resources for information provision activities
Resources for information activities are emphasized including assurance of human resources, financial resources and physical facilities.
For human resources: Article 29 of Decree 11 has defined individuals engaged in scientific and technological information activities including civil servants, public employees, employees operating and providing scientific information services and technology, serving state management, scientific research and technological development. At the National Science and Technology Information Administration, there are about 160 people including civil servants, public employees and (contractual) employees working in administrative departments, administrative offices and non-business units under the Department. At the local level, the human resources for science and technology information work at the Departments of Science and Technology and departments under the Department of Science and Technology (including information and statistics) are 594 people.

At universities, human resources for science and technology information are concentrated mainly in libraries and library information centers. According to data reported to serve the development of the Library Industry Master Plan to 2025, with a vision to 2030 (built by the Ministry of Culture, Sports and Tourism in 2015, updated in 2017), the country has about approximately 7000 librarians, an average of 17 people/library.

As for the community library system, there are about 20,000 people working at the National Library, the public library system at all levels (province, district, commune), community library, reading room at the grassroots level, private libraries that serve the community.

As for financial resources: Article 20 of Decree 11 has identified funding sources for science and technology information activities, including from the state budget, revenue from scientific and public service activities, technology and funding sources of domestic and foreign organizations and individuals, and at the same time determining the state budget for scientific and technological information activities shall be recorded as a separate expenditure item in the state budget for science and technology of ministries, sectors and localities.

In addition, point c, clause 1 and point i, clause 2, Article 4 of Decree 95/2014/ND-CP dated October 17, 2014 of the Government regulating investment and financial mechanism for scientific and technological activities (Decree 95) has determined the formation of information infrastructure, national database on statistics of science and technology; propagating and disseminating knowledge, communication, and scientific and technological information activities are the contents of state budget expenditure for science and technology activities.

In addition, Article 35 of the 2019 Library Law also defines the library's financial sources is drawn from the state budget, revenue from library services, funding sources, aid, donations, and contributions. from domestic and foreign organizations and individuals as dictated by law and other lawful sources of income.

As for physical resources: Decree 11 also stipulates the national information infrastructure on science and technology, consists of (1) the national database on scientific and technological information; scientific and technological information databases; (2) system of technical processing equipment to process, transmit and store information. These regulations have created the foundation for building a database system of scientific and technological information. To date, this database has grown with 255,550 records, including about 180,000 full-text records, with additional articles about 19,000 records/year covering most fields of science, technology and technical and economic sectors[1]. Regulations on physical resources also facilitate the development of the world's leading databases such as Science Direct and Scopus, Spiner Nature, IEE Xploer, Proquest Central, ACS, Web of Science, etc. Networks Science and technology information is also developed, such as:Vina Ren with many services such as Eduroam, E-Culture, E-Learning, etc.

b) Assessment of the current measure

Strengths:

Measures to promote access to scientific and technological information in Vietnam are institutionalized in documents of high legal value such as the Constitution, the 2016 Law on Access to Information, the Law on Libraries in 2019, the Resolution Decree 11 and its guiding documents have basically mentioned the most important issues in ensuring access to information and knowledge for both the general public and specialized audiences. The legal system that concretizes these issues is relatively adequate to ensure enforcement in Vietnam:

- Article 25 of the Constitution provides for the right to access information[2] The exercise of these rights is prescribed by law. In addition, the Constitution Article 40 stipulates the right to research science and technology, Article 62 stipulates that the State gives priority to investment and encourages organizations and individuals to invest in research, development, transfer and application. effective scientific and technological achievements; guarantee the right to scientific and technological research; protection of intellectual property rights. This is considered the basic legal foundation in promoting the right to access scientific and technological information.

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[1] Ministry of Science and Technology (2018), Science and Technology White Paper 2018, Science and Technology Publishing House.
[2] Article 25 of the Constitution: "Citizens have the right to freedom of speech, freedom of the press, access to information, assembly, association, and demonstration".

- The Law on Access to Information 2016 is an important document that concretizes the right to access information as stated in the Constitution, in which the Law on Access to Information has an extremely basic principle, which goes "*every citizen have equal, non-discriminatory rights in the exercise of the right to access information*". In addition, regarding access to intellectual information, the Library Law 2019 also stipulates the principles of library operation that are "*centered on library users; create an equal friendly environment; ensuring the right to access and use the library of organizations and individuals*". At the same time, this Law also stipulates the right to access information (knowledge) of specific subjects such as people with disabilities, children, ethnic people, people who are serving prison sentences. In addition, Article 30 of Decree 11 also directly stipulates the right to access scientific and technological information of organizations and individuals.

Weaknesses:

The legal system aimed at concretizing measures related to information access is still spread out, lacks uniformity and consistency, and the content of legal regulations is still contradictory and overlapping. For example:

Firstly, regulations on the right to access scientific and technological information are mentioned in many different documents including general and specialized laws, leading to their application in professional and professional activities.

The legal provisions on standardization of scientific and technological information activities are concentrated in Chapter II (from Articles 5 to 12) of Decree 11, but many contents have not been written yet, such as the implementation of guidelines about: collecting, processing and publishing information on application of results of performing scientific and technological tasks (Article 9), science and technology information services (Article 12). Regulations related to library professional and professional activities aimed at ensuring access to information for the community are stated in the Library Law 2019 such as building information resources (Article 25), processing information resources and organization of information retrieval system (Article 26), creation and provision of library information products and library services (Article 27), library inter-library (Article 29) and communication library (Article 33). So far, there is no document specifying criteria, standards, content, and implementation process.

Regulations on standardization of scientific and technological information networks are not only governed by specialized laws on organizational models (Decree 11), but also by specialized documents on internal affairs, documents related to the autonomy mechanism, for public non-business units. So it is difficult to unify and standardize the organizational model.

Regulations on ensuring resources for scientific and technological information activities are regulated in many different documents, but there is no specific regulation. For example, the issue of human resources for science and technology information activities is mainly governed by the specialized law on internal affairs, but there are no regulations on standards for professional titles of scientific and technological information officers; The issue of financial mechanism is mainly governed by regulations on the financial mechanism for scientific and technological activities in general, but not yet specific to scientific and technological information activities.

Secondly, there is an overlapping contradiction between legal documents, in which the contradiction between general provisions on access to information and specialized legal regulations on scientific and technological information. Clause 1, Article 6 of Decree 13/2018/ND-CP dated January 23, 2018 of the Government detailing and implementing measures to implement the Law on Access to Information (Decree 13) stipulating the establishment of a taxonomy list , update information that stipulates that the listing of information must be made public, and the list of conditional access instead of the listing of information that is not accessible; this narrows the scope of access and cannot determine the limits of organizations and individuals' access to scientific and technological information. This content completely contradicts the provisions of Clauses 1 and 2, Article 32 of Decree 11 (on the rights and obligations of organizations and individuals exploiting scientific and technological information).

Third, the document regulating access to scientific and technological information is still of low legal value (Decree 11). In Decree 11, there are articles and clauses stipulating the rights and obligations of organizations and individuals (Articles 31, 32 and 33) that are not really appropriate, because usually, in the legal document system in Vietnam, citizens' rights and obligations are often recognized and guaranteed

to be implemented in a legal document called the Law. Moreover, because it exists in the form of a document as a Decree, there is no "forbidden" regulation to limit the rights of organizations and individuals.

4.2.2 Ensuring freedom of access to information by creating a platform to encourage open access associated with the protection of intellectual property rights (copyright)

a) Current policies

Content on encouraging open access is mentioned in documents and orientations of the State related to the implementation of projects and strategies in promoting cultural and educational development in Vietnam, namely:

The "Development of a digital Vietnamese knowledge system" project (based on Decision No. 677/QD-TTg dated May 18, 2017 of the Prime Minister). This is considered a fundamental project in the development of the information resource system. This project advocates for open educational resources thereby promoting open access and free access to information so that people can continue learning lifelong, master knowledge, enhance creativity, research and apply science and technology.

The National Digital Transformation Program to 2025, with orientation to 2030 (Decision No. 749/QD-TTg on June 3, 2020) has identified open data as one of the tasks and solutions to develop digital government, integrate open data components of digitized Vietnamese knowledge system, provide open data, develop integrated national data sharing platform, connect with national database, record databases of ministries, branches and localities in order to connect and share information and data for exploitation and use[1].

The project called "Building a learning society in the 2021-2030 period (according to the Prime Minister's Decision No. 1373/QD-TTg dated July 30, 2021) also sets out the goal of creating conditions for everyone to have equal opportunities and equality in accessing an open, diverse, flexible and interconnected education system; at the same time, defining the task of promoting digital transformation and application of information technology in the organization of lifelong learning activities, in which higher education institutions "strengthen the construction, exploitation, integration, sharing share open educational resources and open learning materials with educational institutions, organizations and individuals at home and abroad; actively participate in the project to digitize Vietnamese knowledge system and Vietnamize international open educational resources"[2].

The program on digital transformation of the library industry to 2025, with orientation to 2030 (Decision No. 206/QD-TTg dated February 11, 2021 of the Prime Minister) also orients solutions to develop digital data of libraries, which focuses on promoting projects to digitize documents and resources, library information products on the basis of new creation and integration with existing digital data in an open direction, opening educational resources to share and use to spread and propagate culture, and contributing to improving people's intellectual, material and spiritual life[3].

In addition, in the policy on development of the library career specified in Article 5 of the 2019 of Library Law, there is content that the State invests in public libraries in library modernization; building digital libraries, shared information resources, opening information resources; linking domestic and foreign libraries; regulations on construction of information resources specified in Article 25 include the following contents: *collection of open information resources, resources belonging to the public, and other valuable information resources.*

b) Evaluation of measures

In terms of orientation, scientific and technological achievements in the context of the fourth industrial revolution and the trend of digital transformation related to the issue of open access, development of open educational resources, open learning materials, serving the dissemination of knowledge, supporting people's lifelong learning, there have been many important documents and projects of the Prime Minister, the State's

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[1] Clause 3, Section V, Article 1 of Decision No. 749/QD-TTg dated June 3, 2020 of the Prime Minister approving the National Digital Transformation Program to 2025, with orientation to 2030.

[2] Point a, Clause 3, Section III, Article 1 of the Prime Minister's Decision No. 1373/QD-TTg dated July 30, 2021 approving the Project "building a learning society in the 2021-2030 period".

[3] Point a, Clause 4, Section II, Article 1 of Decision No. 206/QD-TTg dated February 11, 2021 of the Prime Minister approving the "program for digital transformation of the library sector by 2025, with orientation to 2030.

policies in promoting the library career with the role of providing and ensuring the freedom of information for the people in the continuous development of libraries.

However, through review, so far, in Vietnam, there is no specific legal document regulating or guiding activities to promote open access, develop open educational resources, open learning materials, etc. serving access to information and knowledge. In the context of digital transformation, the issue of copyright protection in the digital environment to promote the development of open educational resources and open learning materials is also a problem because copyright protection emphasizes the protection, promotion and encouragement of the creativity of organizations and individuals for literary, artistic and scientific works. Meanwhile, the requirement of digital transformation, promotion of open access, development of open educational resources, open learning materials, etc. are important factors promoting the assurance of access to information and knowledge of the community. In some respects, these two issues always have certain conflicts, which require a legal framework to resolve thoroughly.

However, until now, thoroughly resolving the conflicts between copyright regulations and the requirements of digital transformation and data digitization in general and in accessing and spreading knowledge to the community in particular still faces many disadvantages, which may include:

(1) The right of reproduction to create copies of works in digital form conflicts with the requirements of digital transformation of the library, including the requirements for the development of digital and interconnected information resources, the sharing of this material in the library system to serve the community. The consequence of this conflict is that the number of digital information resources in the library compared to the proportion of information resources in general in the library system in Vietnam is still relatively modest, as shown in the following chart:
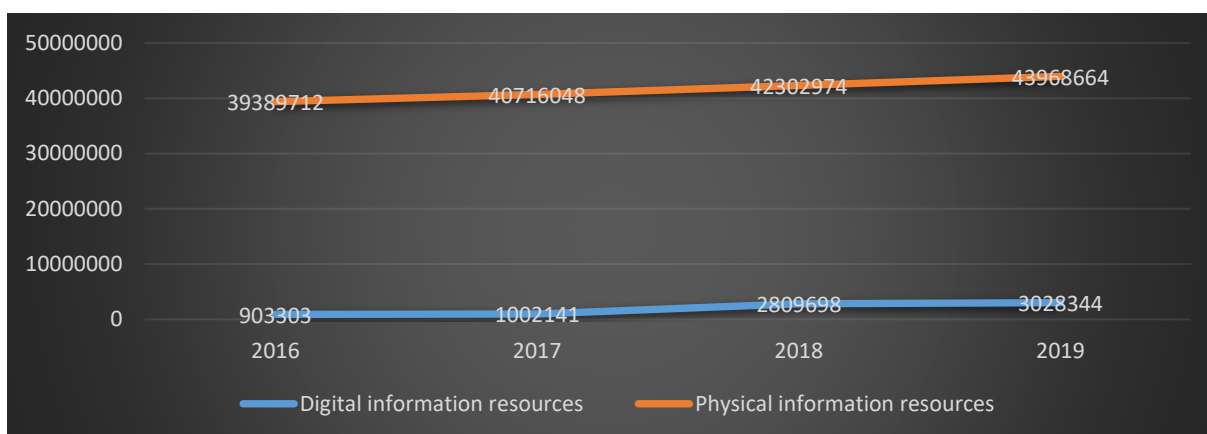
Graph 4.3. The effectiveness of the library system's information supply activities for the community in the period 2017-2021
Source: Statistics of the Ministry of Culture, Sports and Tourism of Vietnam from 2016 to 2019

(2) The right to communicate works to the public conflicts with the library's public dissemination of knowledge. It should be emphasized that knowledge information must be circulated and circulated to promote its value. Libraries, with their media role, will help bring scientific knowledge to the community. This content is also reflected in Article 33 of the Law on Libraries, but this issue conflicts with the right to transmit works to the public. This right shall be exercised by the owner of the exclusive work according to the provisions of Point dd Clause 1 and Clause 2 Article 20 of the Intellectual Property Law.

(3) The right to make derivative works conflicts with the requirements to develop library information products. The manifestation of this conflict is that the right to make derivative works specified at Point a, Clause 1, Article 20 of the Intellectual Property Law is exercised by the owner of the exclusive work. While the library not only provides information products, but the development of these information products also creates derivative works and is the subject of copyright. In other words, in the absence of a thorough resolution of this conflict, the library will not be able to develop information products to serve the needs of the community to access information.

5. DISCUSSION AND POLICY FRAMEWORK PROPOSALS

Through analyzing the current state of regulations in Vietnam, the following arguments can be made:

(1) In Vietnam, there is a policy to ensure intellectual freedom, but it is not really compatible with the trends of policy-making in the world. The real task is to complete the legal framework on the basis of research, amend the provisions of the Law on Access to Information, and issue the Law on Scientific and Technological Information Activities (replacing the Decree No. determination 11).

(2) The content of the policy is expressed in many different documents with high legal value, but there are contradictions and conflicts leading to a reduction in the effectiveness and efficiency of the implementation organization.

Through comparative study, the research team would like to make recommendations to improve in the following aspects:

- The philosophy of the policy:

+ Recognizing that intellectual freedom is one of the fundamental and key rights for the realization of other basic human rights and citizens' rights such as the right to study, the right to scientific research, to enjoy the cultural values and freedoms of expression.

+ The State plays a regulatory and motivating role in ensuring intellectual freedom by establishing an information organization system and ensuring information supply activities; at the same time creating conditions for organizations and individuals to participate in providing information to serve the needs of learning and scientific research.

+ Forming an open access system for scientific and technological information sources using the state budget, in association with the dissemination of scientific and technological knowledge to the community.

- Proposed policy framework:

+ The policy of establishing a community-oriented information supplies organization with a high diversity including both state-established and private organizations, thereby ensuring in the provision of information to the general public.

+ Policies on standardization, communication and digital transformation in the provision of information to the people.

+ Policies to promote open access to scientific and technological information sources using the State budget; policies to deal with copyright issues in library-information activities in the direction of "guaranteeing a balance of interests" between creators and the community, so that people can access information to serve the needs of the public learning while still encouraging creative subjects, creating knowledge for the community.

6. CONCLUSION AND RECOMMENDATION

"Intellectual freedom" is both a fundamental right of citizens mentioned in international documents and a philosophy contained in policies on ensuring freedom of access to information towards freedom of study, scientific research, freedom of expression, etc. These rights will make an important contribution to the formation of a learning society towards the realization of sustainable development goals. During the process of researching policies to ensure intellectual freedom in Vietnam, through the analysis of documents that can enact policy content, the research team has pointed out inadequacies and overlaps in the the legal system, then propose a complete policy framework to overcome those flaws. Through this research result, the research team makes recommendations that the State of Vietnam needs to look into and propose to develop a Law on scientific and technological information activities (on the basis of upgrading and replacing Current Decree 11) to improve the institution and legal framework strong enough to ensure freedom of information, to establish an open access system towards universalizing scientific and technological knowledge to the community; and at the same time, perfecting the legal system on access to information to ensure the compatibility between the current Law on Access to Information 2016 and scientific and technological information activities.

Due to limitations in the research framework and the complexity of content related to intellectual freedom, this article has not been able to analyze and identify the effectiveness of access to information, the implementation of this policy, and the community's assessment of the system of ensuring access to information to ensure intellectual freedom. These areas will be thoroughly identified in future studies./.

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CORRECTIVE FEEDBACK ON STUDENTS' ERRORS IN ONLINE AND ONSITE ENGLISH-SPEAKING LESSONS AT FFL - IUH: ARE THERE ANY DIFFERENCES?

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Abstract. As there have not been so many studies on comparing corrective feedback in face-to-face and online English-speaking classes, the research was conducted to bridge the gap and identify factors supporting or restricting error correction activities. The research applied qualitative approach examining deeply teachers' evaluations and experience in corrective feedback activities in the two different teaching contexts. Data collection was carried out with a survey followed by an individual open-ended interview with nine teachers who have experienced teaching English speaking skill in both online and in-person classes. Although findings of the study showed that there were no differences in the time and frequency when errors were corrected in the two learning modes – online and onsite, non-verbal language failures were claimed to be corrected less frequently because they could not see all their students on the screen and students even turned their cameras off when speaking. In addition, peer correction became more declined due to time limit and weak peer interaction and feedback was given in the form of texts in the chat-box more frequently in online classes. When it comes to benefits and obstacles, online classes have posed both significant merits and demerits for oral error correction to be considered. Solutions to overcome the drawbacks such as using supportive online teaching tools and techniques should be applied for more effective corrective feedback activities.

Keywords. corrective feedback, error correction, teaching English online, teaching speaking skill

1. INTRODUCTION

As the saying goes, "To err is human", errors can be found in every aspect of life, and language learning is not an exception. When learners make errors, which are considered as an integral part of learning a target language, it signifies a sign of learners' language learning (Khansir & Pakdel, 2018). From such errors, students can visualize more clearly of what should be improved in the way the language is used, especially with the help of their teachers. However, teachers' jobs are not merely pointing them out and giving correction but there should generally be efficient techniques for them to complete the role of giving corrective feedback and make students learn from their errors in an active way. For example, they need to identify which errors to be tolerated or corrected excessively, who to do the correction or whether to do it implicitly or explicitly. In fact, this issue has been thoroughly investigated with much attention paid to such aspects so as to deal with eorrors in such a tactful way (Chu, 2011; Gumbaridze, 2013; James, 1998; Lyster & Ranta, 1997; Krashen & Terrell, 1983; Tedick & de Gortari, 1998; Yoshida, 2008). These studies have generally looked into types of errors, ways in which corrective feedback has been given as well as the students' attitude towards such feedback activities. To focus more on students' communicative competence, besides corrective feedback on written errors, that on oral ones has also been widely studied (Chu, 2011; Gumbaridze, 2013; Lyster, Saito & Sato, 2013; Jing, Xiaodong, & Liu, 2016). Corrective feedback on such errors has been recognized essential in the development of teaching pedagogy. However, not every error needs corrective feedback and corrective feedback varies according to different types of errors. The amount, time, and type of corrective feedback, according to Değirmenci and Aydin (2017), also differ in various

situations. Besides the context of traditional classrooms, the advancement of technology has led to the emergence of online classrooms, which has become a more popular teaching and learning situation in EFL (English as a foreign language) context. There should be different types of corrective feedback in different tasks according to specific situations (Keyu and Xing, 2018). Importantly, as EFL speaking classes tend to include a variety of activities, identifying how corrective feedback is given in different speaking tasks is also very crucial (Bitchener, Young & Cameron, 2005). However, despite the significance of corrective feedback on students' errors has been acknowledged, Sheen (2011) and Vásquez and Harvey (2010) pointed out a remarkable gap between what had been found in research studies and what teachers' beliefs and practices were on oral corrective feedback. Thus, based on the research literature, the study of 'Corrective feedback on students' errors in online and onsite English-speaking lessons at FFL - IUH: Are there any differences?' was conducted with an effort of finding out how errors were handled in EFL speaking class in both contexts in reality. In particular, the study aimed at findings the answers for the research questions of (1) How are errors dealt with in synchronous EFL speaking lessons? and (2) What factors affect corrective feedback activities in speaking lessons?

2. LITERATURE REVIEW

Errors and mistakes

In the field of language education, an error is defined as a "noticeable deviation" from the grammar target language (Brown, 2000), "the production of a linguistic form which deviates from the correct form" (Allwright & Bailey, 1991, 84), a "linguistic form or content that differed from native speaker norms or facts" (Chaudron, 1986, 66), or when one "unconsciously breaks the unwritten rules" of the target language because of "imperfect leaning' (Tomlinson & Ellis, 1992, 259). Meanwhile, in the case of mistakes, the rules of the target language are wrongly made as a result of "non-linguistic factor" such as tiredness, carelessness, sickness, boredom, or even quickly writing and thinking (Brown, 2000). According to Brown (2000), a mistake refers to a "performance error that is either random guess or 'slip'; it is a failure to utilize a known system correctly" (p. 217). Therefore, while a learner may not be able to self-correct an error, he/she may have the ability to recognize and self-correct a mistake (Brown, 2000; Khansir, 2010; Huang & Liu, 2016; Khansir & Pakdel, 2018).

Importantly, according to Allwright and Bailey (2000), a great deal foreign language classes in the world are being taught by non-native speaking teachers, who provide a non-native model of the target language. Thus, the language being taught may itself actually deviate in a number of aspects from the "standard" English, depending, very much, on the proficiency of the non-native speaking teachers (Allwright & Bailey, 2000). As a result, error is used in this study as an umbrella concept to cover all of its variations of forms and/or sounds "unwanted by the teacher" (George, 1972) and all "behavior" pointed by the teacher as needing repair (Chaudron, 1986).

Sources of errors and types of corrective feedback

According to Gumbaridze (2013), errors may originate from one or combination of the following sources. Interference from L1 (or L1-based) is the first and the most frequent factor. This type of error occurs when a learner's L1 influences his/her production in the second or foreign language. The second factor causing error is complexity of the foreign language itself; and students get distracted by too many variables of the language. Overgeneralization or developmental error was ranged at the third place of frequency; this is when students learn a grammar rule then try to apply the rule to other forms. Fossilization comes the fourth in rating to describe the faulty forms that become so stable and fixed in a student's mind that he/she seems to be unable and even unwilling to correct such production. In addition, other causes related to low communicative competence and confidence, anxiety, fatigue, carelessness, feeling of inferiority and low self-esteem are also identified as the possible causes of errors (Gumbaridze, 2013; Khansir & Pakdel, 2018). When a teacher corrects students, Long (1977) presented a distinction between feedback and correction. While feedback is the case when teachers attempt to supply learners with information about the correct form, correction is based more on the outcome of feedback. However, most scholars shared the perspective that error correction was a form of feedback to learners (Edge, 1989; Johnson & Johnson, 1999; Ur, 1996;

Khansir & Pakdel, 2018). Ur (1996) argued that "feedback is information that is given to the learner about his or her performance of a learning task, usually with the objective of improving this performance" (p. 242). According to Ur (1996), feedback may function as both assessment and correction. In assessment, the teacher simply informed how well or badly the students have performed. However, with correction function, some specific information is provided on certain aspects of the learner's performance.

To note on the affective factors of giving feedback, Lewis (1992), Edge (1992), Doughty (1999), emphasized that correction should not be a kind of criticism or punishment. In Edge's argument, "teacher technique is as important as the learners' feeling that the teacher is trying to help them learn" (p. 21). Sharing this perspective, Pica (1994) highlighted the two following important notes for teachers. Firstly, helping students to recognize their own errors; secondly, correct them with meaningful, communicative strategies. Importantly, Gómez, Hernández, and Perales (2019) noted that if the teachers' attitudes were not positive towards corrective feedback in general or towards any specific strategy, they would not adopt that strategy in the language classroom. They reported that emotions, in most contexts, strongly impact the instructors' attitudes and actions towards corrective feedback. In 1997, Lyster and Ranta carried out an in-depth review of the literature and generated 5 of the framing questions that teachers needed to consider: (1) Should learners' errors be corrected? (2) When should learners' errors be corrected? (3) Which errors should be corrected? (4) How should errors be corrected? and (5) Who should do the correcting?

Should learners' errors be corrected?

Although some second language acquisition researchers such as Krashen (1982) and VanPatten (1992) disagreed about the role of corrective feedback in second and/or foreign language acquisition, other researchers argued that helping learners to notice their errors supported acquisition (Allwright & Bailey, 2000; Khansir & Pakdel, 2018, Marpinjun, 2015). According to Allwright and Bailey (2000), as language teachers, one of our central goals is to "help our learners move along the interlanguage continuum" and "provide them with the feedback they need" (p. 99). In line with Allwright and Bailey (2000), Amara (2015, 2018) and Azara and Molavia (2013) highlighted that there were three reasons that errors must be treated. First of all, it is due to the learner's expectation and they can feel disappointed or resentful if their errors are ignored. Secondly, if errors are left untreated, the defective language would be acquired as an input model. Thirdly, corrective feedback can speed up the process of more conscious language learning compared to the long time it takes for students to deduce the language on their own as in the case of acquisition.

When should errors be corrected?

The issue of whether a teacher should give corrective feedback immediately or should delay it received much attention and discussion from scholars and linguists in the field of language teaching (Doff, 1988; Harmer, 2007; Hendrickson, 1978; Huang, Hao & Liu, 2016; Lewis, 1992; Long, 1977; Méndez & Cruz, 2012; Zarrinabadi & Abdi, 2011). One of the most commonly agreed principles is that teacher should consider if the correction interferes with communication and if the teacher and students have time (Doff, 1988; Hendrickson, 1978; Sa'adah et al, 2018; Zarrinabadi & Abdi, 2011). It is highly recommended that delayed or postponed feedback should be employed during the fluency-oriented activities; in accuracy oriented activities, immediate feedback would take more effect (Gumbaridze, 2013). As Long (1977) points out, correction may become less effective if the time between the error and the correction increases. Lewis (1992) recommends teachers to "correct immediately during accuracy practices" (p. 94) since "in every case if the teacher jumps in immediately with a correction, an opportunity for real understanding is lost" (p. 91). However, Harmer (2007) believes that when a teacher interrupts students to correct their mistakes during communicative activities, such circumstances can raise students' stress level and stop acquisition.

What kind of errors should be corrected?

After a teacher believes that errors should be corrected, it is important for him/her to categorize types of errors that need treatment. Errors are recognized not only on different linguistic categories such as lexical, phonological, grammatical errors, but also on the differences of their origins. Richards (1971) classifies errors into three groups, namely (1) interference (errors caused by the effect of L1 on L2), (2) intra-lingual (errors from overgeneralization or ignorance of rules restriction), and (3) development (errors occur from mis-hypotheses about the target language). Touchie (1986), on the other hand, distinguishes errors as performance errors and competence errors. Accordingly, performance errors are easier to treat as they

mostly occur because of unsupportive learning conditions such as limited time and anxiety. Meanwhile, competence errors are more challenging to teachers as they show the insufficiency of language proficiency. Another method is dividing errors into global and local categories (Brown, 2007); while local errors do not prevent the message from being heard and understood, global errors hinder communication as they prevent comprehending of the message. As a result, Hendrickson (1978) and Krashen (1987) suggests teachers correct 'global' errors, "errors that are most stigmatized", errors that cause the most unwanted reaction, and errors that occur most customarily.

Who should give feedback?

Traditionally, teachers were responsible for correcting all errors of their students (Ellis, 1991; Khansir & Pakdel, 2018). However, the scholars also noted that the best strategy for error correction was to let the students recognize the error and self-correct. As Amara (2015) "self-correction is the best technique, because the student will remember it better" (p. 62). Then, another strategy is to give other students in classroom opportunities to help their classmates with errors. There are a number of advantages of peer correction such as encouraging cooperation learning, involving more students in listening to and thinking about the language, getting more important information about the learners' ability, educating learners giving feedback without hurting each other's feelings (Edge, 1990). In communicative language classrooms, the role of the teacher as error corrector is related to the roles of controller, assessor, organizer, prompter, participant, resource, tutor, and investigator (Değirmenci & Aydin, 2017; Harmer, 1991). In other words, each different role will take a different amount and employ a different strategy of self, peer, or teacher correction. For instance, a teacher as controller may employ more teacher correction than a teacher in participant or prompter role. Noticeably, "we must not forget that the main aim of correction is to facilitate the students to learn the new language item correctly. That is why it is important that after correction the teacher has to ask the student who originally made the error or mistake to give the correct response" (Amara, 2015, p. 62).

In what form should feedback be given?

Grammatically, Johnson and Johnson (1999) noted that corrective feedback "may focus on either meaning or form, and operate at any level: phoneme, morpheme, word, phrase, clause, sentence, or discourse" (p. 274). Strategically, although different scholars may classify types of feedbacks differently in different contexts, the consensus among the scholars is that corrective feedback can be classified into six categories; they are: explicit correction, recasts, elicitation, metalinguistic feedback, clarification requests, and repetition (Lyster & Ranta, 1997; Ohta, 2001; Chu, 2011; Yang, 2016). In explicit feedback, the teacher indicates that a learner's utterance is incorrect and explicitly gives the correct form. Meanwhile, in recast, the teacher implicitly repairs the ill-formed utterance. Elicitation is another strategy; the teacher uses eliciting skills to ask questions to allow students to complete or reformulate the incorrect utterance step by step. In metalinguistic feedback, the teacher explicitly explains what and where the incorrect form or sound is. To help students with the error, the teacher may also use a clarification request to ask for clarification about an incorrect form utterance. Finally, in repetition, the erroneous utterances are repeated with highlighted intonation for students to be aware of the error and then correct it.

Corrective feedback in online class

Recently, due to the increasing application of digital tools in English teaching and learning, researchers and linguists started moving from investigating oral corrective feedback in onsite classes (Muslem et al, 2017; Muyashoha & Sugianto, 2019) to online teaching environments (Aghajani & and Zoghipour, 2018; Demir & Ozmen, 2018; Martin & Valdivia, 2017; McDowell, 2013). McDowell (2013) investigated vocabulary development and corrective feedback in synchronous computer mediated-communication courses. The research showed that small online speaking groups provided the opportunity for collaborative learning through corrective feedback. The researcher suggested that variable levels of attention should be adopted by teachers. In Martin and Valdivia's (2017) study of the relationship between oral feedback and learner anxiety, the result showed a significant difference between the learners' preferences in recast and metalinguistic feedback. In 2018, Aghajani and Zoghipour found that the students in self-correction and peer-correction groups outperformed the teacher-correction group in a writing course. Demir and Ozmen (2018) investigated whether an online course emphasizing on oral corrective feedback exerted any impact

on student competences. One of the findings was that the students were able to correct oral errors effectively and employed different self-correction strategies by themselves.

Therefore, with the expansion of online learning, error correction in cyber teaching and learning environment has been receiving more attention from researchers. However, comparing teachers' corrective feedback in their face-to-face and online English-speaking classes seems to be an arising significant problem for researching. As a result, this study has both theoretical and practical values. The study contributes to bridge the theoretical gap by showing empirical evidence on how a teacher might correct his/her students in online and traditional teaching contexts. Practically, as one of the aims is examining factors that promote and/or hinder the effectiveness of such activities, the results of this study will be a valuable preference for teachers who are trying to improve the effectiveness of their correction activities.

3. RESEARCH METHOD

The research has its focus on how corrective feedback is given in English speaking classes for English-majored students at Faculty of Foreign Languages, Industrial University of Ho Chi Minh City. Teachers and students of such classes have undergone both online and face-to-face learning experience because of the worldwide pandemic of COVID-19. The data were collected from nine teachers (coded as T1, T2, …, T9) who were in charge of such classes and all of them have experienced teaching English speaking in both learning modes of online and in-person classes. They were expected to have experience of giving corrective feedback in such types of classes as well so that they could make some comparisons between those two contexts. For the convenience of the research participants and with their willingness, the surveys and interviews were carried out either in person or online, depending on whether the teachers could make it to meet the researchers in person or not and Vietnamese was used in communication for the sake of thorough understanding between the researchers and the interviewees.

Besides, for the objectives and research questions in this study, the qualitative approach was employed with two phases of data collection: a brief survey to quickly collect background information followed by individual semi-structured interviews, depending on to examine more intensive into their corrective feedback activities. With the theory found in the literature and reviewed by experts for its validity (Amara, 2015; Ellis, 1991; Gumbaridze, 2013; Harmer, 2007; Khansir & Pakdel, 2018; Touchie,1986; Valdivia, 2017, Zarrinabadi & Abdi, 2011), a survey was developed, revised, and sent to related lecturers in advance so that they had an overview of what was being studied. The adoption of the questionnaire also helped collect basic information in a quick and convenient way. There were two main sections in the questionnaire focusing on the two research questions. The first one included questions to help get direct evidence and general views of how oral errors had been given in online and face-to-face English-speaking classes. Though each lecturer might hold different perception of frequency levels of often, sometimes or rarely, the data mainly aimed at comparing each teacher's levels of error correction density in their own classes. The results, therefore, were not contradicted or ill-matched because of the teachers' subjectivity. On the other hand, the second part of the survey employed the Likert scale of agreement to find out factors which might hinder the effectiveness of error corrective feedback activities in English-speaking classes. In the second phase of the data collection, one of the researchers spent from 30 to 40 minutes on interviewing the participants. Questions in the interviews were raised based on the feedbacks given in the survey, follow-up discussion was adopted for clarification and explanation and where significant and interesting issues were generated. For instance, there were questions on reasons why and/or why not the teachers remained or changed the frequencies of applying corrective feedback techniques in the two learning modes, questions on the frequencies they promoted self- and peer-correction, etc. This qualitative method helped clarify the teachers' responses provided in the survey and collect sufficient information for to the study.

After being sufficiently collected, the data were then processed with consideration of each individual response. Generally, the data collected from the survey were analysed and presented in charts and tables while those gathered from the interviews and open-ended questions were included and inserted where the coded participants' viewpoints were found related or needed comparing or discussing. Based on the results, aspects of corrective feedback on students' oral errors in the two learning environments was inferred, compared, and discussed.

4. FINDINGS AND DISCUSSION

This section aims to find out how oral errors are dealt with in online and face-to-face synchronous English-speaking classes. Major similarities and differences between the two types of lessons can be pointed out to make some comparisons in the way teachers correct their students' errors. Besides, there will also be findings on the factors which can hinder or benefit corrective feedback activities in these classes.

How errors are dealt with in synchronous EFL speaking lessons

Despite the fact that not all errors should be corrected, students can benefit from the corrective feedback teachers give on them. Considering the frequency teachers do such activities, all the survey participants declared they gave corrective feedback on students' errors on quite a frequent basis. The frequencies remain unchanged when they carry out online class in comparison with in-person one.
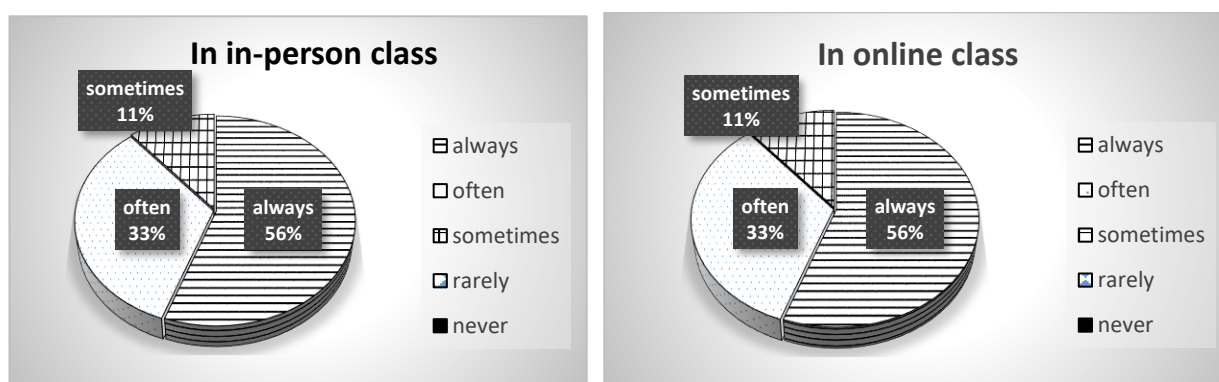
Chart 1: The frequency at which errors are corrected in speaking lessons

As can be seen from Chart 1, errors have been treated quite frequently, whether the class is conducted face-to-face or online. This is also how every participant responded in the survey where there was no shift of choice in the levels of frequency. Similarly, the teachers revealed to have the same choices of moments when errors are corrected in class. Corrective feedback is generally delayed until the end of the students' turns of speaking or of an activity so as not to interfere with communication. They seem not to postpone giving corrective feedback to the next class as they noted that on-the-spot correction helps students remember their mistakes longer (T2, T3 & T7). Additionally, it was emphasized by the teachers that it depended on the focus of the lesson on fluency or accuracy that corrective feedback was given later on or immediately (T6). This viewpoint was aligned with that of Gimbaridze (2013) when the author suggested delayed or postponed feedback after fluency-oriented activities and immediate feedback in accuracy-oriented activities. Furthermore, according to the teachers, "when errors are handled after students' finish their speaking, the correction can be made in relation with the contexts in which better language choices should be made" (T2). Therefore, it is reasonable when Long (1977) stated that correction may be less effective if the time between the error and the correction increases. Thus, they only moved corrective feedback activities to the next class only when the class time was not enough for them or was just over.
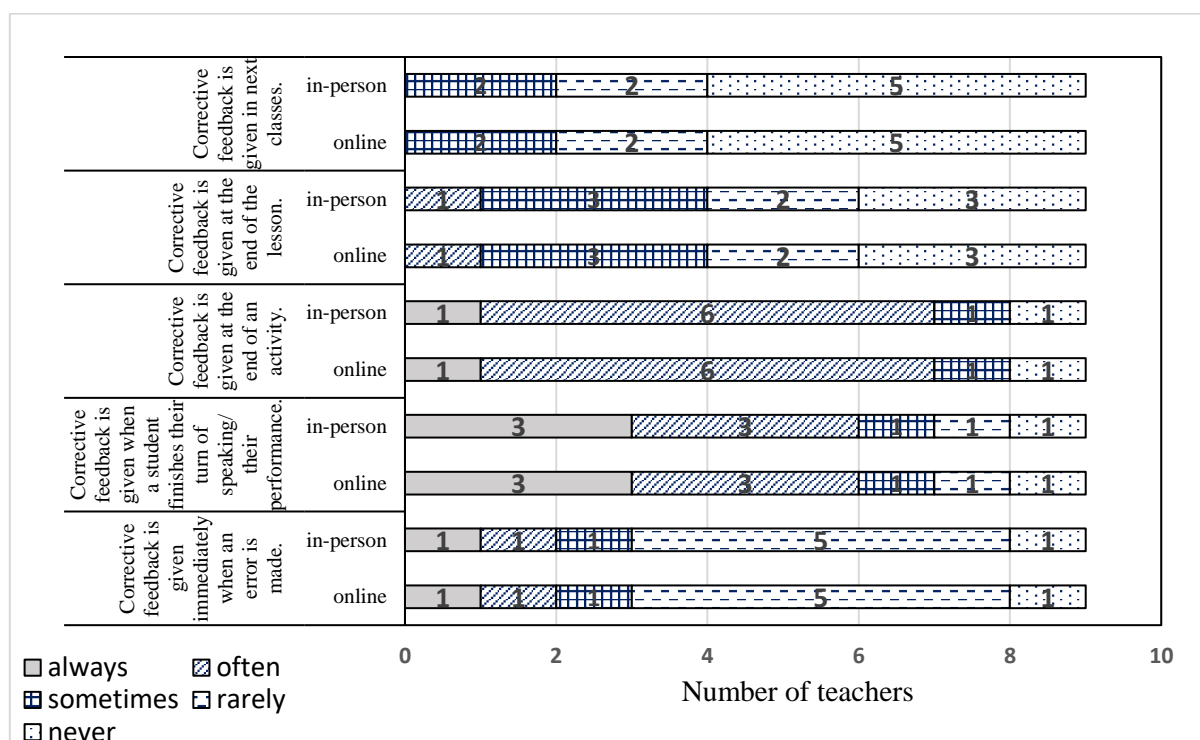
Chart 2: When corrective feedback is given in speaking class

As for types of errors to be corrected, the results from the survey reveal that there are hardly any differences in both forms of classes. In general, students' pronunciation is put into the most consideration when they perform their speaking activities. Seven out nine teachers confirmed to correct such kind of mistakes on a very frequent basis. Pronunciation, in the teachers' opinion, is also the area many students need to improve the most because of the differences in certain sounds, intonation and some other elements between English and their mother tongue (T3, T4 & T5). The teachers also felt that "when talking behind the screen, students sometimes say scripted lines of English which made their speaking fluent but not very natural" (T5). Besides, lexical and grammatical errors also receive constant feedback from teachers no matter what type of class they are teaching – online or in-person. Errors in language function, on the other hand, are fed back less frequently. Explanations for this trend, according to the participants, were because students did not make such mistakes very often and students' inappropriate use, if any, did not cause big problems in communication (T3). However, "it is recommended that the teacher focus on one type of errors at a time instead of correcting all the errors. That will be more beneficial for the students because they will pay more attention to that problem and avoid that kind of errors in the future" (T1). Besides, findings on these types of errors are also similar with those in a study by María and Angie (2016) in which it was claimed that among the three main error categories of grammar, vocabulary, and pronunciation errors, the majority of the errors corrected were pronunciation ones.
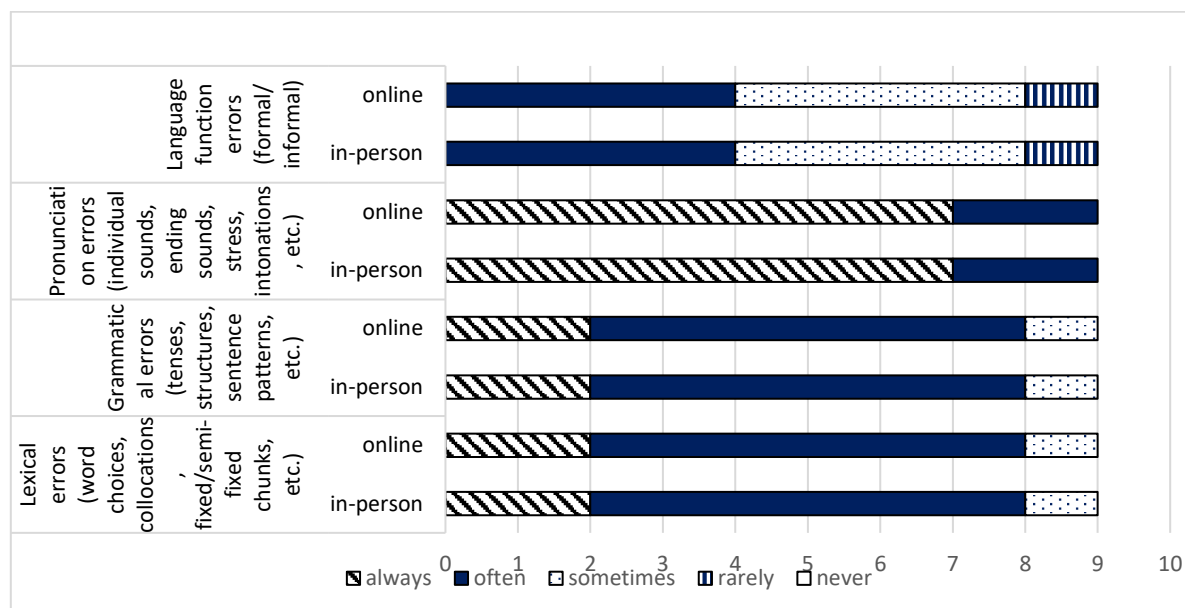
Chart 3: Types of errors to be corrected with same frequencies

Besides similarities in types of errors above, the study found out a shift in levels of frequency between two types of class when teachers do error corrective feedback on such non-verbal language failures as eye-contact, gestures, hesitation, and voice inflection.
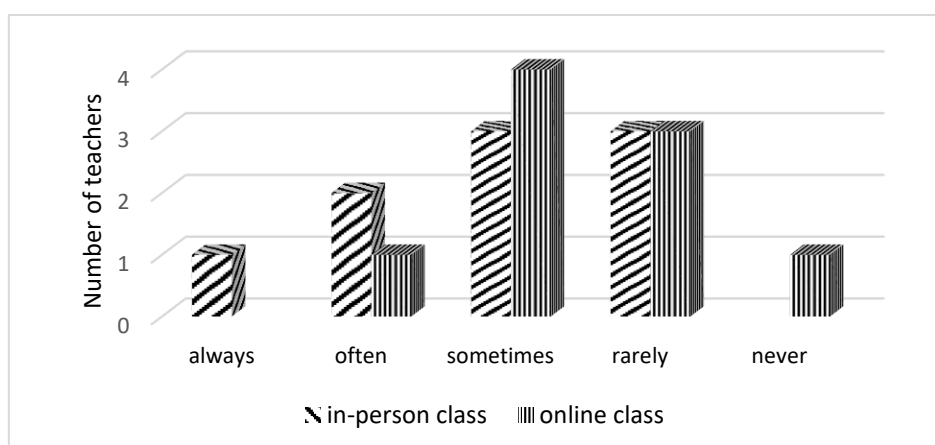
Chart 4: Error correction for non-verbal language failures

Reasons for the above changes, according to the teachers' responses in the interviews, are because most students turned off their cameras while speaking online, which caused it impossible for the teachers to see whether their students were using good non-verbal language or not. They were feedback related to both the teachers and students' interaction, body language, facial expressions, etc., which required clear and direct demonstrations for students to improve their non-verbal language when communicating (T6). However, in online class, clear visualization of the students on the screen cannot always be guaranteed and it prevented teachers' correction from being effective and frequent.
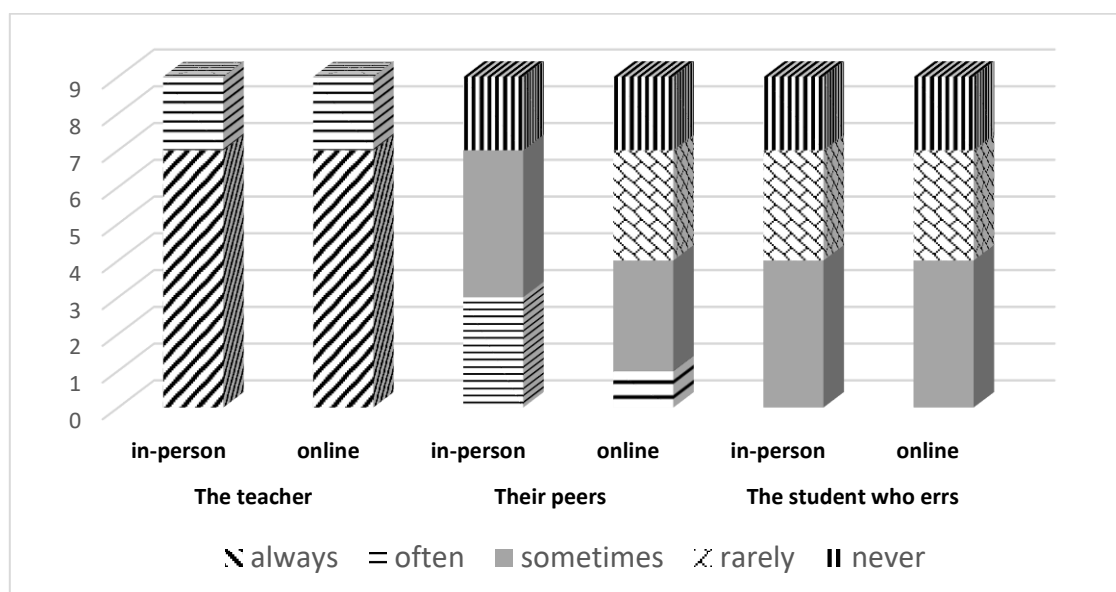
Chart 5: Who corrects students' errors

When errors are made, teachers are traditionally the main people to correct them (Ellis, 1991; Khansir & Pakdel, 2018) and the student who errs hardly do this task themselves. This is true according to the chart above, in both types of classes. However, when working in face-to-face class, more teachers ask them to do peer correction than in online one. According to the participants, it can be explained by the distance among the students themselves in which they could not see or actively interact with one another when most of their cameras were turned off (T5 & T7). Besides, time limit was the second reason which prevented the teachers from asking students to correct their classmates' errors as they could do it more quickly to save time (T6). Therefore, despite the essential roles of self- and peer-correction emphasized by many scholars (Amara, 2015; Edge, 1990), these strategies could not be applied widely in teaching contexts with time limit and little active interaction like in online learning space. This was also the reason for little private feedback in the class, which was hardly done in written or oral form in both online and onsite speaking classes because it could take a lot of time, as can be seen in Chart 6 below.
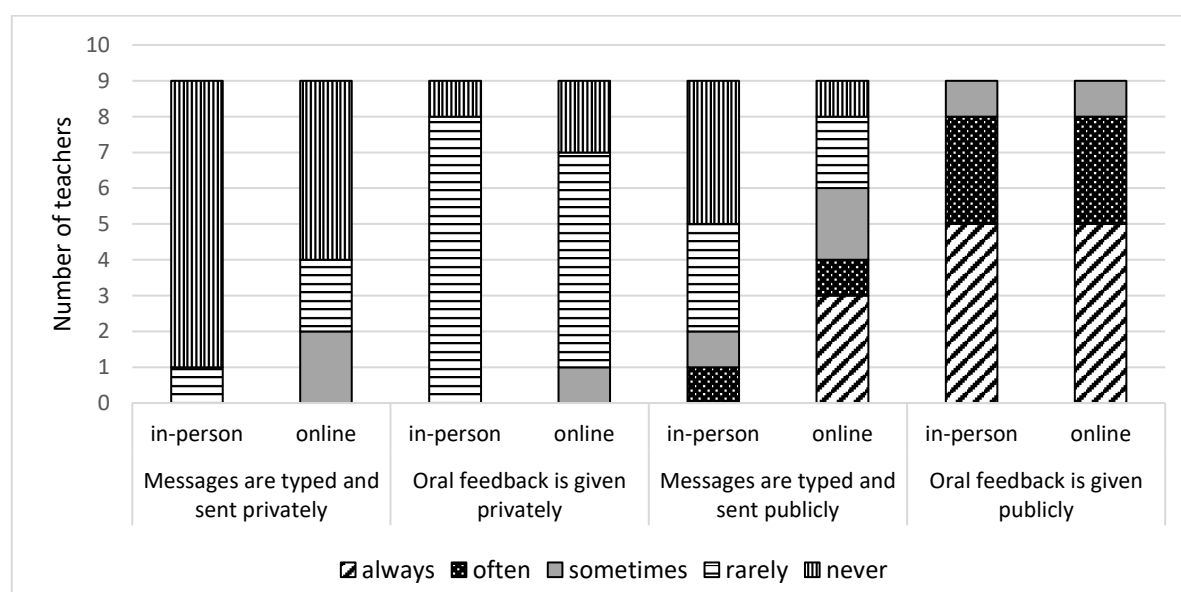
Chart 6: How corrective feedback is given in speaking class

Generally, giving oral feedback publicly in class is the common choice most teachers chose in either type of classes. Teachers generally orally applied various techniques such as explicit correction, recasts, elicitation, metalinguistic feedback, clarification requests, and repetition (T2), which were among the categorizations by previous researchers (Lyster & Ranta, 1997; Ohta, 2001; Chu, 2011; Yang, 2016). However, when teaching online, three out of nine teachers also sent their feedback in written form to their students in the "chat-box" of such online teaching platforms as Zoom or MS Teams. It was explained by the teachers that sending messages can minimize the shortcomings of unclear voice/sound due to poor Internet connection (T2 & T5). This way of delivering feedback is more common than in face-to-face class because it was said to help students have a look back on what mistakes have been made and corrected during the class and review them when needed. In addition, "while students are presenting, teachers can note their errors then send them in the chat-box immediately so that everybody can learn for themselves." (T6)

In summary, when looking at aspects of corrective feedback strategies on students' oral errors, there seem not to be so many differences in the way teachers carry them out in both in-person and online English-speaking classes. Frequency of giving feedback, types of errors to be corrected and the roles of teachers in correcting students' errors stayed unchanged even when teachers teach different types of classes. However, in online class, while non-verbal language was less concerned and peer correction was not much motivated, feedback in written form became more common as the teachers and all learners can type, see their messages exchanged and discussed, and review them more conveniently.

Factors affecting corrective feedback activities in speaking lessons

When looking into factors which may hinder or benefit corrective feedback activities from teachers' perspectives, it was found out that most of them were experienced in giving comments or amendments on their students' errors, especially in traditional classes, as none of the research objects disagreed with this fact. They also claimed to have experience in making use of online tools to support such activities. Remarkably, seven out of nine teachers confirmed to be able to use such tools easily when teaching online classes to help giving corrective feedback more efficiently because they "can use dictionaries and other online tools to help me. I can't do this when teaching onsite due to Internet problems (T3)". Furthermore, the teachers added that they could send links or webpages for students to refer to in an easy and convenient way (T4).

Table 1: Factors related to teachers' experience

Factors	Totally agree	Agree	Neutral	Disagree	Totally disagree
You have **experience** in giving feedback online	1	5	3		
You have **experience** in giving feedback in face-to-face class	1	7	1		
You have **experience** in using online tools to support corrective feedback activities		4	4	1	
You can easily make use of **online tools** (dictionaries, videos, search engines, links to references, etc.) to support giving corrective feedback when teaching online.	3	4	1	1	
You can easily make use of **online tools** (dictionaries, videos, search engines, links to references, etc.) to support giving corrective feedback when teaching onsite.		4	4	1	

In some teachers' perception, students would less anxious when their errors were handled in online classes. For example, it was commented that "Somehow, online classes can be more private for giving feedback as students are usually assigned into individual breakout rooms, creating a more comfortable environment for students to share their ideas and accept teacher's correction" (T2). Besides, the teachers also believed "many

students often turn off their cameras, so they are less embarrassed by the unpleasant feedback they received"
(T5). Students' anxiety, in the teachers' opinion, could also be the results when students were being
corrected publicly (T2). However, many teachers were still reluctant to confirm whether they thought
students might have felt anxious when being corrected online.

Table 2: Factors related to students' feeling when being corrected

Factors	Totally agree	Agree	Neutral	Disagree	Totally disagree
In my opinion, students would feel more **comfortable** when being corrected online	1	3	3	2	
In my opinion, students would feel more **anxious** when being corrected online	2		5	1	1

Sound quality is the next factor to be taken into consideration. From the data in the table below, teachers'
viewpoints ranged from "agree" to "disagree" quite equally. It depended on the Internet connection they
had during the lessons (T9). Thus, it was believed that "it was not easier to do corrective feedback in online
class than in traditional one because there could be technical or Internet problems during the class hours
(the teacher spoke as usual but not all students could hear her properly). The situation could get worse when
teachers could not make sure that every student listened to the correction given. (T4)" As for traditional
class, however, the teachers also claimed to have problems with hearing students' voice when they were
speaking because the classes were so crowded, and many students were too shy away from speaking loud
enough. This caused it hard for both the teacher and other students to hear and do appropriate correction on
their errors if there were any (T6, T7, T8 & T9). Moreover, it was noted that there was a negative effect on
teachers' motivation because of this factor of sound quality as "I don't think it's easy to give corrective
feedback online since the interaction between the teachers and students are not as strong as it is onsite. In
addition, students may make an excuse that they cannot hear the teacher clearly, which can demotivate the
teacher" (T1).

Table 3: Factors receiving fluctuating viewpoints from lectures

Factors	Totally agree	Agree	Neutral	Disagree	Totally disagree
Your students' and your voice can be heard clearly in online class		3	3	3	
Your students' and your voice can be heard clearly in face-to-face class		3	1	5	
Your students are more active during corrective feedback activities in online class than in face-to-face class.		3	2	4	

Also from Table 3, teachers' opinions varied a lot when evaluating students' activeness in two types of
classes. While students' autonomy and active participation in games were mentioned (T3), they were said
to take less initiative in their learning and error correction activities (T5 & T7). Teachers' control on their
participation, their levels of concentration, and other external factors such as learning surroundings and
Internet connection were claimed to cause such a low level of activeness (T4), which therefore could lead
to a low level of effectiveness in learning.
In addition, for the factors listed in the table below, two third of the teachers keep their viewpoint neutral,
which could mean they neither agreed nor disagreed with the statements. Most of them were not affected
to feel more or less comfortable when giving feedback online. On the other hand, the teachers claimed that
Internet disconnection was a cause of unclear sound and time-consumption for fixing unstable technical
problems (T5, T6 & T8). However, it was not feedback activities that took much class time but the teachers'
technical skills in handling technical problems and the time-limit of the course and the class were obstacles

to prevent corrective feedback activities in both online and traditional classes (T9). While sharing that "I don't have enough time to point out and correct all students' mistakes because it'll take too much time (T3)," another teacher added that she could mainly demonstrate or point out the mistakes/errors for students because she could not spend much time explaining in detail or creating activities for students to practise correcting English (T7).

Table 4: Factors most teachers share their neutral viewpoints

Factors	Totally agree	Agree	Neutral	Disagree	Totally disagree
You feel more comfortable when giving feedback online		1	**6**	2	
You feel more comfortable when giving feedback online		1	**6**	1	1
The quality of Internet connection generally does no harm to corrective feedback activities.			**6**	3	
Giving feedback in online class is more time-consuming than in face-to-face class.		1	**6**	1	1

Table 5 below presents factors which could be considered impediments to hinder corrective feedback activities for students' oral errors. They include crowded classrooms, students' focus and activeness, teachers' interruption and interaction in speaking classes.

Table 5: Negative factors for corrective feedback activities

Factors	Totally agree	Agree	Neutral	Disagree	Totally disagree
Big-sized class generally does no harm to corrective feedback activities.				7	2
Your students are more focused during corrective feedback activities in online class than in face-to-face class.		1	2	6	
You feel it's easy to interrupt to correct students' errors in online class.		1	4	3	1
The interaction in online class is better than in face-to-face class.		1	2	1	5

Similar to the teachers' viewpoint on big-sized class in which teachers could not have enough time to spend on every student' single error (T8), data from the survey also shows this factor is a negative one. In online classes, in addition, online one out of nine teachers thought students could be more focused than in in-person classes. Some teachers were not sure about what students were thinking or doing behind their screen when their cameras were turned off and sometimes teachers had to take a while waiting for their students to reply when being called. Besides, it was noticed that online classes sometimes included distractors such as background noise, family members and things around, which could drive students away from the main flow of their lessons (T2). Additionally, talking about interruption while students were talking to give correction, the teachers responded that they hardly did it because they wanted to improve students' fluency. They often took note while listening and waited for them to finish their speaking although some teachers sometimes could not note down all errors students had made (T3, T4, T5 & T7). Besides, in online mode, they often muted themselves when students were speaking to avoid much background noise. That was why they usually did not make much interruption during students' speaking. Last but not least, as shared by many lecturers, that internet connection was not always stable, and many students' cameras were often disabled made it hard for students and teachers interact together. In comparison with face-to-face classes, the interaction in online ones was opposed to be better, as confirmed by the data in the survey. A study

participant also added that sometimes "students may make an excuse that they cannot hear the teacher clearly" (T7), which could demotivate the teachers' effort in giving feedback on them.

Besides factors mentioned above, many teachers came up with two important ones, which were said to be essential in error correction in any kind of class. They are teachers' experience and in providing positive comments on what is not correct and students' effort and awareness in correcting themselves as well as in practicing not to make the corrected errors again. In particular, the importance of giving proper positive feedback was also emphasized, not just trying to correct errors and discouraged them (T7) and teachers should encourage peer-feedback to save time and foster interaction among the students (T5). More importantly, all the interviewed teachers confirmed that students' motivation and learning attitude were still major decisive elements in students' speaking improvement. In the teachers' viewpoints, many students' errors have been repeated and habitually systematic, which were quite hard to improve although they have been corrected again and again in their class (T6 & T9). It is important that students be aware of the mistakes and practice to better their English speaking. For example, students were suggested to watch the recordings of the online lessons again to correct themselves, be more focused and active in their class, and keep their learning motivation high for better learning and practicing for English speaking skill (T9).

5. CONCLUSION AND RECOMMENDATIONS

Based on the results collected from the questionnaires and interviews, it can be concluded that although corrective feedback activities have been carried out frequently in English speaking class, whether it was conducted in face-to-face or cyber contexts. Strategies on giving feedback on oral errors were applied quite similar in both types of learning modes. However, when it came to online teaching contexts, there were some disadvantageous factors such as time restraint, students' awareness, technical failures, and poor Internet connection, which prevented the teachers from paying more attention to students' non-verbal errors and promoting self- and peer-correction. On the other hand, it was on the virtual teaching platforms that teachers could make use of the chat-box to timely send their feedback for every student to see and the recording function for students' further review and reference on the errors made and corrected. For factors affecting teachers' corrective feedback on students' errors, teachers' experience, and the available online tools to support such activities were found to be favorable factors to support them. Nevertheless, besides being in crowded classrooms, students were also thought to have lower levels of concentration and interaction in their online speaking class. It is recommended that teachers try to apply more exciting computer-based teaching activities to call for students' attention and participation, promote good rapport among them as well as create an open and comfortable learning atmosphere so that corrective feedback can be provided more effectively. In short, results from the study showed there have been some factors which have affected the ways teachers give corrective feedback on oral errors when teaching online in both positive and negative ways. Knowing which can support or hinder corrective feedback activities is believed to help teachers make their online lessons more efficacious and productive.

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WORDS IN ENGLISH AND VIETNAMESE – A VIEW FROM READABILITY AND APPLICATIONS

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Abstract. Readability has gained its recognition since 1890s; however, this research direction has not been given much interest in Vietnam, so investigating in Vietnamese readability is not fully exploited. English readability has a long history of research with increasing international publications and practical applications at 3 main linguistic levels: words, sentences, and texts. Within the paper scope, the focus is "word level" and the aim of this study is to quantitatively investigate the factors and elements affecting Vietnamese readability, in comparison with English. Therefore, the paper used 3 English texts as the illustrative case studies and examined 371 Vietnamese texts from Vietnamese Textbooks and Literature Textbooks, categorized into 3 levels: Primary School- 209 texts; Secondary School- 79 texts; and High School- 83 texts, to save time, money, and labor costs as well as to conduct the research persuasively and effectively. Based on statistics, the paper used the descriptive method and contractive method to describe the findings. In addition, the research results of the Vietnamese corpus, Vietnamese Frequency Dictionary, CLC- Vietnamese Toolkit, Flesch Readability Formula and the information algorithms were also applied to support and analyze the paper subjects. The results showed that 2 elements as the average word-length in syllables and the average word-length in characters did not affect readability in Vietnamese as in English; the word frequency was the factor having the strongest influence on readability in both Vietnamese and English. Initially, we could quantify the surface linguistic elements in a Vietnamese text for 3 school levels: the average number of characters, the average number of syllables, and the average number of words. Besides suggesting the practical applications, the paper findings can support the computational linguistics to build applicable formula or tools for measuring Vietnamese text readability to meet the demand for users and Vietnamese community in this era of technology.

Keywords. Vietnamese readability, in comparison with English, word level, applications

1. INTRODUCTION

Readability or text readability in English has been studied since the end of the 19th century with hundreds of thousands of published works and a large number of applied findings; currently, it is an interesting problem and still being continuously studied by researchers, not only for English but also for many other languages. However, the study of readability in Vietnamese is still limited; it can be said that the source of readability in Vietnamese is low and poor, so the paper about the words in English and Vietnamese – a view from readability and applications is the initial steps to survey and investigate text readability in Vietnamese.

In readability research, the publications have showed that the linguistic factors and elements are studied at 3 main levels: Words, Sentences and Texts, so the "word level" has been carefully investigated as the initial foundation for the next research.

At the word level, the deep linguistic elements are carefully analyzed such as parts of speech, single words and compound words, monosyllable and polysyllable, homonym, synonym, polysemy, etc.; however, at the

initial step, the surface linguistic elements and word frequency are always examined to assess the text levels quantitatively. For example, the automatic formula "FLESH" (Flesch Reading Ease and Flesch Kincaid Grade Level) integrated in Microsoft Word uses the surface linguistic elements as the numbers including words, paragraphs and sentences and the averages consisting of sentences per paragraph, words per sentence and characters per word to measure the grade level for an English text. In addition, the limit of using vocabulary- 1000 most popular English words at Level 1; 2000 most popular English words at Level 2 and 3000 most popular English words at Level 3- is the prerequisite to write English texts for the news at website News in Levels (https://www.newsinlevels.com/).

Assessing text levels by the surface linguistic elements and word frequency helps us save time, money and labor costs; especially, this evaluation can be done quickly and effectively with a large number of texts to support for the next qualitative assessments. Therefore, within the scope of the study, the paper is done with the hope to determine the quantitative numbers of the surface linguistic elements at word level to support the texts at 3 school levels: Primary School, Secondary School, and High School. In addition, the paper wants to prove that the word frequency is the factor having the strongest influence on Vietnamese readability as English readability. Based on the paper findings, we can develop and study this problem deeply in the future as well as support the computational linguistics to build applicable formula or tools for measuring Vietnamese text readability.

2. RELATED WORKS

Readability and Comprehensive

Readability and Comprehensibility are closely related, but they are intrinsically different. Two concepts are not considered as synonyms because there is a remarkable distinction between them in many readability studies. Wray and Dahlia (2013) [1] distinguish that readability is as a characteristic of the text itself and comprehensibility is understandability as an indication of the readers' ability to make meaning of the text. While the readability features, making a reading text easy, are content, style, design, and organization, the reader features, making a reading text easy, are prior knowledge, reading skill, interest, and motivation as Dubay (2007) [2] presents. Having the same view, Chiang et al. (2008) [3] and Jones (1997) [4] state that the readability level of a text is an indicator of the textual difficulty level of the text which is fixed for a given text and is not varied by reader characteristics. Comprehensibility is affected by reader characteristics such as the reader's background, prior knowledge, interest, and general reading ability. Thus the subject of readability is texts, and the subject of comprehensibility is readers.

Investigating readability, Dale and Chall [5] in 1949 gave a common definition as follows: "the sum total (including the interactions) of all those elements within a given piece of printed material that affect the success of a group of readers have with it. The success is the extent to which they understand it, read it at an optimal speed, and find it interesting." In 2008, Fukun Xing, Dongyuan Cheng, & Jianzhong Pu [6] presented: "readability is how easily written materials can be read and understood. Readability depends on many factors, including (a) the average length of sentence in a passage, (b) the number of new words a passage contains, (c) the grammatical complexity of the language used."

Words and Readability in English Studies

Readability focuses on the elements or factors in a text itself such as word length, sentence length, average length of sentences by word, the number of sentences, and the number of words. Analysis of readability in a text is the analysis of both the surface linguistic elements and the deep linguistic elements of that text since these linguistic elements and factors make the text itself easier or more difficult to understand.

Determining the role of words in readability assessment, well-known researchers have investigated the word influence on English readability, especially the surface linguistic elements and the word frequency factor, to support English teaching and learning and to build regression equations or formulas to measure text readability for practical applications.

The most important precursor to this research is E.L. Thorndike's attempt (1921) [7] to measure the familiarity of words in The Teacher's Word Book. This is a list of 10,000 words that he believes to be commonly used in 41 different sources of various kinds. The bridge, Thorndike's Teacher's Word Book, is the basis for Lively and Pressey's study (1923) [8] "A Method for Measuring the Vocabulary Burden of Textbooks." Lively and Pressey used three different metrics to assess the difficulty of vocabulary and two

of them depended on Thorndike's word list and their research concluded that "the higher the word frequency is, the easier the word is. Conversely, the lower this index is, the more difficult the word is."

The word frequency was focused on Vogel and Washburne (1928) [9] readability work, their surveyed books were selected from Winnetka Graded Book List (Washburne and Vogel 1926), which consisted of a list of 700 books, "on each of which twenty- five or more children's judgments were received". From the 700 books in the Winnetka Graded Book List, Vogel and Washburne selected 152 books as the basis for their 1928 study. A wide variety of factors were considered in an attempt to identify the characteristics to build their readability equation including the following categories: vocabulary difficulty and parts of speech. Investing in more details, Dale & Tyler (1934) [10] added the number of different technical words in the selection and the number of different hard non-technical words to develop their regression equation to predict the difficulty of reading materials for a group of readers at the third to fifth grade reading level.

With the same goal as Dale and Tyler, Gray and Leary (1935) [11] was to find objective criteria for assessing readability; however, unlike Dale and Tyler, Gray and Leary more focused on factors which may contribute to the development of a readability formula. Their work identified 288 elements affecting English text readability and ranked the major categories in the following order of importance: (i) content, (ii) style, including vocabulary and the kinds of sentences used, (iii) format, and (iv) general features of organization. Among them, at word level, 41 elements affecting text readability were counted. And the significant note was that the word frequency (hard words, parts of speech) and the average number of words in a sentence were the most important factors to be considered for English readability assessment.

Examining the same "structural elements" as Gray and Leary (1935), Lorge (1939) [12] examined the word frequency and added an additional variable, "a weighted index of word difficulty", he also believed that the "hard word" and the part of speech "prepositions" played as the key roles to measure syntactic complexity in English. He suggested the readability formula which adjusted weights and used various combinations of two variables such as (i) prepositional phrases and different hard words, (ii) average sentence length and different hard words, and (iii) the number of prepositional phrases and average sentence length.

Like many of the predecessors who tended to include two sorts of measurements of difficulty: one for vocabulary and the other for sentence structure. Rudolf Flesch (1948) [13] developed his original formula in his 1943 PhD dissertation, entitled "*Marks of Readable Style: A Study in Adult Education",* and completed his studies *"The Art of Plain Talk"* in 1946 and *"A New Readability Yardstick"* in 1948 to build the formulas to measure the readability of written materials in English. Flesch formulas have been widely used as ways of assessing textual difficulty; especially, the Reading Ease formula. This formula countes by these two factors: wl standing for word length (the number of syllables per 100 words), and sl standing for sentence length (the average sentence length). In more details, a text can be determined the grade level automatically by the surface linguistic elements: (i) the number of words; (ii) the number of characters; (iii) the number of paragraphs; (iv) the number of sentences; (v) the average of sentences per paragraph; (vi) the average of words per sentence; and (vii) the average of characters per word. The Reading Ease formula was adapted for use by the United States Military, using the same factors with different weights in 1975, and this formula can be found to this day as a tool in the most popular word processing program in the world, Microsoft Word.

Words and Readability in Vietnamese Studies

Compared with more than hundreds of thousands of studies on English readability, published in specialized journals and still being continuously researched, the research in Vietnamese readability is still extremely limited. Until now, according to our survey, for readability research on Vietnamese language, there are only 2 formulas for measuring Vietnamese language of the same group, Liem Nguyen and Alan B. Henkin in 1982 [14] and in1985 [15].

Their research results initially gives the classic formula for calculating Vietnamese readability based on two elements: "word length" and "sentence length". This formula only focuses on the relationship between the statistical characteristics of difficulty based on 2 surface linguistic elements, the number of words and the number of sentences, in a small corpus (24 texts), while the deep linguistic elements are not investigated. The most important thing is that these two elements are calculated manually to determine the readability of a text, which is an inconvenience of this scale compared with the popular automatic English readability formula, Flesch Readability Formula, as mentioned above.

3. METHODS AND DATA

Methods

To study words in English and Vietnamese- a view from readability and applications, the paper used the descriptive method and contractive method to describe the process of corpus processing, the influence of the linguistic elements and factors on Vietnamese readability, compared with English, as well as stated the paper findings.

The case study method of the paper was the illustrative case studies; the paper used 3 English texts as the illustrated examples to compare the surface linguistic elements affecting text readability between Vietnamese and English.

The paper used the statistical method to process data with 371 texts from Vietnamese Textbooks, Literature Textbooks for primary schools, secondary schools and high schools.

In addition, the research results of the Vietnamese corpus, Vietnamese Frequency Dictionary, the CLC-Vietnamese Toolkit[1], the Flesch Readability Formula in English and the information algorithms were also applied to support, calculate, survey, examine and analyze the subjects of the paper.

Data and the Paper Scope

The corpus of the paper is mostly extracted from the textbooks because of the following reasons: (i) currently, there is no tool to automatically measure readability for a large corpus of Vietnamese texts; therefore, categorizing text levels into grades or school levels by manual and semi-manual processing will take a lot of time, effort and costs; (ii) Vietnamese Textbooks for primary schools, Literature Textbooks for secondary schools and high schools are official Vietnamese corpus sources that have been classified text readability into grades and school levels, used by the whole population; (iii) the texts in Vietnamese Textbooks convey the most general and educational backgound; in addition, representing as a representative of Vietnamese language used by the whole population, the language in literatures is the most typical, the most representative, and the most essential.[2]; and (iv) classified texts, especially texts in school textbooks, have always been the first choice in most of the research for English text readability.

The data can be seen in details in the following table:

Table 3.1: the number of texts from Vietnamese Textbooks and Literature Textbooks

School Levels	Primary School					Secondary School					High School				Overall
Grades	2	3	4	5	Total	6	7	8	9	Total	10	11	12	Total	
Text Numbers	67	62	40	40	209	28	13	17	21	79	15	19	49	83	371

The paper conducted the data, including 371 texts selected from Vietnamese Textbooks for primary schools, Literature Textbooks for secondary schools and high schools. Vietnamese textbooks for grade 1 was not selected since the book contents are mainly spelling teaching and reading with words, phrases and sentences, accompanied by illustrations. Because of the purposes and requirements of the study, we only proceeded to select the prose texts in textbooks from grade 2 to grade 12. These texts informed common and basic knowledge contents, such as descriptive texts, narratives, fables, jokes, and literary works.

Within the paper scope, the study focuses on surveying the surface linguistic elements to determine the quantitative numbers for Vietnamese readability assessment at grades and school levels. These elements include: (1) ANW: Average Number of Words; (2) ANDW: Average Number of Distinct Words; (3) ANS: Average Number of Syllables; (4) ANDS: Average of Number of Distinct Syllables; (5) ANC: Average Number of Characters; (6) AWLS: Average Word Length in Syllables; and (7) AWLC: Average Word Length in Characters.

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[1] The tools and resources owned by Computational Linguistics Center, University of Nature, Vietnam National University Ho Chi Minh City. CLC- http://www.clc.hcmus.edu.vn,

[2] ''đại diện sự tiêu biểu cho tiếng Việt toàn dân thì ngôn ngữ văn chương là tiêu biểu nhất, tiêu biểu một cách toàn vẹn, bản chất nhất'' (Cù Đình Tú. (2007). *Phong cách học và đặc điểm tu từ tiếng Việt*. Ho Chi Minh City: Education.)

The main aim of the paper is also to identify the influence of the deep factor- the word frequency- on Vietnamese readability, compared with English. The study wants to prove the word frequency is the factor having the strongest influence on readability in both English and Vietnamese; based on the findings, the practical applications will be suggested.

4. RESULTS AND DISCUSSIONS

Manner of Forming Vietnamese Words (in Comparison with English)

During the text processing, we used the supported tool, CLC VN Toolkit, to separate words, sentences and assign labels for the text categories. This is a tool of Computational Linguistics Center, University of Nature, Vietnam National University Ho Chi Minh City and has the text processing function, such as sentence separation, word separation, type word labeling, entity name recognition, etc. We can see an illustrated example, "Âm thanh Thành phố" (Sounds of the city) (Vietnamese Textbook, Grade 3, Volume 1, p.146) as follows:
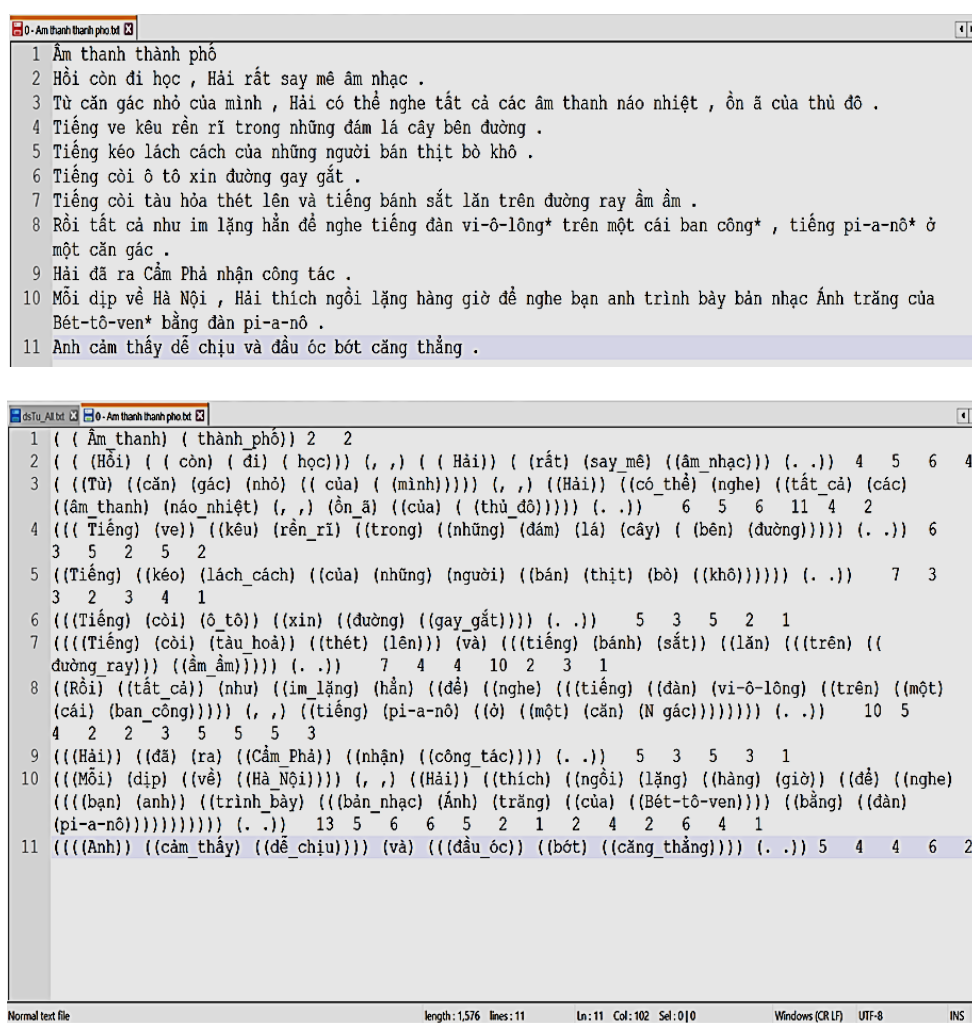
Figure 4.1: Separating sentences and words in the text "Sounds of the city"

When examining the number of words in a text, we calculate the total number of words used in that text; however, there are many cases having repetitions of the same word in the text; for example, considering the case of the text "Sounds of the City" in the example above: the word "âm thanh" is separated into a two-syllable word, but this word appears twice in line 1 and line 3. Similarly, the word "tiếng" is separated into a one-syllable word and this word is also repeated in the 4th, 5th, 6th, 7th, and 8th lines. Therefore, the

"distinct word" is used for the analyzed results of this corpus without word repetition. Based on this method, the word frequency and the basic lexicon used in grades and school levels can be accurately calculated. For example, in the text above, considering 2 words "âm thanh" and "tiếng", the total number of words used in the text is 9 words because they appear 9 times in the text, but only 2 distinct words. Similarly, the linguistic element "distinct word" is used to calculate the words without repetition in the text; it means that this word is counted only once time although it appears many times in the text.

Based on statistics of the linguistic elements at the word level, the data is ranged by the grades and school levels. The statistics can be seen in the following table[1]:

Table 4.1: Statistical number of surface linguistic elements affecting Vietnamese readability, word level

The Surface Linguistic Elements affecting Vietnamese Readability, Word Level								
Grades	Text Numbers	ANW	ANDW	ANS	ANDS	ANC	AWLS	AWLC
2	67	158.06	100.63	178.48	111.36	826.82	1.13	5.25
3	62	192.31	125.58	221.98	141.53	1065.45	1.16	5.61
4	40	231.28	144.30	276.10	164.78	1335.00	1.20	5.84
5	40	244.40	152.78	288.00	173.35	1395.95	1.19	5.77
6	28	679.54	304.86	784.11	327.54	3709.00	1.15	5.43
7	13	676.92	329.69	820.85	372.46	3942.31	1.23	5.98
8	17	969.24	394.29	1131.47	428.35	5401.94	1.19	5.74
9	21	1447.43	526.29	1709.67	555.52	8160.05	1.20	5.78
10	15	861.73	368.40	1006.47	390.07	4860.00	1.17	5.67
11	19	1359.95	510.00	1579.05	534.95	7535.11	1.18	5.70
12	49	1710.31	576.00	2179.43	594.2	10761.02	1.32	6.59
Total	371	643.69	270.70	776.12	290.71	3752.95	1.19	5.74

Where:
ANW: Average Number of Words
ANDW: Average Number of Distinct Words
ANS: Average Number of Syllables
ANDS: Average of Number of Distinct Syllables
ANC: Average Number of Characters
AWLS: Average Word Length in Syllables
AWLC: Average Word Length in Characters

According to statistics, the total of text is 371, it shows that although the average number of words of a text (ANW) is nearly 644 words, but at each different grade, this surface linguistic element is distinctly different: grade 2, ANW is 158.06 words; grade 3 is 192.31 words; grade 4 is 231.28 words; grade 5 is 244.4 words; grade 6 is 679.54 words; grade 7 is 676.92; 8th grade is 969.24 words; 9th grade is 1447.43 words; 10th grade is 861.73 words; grade 11 is 1359.95 words; and grade 12 is 1710.31 words.

In Vietnamese language, a syllable is not always a word, so when examining the average of number of syllables (ANS) in a text, this element always has a significantly increased number when compared to ANW at all grades. This is clearly shown in the data in Table 4.1; for example, at grade 2, the average of number of distinct syllables (ANDS) is 111.36 and this number increases to 178.48 (ANS) at the same level; ANDS is 141.53 and ANS increases to 221.98 at grade 3; ANDS is 164.78 and ANS increases to 276.1 at grade 4; ANDS is 173.35 and ANS increases to 288 at grade 5, etc.

Exanimating 7 surface linguistic elements: (1) Average Number of Words; (2) Average Number of Distinct Words; (3) Average Number of Syllables; (4) Average of Number of Distinct Syllables; (5) Average Number of Characters; (6) Average Word Length in Syllables; and (7) Average Word Length in Characters, the important thing can be seen that 5 of them tend to increase at the higher grade except for 2 surface

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[1] The method for data processing published in the paper: An-Vinh Luong, Diep Nguyen, Dien Dinh, Examining the Text-length Factor in Evaluating the Readability of Literary Texts in Vietnamese Textbooks. *2017 9th International Conference on Knowledge and Systems Engineering (KSE)*. Hue, Vietnam, pp. 36-41, 2017, doi: 10.1109/KSE.2017.8119431.

linguistic elements: Average Word Length in Syllables (AWLS) and Average Word Length in Character (AWLC). These elements have almost no notable change, from 1.13 to 1.32; and from 5.25 to 6.29, so it can be said that they are not the surface linguistic elements having influence on readability in Vietnamese. Besides determining a specific number of the surface linguistic elements from grades 2 to grade 12, based on the minimum and maximum of the statistical numbers, these elements can be quantitatively determined at 3 school levels: Primary school- Level 1; Junior High School- Level 2; High School- Level 3 as the following table:

Table 4.2: The length of Vietnamese texts for school levels at word level

The Length of Vietnamese Text for School Levels						
School Levels	**Counted by Characters**		**Counted by Syllables**		**Counted by Words**	
	Average	From Minimum to Maximum	Average	From Minimun to Maximum	Average	From Minimun to Maximum
Primary School	1,104	827 – 1,396	231	178 – 288	199	158 – 244
Secondary School	5,295	3,709 – 8,160	1,111	784 – 1,710	946	680 – 1,447
High School	8,956	4,860 – 10,761	1,830	1,006 – 2,179	1,477	862 – 1,710

Based on statistics, we can quantify the surface linguistic elements: (1) the average number of characters, (2) the average number of syllables; and (3) the average number of words in a text of 3 school levels as follows: Primary School: 1,104; 231; 199; Secondary School: 5,295; 1,111; 946. High School: 8,956; 1,830; 1,477. With these qualitative numbers, initially, we can determine the text readability quantitatively in Vietnamese language.

When comparing the above-mentioned surface linguistics elements in Vietnamese with English, we can see that there are the similarities with the readability studies in English as presented in the related works mentioned above; especially, the remarkable research results of Gray & Leary (1935) and Flesch (1948). This can be illustrated more clearly in 3 English texts [1]as follows:

Figure 4.2: Illustrated examples in English readability

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[1] Monsoon Flooding. (July 26, 2019). Retrieved from https://www.newsinlevels.com

Applying the Flesch readability formula for English language which is already supported in Microsoft Word to measure the readability of the texts, the statistical numbers of the surface linguistic elements at the word level are counted as follows:

Figure 4.3. Readability Statistics in English texts by Flesch formula

It is clear that the average number of words (ANW) and the average number of characters (ANS) in each text gradually increase from level 1 to level 3: ANW at level 1 is 73, level 2 is 87, and is 127 words at level 3; therefore, the ANS of the text at level 1 is 335 characters, 462 characters are at level 2, and the maximum number of characters is 683 at level 3. Thus, this is the similarity in the influence of the two surface linguistic elements- ANW and ANS- in a text on readability in both Vietnamese and English languages.

Besides, the statistics of 3 texts above also show that there are differences among the average word length in characters (character per word- AWLC). At level 1 this element reaches 4.4 characters in a word, and it increases to 5.2 characters in a word at level 2 and level 3. If we consider the numbers alone, in this case, there are not significant differences. However, in each specific text, the word length calculated in characters of each word is a focused element because of its influence on English readability, and it is also the essential element to measure grades in Flesch readability formula.

Considering the texts in the example above, at Level 1, the difficult words are flood (go under water), affect (when something happens to you), and disinfect (clean with chemicals to kill bacteria) while the difficult words at Level 2 are monsoon (a wind in South East Asia which brings rain), flooding (a lot of water), and disinfect (clean with chemicals to kill bacteria). Thus, in terms of the word length in characters, it is clear that words counted by characters at Level 2 are longer than those at Level 1.

Comparing the AWLC in Vietnamese with English, there is a clear difference based on the statistics of corpus in this paper. Table 4.1 shows that most of the grades from grade 2 to grade 12 do not have significant differences in this element. The statistics show that AWLC in Vietnamese is about from 5 to 6 characters, which the lowest is grade 2 with 5.25 characters and the highest is 5. 98 at the 7th grade level. It is noteworthy that grade 11 has an AWLC with the number of 7 characters.

The results of this study also coincide with another study with the more universally corpus, Vietnamese corpus, including more than 17 million sentences with more than 346 million words and 443 million characters in 42 fields which group into 18 topics (scientific, economic, cultural, social, etc.). The Vietnamese corpus, also known as Vcor, was automatically collected from online newspaper websites (www.tuoitre.vn, www.vnexpress.net...) from 2000 to 2010; currently, this corpus is conditionally distributed by Computational Linguistics Center. The research results of this universal corpus also show that a Vietnamese word has one or more characters, the maximum is up to 7 characters (only one case which is the word 'nghiêng'); the words are the most common ones with 3 or 4 characters. Average is 4.5 characters. (Dien Dinh, 2019) [16].

Thus, investigating and comparing 2 elements: AWLS and AWLC, in Vietnamese and English languages, it can conclude they are the elements affecting in English readability, but they do not have influence on Vietnamese readability. It is worth noting that this difference is not only expressed in terms of statistics on these two surface linguistics elements, but also in terms of the structural forming of the two languages - English is a fusional language while Vietnamese is an isolating language.

The Affection of the Word Frequency Factor in Readability Vietnamese (in Comparison with English)

The history of readability research in English shows that word frequency is always the factor focused on evaluating readability. Therefore, the paper examined this factor to evaluate readability in Vietnamese language.

The paper used the corpus classified into three school levels: primary, secondary, and high school; and each school level was categorized in ascending grades to incorporate the frequency approach. On this basis, the "word frequency" can be examined as the factor affecting on readability in Vietnamese as in English. The results of word frequency statistics can be summarized in the following table:

Table 4.3: Overview of the statistics results of word frequency, Vietnamese and Literature textbooks

Grade	Text number	Word number	Highest frequency	Lowest frequency
2	67	2,167	0.016525024	9.44287E-05
3	62	2,637	0.016271073	8.38715E-05
4	40	2,397	0.016271073	0.000108096
5	40	2,508	0.015650573	0.000102291
6	28	3,401	0.014558259	5.25569E-05
7	13	2,389	0.016590909	0.000113636
8	17	3,262	0.022576925	6.06907E-05
9	21	4,696	0.01549546	3.28991E-05
10	15	12,951	0.000694927	1
11	19	25,878	0.000419815	1
12	49	84,099	0.00026617	1

The number of words calculated for word frequency at 3 school levels is 14,864 words: 5,523 words in the primary school texts; 8,138 words in the secondary school texts; and 10,690 words in the high school texts. The data shows that the words appear with different frequencies. The frequency is calculated by using the formula $f = -\lg(n/N)$; where n is the number of occurrences of the word and N is the total number of words in the corpus. For example, in 100 million words "người" (people) appear 1 million times then f will be $-\lg(10\exp6/10\exp8) = 2$. When this number is lower (minimum is 0), it means that the word appears more and vice versa (maximum is 8, if the word appears only 1 time). We can have an overview in the extracted table as follows:

Table 4.4: Extracted word frequency

PRIMARY SCHOOL												
No	Grade2			Grade 3			Grade 4			Grade 5		
	Words	n	f	Words	n	f	Words	n	f	Words	n	f
1	một	175	0.016525024	một	194	0.016271073	một	151	0.01632256	một	153	0.015650573
2	có	139	0.01312559	người	115	0.009645224	là	99	0.010701546	người	130	0.013297872
3	con	122	0.011520302	đi	110	0.009225866	có	97	0.010485353	có	123	0.012581833
4	em	110	0.010387158	tôi	110	0.009225866	của	93	0.010052967	là	98	0.01002455
5	không	99	0.009348442	có	104	0.008722637	và	85	0.009188196	không	98	0.01002455
6	là	93	0.00878187	là	102	0.008554894	những	78	0.008431521	của	94	0.009615385
7	cho	84	0.007932011	của	99	0.008303279	không	76	0.008215328	đã	87	0.008899345
8	của	82	0.007743154	lên	97	0.008135536	đã	75	0.008107232	được	82	0.008387889
9	cậu	78	0.007365439	và	97	0.008135536	cho	73	0.007891039	và	82	0.008387889
10	người	78	0.007365439	ông	96	0.008051665	ông	69	0.007458653	những	78	0.007978723
SECONDARY SCHOOL												
SNo	Grade 6			Grade 7			Grade 8			Grade 9		
	Words	n	f	Words	n	f	Words	n	f	Words	n	f
1	một	277	0.014558259	của	146	0.016590909	tôi	372	0.022576925	một	471	0.01549546

2	tôi	240	0.012613654	và	132	0.015	một	232	0.014080233	không	411	0.013521516
3	không	230	0.012088085	một	122	0.013863636	không	220	0.013351945	là	361	0.011876563
4	con	217	0.011404846	tôi	111	0.012613636	và	201	0.012198823	tôi	344	0.011317279
5	có	215	0.011299732	con	102	0.011590909	cho	171	0.010378103	và	329	0.010823793
6	là	179	0.009407684	là	100	0.011363636	của	170	0.010317412	có	313	0.010297408
7	đến	171	0.008987229	những	94	0.010681818	lão	170	0.010317412	của	271	0.008915647
8	và	159	0.008356546	có	92	0.010454545	là	169	0.010256721	lại	264	0.008685353
9	cho	159	0.008356546	không	91	0.010340909	có	167	0.01013534	những	261	0.008586656
10	người	142	0.007463079	như	86	0.009772727	những	155	0.009407052	anh	260	0.008553757

HIGH SCHOOL										**Overall**		
No	**Grade 10**			**Grade 11**			**Grade 12**					
	Words	*n*	*f*	Words	*n*	*f*	Words	*n*	*f*	Words	*n*	*f*
1	không	194	0.01500851	một	362	0.01400983	của	1613	0.019247062	một	3499	0.014651815
2	là	177	0.013901979	và	359	0.014091141	và	1232	0.014989293	của	3031	0.012880826
3	một	159	0.012664277	có	312	0.012421371	một	1203	0.01485919	và	2731	0.011757362
4	người	154	0.012423362	người	292	0.011771346	là	1053	0.013202603	là	2716	0.011831896
5	có	128	0.010455808	là	285	0.01162601	có	974	0.012375483	không	2679	0.011810451
6	cho	128	0.010566287	và	274	0.011308762	những	932	0.011990223	có	2664	0.011884686
7	đến	115	0.009594527	hẳn	254	0.010603214	người	873	0.011367484	người	2315	0.010451939
8	lại	114	0.009603235	cái	250	0.010548078	trong	840	0.01106355	những	2092	0.009544884
9	được	113	0.009611295	mà	234	0.009978253	không	808	0.010761137	tôi	2078	0.009572376
10	của	111	0.009532807	thì	228	0.00982039	được	626	0.008427912	cho	1793	0.008339341

Thus, based on the frequency of a word we can see the popularity of that word; on this basis, we can determine the basic lexicon in Vietnamese according to the frequency or popularity of words. Vietnamese texts used with "common words", the words with high frequency, are easier to understand; and vice versa, Vietnamese texts used "uncommon words", words with low frequency, are more difficult to understand. It is the similarity when comparing the influence of word frequency factor on Vietnamese readability with the English studies mentioned above in the related works.

Comparing the influence of the word frequency factor on readability in Vietnamese and English, we once again review the texts in figure 4.2 as the illustrated examples to find the similarities or differences between these 2 languages.

As mentioned, these 3 texts are extracted from News in Levels website. The website, News in Levels, as its name, publishes the news conveying the same content but is written in 3 levels: Level 1- Elementary; Level 2- Intermediate; and Level 3- Advance. The key factor when writing the news is the word frequency factor. The prerequisites to write these texts are as follows: Level 1 using 1000 words that are the most common in English, Level 2 using 2000 words that are the most common in English, Level 3 using 3000 words that are the most common in English; and in all of 3 levels, vocabulary and grammar are not abbreviated. Therefore, the text at level 1 is the easiest to understand, the text at Level 3 is the most difficult to understand and the text at level 2 is for medium reading level. With the motto "News written in different difficulty is a great resource"[1], the website can help readers, especially English learners, work with the texts appropriate to their current skill. It is evident that the word frequency has been applied in grading text readability to meet the actual needs of society.

In order to clarify the role of word frequency factor in Vietnamese readability, the paper used "Vietnamese Frequency Dictionary" to verify the influence of this factor. This dictionary is universal because it is built on the VCor corpus including 42 topics (entertainment, sports, informatics, education, health, economy, life, society, religion, culture, law, science...) with 805,185 texts in which the total number of sentences is 17,095,994, and the total number of words is 346,454,533. This dictionary includes 36,092 words arranged from the highest to the lowest frequency, which means that the "common words" are on the left and the less common are on the right.

The study compares the word list of the paper's corpus to the list of 3000 words that are the most common in the Vietnamese Frequency Dictionary. The results are as follows:

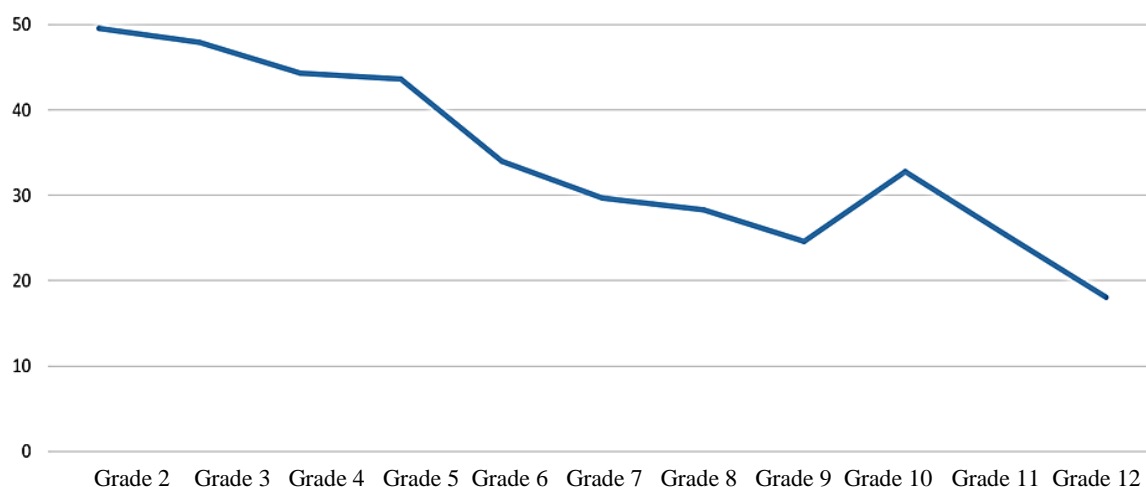[1] Retrieved from https://www.crunchbase.com/organization/news-in-levels#section-overview

Figure 4.4. Frequency of words in Vietnamese textbooks compared with Vietnamese Frequency Dictionary

It can be seen that the frequency of using words in Vietnamese textbook corpus when compared with the "Vietnamese Frequency Dictionary" is as follows: 50% of the words in grade 2 was in the 3000 most common wordlist of this dictionary; and this ratio decreased as the grade increases. In other words, the comparison of the word frequency of the paper's corpus with the general corpus, Vietnamese Frequency Dictionary, shows the conclusion that the word frequency is the factor having the strongest influence on readability in both Vietnamese and English. This finding also shows that at the word level, the word frequency is the deep linguistic factor that can be used with other linguistic elements to suggest the practical applications for assessing Vietnamese readability.

5. CONCLUSIONS AND RECOMMENDATIONS

In conclusion, on the readability view, investigating words in Vietnamese, compared with English, the paper examined as well as analyzed the linguistic elements and factors affecting readability in Vietnamese. The results from the corpus statistics show that among 7 surface linguistic elements: (1) Average Number of Words; (2) Average Number of Distinct Words; (3) Average Number of Syllables; (4) Average of Number of Distinct Syllables; (5) Average Number of Characters; (6) Average Word Length in Syllables; and (7) Average Word Length in Characters. 5 of them are the elements affecting readability in both English and Vietnamese except for 2 elements: Average Word Length in Syllables and Average Word Length in Characters. These 2 elements are the surface linguistic elements having influence on readability in English but not in Vietnamese. The paper findings also show that word frequency is the factor having the strongest influence on readability in both Vietnamese and English.

Based on the paper findings, we can generally quantify the surface linguistic elements: (1) Average Number of Characters; (2) Average Number of Syllables; and (3) Average Number of Words, in a Vietnamese text at 3 school levels respectively as follows: Primary School is about 1104; 231; 199; Secondary School is about 5295; 1111; 946; and High School is about 8956; 1830; 1477.

Determining the word frequency is the factor having the strongest influence on Vietnamese readability at word level lays the foundation for the paper to suggest the following recommendations: the Most Popular Vietnamese Wordlist; the Part of Speech Wordlist; and the Sino-Vietnamese Wordlist.

The basic lexicon appropriate to the reader's level should be determined based on the word's popularity. For example, based on the results of word frequency statistics of this paper corpus, we can draw a list of 1000 words (accounting for nearly 76% of words used in the texts), a list of 2000 words (accounting for nearly 85% of words used in the text), or a list of 3000 words (accounting for more than 88% of words used in the texts) that are the most common Vietnamese words in Vietnamese textbooks and Vietnamese Literature textbooks. Thus, we can build a suitable vocabulary for learners according to their level so that they can

read and understand Vietnamese and Literature textbooks because the word frequency is related to text processing.

Words can be listed by parts of speech and calculated according to the frequency of the word use. For example, a study of Dien Dinh (2018) [17] shows that nouns in Vietnamese are used with the highest frequency, the next is verbs, then adjectives and the final is other parts of speech. This should also be noted in the hierarchical classification of Vietnamese readability in selecting parts of speech in writing texts with the same content but at the different levels from elementary to intermediate and advance as Diep et all [18] stated in 2019.

In the paper in 1985, Liem T. Nguyen & Alan B. Henkin stated that Sino-Vietnamese words were identified as the element that influenced and increased Vietnamese text readability. Besides, Sino-Vietnamese words account for a large proportion in Vietnamese; for example, statistics on the origin of words in Vietnamese Dictionary of Linguistics Institute (Phe et all, 2003) shows that words related to Sino-Vietnamese element accounting for nearly 40% of Vietnamese words, in which about 30% are completely Sino-Vietnamese words and 8% are partly Sino-Vietnamese words. In addition, Sino-Vietnamese word class includes Vietnameseized Sino-Vietnamese words, and this element is widely used in the styles but is limited in the combination of morphemes such as sơn (mountain), thủy (water), độc lập (independence), dân tộc (people), hợp tác hóa (cooperation), xã hội chủ nghĩa (socialist), etc. Therefore, on the view of word frequency, Sino Vietnamese word is the 'potential' element to be examined to determine its influence on Vietnamese readability, and this element should be investigated deeply in the future.

Within the scope of a paper, the study only presents the elements and factors in terms of language and suggests the specific applications, so the details related to information processing and technology are mentioned in the cited publications. In comparison with English, the paper results initially lay the quantitative foundation of word affection in Vietnamese readability. The findings are the basic theories for us to continue to investigate the other linguistic factors and elements in a larger corpus to find reliable and convincing conclusions to assess text readability in Vietnamese more deeply and comprehensively. Besides suggesting practical applications, we hope that the paper findings can support computational linguistics to build applicable formula or tools for measuring Vietnamese text readability to meet the demand for users and Vietnamese community in this era of technology.

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HOW TO ORGANIZE ONLINE GROUP WORK EFFECTIVELY: A CASE STUDY IN THE ICT CLASSES

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Abstract. To investigate the challenges facing the students at the Faculty of Foreign Languages (IUH) in online group work as compared with in onsite context, discover the impacts of online collaboration on the students' learning results, and figure out the optimal ways that help their teacher organize virtual collaboration effectively, a case study was conducted with 165 IUH English-majored students in 4 classes of the course named *Information and Communication Technology in Teaching English* (the ICT course). At the beginning of the course, the teacher let the students choose a group to work in and assigned the roles for the group leaders and members; then they were all put into private channels in Microsoft Teams to work together for ten weeks. Weekly tasks were given to the groups on the Assignments in Microsoft Teams. The researchers observed how the students collaborated in groups to collect data for the research. By the end of the course, a survey was given to the students anonymously to gather their opinions on how effectively they had worked in groups. The results showed that the leaders of the groups had certain challenges in leading their group virtually but they appreciated the chances to learn from other members and improve their soft skills. For the group members, they agreed that virtual collaboration encouraged them to finish the tasks on schedule and other members' feedback was valuable for them to improve their own weekly products despite the fact that they had arguments and sometimes dissatisfaction with the other group members. Most participants found the ways to conduct virtual group work efficiently and recommended to spread to other classes.

Keywords. learning efficiency, online group work, self-improvement, virtual collaboration

1. INTRODUCTION

Under the influence of the Covid-19 pandemic as well as the trend of technology transformation, our work and life has gradually been converted to online mode. In education, online teaching has required teachers to redesign their educational content in different ways including suitable strategies to satisfy learners' demands (Koh & Hill, 2009).

Organizing student collaboration virtually must be taken into consideration by the teachers at IUH to be appropriately structured with the new learning environment. Collaborative learning has become one of the key instructional strategies (Lesley & Albert, 2002). For effective online collaboration or even achieving flying academic results in learning, members in those groups must strive to forge their skills which will establish new relationships with strange friends, enhance social skills, and increase each member's ability to contribute to the overall results of group work (Figueira. & Leal, 2013). Therefore, it is necessary to equip IUH students with basic knowledge about online group work such as what an online group should do, what an online group needs to avoid or what difficulties an online group may face during its collaboration, and whether the students who are group leaders or group members. In addition to aspects of knowledge and attitude, objective factors like the internet quality also play an equally important role in constituting the success of group work, especially in online environments.

To help the students to gain achievements in online groups as well as suggesting some helpful strategies for the teachers of the course named *ICT in Teaching English* (the ICT course) to organize better group work online, this study aims at investigating the students' attitudes towards (i) how effectively the online collaboration was carried out, (ii) whether they benefited something from collaborative learning, and (iii) what challenges they had to overcome. Our study desired to address the questions below:

Research question 1. Is it effective for the students to work in groups virtually in the ICT classes?
Research question 2. What are the challenges facing the students in working in online groups?
Research question 3. What are some suggested strategies to help organize online group work effectively?

2. LITERATURE REVIEW

2.1. Definition of online group work

Chinowsky and Rojas (2003, p.3) stated that "online group work" is the collaboration among students in a small group "through electronic media without regard to geographic location". This modern working method has been widely and increasingly applied everywhere (Koh & Hill, 2009). In such online groups, students work with their groupmates to finish a group task, assignment or project though the online environment with supported devices (smartphone, tablet, laptop, computer), using the internet and online tools to collaborate. Moreover, despite sitting in a fixed space in a classroom, online groups allow students to work from different times and locations by accessing shared online workspaces or virtual learning environment.

2.2. The impacts of online collaboration on students' learning efficiency

The results of the study carried out by Urquhart & Urquhart (2012) showed that after participating in a competently organized online working group, students received some certain positive impacts. These impacts encouraged students' learning performance and improved their academic results by nearly 18%. In another research, Humes (2015) mentioned in his study of "Effects of Online Collaborative Learning on Student Engagement and Academic Success" that students would be involved in more activities about tasks or assignments when taking part in those online collaborating groups; therefore, they had more chances to put practice and then their learning result was high. If this online collaborating method was more and more widely used in educational institutions, students' learning outcomes would be increasingly improved, leading to other countless benefits. After a long time working in collaborative environment, gradually students form the habit of group interaction instead of working individually, which does not produce learning outcomes as high as working in a group, and improve the awareness of how to give and receive help to other group members. Furthermore, the collaborative or group activities in an online course help students to achieve high learning academic outcomes. Collaborative group interactions facilitate students' awareness of learning, share knowledge and promote social interaction between students and students or teachers and students, and an active online learning community. Students would be shaped into a habit of collaboration and put their experience of working with groupmates in school into practice in future workplaces (Higley, 2018). After all, collaboration constantly brings positive effects to the online working group. From that, the core value that the works or activities aim for is consolidating students' academic quality as well as their self-awareness in learning which primarily deciding students' learning results, especially in an independent environment like the university.

2.3. Challenges of working online collaboration

Unlike onsite group work, virtual collaborative learning is affected by some factors which are sometimes out of the control of both teachers and learners.

2.3.1. Self-challenges

When students have to continuously keep their eyes on their learning or particularly their group working process, this unintentionally becomes a pressure on them. In addition, some shy students are usually unconfident when presenting in front of their group or reluctant to collaborate with strange groupmates. As a consequence, this obstacle gradually makes them lose the group contributing motivation and puts them into a situation of suffering uncomfortableness. When the suffering reaches the top, it will explode and become a conflict among groupmates, which should be avoided in any working group. Probably, such a conflict in groups not only brings down students' enthusiasm in their group, in task or even in the subject they are learning, but also discourages the learning motivation of each member (Keith, 2017). This also increases the degree of stress, leading to negative consequences in both students' learning results and physical or psychological health on them. Taking everything into account, conflicts can be compared to a "sleeping" flame that may be wakened anytime if group members are not equipped with knowledge on how

to contribute to a positive working group. Reducing pressure and sympathizing with each other are two factors that should be noticed to avoid conflicts during the group working process.

2.3.2. Stability for communicating across members

It is true to affirm that it is easier to gather everyone in an onsite environment, as it is a closed space, than in an online one, especially when gathering them to make acquaintance before working with them, to assign tasks, or simply to listen to them. Thus, when students are unable to control the objective surprising factors during online working such as the internet quality, the electricity stability, etc., it is a challenge to maintain communication across members in the group. Koh and Hill (2009, p. 6,) shared their feeling that "technical problems may hinder communication between group members, which, in turn, can make collaboration between group members difficult." Those surprising factors interrupt the working progress of the group resulting in time-consuming or even if the internet connection or electricity is lost for a long time, students completely cannot follow their group's working progress.

2.3.3. Impossible face-to-face opportunities

Another online group work challenge after the group was formed is the shortage of a chance to maintain relationships with other team members. As in the onsite setting like in school or university, students easily chat, invite someone for a meal and discuss the task. While in remote working groups, students find it more difficult to engage in a quick conversation because all tasks depend on devices (computer, smartphone, etc.) and software (Messenger, Gmail, Teams, etc.). A survey from Smartsheet – a workplace collaboration software & solutions from the USA found that 80% of participants felt that they were less connected when working online. When the group members feel lonely and disconnected from the collective, it affects their motivation and overall happiness in contributing to the group.

2.3.4. Technical issues

Technology is another factor identified as being relevant to students' satisfaction with online group work (Koh & Hill, 2009). For helping the online groups' working process to go smoothly, members need to have a deep understanding of the skill of using technical hardware (devices) and software (platforms to organize the group meeting) when participating in a group meeting as well as solving the assigned tasks to maximize the functionality of the software and avoid unintended incidents. Students are also required skills in solving technical problems that arise during an online group meeting: adjusting the microphones and cameras, using software to record meeting content (if necessary), managing group materials by platforms, device hanging errors, etc. However, numerous students are not knowledgeable enough to master all of the above requirements, so technology barriers are considered a big challenge for students when organizing a working group in online environment.

2.4 ICT in teaching English classes at IUH and weekly tasks

ICT in teaching English is designed for the final-year students at the Faculty of Foreign Languages, IUH. It focuses on theories and practices of applying technological tools in teaching English, principles for designing teaching activities, strategies for developing classroom management with the assistance of ICT tools, and evaluations of related educational software. The course was 15-week long, being delivered through Microsoft Teams.

On the first day of the course, the students were allowed to select group members and form groups of five students working online under the supervision of the teacher. Then, each group was added to a private Channel to work together till the end of the course. Each group was asked to select a group leader, who was responsible for facilitating the flow of the group work (e.g., coordinating specific tasks among the group members such as designing the PowerPoint gameshows for teaching, making educational videos, designing lesson plans with the use of online websites and applications, etc.). In addition, all the group leaders were added to one more Channel to incorporate with the teacher and other leaders.

The participants were required to involve various discussion activities with their members through Channel to give and get feedback for the 10 weekly tasks assigned by the teacher; then they submitted the final products in the Assignment. Guidance and training on group collaboration were provided throughout the project planning, execution, and reflection process.

3. RESEARCH METHOD

The study done for and reported in this paper applied both qualitative and quantitative methods to find out the impacts, challenges, and suggested strategies for organizing an effective online group work. Data were collected qualitatively via observation and an open-ended survey and quantitatively via a set of questionnaires. The study's participants were 165 English-majored students; they belonged to 34 groups including 34 groups leaders and 131 group members in four *ICT in teaching English* classes. In the last class of the course, the surveys were delivered to the students. They were well-informed that the data would be used for course review which could help the teachers improve the way to conduct online collaboration in the future courses; therefore, their honest feedback would be valuable. Moreover, the participants answered the questions anonymously so that they felt comfortable to give their true opinions. The observation of groups' collaborative performance in *Channels* in Microsoft Teams was carried out weeks after the ends of the course, it meant that while students were collaborating, they were unaware that their performance would be observed; thus, the researchers could collect valuable data through observation.

4. FINDINGS AND DISCUSSION

4.1. Students' satisfaction with their online group's collaboration

Level of satisfaction
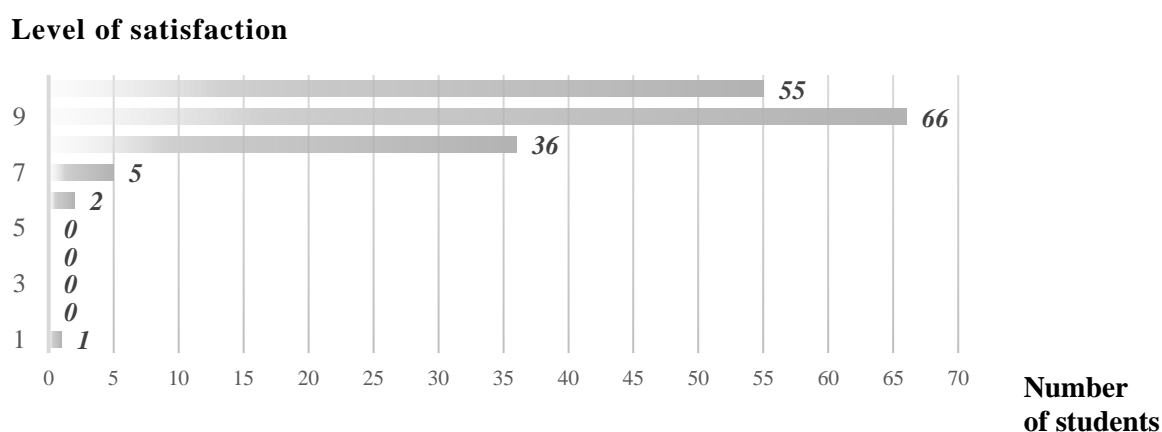
Figure 1: Students' attitude towards the effectiveness of their online group's collaboration

Most surveyed participants confirmed that their online groups collaborated effectively. There were totally 165 votes from all the group leaders and members for this question. As we can see, the votes of confirmation from 8, 9 and 10 makes up the majority in this chart, accounting for nearly 95.15% on the total of 165 votes. Specifically, 36 (21.82%) participants agreed that their online group collaborated effectively when rating at 8; 66 (40%) participants were satisfied when rating at 9, and 55 (33.3%) participants were extremely satisfied with their online group collaboration when rating at 10. The remain votes including five votes of 7, two votes of 6, and one vote of 1 that makes up a very small and insignificant part in this chart.

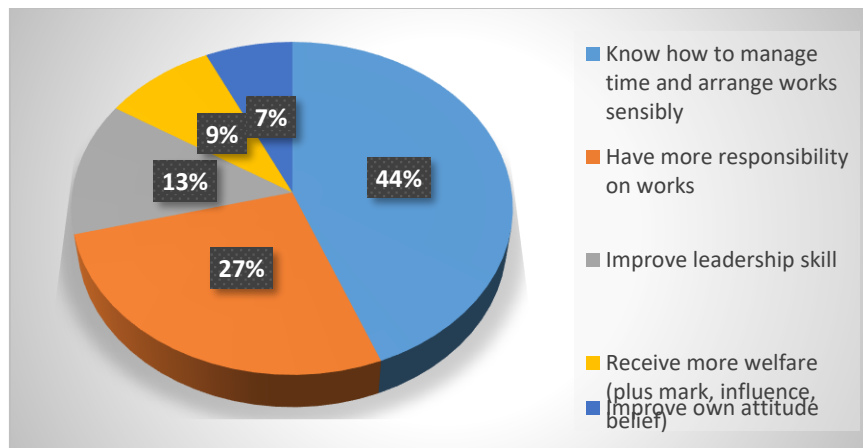## 4.2. Benefits that the group leaders got during the ICT course

Figure 2: Benefits that the group leaders got from working in online groups in the ICT classes

All of 34 group leaders contributed to this checkboxes question with the given answers/choices. At the first glance it is easy to see that most of the participants agreed that taking the group leader role brought them the biggest advantage of knowing how to manage time and arrange work sensibly when up to 20 out of 34 participants sympathized with this choice. Out of that most voted choice, the participants felt that their responsibility onwork and their leadership were also improved after spending collaborating time with their online groups because there were totally 18 votes from 34 participants for these two choices. Finally, relatively few participants assumed that they could receive more welfare such as plus mark, influence and belief from groupmates or improve their own attitude through taking the group leader role in the ICT course, with respectively 4 and 3 votes. Thus these two choices are at the lowest points in the chart.

4.3. Benefits that the group members got during the ICT course
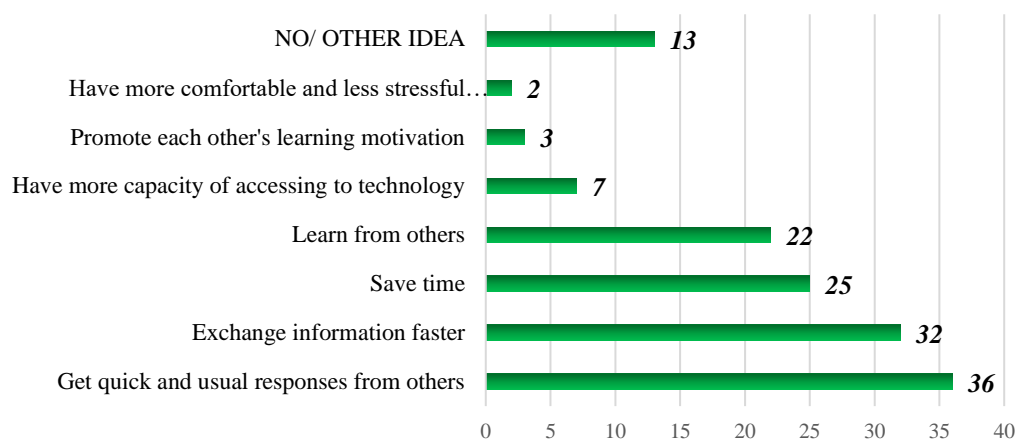
Figure 3: Benefits that the group member got from working in online groups in the ICT classes

There were 131 group members contributing to this checkbox question. Apparently, most of the participants agreed that they got three featured advantages including getting quick and usual responses from others, exchanging information faster, and saving time. This was provided by the fact that up to 115 out of 140 votes accounting for nearly 82.2% from 131 participants agreed with these choices. Beside the most three voted choices, there were just 8.5% of votes from the participants who supposed that they could have more

capacity of accessing to technology, promote each other's learning motivation, or have more comfortable and less stressful learning environment when taking part in the online collaborating groups in the ICT course.

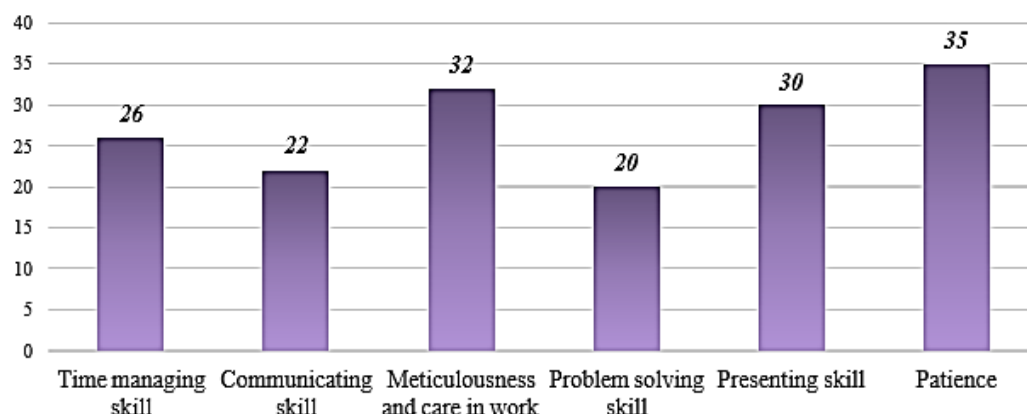**4.4. The skills that students learned after the online collaboration in the ICT course**

Figure 4: Chart of learned skills of students after the online collaboration in the course

At first glance,the three most common voted skills belonged to presenting skill, meticulousness/care in work, and patience. Furthermore, it could be clear from the chart that beside the above three skills, problem solving skill, communicating skill and time managing skill were also the positive things that the participants learned after the online collaboration in the ICT course. Although the questionnaire designed to collect data for this chart were the single choice questions, meaning that each participant was only allowed to agree with one answer, the collected resultswere surprisingly spread across all the six skills that my research team predicted. This showed up the importance that these skills brought to the students in the process of collaborating with online groups.

4.5. Challenges that the group leaders faced during the online collaboration

The difficulties	Agreed votes
Not be confident in their own abilities	9
Slow responding speed due to online working environment	6
Find hard in balancing time and making decision	5
The ability to connect members was not good	4
Required to work more and the works were more serious	3
Be stressful	1
Collaborated with irresponsible groupmates	1
Felt awkward when groupmates missed deadlines	1
No ideas	4

Figure 5: Challenges that the group leaders faced during the online collaboration

Overall, we could see from the table that almost the participants who were the group leaders met certain difficulties in collaborating, and only 4 out of 34 surveyed participants confirmed that they did not meet any difficulties, accounting for just 11.7% a very modest ratio. Among the 34 participants who were the

group leaders, 9 participants (26.47%) assumed that they were not confident in their own abilities, 6 participants (17.65%) admitted that the slow responding speed due to online working environment prevented them from performing the work well, 5 participants (14.71%) found hard in balancing their time and making decision, 4 participants (11.76%) concurred that the ability to connect members was not good, 3 participants (8.82%) felt that they were required to work more and the work was more serious. Finally, being stressful, collaborating with irresponsible groupmates, and the awkward feeling when groupmates missed deadlines were the difficulties that 3 participants faced in the course, accounting for 8.82%.

4.6. Challenges group members faced during their working online collaboration
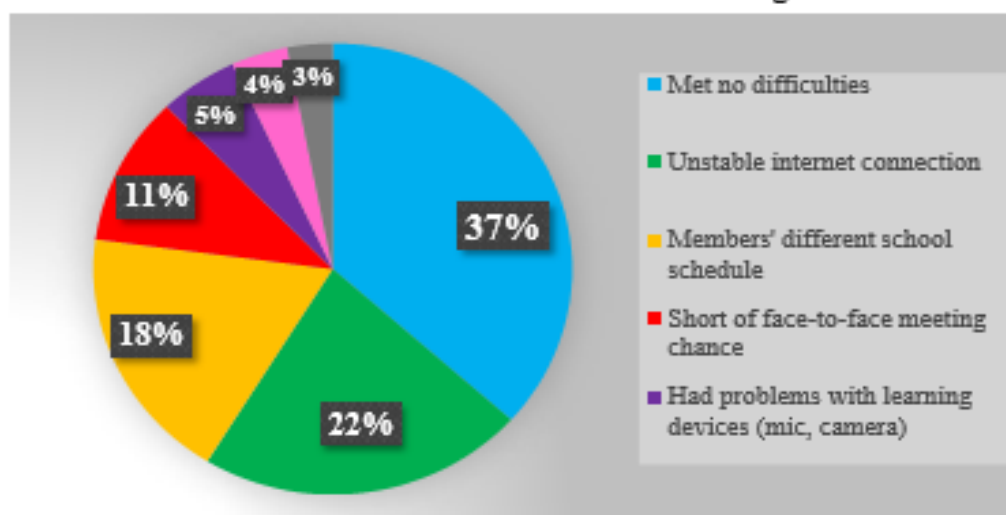
Figure 6: Challenges group members faced during their working online collaboration

There were 6 most popular challenges the members faced in their online collaboration that we collected from 131 group members. However, the thing impresses us when looking at this pie chart is not the difficulties that the participants encountered, but the number of participants who did not face any difficulties in the process of organizing online working group, accounting for up to 37%. This proves that the process of organizing the online collaboration in 4 ICT classes were very effectively. Beside the large number of the students met no problem when taking part in the online groups in the course, difficulties still existed against the rest of the participants. By a quick glance at the chart, it could be clear that the green, yellow and red pies stand for the participants who had problem with the internet, the schedule and the meeting chance. Specifically, 22% of the students admitted that their internet connection was unstable for the online working and learning; 18% of the students met difficulty when their groupmates had different school schedules; and 11% of the students felt that they were short of face-to-face meeting chance. These 3 difficulties alone accounted for 51% of the total answers. The 12% of the answers left belonged to the remaining 3 difficulties as I illustrated in the above pie chart.

4.7. Findings from Observation

Interaction between the teacher and the group leaders
Next, we observed how the teacher worked with the group leaders. In these ICT classes, the teacher did not work with the individual students, but through the leaders, to assign tasks or anything else. Thus, the group leaders were considered a bridge between the teacher andtheir group members. In order to facilitate and create professionalism in exchanging and keeping in touch with the group leaders, a channel named *"Nhom truong"* was created by the teacher. The latest information or notification were updated here, and the leaders were supposed to follow that information and transfer back to their group.
Leaders' collaborating attitude and role performance
One of the biggest duties of the leaders was to record and transfer information or assigned worksfrom the lecturer back to their members. After providing accurate and careful information to the members, the leaders also had responsibility to track, remind, checks, and give feedback on the members' products. Every

week, the leaders evaluated the work completion of each member and then reported back to the teacher. Out of that, the leaders needed to take the initiative to interact with their members, to show their own responsibilities, to communicate politely, to have a good attitude and management ability to beable to run their online groups.

Figure 7: Leaders' evaluation on the members' work completement

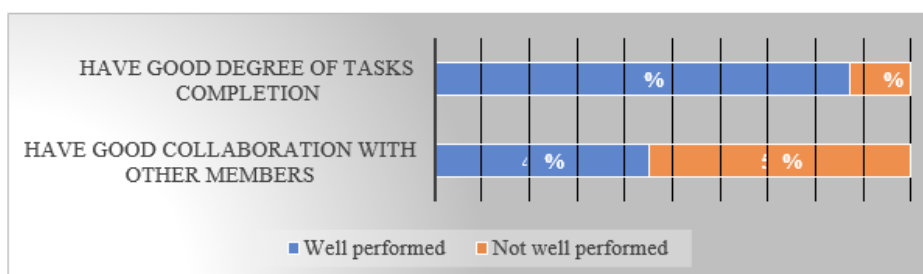**Members' collaboration with each other**

Figure 8: Chart of students' degree of tasks completion and collaboration

Below are the leaders' comments on their group members. Two aspects of the members we focused during the observation were the degree of tasks completion and the collaboration with other members.

This bar chart illustrates the member's degree of task completion and collaboration with othermembers based on the data we collected from the observation. Through the chart, we can affirmthat most of the members completed their assigned tasks and ensured the course's outcomes. Although the products were pretty good, the working progress did not seem to be positive: only 50% of the members estimated to perform well in collaborating with other members.

4.8. Strategies to organize online group work effectively

Through the realistic observation on 165 students including 34 group leaders and 131 group members in the 4 classes of the ICT course, combining with some of the results from the survey, we draw out the strategies to organize effective online collaborating groups in the course according to the following steps:

Figure 9: The four steps to organizing online group work effectively

Step 1: FOUNDATION   Keep the groups' setting to be structured and stable
The key to organize an effective online collaborating group is to have clear division in workand roles of all members in the very early days, and the teacher and the students in the ICT course did a good job on this. At the beginning of the course, the lecturer let students choose a group to work in and assign roles including group leaders and group members for the students and put them into channels in Microsoft Teams. There was a general channel in a class gathering all of its group leaders who directly worked with the teacher to receive either notifications or requirements relating to the course. Then the leaders themselves transferred them back to their group. It was strongly introduced from the early that the teacher worked with the leaders and the leaders collaborated with their groupmates; thus the leaders had full influence in managing and organizing their group in the online environment and the lecturer would not interfere. Finally, the leaders also had duty to report their group's working performance to the lecturer at 8:00 p.m. every Sunday so that the teacher could perceive how the groups were going. Briefly, to conclude that under the clear division in work and tasks in the very early days, we can imagine an online collaborating group as a machine with its fully installed functions. What we need to do is just press the "Start" button, and the machine will run as smoothly as it has been set up. It is similar to the organization of an online working group: if we have clearly defined the roles and tasks of each group, and even each member of the group, then the group operates. This means each individual knows what he or she needs to do and how to do it.

Step 2: SEEDING   Assign weekly tasks
It was significant to distinctly determine that the purpose of organizing the online group work was to complete required tasks in order to ensure the learning outcomes of the ICT course. Thus, weekly tasks were the main objects that students worked on. From the beginning to the advanced level, the weekly tasks relating to the use of MS PowerPoint and other software that served the technology-included teaching progress were given to the groups on the Assignments in Microsoft Teams. The default deadline for every task was at 7:00 p.m. every Sunday. With the above-mentioned content and the fixed format of the course assignments, the students would actively finish their own tasks because each member of the working groups of the ICT course has developed the good habit of obeying every deadline at IUH. This ensured that the working groups usually operated actively operated effectively.

Step 3: GROWING   Organize online group collaborations
There should be an association between the teacher and the group leaders, and between the group leaders and their group members. Therefore, the group leaders were considered as bridges to connect the teacher with their groupmates. For achieving that, the leaders needed to complete their leadingrole first. It included announcing to groupmates about lecturer's notifications and deadlines (if necessary), observing and managing group's working progress, responding to questions or tasksubmission from members, giving feedback and evaluating their completement. The leaders were aware of his role, and they did not want to make the lecturer be disappointed when assigning that important role on themselves, so these two factors motivated them to complete their mission well. From the realistic observation we conducted, we saw that most of the leaders tried to establish a connected atmosphere when they promptly gave feedback on groupmate's products because they were required to send their products to their group's channel for receiving feedback before summiting it to the lecturer. This was a necessary effort of the group leaders to increase the quality of the collaboration in their group.

Step 4: HARVESTING   Give comments on students' performance
To help the students to operate their online groups in effective and correct way, the general controlling role

of the lecturer cannot be ignored. The lecturer had her own methods to make their students productive. For the leaders, the lecturer encouraged them to complete their responsibility well by stating benefits they were achieved after playing the leading role in the course such as being trained the leadership skill or gaining additional welfare like plus mark. Besides, the lecturer also reminded the leaders to ensure their work in managing the group because their leading position might be cut off if they performed badly. The lecturer's comments on leaders' performance were timely and practical. These were both motivation and determination for the leaders to strive more.

Through the observation of the "Assignment" in MS Teams, we collected how the lecturer's gave feedback on student's products. They were in great detail on every aspect in a product. Taking a video exercise exported from PowerPoint presentation for instance, the lecturer carefullycommented on the audio, the visuals, the transitions, then the content and presentation, the text presentation and arrangement, and the creativity in that product, generally very detailed. These particular and timely feedback themselves helped students to see the shortcomings in their work, thereby drawing lessons for future products. This spirit and effort motivated students to try harder in their own work as well as in collaborating with their group so that they could receive suggestions from friends, and ultimately produced the best product before submitting to the lecturer in the later assignment. This indirectly increased the morale of their online working group.

5. CONCLUSION

Firstly, a good collaboration impacted students on two different aspects: attitude and skills. For group leaders, they gained more experience in leading the groups to complete tasks and improved soft skills like time management and arranging work sensibly. The leading mission forced them to work more, not only for their own results but also for the whole success of the group they managed; thus they were trained of the sense of responsibility and leveled up their leadership in solving problems, commenting, encouraging, and supporting other groupmates, for example. The clearest advantage the students who were group members got was the quick and usual responses and supports that they received from their groupmates in the current distance working situation. The convenience of online learning environment brought them the feeling of comfortable and less stressful. It also helped students to exchange information or learning documents in a much faster way, which offered another benefit that was saving time. Moreover, the capacity when dealing with the online collaborating situation also created chances for students to access to technology and apply gained experience into practice. Out of the above positive impacts affected to the group collaboration on group members, there were some benefits from self-awareness to students. They recognized their responsibility in contributing to group's performance, and at the same time they were aware of the duty for themselves when spending more time on their tasks' product because they knew that an individual must be a successful factor first if they wanted to contribute to the overall achievement of the group. Finally, the improved skills we surveyed on all students were presenting skill, time managing skill, communicating skill and problem-solving skill that supported them a lot during the working progress. Beside above skills, students were ameliorated the capacity to keep patience, also maintain meticulousness and care in work.

Along with the advantageous impacts are the difficulties that students faced during the collaboration in their online groups. As to the students in the leader role, they admitted that they were not confident in their own abilities. Maybe their leadership was realistically good, but this shyness became a barrier keeping them unable to exert their full leading potential and resulting in many results that are not as expected. Besides, the nature of the online environment often raised network problems such as lagging, or unstable internet speed; thus it created a difficulty for them to interact with their groupmates. There were also many other group leaders faced the obstacle in balancing their time also in making decision because the big workload made them overloaded. More seriously, some leaders assumed that they did not know how to connect their members or connected not effectively, so they were pressured before attending the meeting with their groupmates. The stress was increased when they were required to work more, and their work was more serious. Finally, they might fall into the awkward state when their groupmates missed deadlines which mainly came from the irresponsible groupmates.

These challenges really hindered the working progress of students in their online collaboration. However, it had not stopped here, after that we strived to find out the reasons for those challenges and difficulties and successfully collected the following results. The most familiar cause came from the quality of students'

internet connection. Family situation/condition was the second ranked reason because students did not have guaranteed conditions to be able to study and work such as finance and environment for learning problems. Finally, I would like to express my opinion about the 4-step strategy that was presented in the "Discussion". Figure 9: Art illustrating the four steps in strategy + General comments The four steps in this online group organizing strategy included (1) keeping the groups' setting to be structured and stable, (2) assigning weekly tasks, (3) organizing the collaborations, and (4) giving comments on students' performance - the lecturer's role. In my opinion, this steps sequence is very reasonable because they were arranged in an order from top to bottom and there was the connection between the steps.

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ONLINE CHILD ABUSE IN VIETNAMESE E-NEWSPAPERS

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Abstract. The development of technology has changed and strongly impacted the current lives of Vietnamese children. Becoming digital citizens early, children are active on the Internet for hours a day. In addition to the benefits brought about by technology, children face several risks in cyberspace, especially acts of online child abuse. The media in general and e-newspapers in particular play an important role in protecting children's rights and raising public awareness on this issue. However, online child abuse is still a relatively new topic, which has just been exploited by the press recently and not really been given due attention. With the study "Online child abuse in Vietnamese e-newspapers", the authors conducted a survey about online child abuse on three websites including vnexpress.net, vietnamnet.vn, dantri.com.vn from 2018 to 2021 to find out the current situation of news reporting as well as propose solutions to stakeholders to reduce child abuse in cyberspace.

Keywords. cyberspace, e-newspapers, media, online child abuse

1. INTRODUCTION

Vietnam is one of the countries with fast development in information technology, which can be seen by the great and growing number of Internet users. According to the Department of Information Security (Ministry of Information and Communications), about two-thirds of more than 24.7 million Vietnamese children can access Internet-connected devices and 43.4% of them use the Internet on an average of 1-3 hours per day [1]. Born in the digital age, children are the fastest adopters and simultaneously, being the most impacted by technology and the Internet. The cyberspace brings a plethora of benefits and opportunities for children in cultivating knowledge, enhancing entertainment activities, expanding networks and social interaction, etc. However, it also imposes potential dangers for children, whose awareness and experience are insufficient to protect themselves in cyberspace. Therefore, any child with Internet access can become a victim of online child abuse. In this article the authors will investigate the issue of online child abuse through the lens of journalistic research, including a survey conducted on the current reporting state on child abuse in cyberspace on three e-newspapers consisting of VnExpress (vnexpress.net), Vietnamnet (vietnamnet.vn), and Dan Tri (dantri.com.vn) from January 2018 to December 2021 in order to offer suggestions and recommendations to help improve the quality of news on this subject.

2. RESEARCH RESULTS

2.1. Concepts and forms of online child abuse

It is necessary to clarify some terms and concepts in studying the issue of child abuse in cyberspace. In different studies the concept of children is presented differently. There are documents that consider children as individuals under 16 years of age, other documents consider children as people under 18 years of age. According to Article 1 of the United Nations Convention on the Rights of the Child (CRC), "For the purposes of the present Convention, a child means every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier". In Vietnam, the concept of children was officially mentioned for the first time in the Ordinance on Protection, Care and Education of Children in 1979. It was said, "Children mentioned in this Ordinance include children from birth to 15 years of age" [16]. Article 1 of the 2016 Law on Children, which is in effect, also stipulates, "A child is a person under 16 years of age" [8]. Thus, in specialized law, Vietnam recognizes the age of children protected and cared for by the law as citizens under 16 years old. The authors agree and share with the view that children are

individuals under the age of 16, but also thinks that this concept is very flexible, depending on space, time, and "context, culture and capacity" [17]. The core of this concept implies a weak, vulnerable, and protected individual in society.

As defined by the World Health Organization (WHO), child abuse "includes all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power" [18]. Clause 5, Article 4 of Vietnam's 2016 Law on Children also stipulates that child abuse means "acts that cause harm to the physical strength, emotion, psychology, honor and dignity of a child in form of violence, exploitation, sexual abuse, trafficking, abandonment, neglect or other harmful forms" [8].

Therefore, it can be understood that online child abuse are all acts of harm to children that occur in the Internet environment and being supported by technological devices such as computers, tablets, mobile phones and so forth. These behaviors can happen on any online platform offering online communication like social networks, text messages applications, email, live streaming sites or online games, etc. However, online child abuse is regarded as a particularly complex form of child abuse, which is difficult to detect and control due to its anonymity feature, unlimited geographical connectivity and number of participants. Therefore, children are at risk of repeated violence, persistent obsession when information and data are exploited, accessed, publicly posted, distributed and permanently exist on the Internet. In addition, means and tricks of child abuse also increase in their complexity and diversity. According to the UK's National Society for the Prevention of Violence against Children (NSPCC), common forms of online abuse include: cyberbullying, emotional abuse, sexual violence and exploitation, privacy invasion, grooming, etc. [7]. Based on research and synthesis from the reality in Vietnam and oversea, it was found that these forms are often expressed through the following specific behaviors:

- Cyberbullying is the intentional, repeated activity of an individual or a group of people using information technology to cause harm to children or making them scared, angry or ashamed.

Forms of cyberbullying: Send threatening, defamatory or disparaging messages; Post malicious or harassing comments; Create and share images or videos that hurt or upset children; Isolate, exclude children from games, group activities or online groups; Establish websites or online groups to attack a particular child; Encourage children to self-destruct; Advocate harmful behaviors to children; Steal passwords and access children's accounts to send or post harmful pictures, videos and information; Spread rumors aiming at smearing children through text messages, emails, social networks, etc.

- Online grooming is the process of establishing close relationships and trust with children through the Internet in preparation for the stage of sexual abuse or exploitation. The seducer can spend a lot of time learning about the child's interests and using that information to form a relationship with the child. Setting up a virtual chat room, chatting in an online game, creating a forum, pretending to be a same-gender person, etc. are tricks often used to approach, get acquainted, and seduce children online. Therefore, many children do not know they are being seduced or not understanding that those actions are abusive. Children mistakenly believe that the seducer is a friend or relative, from which they do not want to report or share their stories for fear of isolation and losing the special relationship between the two parties.

- Online sexual abuse and exploitation include all acts of seduction, harassment, coercion and sexual exploitation of children occurring in the online environment. In particular, sexual exploitation is a form of sexual abuse that exists when the purpose of the abuse is for money, power or status.

Online sexual violence and exploitation occur when children are persuaded or coerced to receive, send or post sexual images; witness or engage in sexual activities via webcam and smartphone; sexual talk by texting or voice (sexting), etc. Online sexual exploitation is also expressed through the use of technology to enduce and coerce children to participate in other sex-related activities such as children trafficking via online platforms for the purpose of prostitution, online sex tourism or creating pornography contents for sale, possession, distribution and transmission on the Internet.

- Online emotional abuse includes acts in cyberspace that are harmful to the children's mental development and leaving significant psychological trauma for children. Often, forms of online child abuse overlap, and emotional abuse can co-occur with any form of online child abuse described above.

Online emotional abuse can also occur when children have access to false information and malicious content in cyberspace. In addition, emotional abuse also includes the persuasion, coercion, or intimidation

of children to participate in activities that they do not want, feel uncomfortable, or are not age-appropriate or deliberately putting children in dangerous situations. These activities make children feel afraid and easily manipulated; even make them feel inferior, not valuable, not talented and doubt their own abilities.

- Privacy invasion and children exploitation: Several forms of online child abuse violate or involve violations of children's privacy rights. These may include hacking into a computer to steal or spread private information or images; disclosing and posting personal data without permission or other cases of using children for online gains such as: producing sensational children-related contents, using children to attract public attention, then monetizing the numbers of likes and followers; trading children's pictures and clips; collecting and selling children's information for bad purposes, etc.

2.2. Vietnam's legal documents on protecting children in cyberspace

Vietnamese children are currently facing various risks of being abused in cyberspace. Statistics from the US National Center for Missing and Exploited Children (NCMEC) show that in 2018, Vietnam had 706,435 reported cases related to online child-sexual-abuse images/videos - ranked 2nd in ASEAN, after Indonesia. Survey results released by the United Nations on September 4, 2019 also show that 21% of young people in Vietnam admit to being victims of cyberbullying, but 75% do not know about the hotlines or any other support services if faced with this phenomenon [2]. According to a report by DQ Institute in 2020, Vietnamese children are in the group with the lowest online safety index in the world, reaching 12.7 points, while the average level is 30 - 59.9 points [3]. Especially, during the Covid-19 epidemic, when regulations on social distancing make children spend more time online, the problem of online harassment and violence tends to be increasingly serious. Online abuse does not require physical interaction or face-to-face meetings but still puts such devastating consequences and can be the start of real-world forms of abuse such as physical violence, sexual assault, exploitation and trafficking.

Facing the complicated developments of the actual situation, as one of the first countries to ratify the Convention on the Rights of the Child, Vietnam has been making great efforts to protect children in cyberspace. Accordingly, Vietnam has issued several legal documents directly related to this issue such as: Law on Children 2016, Law on Information Technology 2006; Law on Cybersecurity 2018, Criminal Code 2015, and Law on Press 2016. Besides, the Government and ministries have also issued a number of documents guiding the implementation of the law. Decree No. 56/2017/ND-CP detailing a number of articles of the Law on Children devotes a whole chapter (Chapter IV) stipulating the responsibilities of stakeholders in protecting children in cyberspace, including: Confidentiality of children's private lives and personal secrets (Article 33); Communication, education and enhancing capacity of child protection in cyberspace (Article 34); Safety insurance of children in exchanging and providing information on the network environment (Article 35); Measures to protect confidential information of children's private life in the online environment (Article 36); and Measures to support and intervene for abused children in the cyber environment (Article 37). In addition, Decree 130/2021/ND-CP stipulating the sanction of administrative violations in the field of child protection, social assistance and child care clearly specifies the fine levels for violations of the responsibility to protect children in the online environment (Article 36). Decree 119/2020/ND-CP stipulating penalties for administrative violations in press and publishing activities also has contents related to violations of children's rights in the media such as: Violating regulations on publishing and broadcasting information content in newspapers, newsletters and special journals (Article 8); and Violations against regulations on presentation and illustration of publications and information that must be written on publications (Article 25).

In particular, on June 1, 2021, the Prime Minister signed Decision No. 830/QD-TTg approving the program "Protect and support children to safely and creatively interact with cyberspace for the 2021-2025 period". This is the first time that Vietnam has issued a separate national program on child protection in the online environment. The program includes many drastic actions, building and forming a network to rescue and protect children in the online environment with many participating units. On March 5, 2022, the Prime Minister continued to issue Decision No. 311/QD-TTg approving the program "Educating revolutionary ideals, morality, and cultural lifestyles for youth, teenagers and children in cyberspace in the period of 2022-2030" with specific contents aiming at improving the effectiveness of education in ideals, morality, lifestyle as well as forming and developing skills in identifying and handling, mastering information and digital tools for young people.

It can be said that with the above legal documents, Vietnam has initially established "shields" to protect children participating in the online environment. However, life in reality is very different and keeps changing in comparison with the laws, especially in the digital age. Legal provisions are framework regulations. There are no regulations that cover all of the specific details and facts [11]. Experts said that Vietnam still needs continue to improve the legal corridor by building a system of documents guiding specific law enforcement; to amend and supplement sanctions for acts of online child abuse (for example, the act of storing videos and images of sexually abused children and act of grooming should also be considered for criminal prosecution) [9] [12] [15]. For the law to be really effective and come to life, it is necessary to have the cooperation of the whole community, in which it is indispensable for the role of the press and media agencies in propagating, reflecting, shaping public opinion and further raising public awareness on this issue.

2.3. Online child abuse in Vietnamese e-newspapers

Overview information about the survey

In this study, we use content analysis method, based on statistics and data analysis of the articles writing about online child abuse. The aims of using the method are to study more deeply the motives and intentions of journalists in messages brought to the public, to find out the features of the content and form of the 3 e-newspapers reporting the problem of online child abuse, to give some suggestions and recommendations to stakeholders to improve quality of the above mentioned e-newspapers.

The authors conducted a survey of the articles on the issue of child abuse in cyberspace on three online newspapers: VnExpress (http://vnexpress.net), Vietnamnet (http://vietnamnet.vn) and Dan Tri (http://dantri.com.vn). They all belong to reputable and official online newspapers with a large number of articles, rich information content and a large number of readers.

A survey of articles written on the issue of child abuse in cyberspace on three e-newspapers showed that from 2018 to 2021 a total of 475 articles exploited this topic. Specifically, Vietnamnet newspaper (http://vietnamnet.vn) led in the number of articles published with 220 articles, accounting for 46.3%; followed by Dan Tri newspaper (http://dantri.com.vn) with 143 articles, accounting for 30.1%; and VnExpress newspaper (http://vnexpress.net) has the lowest number of articles with 112 articles, accounting for 23.6%.

The reason why the number of articles related to the topic of child abuse in cyberspace is different can be explained as follows:

Vietnamnet is an online newspapers under the Ministry of Information and Communications, responsible for propagating the Party's guidelines, the State's policies and laws, and updating information in the fields of information & communication, politics, economy, socio-culture, and scientific and technological advances in the country as well as in the world. The fields of technology, information and the press are controled and managed by the Ministry of Information and Communications. Therefore, it was easily understandable when Vietnamnet paid great attention to the issue of online child abuse.

Similarly, Dan Tri online newspaper under the Ministry of Labor, War Invalids and Social Affairs (the national institution manages general issues related to children and coordinates the implementation of children's rights) has also focused on reporting on the topic.

The VnExpress newspaper, under the Ministry of Science and Technology, has a very large readership, but the number of articles about online child abuse is not much compared to the other two newspapers because VnExpress often provides general information about what is happening in the world in the field of science and technology. In addition, the Ministry of Science and Technology is not directly responsible for children's issues. Therefore, the number of articles reflecting on this topic is smaller.

In terms of publication frequency, within the four-year survey, the number of articles about online child abuse in all three e-newspapers increased year by year. In 2018, all three newspapers had only 26 articles (5.5%), 99 articles in 2019 (20.8%), 123 articles in 2020 (25.9%) and up to 227 articles (47.8%) in 2021. To explain, Vietnam has actively implemented various activities to support and protect children in cyberspace since 2019. Especially in 2021, when the Government promulgated the Program "Protecting and supporting children with healthy and creative interactions in cyberspace in the period 2021- 2025" (the Ministry of Information and Communications as the program host), the number of articles in Vietnamnet skyrocketed. Within the last 6 months of the year, Vietnamnet published up to 117 articles on the issue of

online child abuse on its columns, equivalent to the total number of such publications of Dan Tri or VnExpress in the whole period from 2018 to 2021. The Covid-19 epidemic, which lasted for two years, also had a significant impact on children's lives when online classes and prolonged social distancing situations had increased children's opportunities and time to use the Internet; and the risk of children being abused online is becoming increasingly clear. As a result, the amount of media attention on this issue skyrocketed.

Table 1. Number of journalistic works about online child abuse by three e-newspapers VnExpress, Vietnamnet, Dan Tri in the period 2018 – 2021

	2018	**2019**	**2020**	**2021**
VnExpress	10	38	25	39
Vietnamnet	6	24	55	135
Dan tri	10	37	43	53
Total	**26**	**99**	**123**	**227**

In addition, the survey also shows that the articles were often released in the middle of the year, especially when children were on summer break or starting a new school year. The frequency of those articles increased when there were serious violence incidents, such as the "Momo Challenge" online trend inciting children to commit suicide in 2019, harassment activities in online classes in 2020 or the Kumanthong doll case of Youtuber Tho Nguyen in 2021. All in all, it partly proves that e-newspapers did not have appropriate plans regarding time and frequency of publications for the topic. The published information lacks regularity, continuity and being heavily circumstantial, only when the issue or phenomenon becomes sensational and being noticed by the public will the press report it. This is a common feature of journalism, but the press needs to be the leader in creating awareness and proposing solutions to help the public make decisions for themselves.

The survey results

Based on the main content of the articles, the journalistic works about online child abuse from three e-newspapers Dan Tri, VnExpress, and Vietnamnet mentioned the following topics: (1) The Party's viewpoint and the State's legal policies on child abuse in cyberspace; (2) Overview of the situation and providing general knowledge about violence against children in cyberspace (concepts, forms, causes, and levels of danger); (3) Actions and cases of child abuse in cyberspace; (4) Solutions to prevent online child abuse; (5) The current situation of child abuse prevention in cyberspace (campaigns and activities of individuals, authorities, and organizations); (6) Scientific research activities, statistical reports on child abuse in cyberspace; (7) Cases, experiences and lessons on online child abuse from other countries. Such division of topics is only relative, because news often intertwines a lot of information.
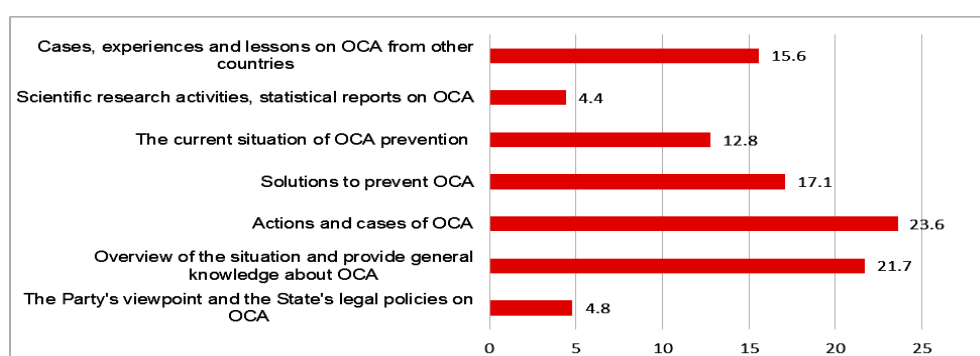

Chart 1. Topics of journalistic works about online child abuse (OCA) on three e-newspapers VnExpress, Vietnamnet, Dan Tri (%)

Among 475 journalistic works, there was 23.6% of articles that reflected specific actions and cases of harassment; 21.7% of them provided knowledge and overview of the situation about the child abuse in

cyberspace. These were also two kinds of content published the most by online newspapers in the period 2018-2021. Ranked third with 17.1% was articles of discussing, analyzing and proposing solutions to prevent child abuse on the Internet. Cases, experiences and lessons translated from foreign press accounted for 15.6%. The type of news reflecting the current situation of the fight against child abuse in cyberspace by individuals, agencies and organizations accounted for 12.8% of the total posts. In particular, a great number of activities to protect children in online environment have been implemented with extensive international cooperation, shown in these articles: "Vietnamese police solve cases of child sexual abuse from the warning of the US Department of Security" (Dan Tri, January 13, 2020), "Google guides Vietnamese children how to be safe on the Internet" (VnExpress, October 13, 2021), "Abroad Coordination to prevent online child sexual abuse" (Vietnamnet, December 2, 2021). This shows that the press has tried to exploit various aspects of the problem, playing a good role in reporting, reflecting the current situation as well as providing necessary knowledge. Therefore, the public can be aware of the violent acts and abuse against children in the current situation.

However, another important part was the propaganda about the views of the Party, and the State's legal policies (on violence against children in the cyber environment), which was lacking with a rate of only 4.8%. Disseminating and educating about the law as well as emphasizing political determination in child protection against online child abuse activities (usually from the opinions of central leaders or members of the national assembly) are very important sorts of content that need more attention from the media. In addition to timely and accurate information on guidelines and legal policies, the press also needs to become an effective feedback channel for the policy. When loopholes in the law exist, the press must be the place to promptly reflect on these shortcomings in order to make reasonable adjustments and improvements. Finally, there was a kind of news that updated research results and scientific seminars on child abuse in cyberspace. Although only 4.4% of news articles reported about those, the outstanding results and figures were cited by reporters in a lot of articles on other types of topics. Citation of such results helped the article to be more objective and trustworthy.

The forms of children abuse in cyberspace are also reflected in articles posted on Dan Tri, VnExpress and Vietnamnet, where articles mentioning multiple forms of online children abuse at the same time accounted for 33.4%. Next, online sexual abuse and exploitation is regarded relatively common with 24.2%. Psychological harassment and online abuse were 13.3% and 9.7%, respectively. Notably, the act of online solicitation was mentioned in lots of specific abuse cases, accounting for 11.8% of the total publications. However, the way reporters and journalists described and expressed this behavior was sometimes not very accurate, which can create vague inferences and distort the incident, such as calling the victim a "little girlfriend", "little lover". In addition, they described the process that the offenders seduced children as "getting acquainted through social networks and then falling in love", "getting acquainted and falling in love online". Those headlines are: "11-year-old girl has a baby with her lover" (VnExpress, July 14, 2018), "Going to Ben Tre to lure a 15-year-old girl to Quang Binh to do adult things" (Dan Tri, May 2, 2019), "Young man received 8 years in prison for three days of 'loving' a young girlfriend" (VnExpress, July 26, 2019), "The heartbreaking consequences for young people who love their little lover" (Vietnamnet, January 29, 2021)… Moreover, 7.6% of articles analyzed in-depth acts of infringing upon privacy, exploiting children on the Internet. In which, there are a large number of cases where parents and relatives intentionally or unintentionally abetted child abuse incidents when sharing pictures and posting personal information of children on the Internet. It was so alarming that children were turned into "clickbaiting" content, "profiteering" or forced into "stars" on online video platforms.

There have been many different conceptions about the division of the journalistic work genre system. The opinions of some authors such as Ta Ngoc Tan, Nguyen Van Dung, Duc Dung, Duong Xuan Son, Nguyen Thi Thoa, etc. are noteworthy. In this study, we divided the categories of works mainly based on the views of the author Nguyen Thi Thoa in the book "Textbook of general journalistic works". Accordingly, journalistic works can be divided into two groups of genres: Informative genre (including news, report, reflection, reportage, investigation, and fast record) focusing on accurate and objective information and opinionative genre (including editorial, commentary, specialized commentary, idle discussion, interview, talkshow, forum) focusing on general information and opinions [13].

The survey results show that the group of genres was most used by newspapers writing about online child abuse belong to the informative genre with a rate of up to 91.6%, in which the reflection is used the most,

followed by news, reporting and finally reportage. Specifically, reflecting articles took up 64.8%; news 22.2%; report 3.8%, and reportage 0.8%. In the opinionative genre, commentaries and editorials accounted for 4.4% and interviews accounted for 4%.

This variance was consistent with the allocation of the main type and topics when the number of articles about misdeeds and cases, reflecting the current situation and providing knowledge, occupied a large proportion. Most of the publications in all three newspapers used simple, easy-to-understand language, without using academic jargon or slang, or dialects. Authors often reported directly on the issue, straight to the point, and told the story with a neutral, listing tone avoided a leading one. However, this easy, "one-way" writing style made many works become dull, trivial, and not very attractive.

Writing on the topic of online child abuse, nearly two-thirds of the works published in three newspapers focused on exploiting the negative aspects of the problem, which were reporting on the current situation of violent incident (61.1%). Information aimed at promoting the prevention of child abuse and child protection in the online environment accounted for 38.9%. Emphasizing negative information can help the public be conscious of the severity and complicated situation of child abuse issue in digital age in our country nowsaday. However, the presses also need to have a more multi-dimensional, objective, and profound view on this problem. Newspapers should diversify the genres, deploy more lines of commentary, investigation and reportage to analyze and explain cases in the general context. In addition, it is necessary to disseminate more information about organizations and hotlines that can advise and support children, commendate for child protection cases, introduce new solutions and promote their application into practice.

In regards to the form, the statistical results show that the news on the three surveyed online newspapers mainly used text with images to express the messages, accounting for 95.6%. Among them, the number of articles with 1 image accounted for the majority, up to 57.5%. Articles with 2 photos accounted for 23.4%, and articles with 3 or more occupied 14.7%. Such usage of images will attract readers better, enhance more credibility to the information, create a break for the eyes and help the article become more vivid. The images used were usually illustrations, photos of perpetrators/suspects or victims (their faces are censored to avoid revealing personal information), event reports images, screenshots of infringing actions/websites, etc. It is worth mentioning that among the illustrations, there were some violent and horror photos that can cause mental obsession for viewers, especially children. Here are some examples: "Momo - a virtual character that is causing terror on social networks" (VnExpress, July 24, 2018), "Momo challenge and the truth about rumors that shook social networks" (Vietnamnet, March 2, 2019), "Jonathan Galindo - Who is the mysterious character that is causing confusion on social networks?" (Dan Tri, July 7, 2020). Therefore, reporters and journalists should blur them or use other more appropriate images, in order to avoid children from being psychologically abused right in the press.

In addition, 6.5% of the articles used the information box to emphasize important parts, provide additional data to enrich the information. A small proportion of publications (5.4%) included video clips and other creative presentations such as polls or e-magazines. Since April 2019, Dan Tri has applied AI technology to integrate the spoken version. When accessing the website of Dan Tri on a computer or mobile device, readers will see below the headline of the article an option to play audio, they can click here and listen to the article, instead of having to read it themselves as before. Furthermore, depending on preferences and regions, listeners can choose whether the voice is male or female, the South or the North to hear the article more clearly. This helped bring interesting, convenient, and useful personalized experiences to readers, and also caught up with the trend of digital transformation that had been taking place strongly in the field of journalism and media in Vietnam.

2.4. Discussion and Recommendations

Three online newspapers VnExpress, Vietnamnet, and Dan Tri reported and explored a large number of topics related to online child abuse creating relatively abundant sights of information picture. As mentioned above, the provision of basic knowledge about violent incidents has contributed to helping readers identify the risks that kids might deal with in the digital age, raising the alarm so that parents and the community can understand the severity of the incidents, thereby taking drastic actions to protect their kids. At the same time, the press also gave an active voice by reflecting on violence prevention activities as well as providing analysis and suggestions for problems related to law, technology or strengthening coordination among units for children's rights.

The content in the publications was simple, easy to understand and to approach, the information was clear and reliable because of the trustworthy sources from authorities, experts, researchers, social organizations, and international organizations. According to the survey in all three newspapers, reflection articles were used most, followed by news. These are the types of news that were fast and easy to write and easy to find documents.

However, there were still certain shortcomings when undertaking media activities of Vietnamese online newspapers on the issue of child abuse in cyberspace. Basically, the topics are explored in a broad but not comprehensive and in methodical manner, and the frequency of posting is still heavily incidental. In particular, the number of publications mentioning the viewpoints and policies of the Party and the State (on the protection of children in cyberspace) was small, which affected the propaganda of those for the public. In some cases the articles only let the public access the information, but did not analyze and explain the phenomenon thoroughly. Some articles had been written in a narration and listing way and unaccurate, insensitive and monotonous words had been used. Moreover, during the period of 2018 - 2021, all three newspapers only had a total of 4 reportage articles, accounting for 0.8%. The absence of an investigative or reportage genre when writing about a sophisticated topic like child abuse in cyberspace partly showed how the journalists had paid their attention to the problems. The multimedia forms were not fully utilized when the articles mainly used text and image; the using of audio/video and other forms of message transmission was limited.

Based on the results of the survey above, the authors would like to make some suggestions to reporters, editors and press agencies:

Firstly, exploiting multi-dimensional aspects of the topic and increasing the frequency of publishing: In order for the public to have a thorough view of the online child abuse problem, news agencies should even need to work on this issue in a more multi-dimensional and deeper way; and information must be updated regularly. In particular, newspapers need to promote communication about the Party's guidelines, the State's policies and the orientation of governing bodies in protecting children in cyberspace. In addition to publishing original document or quoting legal documents on the newspaper, the press also needs to summarize the main points and highlights so that readers can easily grasp the information.

The press should open the sections "Question and Answer" and "Legal Advice" to meet the people's need to learn about policies and law-related issues, and organize forums in order to promote public interactions. On Vietnamese online newspapers, there are two types of online forums: direct (including "Online Exchanges", "Online Roundtables", "Online Talk shows", "Online Dialogues") and indirect (including "Forum Category", "Readers Write" and "Opinion Polls"). With these forms, the public is not only the one who asks questions and receives direct answers from guests, but also the initiator, discussion participants and problem-solver on a topic brought up by the editorial office or another people [4]. Thereby, the information will be transmitted two-way in the press, ensuring the combination of legal propaganda and reality life.

Second, being objective, truthful, profound in reporting, and diversifying the genres: The press is responsible for providing objective and honest information, contributing to orientation, persuasion, and changing public perception, attitude, and behavior. The results of a survey of journalistic works about online child abuse in three newspapers VnExpress, Vietnamnet and Dan Tri show that there was a serious unequal in the publication genre when news and reports accounted for 87% of the total posts. Therefore, the press agencies need to diversify more in genres, increase the number of commentaries, reportages, interviews, etc.

Instead of focusing on simply reporting the case, the publications need to be varied in genres and deep in content, especially it is necessary to develop articles that analyze and explain the causes, pointing out the social impacts leading to child abuse in cyberspace issue; thereby proposing effective solutions, create fundamental changes in community awareness. On the other hand, in writing about sensitive issues like child abuse, language in journalistic works need to avoid prejudice, blame and attribution of responsibility; ensure that personal information cannot be leaked, affecting children's rights. This requires reporters and editors to have a deep understanding of policies and laws, be able to observe and analyze social issues and understand the psychology of each public group.

Third, innovating the form of presentation to enhance the visual and vividness of the articles: For a quality article, in addition to attractive content, the way it is presented and expressed is also very important.

Reporters and editors need to make the most of the multimedia strengths of e-newspapers. Instead of monotonous, wordy articles, the journalistic works need to be presented in creative forms such as infographics, e-magazines, and podcasts. While providing information in a concise and scientific way, be aesthetically pleasing and attractive. Some e-newspapers also apply advanced technology (such as the Dan Tri with an audio version using AI voice technology) to enhance interesting experiences for readers, creating novel journalistic works and contributing to making the newspaper more professional.

In addition, in order to further promote the role and effectiveness of electronic newspapers in communicating about child abuse in cyberspace, the authors propose some recommendations for the stakeholders:

For the management agencies: It is necessary to strengthen close coordination with the press agencies in the propaganda, establishment and improvement of legal policies; further, promote the role of e-newspapers in detecting, dealing with, and preventing online child abuse; create a mechanism to provide information to the press and facilitate the reporters to work in accordance with the law, which reduce the lack of information in the press leading to one-way reporting, lack of objectivity, comprehensiveness, and accuracy. Management agencies also need to promptly grasp and deal with negative public opinions; conduct and supply concrete guidance flexibly; have specific propaganda schemes sent to the press agencies, so that the press agencies can implement them methodically and effectively. In particular, the Ministry of Information and Communications is responsible for reviewing, studying and proposing amendments and supplements according to its competence or proposing competent agencies to amend and supplement the legal corridor, policies and sanctions on the prevention and combating of child abuse in cyberspace; quickly prevent and handle toxic information that affects children's development. In addition, the Ministry of Information and Communications needs to actively coordinate with other agencies and organizations to quickly implement the activities of the Network for Rescue and Protection of Children on the Internet into practice.

For educational institutions, mass organizations and social organizations working for children: Actively participating in discussions and contributing ideas to help establish and improve the legal framework on child protection in cyberspace through forums or columns published by the press; cooperating with the media to promote the propagation and dissemination of legal education; equipping knowledge and skills to help kids go online in a safe way; shaping public opinion to fight against cases and acts of child abuse; supporting the development of coordination among journalists, reporters, and experts, scientists, lawyers, managers; and cooperating to organize seminars, training sessions, professional activities to exchange and share communication knowledge about child abuse for reporters and editors.

For companies providing Internet services, and providing platforms and technology - technical solutions: Coordinating with press agencies to disseminate and introduce to the community Internet services to protect, intervene and support children; announcing the policies, community standards and ethical standards on children protection in cyberspace; proactively detecting, preventing and providing information on unhealthy content of child abuse to the authorities; actively scrutinizing and removing content and acts of child abuse as soon as information is reflected by the public or the press.

For the public: Readers need to increase interaction and actively express their opinions on the issue of online child abuse through answering interviews, commenting on articles and participating in discussion forums and columns for confiding and legal questions, sharing opinions, etc. on e-newspapers, so that the press is really a "forum of the citizens". Along with that, the public needs to receive, propagate and realize information obtained from the press, turning positive comments, feelings and aspirations into protecting behaviors. In reality, children have the responsibility to learn and strictly comply with the law, and behave culturally when using the Internet.

3. CONCLUSION

Child protection in cyberspace is currently a "hot" topic in society, but the survey results show that communication activities on the three online newspapers VnExpress, Vietnamnet, and Dan Tri are still not commensurate with the importance of the problem. The frequency of information is uneven; the topic is wide but not comprehensive and deep; and the content and form of many articles are not really attractive. In dealing with such a situation, we imply that reporters, press agencies, and stakeholders should be more interested in communicating for children's rights and interests, have feasible solutions to enhance the

effectiveness of propaganda, education, as well as raise public awareness, thereby preventing and reducing the problem of children abuse in the digital age.

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ETHICAL EDUCATION FOR THE YOUTH IN VIETNAM: FROM THEORY TO PRACTICE

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Abstract. Youth are considered an important factor for future development in countries, so it is necessary to focus on training to improve professional qualifications, skills, ideal and ethical education, and lifestyle for youth. Currently, many objective and subjective factors influence a part of Vietnamese youth to follow a pragmatic, fallen, spoiled lifestyle, away from the good moral values of the nation, and the attitude of indifference to economic and political events of the country. This study focuses on analyzing the views of the Communist Party of Vietnam on ethics education for the youth in Vietnam today, assessing the current situation of ethics education for the youth in the past, thereby developing solutions to improve ethics education for youth in Vietnam.

Keywords. youth, ethics education, ethical education for youths

1. INTRODUCTION

According to Karl Heinrich Marx and Friedrich Engels, morality is not something constant but often changes according to social existence. The basis of moral formation is the socio-economic foundation, associated with the process of education, moral training, and practical activities of people. Vladimir Ilyich Lenin has excellently inherited and applied creatively, and comprehensively developed the views and ideas of Marxist ethics, saying that the noblest moral ideal of communists and communist ethics always attached to political ideals, which is the driving force for political ideals to become the reality of socialist revolution. He asserted: "The class struggle continues, and it is our duty to subordinate all interests to this struggle. And our communist morality must also submit to this struggle. We say: That morality is what contributes to the destruction of the old society of the exploiters and to the unity of all the working people around the proletariat who are creating a new society, of the working people communism" (V.I. Lenin, 1978, vol. 41, pp. 369).

With a deep understanding of the issue of ethics education for youth for the development of society; and by summarizing rich and vivid revolutionary practical experience, Ho Chi Minh also pointed out the special important role of ethics education for youth for the development and progress of a country. In the "Di chúc," Ho Chi Minh warned: "Our union members and youth are generally good, everything is enthusiastically volunteering, not afraid of difficulties, have the will to advance. The Party needs to take care of educating them on revolutionary morality, training them to be heirs to build socialism both "hồng" and "chuyên". Nurturing the revolutionary generation for the next generation is a very important and necessary thing." (Ho Chi Minh, 2011, vol.12, pp.498) this clearly shows President Ho Chi Minh's point of view on ethics education for youth.

Therefore, during the leadership process, the Communist Party of Vietnam has always paid attention to the work of ethics education for youth to take care of fostering and promoting the role and strength of the young generation in the construction of building and defending the socialist Vietnamese Fatherland. Inheriting and developing the views and guidelines on ethics education for the youth of the previous congresses, the 13th National Congress of the Communist Party of Vietnam continues to affirm its interest in the public sector of educational work, especially the education of revolutionary ideals, ethics, and lifestyle, which

emphasizes: "Strengthening the education of the young generation on revolutionary ideals, morality, cultural lifestyle, raising patriotism and national pride, nurturing dreams, ambitions, and aspirations to rise; uphold the sense of responsibility to the country" (Communist Party of Vietnam, 2021, pp.168). The role of ethics education for youth is to improve ethics education for Vietnamese youth in line with the current trend. This study focuses on analyzing the views of the 13th National Congress of the Communist Party of Vietnam on ethics education for youth, assessing the achievements and remaining limitations in ethics education for youth in recent years, thereby proposing some solutions to improve the role of ethics education for youth in Vietnam today.

2. VIEWPOINTS OF THE 13TH CONGRESS OF THE COMMUNIST PARTY OF VIETNAM ON ETHICS EDUCATION FOR THE YOUTH

Vietnam has renovated the country since the 6th National Congress of Deputies (December 1986). It can be said that 35 years of renovation (1986 - 2021) is an important period in the cause of national construction and development. The achievements have marked the maturity of all aspects of the Party, State, and People. Achieving these proud achievements is the wise and ingenious leadership of the Communist Party of Vietnam.

From the renovation from a centrally-subsidized economy to a socialist-oriented market economy, the economic development of Vietnam makes all aspects of social life develop; accordingly, the position of the country is increasingly enhanced, which plays an important role in the international community, and the people have a prosperous life, and happiness. However, besides the achievements of the country's renovation, the market economy and international integration always contain downsides, and negative factors have a significant impact on economic development and the socio-economic situation in Vietnam today. The negative sides and negative factors of the market economy and international integration have impacted and damaged many traditional cultural beauties; trampled on the good moral values and stereotypes of the people, and ethnicity; and changed the morality, life concept, and lifestyle of a part of youth in Vietnam. This is confirmed in Resolution No. 25-NQ/TW of the Seventh Conference, the Xth Central Committee of the Communist Party of Vietnam commented: "A part of youth lives without ideals, has reduced faith, has little interest in the situation of the country, lacks a sense of law observance, lives pragmatically, and leaves the national cultural tradition. The education of a part of youth, especially rural youth and ethnic minority youth is still low; many young people lack knowledge and skills in international integration" (Communist Party of Vietnam, 2008, pp.37-38). On the other hand, in Vietnam today, hostile forces continue opposing and interfering in the internal affairs of the country, inciting riots, overthrowing, and promoting "diễn biến hoà bình" activities as well as "tự diễn biến" and "tự chuyển hoá" within the country. In particular, outside reactionary organizations thoroughly took advantage of the mass media, especially the internet and social networks, to propagate and distort to lower the prestige of the Party and the State. This leads to a part of youth with reduced faith, lack of ideas, lack of sense of law observance, pragmatic lifestyle, enjoyment, competition, wastefulness, and negativity in morality and lifestyle. This was emphasized by General Secretary Nguyen Phu Trong in his speech at the 11th National Congress of Deputies (2017-2022) of the Ho Chi Minh Communist Youth Union, stating "The Union work and the youth movement The last term still has many limitations. A part of the youth lost faith, faded revolutionary ideals, lived pragmatically, and left the fine traditions of the nation. Even some youth are being manipulated by some jobs against the tradition of the Youth Union, against the goals of the Party and the nation" and "Especially, the Youth Union needs to orient and educate the youth to keep it strong." The Youth Union also increases revolutionary bravery, political acumen; actively fights to prevent and refute false information and claims; increases youth resistance to negative and negative manifestations of society and the opposition and distortion of hostile forces, especially on social networks; and avoids the situation of "nhạt Đảng", "khô Đoàn", "xa rời chính trị"..." (Ho Chi Minh Communist Youth Union, 2021).

Faced with that situation, the viewpoint of the 13th National Congress of the Communist Party of Vietnam on ethics education for youth is a new development in awareness for the youth of the Communist Party of Vietnam. based on inheriting and creatively applying Marxism-Leninism and Ho Chi Minh's thoughts on youth education. It is the result of the process of supplementing and developing the Party's views over the periods on ethics education for youth in new conditions and situations. New points on the viewpoint of

ethics education for youth can be summarized according to the Document of the 13th National Congress of the Communist Party of Vietnam with the following basic contents:

Firstly, at the 13th National Congress of the Communist Party of Vietnam, there were candid assessments of the limitations and shortcomings of education and training work in the previous term in which the work of human education, ethics, and lifestyle are still overlooked. Especially, for youth who are the backbone of the country, it is necessary to have new perspectives to overcome limitations and build a young generation with enough virtues and talents to build the country in the future. Since then, the Communist Party of Vietnam has given a new perspective on ethics education for youth in the new situation "with more emphasis on ethics education, personality, creative capacity, and core values", especially the education of patriotism, pride, national pride, tradition and history, and a sense of social responsibility for all classes of people, especially the young generation" (Communist Party of Vietnam, 2021, vol.1, pp.136).

Secondly, a part of Vietnamese youth today has many negative interpretations in the process of complying, enforcing the law, and protecting and preserving the national culture. The situation of youth breaking the law is at a high level; the phenomenon of youth moving away from the nation's history and culture, importing and absorbing negative cultural activities from abroad, contrary to fine customs and traditions. Faced with that situation, the 13th National Congress of the Communist Party of Vietnam made the point of "promoting education to raise awareness, a sense of respect and observance of the law, protect the environment, keep preserving the national cultural identity of the Vietnamese people, especially the young generation" (Communist Party of Vietnam, 2021, vol.1, pp.143) to uphold the position and role of ethics education, lifestyle, form youth personality and preserve and promote the values of the youth, traditional culture of Vietnam.

Thirdly, the education of youth's revolutionary ideals, morality, and lifestyle has always been identified as a particularly important task, considered the responsibility of the Communist Party of Vietnam, the political system, the community, the whole society, and each family. The work of educating youth on revolutionary ideals, ethics, and lifestyles is a continuous, regular and long-term process. It should be implemented in a synchronous, innovative, creative, and effective manner by family, school, and society. Facing that issue, the 13th National Congress of the Communist Party of Vietnam affirmed: "Strengthening the education of the young generation about revolutionary ideals, morality, cultural lifestyle, and patriotism, national pride, nurture dreams, ambitions, and aspirations to rise; upholding the sense of responsibility towards the country and society; building an environment and conditions for learning, working, entertaining, and training for healthy, comprehensive, and harmonious development in terms of intellectual, physical and aesthetic values" (Communist Party of Vietnam, 2021, vol.1, pp.168).

Fourth, the ideal, moral, and lifestyle education of people is composed of four basic elements: family education; school education; society education, and self-education. Indeed, family education plays a fundamental role. Because family is the first educational environment and plays a decisive role in the formation of human personality. With the development of today's society, many new problems have arisen. All aspects of social life move and change. The development of a market-oriented economy always has negative effects on youth's ideals, morality, and lifestyle. There are also limitations in family education, and the educational role of the family for youth has not been paid enough attention to. Therefore, the 13th National Congress of the Communist Party of Vietnam made the point: "Highlighting the role of the family in nurturing and educating the young generation" to promote the role of education of the family in the process of national development; creating favorable conditions for the family to perform well in the education of the young generation in the current context. (Communist Party of Vietnam, 2021, vol.1, pp.144).

Thus, to improve the work of ethics education for youth in the current period, The Communist Party of Vietnam has set the four new views at the 13th National Congress of Deputies based on the inheritance and development of previous congresses, especially the application of Marxism-Leninism and Communism Ho Chi Minh's ideology to orient and improve ethics education for youth in line with the current socio-economic situation in Vietnam.

3. THE SITUATION OF MEDICAL EDUCATION FOR YOUTH IN VIETNAM TODAY

Along with the development and achievements of Vietnam, over the years, youth ethics education has achieved important achievements, making a significant contribution to the training of generations of youth,

meeting the requirements of development, being worthy of the future generation to inherit the renovation and construction of the country. Achieving these achievements is the leading concern of the Communist Party of Vietnam, the State, socio-political organizations, families, schools, and the efforts of the youth. However, besides the achievements, there are limitations in ethics education for youth. The specific achievements and limitations are as follows:

(1) Achievements: Youth ethics education has contributed to comprehensive development to meet the country's renovation cause requirements. Vietnamese youth increasingly have a better environment and conditions to study, practice, and grow up, contribute to improving their qualifications, and form revolutionary ideals, ethics, cultural lifestyles, and personality. The majority of youth believe in the leadership of the Communist Party of Vietnam and the development path of the country today; live responsibly to the Fatherland, family, and themselves; have dreams and ambitions; have the knowledge, skills, good health, active thinking, creativity; dare to think; and dare to do. The overwhelming majority of Vietnamese youth always believe and agree with the political line of the Communist Party of Vietnam; abide by the State's policies and laws; strive to study, practice, and work productively; contribute significantly to the stability of the country and the regime; and together make great achievements in the country's socio-economic and cultural development (Tri. N. M, 2021).

This is shown through the data, 61.2% of youth feel excited and believe in the Government's economic stabilization solutions, but 21.7% of youth think that in the country, there are still many issues to continue to solve for the economy to develop more sustainably (Youth Research Institute, 2015, pp.76, 85). At the same time, the number of young Vietnamese people who want to join the Ho Chi Minh Communist Youth Union and the Communist Party of Vietnam is also constantly increasing. There are 65.7% of the working youth group affirmed the goal of becoming a party member and 24.6% planning to strive for this goal (Youth Research Institute, 2017, pp 45, 92).

On the other hand, Vietnamese youth are ready, confident, and proactive with the ability to integrate into the world in the current context. The value orientation of youth has changed positively in the direction of attaching importance to humanistic, practical, and specific values and becoming more and more interested in the political and social activities of the country. Specifically, youth think that as a young person, you must pay attention to the political situation of the country (89.8% of youth; 82.5% of students); youth must participate in defending the country when required (95.3% of youth, 94.2% of students); being a young person must be responsible for making the country rich and strong (92.4% of youth, 90.3% of students (Youth Research Institute, 2017, pp.45, 92).

From the actual situation and statistics, it shows that the work of ethics education for youth in Vietnam in recent years has improved. Vietnamese youth now realize the importance of social norms and traditional values of the nation; adapt quickly and approach the values of modern life, be responsible, and be idealistic; actively study, work, create, overcome all difficulties and hardships; maintain the will to strive persistently, and always rise in life to perfect and develop yourself, and contribute to the development of the company society.

(2) Limitations: (i) In the past time, the work of ethics education for youth has not met the requirements of national development. A part of the youth live without ideals and morality, have reduced beliefs, have deviant expressions, have a pragmatic lifestyle, attach too much importance to material values, have poor political skills, and fluctuate instances. ideological, indifferent to socio-political issues, and be easily provoked and manipulated to participate in illegal activities (Tri. N. M, 2021). Resolution No. 25-NQ/TW of the Seventh Conference, the 10th Party Central Committee commented: "A part of youth live without ideals, have reduced confidence, and pay little attention to the situation of the country. Lack of sense of law observance, pragmatic living, away from national cultural traditions. Education of part of youth, especially rural youth and ethnic minority youth, is still low; many young people lack knowledge and skills in international integration (Communist Party of Vietnam, 2008). (ii) The situation of law violation among youth is still complicated and at a high level. Crime and entanglement in social evils among youth tend to increase, especially drug and prostitution crimes. The rate of criminal crimes among youth is increasing rapidly, especially since the thug and dangerous nature is also increasingly serious. The proportion of juvenile cases of law violations subject to criminal prosecution in the total number of law violations over the years is still high: in 2012 it was 83.5%, in 2015 it was 90.2% and in 2016 was 81.9%. According to

the statistics of the Criminal Police Department - Ministry of Public Security in 2012, youth violated the law from 31,098 cases with 38,997 subjects; in 2016, down to 24,371 cases with 35,792 subjects; in the first six months of 2017, there were 11,612 cases with 19,386 subjects. Along with that is the phenomenon of the moral degradation of youth and students in the school environment's increasingly serious nature (Tri. N. M, 2021). Besides the achievements, ethics education for youth still has many limitations that need to find solutions to overcome. In the context of the situation in the world and the country with many ups and downs, the situation of youth living without ideals, decreasing faith, paying little attention to the situation of the country, lacking a sense of law observance, living pragmatically, a departure from the national cultural tradition is an alarm bell. It is required to identify the causes leading to the limitations in ethics education for youth in Vietnam in the past time. In detail, (a) Vietnam is under the impact of globalization and international integration, the introduction of new cultural and ethical values in Vietnam. There have been many negative effects that make the concept of life, especially the youth, somewhat "open", spacious, liberal, and even hysterical, disregarding traditional cultural and moral values. The lifestyle of gratitude, loving people as if you love yourself, industriousness, hard work, and harmony cannot avoid the truth being harmed and violated. Because youth are at the age of perfecting human personality, they have not yet fully matured psychologically. With the personality of always searching and discovering new things, youth are easily excited, seduced, and manipulated. (b) The Ho Chi Minh Communist Youth Union and the Vietnam Youth Union have an important role in educating youth about revolutionary ideals, ethics, and cultural lifestyles. The effectiveness of ethics education for youth in Vietnam still has some limitations because the current educational content is not appropriate. There has not been a combination of ethics education, and cultural education with science and technology education. It is worth noting that for a long time the work of ethics, education for youth was still formal and ineffective. On the other hand, educational methods are still heavily traditional and outdated, no longer suitable for the current trend of the digital technology boom, while youth have adapted to this boom. This is confirmed in Resolution No. 25-NQ/TW of the Seventh Conference of the Central Executive Committee, term X, "The renewal of the content and mode of operation of the Ho Chi Minh Communist Youth Union and the Union of Communist Party of Vietnam. The Vietnam Youth Union has not kept up with the development of the youth situation" (Communist Party of Vietnam, 2008). (c) The combination of family, school, and society is not synchronized and lacks regularity and continuity. Family is the first educational environment imprinted on the child's soul, so it has a profound impact on the formation and perfection of each person's personality. Meanwhile, families mainly entrust their children's education to the school in all aspects. On the other hand, the school is an important environment for educating the political bravery of youth, having a purposeful and planned role to influence students to prepare for future life with knowledge, wisdom, morality, will, and scientific belief. In Vietnam, our educational program is still more about teaching letters than teaching people. In society, there are many good things but also many mistakes. This is confirmed in Resolution No. 25-NQ/TW of the Seventh Conference of the Central Executive Committee, term X "Education - training, vocational training, job creation, prevention and control of social evils. Associations, cultural activities, sports, journalism, and publishing have many shortcomings and weaknesses but are slow to overcome, which have greatly affected the generations of youth. The work of educating, preventing, and fighting against the influences and enticing youth of hostile forces, and the propagation of foreign lifestyles that are incompatible with national cultural traditions are still weak, even loose" (Communist Party of Vietnam, 2008). (d) Besides objective reasons, Vietnamese youth have not paid much attention to self-education and self-training. Currently, a part of the youth is still passive, not active in studying, researching, and practicing morality, even a large part of the youth move away from revolutionary ideals, forgetting the values of the revolution and traditional cultural values of the nation, having a selfish, utilitarian lifestyle, worshiping individualism, worshiping foreign countries, being pragmatic, falling into social evils, breaking the law, and violating moral standards of society. Notably, the process of training ideals, ethics, lifestyles, and successful careers in the process of self-study and self-cultivation of youth. This was advised by President Ho Chi Minh: "If you don't have a teacher, you will learn, if you don't come, you will joke. Must know automatic learning"; "Must enhance

and guide self-study, study at school, learn from books, learn from each other and learn from people" (Ho Chi Minh, 2011, vol.6, pp.360-361).

4. SOLUTIONS TO IMPROVE ETHICAL EDUCATION FOR YOUTH IN VIETNAM TODAY

Faced with the impacts of the market economy, the trend of globalization and international integration, and the requirements of the current cause of innovation, industrialization, and modernization in Vietnam, to overcome the limitations in the work of ethics education for youth. To improve the effectiveness of ethics education for youth in Vietnam, it is necessary to focus on doing well the following main contents:

First, it is necessary to strengthen the leadership of the Communist Party of Vietnam in youth work in general and ethics education for youth in particular. Specifically, it is essential to implement Directive No. 42-CT/TW, dated March 24, 2015, of the Secretariat of the Central Committee of the Communist Party of Vietnam, "On strengthening the Party's leadership in the work of idealistic education network, ethics, cultural lifestyle for the young generation in the period 2015 - 2030". Because the youth are the future owners of the country, and the force to be attacked and volunteer in the construction and defense of the country, ethics education for youth is considered an important strategy in promoting human factors and resources. It is necessary to renovate leadership content and methods to take care of and foster ethics education for adults to become " vừa hồng vừa chuyên" classes according to Ho Chi Minh Thought. Leading the organization to build a strong youth union organization is considered to be one step ahead of Party building, and the Party needs to set out guidelines and guidelines in ethics education for youth on the situation of the country at each stage. In particular, Party committees at all levels should regularly grasp and promote learning of the Party's resolutions on youth work in the current period; actively pay attention to, and lead the affiliated grassroots of youth union organizations to promote initiative and creativity; and seriously overcome the manifestations of undermining ethics education for youth. The Party grassroots needs to focus on leading the Youth Union to fight against and push back the political, moral, lifestyle, and " tự diễn biến" and " tự chuyển hoá" expressions among youth.

Second, the State needs to renovate the mode of operation to improve the effectiveness and efficiency of state management of youth and youth work; improve institutions, policies, and laws on youth; and focus on propaganda, legal education, and ethics education for youth suitable to the situation of the country. Institutionalization aims to introduce the guidelines and policies of the Resolution of the 13th National Congress of the Communist Party of Vietnam on ethics education for youth. It is necessary to promote propaganda and education on the observance of the Youth Law 2020 passed by the National Assembly of the Socialist Republic of Vietnam on June 16, 2020, effective from January 1, 2021 responsibility of the state from central to local. The State should also promulgate decrees and circulars guiding the implementation of the Youth Law in 2020; promulgate and well implement policies for youth; and focus on the policy of learning and scientific research specified in Article 16 of the Youth Law 2020 as follows: (1) ensuring equality in access to education and creating conditions for youth to participate in scientific research; (2) promulgating and ensuring the implementation of educational programs on ethics, ideals, national traditions, cultural lifestyles, life skills, and a sense of law observance for youth; (3) having policies on credit, scholarship, exemption and reduction of tuition fees for youth in accordance with the law; (4) encouraging and supporting youth to study and improve their professional qualifications; ability to create, research and apply scientific and technological advances; (5) incentivizing and supporting organizations and individuals to invest in scientific research and innovation activities of youth; participate in training life skills and other necessary skills for youth (National Assembly of the Socialist Republic of Vietnam, 2021). For youth work, the youth effectively implement the Prime Minister's Decision No. 1331/QD-TTG dated July 24, 2021 step by step, promulgate the Vietnam Youth Development Strategy for the 2021-2030 period towards the general goal of "Building a generation of Vietnamese youths with comprehensive development, rich in patriotism, strong will, and national pride; having revolutionary ideas, ambitions, and aspirations to build the country; being ethical, having a sense of citizenship, obeying the law; having health and healthy lifestyle; having culture, knowledge, education level, life skills, occupation, and employment; having the will to establish themselves, establish a career, be dynamic, creative, master science and technology; developing high-quality young human resources to meet the requirements of fast and sustainable development of the country and international integration; and promoting the spirit of dedication,

impulsiveness, volunteering and raising the responsibility of youth in the cause of national construction and defense" (Prime Minister, 2021). In particular, it is necessary to focus resources on organizing the implementation of the program "Educating revolutionary ideals, ethics, cultural lifestyles for youth, teenagers and children in cyberspace for the period 2022-2030 approved by the Prime Minister. The Government signed and promulgated on March 5, 2022, a new common goal "Improve the effectiveness of education for revolutionary ideals, morality, and cultural lifestyles for youth, teenagers, and children in cyberspace. It contributes to building a young generation with revolutionary ideals, solid bravery, rich patriotism, knowledge and culture, a sense of law observance, responsibility to the community, dreams, and nostalgia. storms, aspirations, and international integration skills in the digital era; forming and developing skills in identifying, processing, and mastering information and tools and technical means in educational activities of revolutionary ideals, ethics, and cultural lifestyles in cyberspace; proactively screen and identify "bad" and "toxic" information, receive positive information in cyberspace, fight and refute false and hostile views, and actively contribute to its implementation. aspiration to develop a prosperous and happy country in the spirit of the Resolution of the 13th National Party Congress. (Prime Minister, 2022).

Third, the Ho Chi Minh Communist Youth Union and the Vietnam Youth Union focus on innovating the content and methods of ethics education for youth to meet the requirements in the new situation, in line with the trend of the rapidly changing situation of today's youth. As for the content, it is obligatory to always stick to the political tasks of the country and localities; always actively self-study and update new situations, especially the impact of information technology on youth's morality; and focus on ethics education for youth about Marxism-Leninism, Ho Chi Minh's thoughts on Vietnamese youth. Since then, I have trained in political bravery, patriotism, education in kindness, honesty, responsible living, good law observance, love of labor, and preservation and promotion of traditions and cultural identity. culture of the nation. In terms of methods, it is necessary to carry out activities and movements in line with current trends such as "Youth Volunteers", "Creative Youth", "Youth in charge of defending the Fatherland" and three programs " Accompanying youth in learning", "Accompanying youth to start a business" and "Accompanying youth to practice and develop skills in life, improve physical fitness, spiritual cultural life"

On the other hand, it is necessary to renew the content and form of propaganda, political education, and ethics education for youth. With the current explosion of information technology, it is a favorable condition to change traditional forms of propaganda. In educating political bravery for youth, the Ho Chi Minh Communist Youth Union needs to renew the content and way of learning 04 political theory lessons by current conditions. Besides using traditional methods, it is necessary to focus on studying learning methods through the internet, social networks, and websites of the union organization. However, combining moral and cultural education in the spirit of Directive 05-CT/TW of the Politburo on "Continuing to promote the study and following of Ho Chi Minh's thought, morality and style " is necessary.

Fourth, it is vital to improve the educational role of the family and closely coordinate between the family, school, and society in ethics education for youth because the family is the first educational environment and plays an important role in determining the child's personality formation. In building an equal family, all family members share joys and sorrows in life, and all family members must have the same rights and obligations, thereby ensuring equality. Preserving and promoting traditional family values such as respect above and below, respect for and care for each other, no gender discrimination, and no domestic violence are the basis for each individual's fulfillment to improve his personality. On the other hand, it is necessary to closely coordinate the family, the school, and the society in ethics education for youth, and this is a matter of special significance in the combination between family education and social education. The advantages of family education will complement the limitations and deficiencies of social education, and at the same time, social education will complement the advantages of family education. This is considered a dialectical relationship in ethics education for youth in the current context before the impacts of the market economy, globalization, and international integration. Therefore, it is necessary to establish a relationship between the family, the school, and the social organizations, to avoid pushing the responsibility of educating the young generation for family education or social education.

Fifth, Vietnamese youth themselves have to self-study, self-cultivate, and practice morality and lifestyle. Youth is a class of young, healthy people with revolutionary enthusiasm and sensitivity to new and progressive things. Promoting the role of youth in self-study and self-cultivation of morality and lifestyle is an important measure to help them quickly progress and mature. To do that, Vietnamese youth need to

self-study and self-practice with the following contents: (i) Living with ideals, youth are the future generation, inheriting the revolutionary achievements of the previous generation. It is required that Vietnamese youth today need to self-cultivate and train their revolutionary ideals and morals, which are rich in patriotism, a sense of mastery, responsibility to themselves, their family and society, and their intelligence, knowledge, health, cultural life, meaning, and love. (ii) Always studying, practicing, and cultivating ethical standards which are the need, thrift, integrity, righteousness, and impartiality according to Ho Chi Minh's thought. Ethical standards and behavior are very necessary for the moral cultivation of youth in the current period. Therefore, Vietnamese youth need to train themselves to be industrious, diligent, creative labor, not lazy, not rely on, thrifty, not wasteful, ostentatious, and formal. On the other hand, they always respect and preserve public property, not being greedy, not greedy for position and money. For myself, I am not conceited, conceited, always study hard, improve myself, be humble, united, and honest, and do not lie or deceive.

5. CONCLUSION

Today's young Vietnamese are the main workforce, and the future owners of the country. To shoulder that responsibility, Vietnamese youth strive to become a team that is "both pink and professional" as President Ho Chi Minh once taught. Determining that importance, the Communist Party of Vietnam always highly appreciates and places deep faith in the young generation. Therefore, ethics education for youth is the content of building ideals, ethics, and cultural lifestyles for youth in new conditions. In response to the views on ethics education for youth at the 13th National Congress of the Communist Party of Vietnam, the direction to build content and methods of ethics education for youth today has been determined. From the analysis of the achievements and limitations in the work of ethics education for youth, from there, the basic causes of the limitations are identified. To improve youth ethics education in Vietnam today, it is necessary to strengthen the leadership of the Communist Party of Vietnam; renew the state's management method for youth work; promote the role of the Ho Chi Minh Communist Youth Union and the Vietnam Youth Union; enhance the educational role of the family and the cooperation between family, school, and society. Youth have to train and cultivate themselves. Only in this way can we build and develop a generation of Vietnamese youth to meet the current period of industrialization, modernization, and international integration.

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CAUSES OF STRESS FOR STUDENTS MAJORING IN ACCOUNTING – RESEARCH IN VIETNAM

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Abstract. The current study aims to investigate and validate factors (stressors) affecting stress levels of accounting students in Vietnam. The survey method was used to collect data from 1,020 accounting students at four major universities in Southern Vietnam. The data was analyzed using the SPSS 23 software, and the findings show that four factors influencing Vietnamese accounting students are Learning, Finance, Aspiration for Success, and Academic Major. Among them, the highest-level of impact is in academic Major, and the lowest-level impact is in Finance. Moreover, while the factor of change in the living environment was related to stress, it did not affect students' stress.

Keywords. Stress, Stressor, Stress of student, Stress of accounting students, PSS-scale.

1. INTRODUCTION

Stress is considered as a non-specific response of the body to any demand made on it [18]. It is an inevitable part of life and occurs at all ages [11]. Stress includes "positive stress" (eustress) and "negative stress" (distress) [18]. In particular, negative stress harms our bodies and makes us uncomfortable, even causing depression and loss of self-control [14].

Stress over a long time makes students exhausted, fatigued and reduces their learnability, which leads to ineffective and error-prone performance [18]. Stress even causes worse consequences than poor performance, such as problems with physical and mental health [15], namely drug addiction, isolating oneself, increasing anxiety, and depression [12, 14].

Many studies on this issue show that there are many factors that make students stressed, such as teaching method, worrying about the future, affirming the independence (of the adult), learning volume, feeling hurt, parental relationship, and many other factors [10]. These factors are grouped into learning stress, stress caused by the students themselves [12], stress from family life, stress from friends, stress due to uncertain futures and stress due to financial problems [6, 12].

Age, gender, ability to respond, and academic career all influence stress levels [12, 14]. In the business sector, accounting is considered suitable for students with the least extroverted personalities. Accounting students not only face faculty-related stress, financial and family problems; they also face stress due to the specific difficulty and complexity of the subject, academic volume per semester, and even a complex form of assessment (specificity) of the discipline [17].

Therefore, it is extremely important to conduct research so as to identify the factors that cause stress for students in general as well as accounting students in universities in Vietnam. Then they can propose appropriate impact/improvement measures to ensure mental health and improve the quality of education and training for students.

2. THEORY

2.1. Concept of stress

Basically, stress is an essential part of life and occurs at any age [11]. Stress can affect an individual and make him stressed if it is not properly coped with. This is when a person is unable to cope with a challenge or problem [14]. For some people, the effects of stress are negligible, which means they can tolerate these stresses. Meanwhile, stress has a very significant effect on some individuals, making it intolerable and having negative effects [14, 18].

According to May [16], stress is often manifested in the following symptoms: (1) Concern is how an individual handles/copes with stress; (2) Exhaustion is the state in which a person loses their eagerness and motivation to continue to study or do a particular activity as a result of both external and internal factors; (3) Sadness/suffering is a moment of extreme pain, physical and mental suffering; (4) Fear is the result of a person's instinct to react to danger or insecurity; (5) Anxiety is the result of thinking about an existing problem or what might happen in the future.

Factors of stress are classified into three main groups: emotions, physical health, and perspective/thinking [5].

- Emotionally, people often feel or fall into a state of stress when they have to deal with something that makes them feel scared, unhappy, uncomfortable, frightened, losing control and overwhelmed.

- Physically, bodily injuries also easily put people into a state of stress, such as aches and pains, chest pain, headache, shortness of breath, difficulty sleeping, stomach pain, dizziness, excessive cravings or no cravings.

- People who overthink and have negative views on problems they face are more prone to stress, are unable to concentrate, have many "bad" thoughts and exaggerate everything.

2.2. Theory about the stress of accounting students

Conception of students' stress

Students' stress in general, and accounting students' stress in particular, is primarily academic stress and is a part of learning life caused by pressures from requirements of studying programs and subjects [10]. And according to Kostromina and Gnedykh [13], the stress of accounting students often relates to specialized faculty, assessment of subjects, learning tasks, difficult perceptions about subjects, and career characteristics.

Psychological characteristics and learning activities of students

Students' psychological characteristics are classified into two groups: (1) cognitive manifestations such as problem identification, memory, imagination, thinking, and attention; and (2) individual manifestations such as learning motivation, emotion, will, and self-assessment [13].

The basic psychological characteristics of students are very diverse with three basic characteristics including: (1) *Adapting to new life and activities*: degree of adaption has a direct impact on academic success; (2) *Developing cognitive activities*: making an important contribution to acquiring knowledge, skills, future career skills and helping students adapt to a new social environment; (3) *Developing learning motivation*: they are each different students' psychological factors such as interest, ideals, beliefs ... or external factors such as content, teaching methods, friends ... [2].

The requirements for students' learning activities include: (1) *Forming learning motivation*: Students must identify learning objects that help them to form learning motivation, like knowledge, skills, and techniques; (2) *Forming learning purposes*: showing the mastery level of scientific concepts, skills and appropriate action methods; (3) *Forming learning activities*: solving the proposed learning problems (exercises, learning tasks, projects, topics, presentations, ...); analyzing and specifying activities; evaluating progress and performance in response to learning tasks [1].

Stressful expressions of students

Some expressions of student stress include finding that a lecturer's teaching method is inconsistent with their own perception; or worrying about their career future; or wishing to assert independence to demonstrate adulthood; trauma [10]. They also come from failing in life plans, poor career and school expectations and not having enough time for other activities. And there is pressure from family members regarding grades, spending, and even relationships (boyfriends and girlfriends) [8].

The main reasons cause students' stress

- *Students' relationships*: Stress can occur when relationships change, such as conflicts with roommates; working with people you do not know; dealing with strangers; and issues related to family. Thinking a lot about how to deal with these relationships distracts students from learning [9].

- *Personal issues*: Personal factors actually cause a lot of stress, and they also play a very important role in different aspects of student life [14]. These factors are different from person to person, depending on different perceptions, attitudes, and responses. Personal factors can affect students' academic performance in many ways and put them under stress [8].

- *Issues related to learning*: Students have too much to learn; receive a lower-than-expected grade; have so many class hours that they must sacrifice personal time for other activities; have language difficulties to meet tertiary learning needs [9, 14]; are absence from school which makes students anxious about new information; are disappointed by not comprehending the article [9, 19].

- *Environmental issues*: The environment students encounter can be stressful and can make them lose focus on their studies or other study and work issues such as lack of vacation, entertainment [5], computer/technology [19]; poor living conditions [4], big life-changing events (such as divorce between parents) or falling into unfamiliar situations [14]; fear such as failure or inability to speak in public; future worries or unrealistic expectations [9].

Effect of stress on students

- *In terms of learning*: Because of stress, students have low academic results; lack ability to come up with new ideas [9]; decrease academic performance or outcomes [4, 5]; spend less time on learning and school, and do not follow instructions to deal with assigned tasks; confusion and dementia [19]; it is easy to forget what has been taught [14].

- *Socially*: Students prefer to be away from friends and be alone. In the long run, this will cause them to be lonely [9, 19], discontent in whatever they do, easily angry and irritable at other people's small things [8], [9]; always nagging and complaining [8, 14].

- *In terms of physical health*: Stress leads to a state of distress [14], bringing shortness of breath or hypoventilation; causes panic attacks in people prone to panic attacks, which can make muscles tense; creates a feeling of restlessness; causes difficulty sleeping at night [9]; increases use of alcohol, drugs, and tobacco [8]; and inflicts learning fatigue [4, 9].

- *Emotionally*: Chronic stress can lead to or exacerbate mental disorders such as depression and anxiety, bipolar disorder, cognitive problems (thinking), personality changes and behavioral disturbances [4, 5]; restlessness, anxiety, nail biting and foot knocking, nausea; feelings of helplessness and imminent anxiety about something is going to happen [9, 14]; irritability and easy self-control losing [19].

3. METHODS

3.1. Research hypothesis

Learning factors have been shown by domestic and foreign researchers to be a major factor in creating stress in students. In particular, the teaching method of teachers is the most influential aspect of stress on students [10]. Other factors related to learning requirements or quantity of study also put stress on students, like tests, scores, homework [8], faculty assessments, even learning new skills [10], or attending compulsory classes [6]. From there, the author proposes a hypothesis:

Hypothesis H₁: Learning has an impact on the stress of Accounting students at universities in Vietnam.

The factor of change in the living environment is a cause of stress in people of all ages. Especially when students have to move from hometowns to urban areas [14] or from "provinces" to cities (specifically Ho Chi Minh City; this is the largest and most developed economic city in Vietnam) to pursue their studies. In particular, homesickness is seen as an issue that students must face most, especially freshmen, since they perceive the differences [8]. Moreover, the huge change in learning methods, integration with new friends, and conflicts in teamwork also create stress for students [6, 12, 15]. Therefore, the second hypothesis is confirmed:

Hypothesis H₂: The change of living environment has an impact on the stress of Accounting students in universities in Vietnam.

The factor of finance is also a major factor causing students' stress mentioned in many previous qualitative and quantitative studies. When faced with financial shortages, students find it difficult to satisfy their academic and recreational needs [6]. The scarcity causes stress in daily living expenses; when tuition fees are due, they must work extra hours [10]. Therefore, the third hypothesis is as follows:

Hypothesis H3: Finance has an impact on the stress of Accounting students in universities in Vietnam.

The Factor of Successful Aspiration is also considered a cause of stress for students. This factor is viewed by researchers as students' anxiety about the future of being able to get a job from majors they are studying [8, 10], worrying about future goals [6], and even the process of waiting for results from tests and examinations is stressful for students [7]. From there, the hypothesis is proposed:

Hypothesis H4: Aspiration of success has an impact on the stress of Accounting students at universities in Vietnam.

The Factor of Major is a new element in the author's research. The results of studies show that the stress level of engineering and medical students is often many times higher than that of arts and social students majoring in English, History, Psychology, and Business majors. Accounting is considered suitable for students with the least extroverted personalities. Even students themselves show that they are dissatisfied or unhappy with their majors of study [3, 12]. Therefore, the authors believe that the personalities of academic majors can also create stress for students, and the proposed fifth hypothesis is as follows:

Hypothesis H5: The Academic major has an impact on the stress of Accounting students at universities in Vietnam.

3.2. Research model and data collection

Based on the theoretical basis of psychology related to stress and the stress of students, as well as a research overview of factors affecting stress and research hypotheses, the author builds a research model as follows:

Figure.3.1. – Research Model
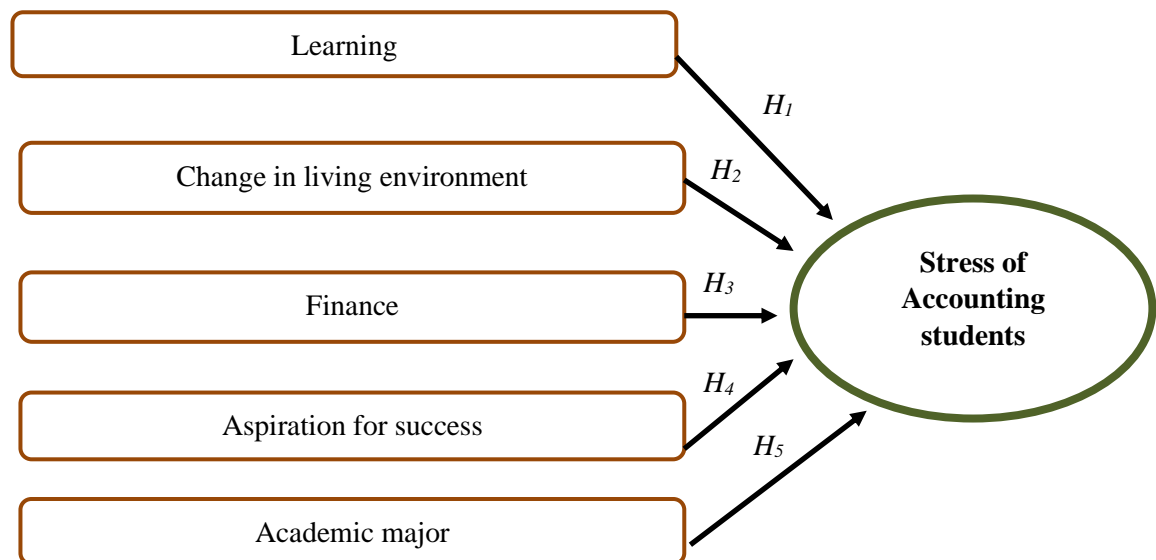
From the research model, the regression equation has the following form:

$$Y = \beta_1 L + \beta_2 C + \beta_3 F + \beta_4 AS + \beta_5 M$$

Where

Y	Stress of Accounting students
L	Learning
C	Change in living environment
F	Finance
AS	Aspiration for success
M	Academic Major
Bi (i=1,2,3,4,5)	Coefficients of independent variables.

3.3. Data collection and analysis

Initial survey questionnaire based on the template of psychological theory of stress and reviews of previous studies such as Selye [18], Fanshawe & Burnett [10], Byrne et al. [6], Hamaideh [12], and Nor et al. [17]. In which the variable "Learning Factor" includes 9 scales; the Academic Major variable includes 4 scales; Environment Change includes 3 scales; and the Aspiration for Success variable includes 4 scales. And the dependent variable includes 14 scales from the study of Cohen et al. (1983).

After that, the author exchanged directly with three experts, including two lecturers in accounting and one lecturer in psychology. The survey table was completed for the second time with 10 scales to measure the dependent variable (according to Cohen's updated table (1994) and 25 scales to measure 5 independent variables. Next, this survey was sent to 5 experts in order to assess it again. The third survey was completed with 10 scales to measure dependent variables and 29 scales to measure independent variables.

Next, this survey was sent back to the experts for completion. Before conducting the official survey, the author interviewed five students again to ensure the scales were easy to understand, clear and simple.

The final survey was sent directly to classrooms of 1,150 students from four universities, including the University of Economics in Ho Chi Minh City; Ton Duc Thang University; Ho Chi Minh City Open University; and Industrial University of Ho Chi Minh City.

The collected data were cleaned and processed by SPSS 22 software through techniques such as descriptive statistics, Cronbach Alpha scale reliability testing, discovery factor analysis-EFA, correlation test, and multivariate regression.

4. RESEARCH RESULT AND DISCUSSION

The response rate was 88.87 percent (1,022 respondents out of a total of 1,150 survey participants). After checking the validity and rejecting ones with inappropriate answers, the official number of questionnaires for data analysis was 1,020 (guaranteed minimum sample size). After that, the author coded and entered the SPSS version 22 software. The results of data collection are described in the following tables:

Table 4.1. – The statistical table describes the dependent variables of the choice of technical structure

Surveyed University	Emitted Questionnaire		Collected Questionnaire		Rate of return
	Quantity	Rate	Quantity	Rate	
Industrial University of HCMC	300	26,09%	267	26,18%	89,00%
HCMC Open University	200	17,39%	138	13,53%	69,00%
University of Economics HCMC	300	26,09%	283	27,75%	94,33%
Ton Duc Thang University	350	30,43%	332	32,55%	94,86%
Total	**1150**	**100.00%**	**1020**	**100.00%**	**88.70%**

Source: Compiled from data analysis results

Based on the data in Table 4.1, the rate of data collection was quite high at 88.70%. In which, the highest rate of collection from students of Ton Duc Thang University was 94.86%, and the lowest was from students of Ho Chi Minh City Open University with 69.00%. And among 1,020 responses, there were 332 votes of Ton Duc Thang University students (rate 32.55%); 283 votes of students from the University of Economics (rate 27.75%); 267 votes from the students of the Industrial University of Ho Chi Minh City (rate 26.18%); and 138 votes of Open University students (rate 13.53%).
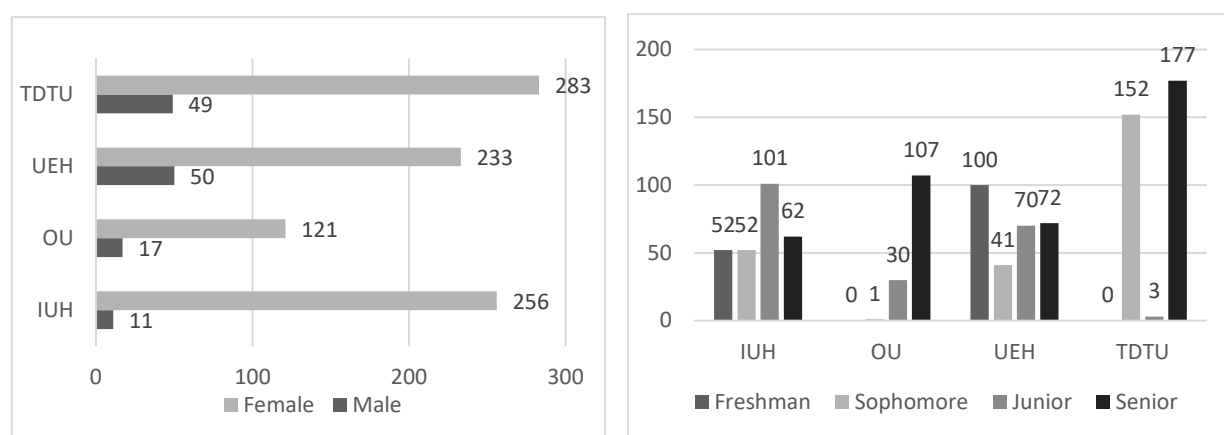
Figure 4.1. – The academic year and gender of students
Source: Compiled from data analysis results

Figure 4.1 shows that the number of seniors is the highest, with 418 students (a rate of 40.98%). Ton Duc Thang University and HCMC Open University had the most students, with 177 and 107 students, respectively. Juniors were 204 students (equivalent to 20.00%) and sophomores are 246 students (24.12%), respectively. The number of freshmen accounted for the lowest rate at 14.90%, corresponding to 152 students. In particular, the University of Economics ranked first with 100 students, while the HCMC Open University and Ton Duc Thang University did not have freshmen participating in the survey. Moreover, the number of female students accounted for a much higher proportion than male students, with 87.55% compared to 12.45% (corresponding to 893 compared to 127 students). The Industrial University of HCMC had the highest rate difference with 256 female students compared to 11 male students and the lowest difference with 233 female students compared to 50 male students.

Table 4.2. - Results of testing the reliability of the scale with Cronbach' Alpha

Scale	Coefficient Cronbach's Alpha	Number of inspection observations	Number of eliminated observations	EFA analysis
Learning factor	0,750	9	1	8
Change in living environment	0,705	5	0	5
Finance	0,869	5	0	5
Aspiration for success	0,713	5	0	5
Academic major	0,945	5	0	5
Stress of Accounting students	0,920	10	0	10
Total		*39*	*5*	*38*

Source: Author's survey data

Cronbach's Alpha test result shows that with 39 measuring scales of 5 independent and dependent variables, there was one observation of a learning factor which was eliminated because the total variable correlation coefficient was less than 0.3. And 38 observations were included in the exploratory factor analysis (EFA).

Table 4.3. – Results of factor analysis to explore EFA for independent variables

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy,		,871
Bartlett's Test of Sphericity	Approx., Chi-Square	10435,729
	df	190
	Sig.	,000

Source: Author's survey data

The results of the exploratory factor analysis (EFA) were performed 9 times with the official eliminated scales due to unsatisfactory: (1) Too many exercises; (2) Pressure from friends' academic results; (3) Difficulty in balancing time between study and other activities; (4) Concern about getting a job in the proper major after graduation; (5) The unexpected results made me nervous; (6) Difficult to establish relationship with lecturers; (7) Difficulty establishing relationships with friends; (8) Anxiety about illness/disease (e.g. Covid-19 epidemic)).

The results of the final discovery factor analysis in table 4.3 show that the coefficient KMO = 0.871 satisfies the condition of $0.5 \leq KMO \leq 1$, so the scales included in the discovery factor analysis are significant. Also, the results of Bartlett's Test of Sphericity in KMO and Bartlett's test tables with significance level sig = 0.000 <0.05 show that observations have a linear relationship with the factors they represent. In addition, the Eigenvalue value of 5 independent variable groups > 1 (the lowest is 1,161) and the total value of the extracted variance is 66,582, proving that 66,582% of the variation of the data is explained by 5 factors, while the rest 33.418% is explained by other factors.

Table 4.4. – Correlation test results

Factor	L	C	F	AS	M
Correlation coefficient	0,338[**]	0,177[**]	0,307[**]	0,369[**]	0,502[**]
Sig.	0,000	0,000	0,000	0,000	0,000

***Where**: **L**: Learning factor; **C**: Change in living environment; **F**: Finance; **AS**: Aspiration for success; **M**: Academic major*

Source: Author's survey data

Test results in Table 4.4 show that five independent variables are positively correlated (positive) with dependent variables, with correlation coefficients ranging from 0.177 to 0.50, and reliability is 99%.

Table 4.5 – Regression results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig,	Collinearity Statistics	
	B	Std, Error	Beta			Tolerance	VIF
1 (Constant)	,971	,100		9,691	,000		
L	,198	,029	,187	6,713	,000	,825	1,212
C	,021	,017	,034	1,234	,217	,846	1,182
F	,071	,021	,100	3,452	,001	,766	1,305
AS	,115	,023	,143	4,973	,000	,775	1,290
M	,258	,018	,397	14,633	,000	,870	1,149

***Where**: **L**: Learning factor; **C**: Change in living environment; **F**: Finance; **AS**: Aspiration for Success; **M**: Academic major*

Source: Author's survey data

From Table 4.5, it can be concluded that there are four factors that have a positive linear relationship with the Accounting student's stress with a significance level of 5%. Specifically, the Learning factor has $\beta 1 = 0.187$; the Financial factor has $\beta 2 = 0.100$; the Aspiration for success has $\beta 3 = 0.143$; and the Academic Major has $\beta 4 = 0.397$. From the above results, the standardized regression equation is determined as follows:

$$Y = 0,187\ L + 0,100\ F + 0,143\ AS + 0,397\ M$$

Furthermore, the test results of ANOVA with Sig. = 0.000b <0.05 show that the research model is suitable; adjusted R2 = 0.348, proving that the model with four independent variables explains 34.8% of the variation of the dependent variable, the remaining 65.2% is due to other factors not included in the research model. VIF coefficients of all 5 factors are <2, indicating that no multicollinearity phenomenon occurred in the model.

Based on the results of regression analysis, the Learning factor has the second strongest impact and is similar to the previous studies of Fanshawe & Burnett [10]; Hamaideh [12]; and De Anda [8]. This is entirely appropriate because the Learning factor is one of the main factors that contribute to student stress [10, 12].

The Finance factor also has an impact on the stress of Accounting students at universities in Vietnam and is similar to previous studies by Byrne et al. [6]; and Fanshawe & Burnett [10]. However, this factor has the weakest impact level compared to the other three factors. This may be due to the fact that families always provide the best resources for their children's learning activities. Moreover, students can also easily find part-time jobs to meet their spending needs.

In addition, the factor of Aspiration for success has the third strongest impact on the stress of Accounting students at universities after two factors: Major and Learning factor. This result is similar to previous studies by de Anda [8]; Fanshawe & Burnett [10]; and Byrne et al. [6].

The Learning factor is newly discovered. The results show that this factor has the strongest impact on the stress of Accounting students at universities in Vietnam and is similar to Hamaideh [12]; Lupien [14]; May & Casazza [15]; Bakar et al. [3]. This result may be due to the psychological characteristics of accounting students who are less extroverted, leading to fewer skills in coping with change and susceptibility to stress [17].

Although change in living environment as well as the feeling of homesickness can also be a factor causing stress for students. The results show that "the factor of changing living environments" does not affect the stress of accounting students in urban areas. This result is completely contrary to the previous studies of Lupien [14]; de Anda [8]; and Hamaideh [12]. This may be due to the development of technology. Mass media and video call applications have contributed to closing geographical, spatial, and temporal distances. And students can find all the information they need through the Internet.

5. CONCLUSION

Research results show that only 4 of 5 hypotheses are accepted, corresponding to only 4 of 5 independent variables affecting the dependent variable. Therefore, only factors of learning, finance, aspiration for success, and major have an impact on the stress of Accounting students at universities in Vietnam. And the factor of change in living environment, although there is a correlation with the stress of Accounting students, does not affect their stress.

From the above research results, in order to reduce the impact of stress on the accounting students' university studies in Vietnam, the author proposes some recommendations as follows:

For universities: (1) It is advisable to develop a soft skill training plan/strategy and even include these skills in subjects of the curriculum as well as force them to complete the module as part of the output standards; (2) Regularly organize refresher courses and teaching methods for accounting teachers in order to help students more excited in the learning process; (3) Regularly hold talk shows with psychologists to help staff, lecturers and students acquire necessary psychological knowledge, especially emotional control to behave properly, and know how to care and share learning difficulties; (4) Set up a psychological counseling and learning support room at the school and open 24/7 with different channels such as face-to-face talk or hotline to be able to promptly solve the difficulties encountered in the study and other activities of students.

For students: (1) Need to actively learn, and cultivate psychological knowledge related to emotions and how to control emotions; (2) Make an effort to learn soft skills so that learning and life goals can be well addressed; have a reasonable study plan, focus on the balance between learning factors and other activities beside learning; (3) Maintain physical fitness and sports to ensure physical health, serving as a premise for maintaining and balancing emotional leads to ensure psychological health; (4) Always actively face up with difficult situations that do not arise as expected; (5) Be willing to seek help from friends, teachers or a psychological counseling center so that stressors can be resolved promptly.

Besides the results achieved, the research content is still limited as the author has only studied five factors affecting the stress of accounting students at universities in Ho Chi Minh City. And the analytical results showed that these factors only explain 35.2% of the variation in student stress. Therefore, there are many other factors affecting student stress that have not been included in the research model. In addition, the study only collected questionnaires from four universities while there are more than fifty universities teaching accounting in Vietnam. Furthermore, these above universities are all public universities, not taking into account accounting students in private universities. Therefore, further studies on this topic need to explore more new factors as well as overcome the limitations of this study.

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PROMOTING ONLINE DISPUTE RESOLUTION IN E-COMMERCE IN VIETNAM

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Abstract. The advantage of technology is that the purchase and sale of goods and services in domestic and abroad through the Internet has become popular, everyone can do business anytime, anywhere without a border. However, when e-commerce activities developed, it also led to many arising disputes such as fraud, breaking agreements, delayed delivery, and canceled orders...According to the Vietnam E-commerce Association (VECOM), the number of Internet users engaged in online shopping has increased from 77% in 2019 to 88% in 20201 and according to e-Conomy SEA Report 2020 by Google, Temasek and Bain&Company, Vietnam's E-Commerce in 2020 will increase by 16% and reach a scale of over 14 billion USD. Among this, the field of online retailing of goods increased by 46%, ride-hailing and technology food increased by 34%, online marketing, entertainment, and games increased by 18%, and online travel alone decreased by 28%, this report also predicts that the average growth rate in the period 2020-2025 will reach 29% and by 2025, e-commerce will reach to 52 billion USD2. It can be seen that an increase in the number of e-commerce transactions is synonymous with the number of disputes arising. However, buyers (usually the consumers) usually ignore and do not sue in court because it takes time and cost to settle with a small value. Therefore, Online Dispute Resolution is popular for e-commerce and was initially used for disputes between parties. This purpose article promotes the out-of-court dispute resolution organization in Vietnam to build an Online Dispute Resolution platform to reduce the number of cases to be resolved for the People's Court system.

Keywords. E-Commerce; Online dispute resolution (ODR); E-Transactions.

1. INTRODUCTION

The Internet has had an impact on many areas of socio-economic life as well as a common source of information, communications tools, and trading. The dynamic growth of the Internet helps people to sit at home and make anything, such as buying without going to the store, studying without having to go to school, and working remotely without going to the company... Especially with the development of Artificial intelligence (AI) has simulated human thinking and learning processes for machines. Artificial intelligence is different from logic programming in programming languages because it can simulate human intelligence, it helps computers have human intellectual abilities such as thinking and reasoning to solve problems, and knowing how to communicate... However, along with utilities, it also causes many difficulties when resolving disputes in traditional commercial activities is already difficult, and resolving disputes in e-commerce activities is even more complicated. On that basis, it posed numerous challenges to the State agencies in ensuring the rights and interests of the parties in e-commerce transactions as well as reducing the load on the judicial system3. At the seminar "Promoting online dispute resolution in e-commerce

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strengthened customer protection"1, the trend of online dispute resolution (ODR) is dispute resolution techniques range from methods where parties have full control of the procedure, to methods where a third party is in control of both the process and the outcome2, so it is considered to be cost-effective with no territorial limitations, facilitating record and data storage as well as document management and search easier. Therefore, with the development of e-commerce. ODR is considered the preeminent solution in resolving current e-commerce disputes. New method of communication has improved many areas of law – including modernising processes for the out-of-court settlement of disputes, examples of which are constituted by systems for ODR.

2. THE TREND OF ONLINE DISPUTE RESOLUTION IN E-COMMERCE

2.1. Online dispute resolution in e-commerce European Union

According to Regulation (Eu) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Regulation on consumer ODR), ODR offers a simple, efficient, fast and low-cost out-of-court solution to disputes arising from an online transaction that helps consumers' and traders' confidence in shopping and selling across borders[3]

According to this Regulation, traders established within the European Union engaging in online sales or service contracts should provide, on their websites, an electronic link to the ODR platform, and traders should also provide their email addresses so that consumers have the first point of contact[4]. At present, there are more than 400 dispute resolution bodies listed on the website of the European Union, all offer out-of-court settlement procedures[5].

It can be seen that in Europe Union, the trend of ODR is a flexible and creative dispute resolution tool, not dominated by complicated proceedings and cost-effective because all stages of negotiation and mediation adjudication are online.

2.2. Online dispute resolution in e-commerce in United States

According to the US Federal Trade Commission (FTC), the Protecting America's Consumers Agency mainly protects consumers in relation to preventing anticompetitive, deceptive, and unfair business practices in the market[6].

Although there is no regulation for ODR related to consumers in e-commerce transactions, but in e-commerce, fraudulent and unfair acts in cyber space are very sophisticated, complex and unpredictable. Therefore, e-commerce websites such as eBay, Amazon... all use the ODR platform in resolving disputes arising between buyers and sellers. It can be seen that in the United States to develop consumer protection policies in e-commerce transactions to avoid fraudulent and unfair behavior in the market, e-commerce websites are forced to use the ODR platform for corresponding dispute resolution in cyberspace.

2.3. Online dispute resolution in e-commerce in Vietnam

Vietnamese law is not yet regular for ODR mechanisms related to consumers in e-commerce transactions. However, Vietnamese law allows the legal value of electronic data messages[7] which data is information in

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[1] Trung tâm Trọng tài Quốc tế Việt Nam (VIAC) (2021). Hội thảo "Thúc đẩy giải quyết tranh chấp trực tuyến trong Thương mai điện tử nhằm bảo vệ người tiêu dùng" [Workshop on "Promoting online dispute resolution in e-commerce to protect consumers"], accessed on 18/6/2021; Available from: https://www.viac.vn/tin-tuc-su-kien/ha-noi-%7C-hoi-thao-thuc-day-giai-quyet-tranh-chap-truc-tuyen-trong-thuong-mai-dien-tu-nham-bao-ve-nguoi-tieu-dung-n1084.html.

[2] Wikipedia, Online dispute resolution (ODR) is a branch of dispute resolution which uses technology to facilitate the resolution of disputes between parties. It primarily involves negotiation, mediation or arbitration, or a combination of all three. In this respect it is often seen as being the online equivalent of alternative dispute resolution (ADR), accessed on 25/9/2022; Available from: https://en.wikipedia.org/wiki/Online_dispute_resolution

[3] Article 4 and Article 8 of Regulation (Eu) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC, accessed on 18/6/2021; Available from: https://eur-ex.europa.eu/legal-content/EN/TXT/?qid=1426859531321&uri=CELEX:32013R0524.

[4] Article 30 of Regulation (Eu) No 524/2013 of the European Parliament and of the Councial of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC, accessed on 18/6/2021; Available from: https://eur-ex.europa.eu/legal-content/EN/TXT/?qid=1426859531321&uri=CELEX:32013R0524.

[5] European Commission. Online Dispute Resolution. accessed on 15/6/2021; Available from: https://ec.europa.eu/consumers/odr/main/?event=main.adr.show2

[6] Federal Trade Commission. Protecting America's Consumers. accessed on 15/6/2021; Available from: https://www.ftc.gov/about-ftc

[7] Article 94.1 of the Civil Procedure Code 2015

the form of symbols, scripts, numerals, images, sounds, or similar forms[1] that is an important factor to build the ODR mechanism and according to the Decree on E-commerce No.52/2013/ND-CP dated May 16, 2013, e-commerce websites are responsible for settling complaints and disputes related to transactions on this e-commerce website[2] and the Consumer Protection Law[3] also stipulates in quite a detail about the settlement of disputes between consumers and organizations or individual trading goods and/or services.

Although there is no regulation for ODR mechanism related to consumers in e-commerce transactions, the Consumer Protection Law mainly protects consumers related to misleading and fraudulent acts in the market, so e-commerce websites such as Tiki, Sendo, Lazada... have built an ODR platform in dispute resolution at their websites to protect consumer interests.

It can be seen that e-commerce transactions, ODR have become a suitable trend for the following reasons:

Firstly, ODR is an inevitable dispute resolution strengthened in e-commerce and allows parties to resolve disputes to break barriers in terms of space and time

ODR resolves quickly, effectively, flexibly, and inexpensively to handle e-commerce disputes without being limited by country or territory boundaries[4]. It allows the parties to resolve disputes to break barriers in terms of space and time.

ODR under the support of technology, especially with the support of AI technology, helps the process of data processing quickly from inspection, review, and evaluation of evidence of the parties. In addition, the ODR system also allows the parties easily to meet each other online to exchange, negotiate, mediate, and adjudicate in the form of exchanging messages, chatting (text communication), or meeting online (video conference), helping to speed up the resolution of disputes for the parties[5].

Secondly, ODR reduces the cost of dispute resolution

ODR reduces the cost of litigation because the parties can negotiate, mediate, adjudicate anytime, anywhere, and are not bound in terms of space and time and all stages of negotiation, conciliation, and adjudication are done online.

Thirdly, ODR protects the interests of the disputing parties (especially consumers)

In small disputes, if the affected party wants to sue to Court or Arbitration for direct settlement, the procedure is complicated and sometimes the cost for dispute settlement is much higher than the interests that they are violated, so ODR will benefit the violated people, especially consumers.

Fourthly, ODR helps to strengthen and build a healthy development e-commerce environment

The ability to access information as well as the buyer's complaints about poor quality products, imitation goods, and counterfeit goods... are easily resolved through ODR. At the same time, it helps against unfair competition practices and restrains competition in the market between traders involved in commercial frauds such as buyers not receiving products, services, or poor quality products and services.

In general, with the advantages of information technology infrastructure in Vietnam being increasingly focused on development, the deployment of 5G breakthroughs in developing Vietnam's economy in integration[6] will support the legal system for e-commerce in Vietnam for promoting the development of the ODR mechanism. However, at present, out-of-court dispute resolution organizations such as arbitration centers and mediation centers have not paid much attention to developing dispute resolution by ODR for several reasons:

First, dispute resolution by ODR may not be effective

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[1] Article 4.5 of the Law on E-Transaction 2005
[2] Article 76 of the Decree on E-commerce No.52/2013/ND-CP dated May 16, 2013 of the Government on e-commerce
[3] Chapter IV of the Consumer Protection Law 2010
[4] Phan Thị Thanh Thuỷ (2016). *Giải quyết tranh chấp thương mại trực tuyến: Những vấn đề pháp lý đặt ra cho Việt Nam [Resolving commercial disputes online: Legal issues for Vietnam]*. VNU Journal of Science: Legal Studies. 2016. Vol 32, No 4. p.40
[5] Hoàng Thế Liên và Trần Anh Huy (2019). *Đề xuất phát triển các hình thức giải quyết tranh chấp trực tuyến ngoài tố tụng tại Việt Nam trong thời kỳ cách mạng công nghiệp lần thứ tư hiện nay*. Kỷ yếu Hội thảo khoa học cấp quốc gia về: "*Cách mạng công nghiệp lần thứ tư và những vấn đề pháp lý đặt ra cho việc xây dựng, hoàn thiện hệ thống pháp luật Việt Nam*" [Proposing the development of online dispute resolution forms outside of legal proceedings in Vietnam in the current period of the fourth industrial revolution. The national scientific conference on: "The fourth industrial revolution and legal issues posed for the constrution and improvement of the legal system of Vietanam"]; Hà Nội; 2019. p.434.
[6] Vũ My (2020). Hiện thực hóa giấc mơ Việt Nam đi cùng thế giới về công nghệ [Realizing the dream of Vietnam going with the world in technology], accessed on 15/6/2021; Available from: https://www.qdnd.vn/kinh-te/tin-tuc/hien-thuc-hoa-giac-mo-viet-nam-di-cung-the-gioi-ve-cong-nghe-645261

ODR will not be effective if one of the parties is not in good faith, and commits fraud in providing documents and evidence[1]. Although Vietnamese law has recognized the value of electronic evidence, without legal documents guiding it, it is very difficult to authenticate these documents.

Second, the use of AI technology in dispute settlement can not be optimal (after all, it is man – made), so it can be manipulated for bad purposes and is not common in Vietnam at present. In addition, the disputing parties do not trust them when the parties need to be knowledgeable about technology and able to use applications on the internet.

Third, the issue of security of personal information of the partiers when resolved by ODR may be stolen in cyberspace. Personal information may be stolen by hackers and it may be a business secret.

Fourth, relevant issues in the dispute settlement process may be exposed to the outside

The entire dispute resolution process by ODR is online, and the parties are not in the same place. Therefore, some non-public information may be disclosed by an unrelated third party.

3. SOME OF THE PROPOSALS SUBJECT TO PROMOTE ONLINE DISPUTE RESOLUTION IN VIETNAM

Currently, Vietnam has not stipulated binding methods of dispute settlement in e- commerce. But according to Directive No. 01/CT-TTg on promoting the development of digital technology enterprises in Vietnam, the ODR will be a useful solution, enabling the disputing parties to settle quickly, effectively and transparently, and at the same time, promote the development of e-commerce in Vietnam to more and more reach far. To promote dispute settlement by ODR in e-commerce in Vietnam, the State needs to have supportive policies for out-of-court dispute resolution organizations to build an ODR platform as well as create a legal corridor. Advantages for dispute settlement by ODR in several aspects:

Firstly, the Government needs to have a mechanism to support and encourage out-of-court dispute resolution organizations in Vietnam to settle e-commerce disputes by ODR to suit the trend of globalization and international economic integration.

Vietnam joined the World Trade Organization (WTO) and signed free-trade agreements (FTAs), so buying and selling with foreign partners has become popular, and there is a need for a method to resolve cross-border disputes. Therefore, ODR will solve this problem and promote the development of cross-border e-commerce, making it easier to reach agreements based on dispute settlement by negotiation, and dialogue rather than confrontation.

Secondly, the Government needs to have a document guiding e-commerce when a dispute occurs, it must go through an out-of-court dispute resolution organization using the ODR platform before filing a lawsuit to the Court to reduce the number of cases to be resolved for the People's Court system.

In the 2016-2020 period, the People's Court system settled civil, marriage and family, business-commercial, and labor cases in 1,842,684 cases. The number of cases increases year by year with an increasingly complex nature while the number of officers and judges are not enough to meet the requirements of the task[2]. In addition, many judges quit due to the increasing number of jobs[3]. Therefore, the Government needs to have a document guiding e-commerce when a dispute occurs, it must go through an out-of-court dispute resolution organization using the ODR platform to settle before filing a lawsuit to the Court that helps to reduce the number of cases to settle for the Court system and reduces the complicated procedures for disputing parties.

Thirdly, the Government needs to support out-of-court dispute resolution organizations to use the ODR platform as investment infrastructure, equipment, and techniques for dispute resolution.

Information technology infrastructure, equipment, and techniques are prerequisites for building an ODR platform but they cost a lot. Therefore, the Government should have t policy to support costs for these organizations and the Government needs to complete authentication databases on population, tax code,

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[1] Article 94.1 of the Civil Procedure Code 2015

[2] Tòa án nhân dân tối cao (2020). Dự thảo Báo cáo tổng kết công tác năm 2020 và nhiệm kỳ 2016 – 2020; phương hướng, nhiệm vụ trọng tâm công tác năm 2021 của các tòa án [Draft report summarizing the work in 2020 and the 2016-2020 term; orientations and key tasks of the courts in 2021]; 12/2020; Hà Nội; 2020

[3] Hải Triều (2019). Nhiều thẩm phán xin nghỉ việc do...quá tải trách nhiệm [Many judges resign due to...overload of responsibilities], accessed on 15/6/2021; Available from: http://congan.com.vn/tin-chinh/ap-luc-lon-nhieu-tham-phan-xin-nghi-viec_82707.html.

telephone number, business-code... to assist these organizations in collecting and verifying information of the parties involved in the dispute settlement process.

Fourthly, ministries and branches need to develop joint circulars to create consistency and synchronization in the verification and collection of electronic evidence, verify identity personnel to make e-commerce activities transparent, and ensure the validity of the contract to avoid fraud, limit contract cancellation or improper delivery.

Finally, e-commerce websites, online marketplaces, or online sales/service websites must integrate an out-of-court dispute resolution organization using the ODR platform in dispute resolution to facilitate the parties when there is a dispute arising from transactions.

4. CONCLUSION

The benefit that ODR will bring is the motivation for dispute resolution in e-commerce in Vietnam which is practically proven in developed countries around the world such as saving time, cost reduction, and convenience.... However, there are barriers to be encountered that need to be overcome with information technology infrastructure, equipment and techniques are prerequisites for building an ODR platform. Therefore, to promote online dispute resolution (ODR) in e-commerce in Vietnam is necessary to have an appropriate legal adjustment to create conditions for out-of-court dispute resolution organizations to use the ODR platform in resolving e-commerce disputes.

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VIETNAMESE ENGINEERING STUDENTS' SELF-EFFICACY IN LEARNING AN INTERDISCIPLINARY ENGLISH MOOC

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Abstract. There has been considerable research into engineering students' self-efficacy in online learning in recent years, especially in Western countries. By contrast, few English studies have investigated engineering students' self-efficacy in MOOCs learning in Southeast Asia countries, namely Vietnam. This present study examined the levels of self-efficacy in learning an interdisciplinary English MOOC of 100 engineering undergraduates in a technical university in Vietnam. Engineering self-efficacy in joining MOOCs is an individual's belief in his or her ability to successfully overcome any obstacles in performing English MOOCs' tasks and achieve good results. Data were obtained from a Likert-scale questionnaire consisting of three variables: a) Self-efficacy in using technology, b) Self-efficacy in performing English-related tasks, and c) Self-efficacy in learning independently. Descriptive analysis, t-test, and ANOVA were used to compare the mean scores of engineering students' self-efficacy based on gender, age, years of study, major, and levels of English. No significant differences in engineering self-efficacy mean scores were found by gender, age, major, and levels of English. However, our results found significant differences in self-efficacy mean scores of Vietnamese engineering students with respect to years of study. This research will inform the development of engineering MOOCs in English in Vietnam and in Asia where English is not the mother tongue.

Keywords. Self-efficacy, Engineering students, Vietnam, English MOOC

1. INTRODUCTION

In line with the rapid development of education today, new technology is emerging, providing various tools for educators to improve the process of teaching and learning. As one of the most outstanding technologies, MOOCs (Massive Open Online Courses) have contributed substantially to lifelong education (Kalz, 2015). They have made a significant revolution in traditional education and given meaning to computer training, free learning, and distance learning (Shrivastava & Guiney, 2014). MOOCs are web-based learning platforms designed to allow hundreds of thousands of learners worldwide to freely study from the best instructors and access the most updated knowledge, regardless of time or location, provided they have a device with Internet access (Baturay, 2015). As a result, the number of students participating in MOOCs has been boosting dramatically, reaching 220 million in 2021 (Shah, 2021). However, great benefits come with great challenges as well. The high drop-out rates, privacy problems, and the low number of participants in developing Asia countries, e.g. Vietnam, are some of the critical problems in the process of learning and teaching through MOOCs (Ma & Lee, 2019; Fidalgo-Blanco et al., 2015). Therefore, it is essential to explore innovative ways to solve these problems and encourage worldwide learners to join MOOCs.

Zimmerman (2000) suggested that learners' self-efficacy beliefs are a significant predictor of students' motivation and learning behavior. Pajares and Valiante (2002) also stated that students tend to perform ineffectively and even avoid doing academic tasks when they lack confidence. In literature, there are many studies investigated the relationship between learners' self-efficacy beliefs and their learning patterns (Ghazali et al., 2020; Tsenn et al., 2013), but only a few English studies investigating it in MOOCs (Rabin et al., 2020; Phan & Chen, 2022). Therefore, this study is conducted to: a) examine if there is any significant difference in self-efficacy beliefs of a group of Vietnamese engineering students with respect to different demographic variables, and b) explore the reason for the ratings of their self-efficacy levels. It is expected that the results of this study will contribute to the development of an English Interdisciplinary MOOC in

Vietnam by suggesting ideas to enhance the self-efficacy levels of its learners. This led to the following research questions:

RQ1: What are the self-efficacy levels of engineering students when joining an Interdisciplinary English MOOC?

RQ2: Is there any significant difference in the students' self-efficacy in joining the MOOC as related to their gender, age, years of study, and English proficiency levels?

2. LITERATURE REVIEW

Engineering Students' Self-Efficacy Beliefs

Self-efficacy is defined as "people's judgments of their capabilities to organize and execute a course of action required to attain designated types of performances" (Bandura, 1986, p. 391). In the context of education, it refers to students' beliefs about their ability to perform well in both traditional face-to-face classrooms and online courses. The influence of self-efficacy on human behaviors is far-reaching. Bandura, Freeman, and Lightsey (1997) noted that:

> Such beliefs influence the courses of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with taxing environmental demands, and the level of accomplishments they realize (p. 3).

On the one hand, if engineering students have a high level of self-efficacy toward a task, they may put more effort into finishing the task, have a positive attitude in performing it, persist in the face of difficulties, and tend to set a high goal. On the other hand, engineering students with a low level of self-efficacy are most likely to reduce the effort they put into accomplishing the task or even completely abandon the given task, which leads to failure. It is also noted that students reported with firmer self-efficacy beliefs in engineering tend to work harder and have a better plan for pursuing engineering careers than those with low self-efficacy (Jones et al., 2010).

According to Bandura (1997), four major factors contributing to an individual's self-efficacy are ***enactive experiences***, ***vicarious experiences***, ***verbal persuasion***, and ***physiological index***. The first and most important factor -***enactive experiences*** or ***direct experiences***- refers to the individual's personal experiences in success or failure to overcome a new challenge in the past. The second major factor, ***vicarious experiences*** or ***indirect experiences,*** are the experiences the individual gains through observing other individuals' successes or failures. Another factor, v***erbal persuasion,*** is commonly used because of its convenience and availability. Receiving positive advice and encouragement while facing a complex task can boost an individual's self-efficacy. In contrast, unrealistic advice and negative feedback have the opposite influence on self-efficacy beliefs. The last factor, ***physiological index,*** is the individual's emotional, physical, and psychological well-being. For example, individuals will likely have more confidence in their capabilities if they are not struggling with stress and anxiety.

Students' self-efficacy and MOOCs

Pretz (2014) stated that MOOCs are one of the ten technologies that could revolutionize the world by 2022. With advanced technological infrastructure, MOOCs allow anyone globally who has a computer, despite their demographic profiles (e.g., location, gender, educational level, and employment status), to study every professional field via the Internet for free (Anderson, 2013). Most current MOOCs offer video lectures, weekly quizzes, open-ended questions, homework, and discussion forums. However, there are still many challenges related to the process of teaching and learning through MOOCs, such as the higher drop-out rate of participants compared to that in the traditional online learning environment. For example, Mourdi et al. (2019) observed that only about 10% of the MOOC participants completed their planned course, which is a staggering trend. Many studies suggest that self-efficacy, self-regulation, and self-motivation are the three main factors determining learners' intention to complete (Gamage et al., 2015; Wang et al., 2013). Therefore, to effectively address the warning completion rate of current MOOCs, this study focuses on researching only the key factor - learners' self-efficacy, or more specifically, students' beliefs in their capabilities to perform a specific task in the MOOC learning environment.

Despite its worldwide popularity in recent years, a comprehensive examination of previous studies in English suggests the limited investigation of learners' self-efficacy in MOOCs (Ghazali et al., 2020). The majority of current research focuses on students' self-efficacy in a traditional education environment or an e-learning setting. Only a few studies examined the importance of self-efficacy beliefs in MOOCs. Some important studies are reviewed as follows.

Wang and Baker (2015) revealed the link between students' motivation, self-efficacy levels, and MOOC completion rates. According to the researchers, learners who completed the course were more interested in the course materials, while learners who dropped out were more interested in MOOCs as a learning experience. Despite finding no significant differences in overall academic efficacy between the course completers and non-completers, the researchers observed that from the beginning, learners who firmly believed that they could complete their planned course were less likely to drop out than those who did not. This finding was supported by Jung and Lee (2018) in their research about learners' engagement and persistence in MOOCs. The researchers surveyed 360 participants in South Korea to investigate the relationships between the learning outcomes and factors that influenced them, including academic self-efficacy. The results showed that self-efficacy had a significant direct impact on learning engagement and an indirect impact on learning persistence. In addition, a recent study confirmed the positive relationship between students' self-efficacy and their satisfaction in a MOOC learning environment (Rabin et al., 2020). By collecting the data of 542 ESL (English as a second language) MOOC participants from the pre- and post-questionnaires, the research reported that learners with low self-efficacy were more likely to lack prior knowledge and had trouble understanding the course context or solving technical issues. Regarding changes in self-efficacy beliefs, Phan and Chen (2022) compared Taiwanese learners' self-efficacy at the beginning and the end of a blended MOOC about English Technical Writing skills. Using descriptive analysis, t-test, and ANOVA, the researchers found that students had higher self-efficacy after completing the course, and self-efficacy was a substantial predictor of MOOC enrollers' academic performance. The data also showed significant differences in learners' self-efficacy and their scores in terms of age group, levels of English, and years of study.

All of the research included in the review above highlighted the significance of self-efficacy in a MOOC context. In addition, our examination shows that most research was carried out in Western countries, with a limited number in developing Asia countries due to unmet fundamental needs (Liliana et al., 2022). We also found no studies in English up to this point focused on examining the self-efficacy levels of engineering students in Vietnam in joining an interdisciplinary MOOC. Our research was conducted in light of the lack of self-efficacy studies in this area.

3. METHODS

Participants

Participants in this study were 100 English as a second language (ESL) undergraduate learners from the Industrial University of Ho Chi Minh City (IUH), a Vietnamese technical university. These students were randomly selected from six different engineering-related majors and aged from under 20 to 25. Of the learners, 96 were male and only four were female. Among the participants, the two largest groups were mechanical engineering students and electrical - electronics engineering students, which were 48% and 34%. Students from Information Technology and other engineering majors accounted for less than ten percent. Most participants were freshmen (79 students). A few participants were from other years of study (five sophomores, nine juniors, and seven seniors). The proportion of participants at beginner's level of English proficiency was 57%, followed by the elementary (23%), intermediate (10%), and lower intermediate (3%) levels. Seven students were unable to identify their levels of English.

Instrument

The Questionnaire
To address the research questions, we invited nine groups of IUH engineering students to answer an online Google Forms questionnaire. For survey purposes, the questionnaire is divided into two sections. The first section collects learners' demographic data, including age, gender, major, years of study, English Proficiency level, the number of prior online courses, and the number of prior MOOCs. For the second section, we used an 11-point Likert scale (from 0 – "Cannot do at all" to 10 – "Highly certain can do") to

measure engineering students' self-efficacy levels in attending the English MOOC. The scale consists of 39 question items focused on three dimensions: a) self-efficacy to use technology, b) self-efficacy to manage time, and c) self-efficacy to learn in the interdisciplinary English MOOC environment. The reliability estimates for this questionnaire based on the Cronbach Alpha method were high ($\alpha = .98$) and therefore are sufficiently reliable for the study. The Online Learning Self-Efficacy Scale (Zimmerman & Kulikowich, 2016) was used as a framework to develop this questionnaire. The data gathered from the questionnaire were examined using Statistical Packages for Social Sciences (SPSS) version 26.0 for Windows. The scale dimensions' construct-related validity was examined and invalid items were removed. Results show that 25 question items were loaded well into three dimensions: a) self-efficacy in using technology (11 items), b) self-efficacy in performing English-related tasks (8 items), and c) self-efficacy in learning independently (6 items).

It is hoped that the researchers can then give some suggestions to encourage future learners to stay with MOOCs and, therefore, contribute to the development of reliable MOOCs in Asian countries, especially Vietnam.

Procedures

The questionnaire was sent to the Vietnamese engineering students via Google form. Participants were asked to provide their contact information and rate their self-efficacy in learning the English MOOC from 0 to 10. Before filling in the questionnaire, all the students were explained the purpose of the study and the terms in the survey. They were informed that their personal information and responses to the survey were completely confidential and would be used for research purposes. No real names would be used in the study and data were shared between the first author and her supervisor. When all the responses were collected, the ones that were not filled by engineering students were treated as not valid. Eventually, there were a total of 100 valid questionnaires. Reliability and validity analyses were conducted on this questionnaire after sorting.

Data analysis

SPSS 26.0 was used to analyze the questionnaire data. The internal consistency of each instrument was first explored by calculating Cronbach's alpha. Subsequently, descriptive analysis, t-test, and ANOVA were used to determine the differences between the mean values of students' self-efficacy in three dimensions regarding different demographic variables.

4. RESULTS

Students' self-efficacy levels when joining the MOOC

Table 1: Result of Descriptive Statistics with respect to perceived self-efficacy

Variable	N	Mean	SD
Self-efficacy of IUH engineering students in joining the MOOC	100	5.814	2.100

Table 2: Result of Descriptive Statistics with respect to MOOCs' self-efficacy scaled dimensions

Variables	N	Mean	SD
Self-efficacy in using technology	100	6.213	2.264
Self-efficacy in performing English-related tasks	100	5.236	2.321
Self-efficacy in learning independently	100	5.993	2.456

Table 1 illustrates descriptive statistics conducted to analyze the perceived self-efficacy of IUH engineering students. The results show that the students' confidence in attending the MOOC was slightly above the moderate level. Specifically, according to Table 2, Vietnamese learners had the highest level of self-efficacy in using technology, while their level of self-efficacy in performing English-related tasks was the lowest.

Self-efficacy regarding different demographic variables

Table 3: Results of Independent Samples Test of male and female students

Variable	Male (N=96)		Female (N=4)		t	df	Sig $_{Levene}$	p
	Mean	SD	Mean	SD				
Self-efficacy	5.813	2.138	5.843	.900	-.028	98	.136	.978

From the t-test result in Table 3, it is observed that Levene's test statistic is greater than 0.05 and the p-value is greater than 0.05. Hence, there was no significant difference in the self-efficacy levels of male (M = 5.813, SD = 2.138) and female engineering students (M = 5.843, SD = .900; t (98) = -.028, p = .978).

Table 4: Results of Independent Samples Test related to age groups

Variable	Under 20 (N=76)		20 – 25 (N=24)		t	df	Sig $_{Levene}$	p
	Mean	SD	Mean	SD				
Self-efficacy	5.853	2.187	5.690	1.835	.330	98	.336	.742

From the t-test result in Table 4, it is observed that Levene's test statistic is greater than 0.05 and the p-value is greater than 0.05. Hence, there was no significant difference in the self-efficacy levels of engineering students aged under 20 (M = 5.853, SD = 2.187) and engineering students aged from 20 – 25 (M = 5.690, SD = 1.853; t (98) = .330, p = .742).

Table 5: Results of One-way ANOVA Test with respect to major

Variable	Major	N	Mean	Sig $_{Levene}$	Sig $_{Welch}$
Self-efficacy	Mechanical Engineering	48	5.612	.675	.600
	Other engineering majors	8	5.340		
	Information Technology	10	5.983		
	Electrical - Electronics Engineering	34	6.162		
	Total	100	5.814		

According to Table 5, participants did not differ significantly in their self-efficacy concerning major as the value of Levene's test statistic is greater than 0.05 and the value of the ANOVA test is greater than 0.05.

Table 6: Results of One-way ANOVA Test with respect to years of study

Variable	Years of study	N	Mean	Sig Levene	Sig Welch
Self-efficacy	Freshman	79	5.850	.033	.002
	Sophomore	5	5.033		
	Junior	9	4.739		
	Senior	7	7.345		
	Total	100	5.814		

According to Table 6, participants differed significantly in their self-efficacy concerning years of study. The seniors had the highest level of self-efficacy in joining the MOOCs (7.345), while the juniors had the lowest level of self-efficacy (5.033). We could also see that the freshmen were more self-efficacious than the sophomores, however, their self-efficacy levels were not very high (5.850).

Table 7: Results of One-way ANOVA Test with respect to English proficiency level

Variable	Major	N	Mean	Sig Levene	Sig Welch
Self-efficacy	Beginner	57	5.712	.675	.600
	Elementary	23	5.999		
	Low Intermediate	3	4.815		
	Intermediate	10	6.070		
	Don't know	7	6.099		
	Total	100	5.814		

According to Table 7, participants did not differ significantly in their self-efficacy concerning English proficiency level as the value of Levene's test statistic is greater than 0.05 and the value of the ANOVA test is greater than 0.05.

5. DISCUSSION AND CONCLUSION

Students' self-efficacy levels when joining the MOOC

In this study, Vietnamese engineering students were slightly confident in their ability to complete an English MOOC. More specifically, they were reported to have the highest degree of self-efficacy when utilizing technology. This result aligns with the findings of Warden et al. (2020), which confirmed that students had high levels of self-efficacy beliefs in performing technological tasks regardless of their levels of technology readiness or prior online learning experience. This high self-efficacy score was perhaps due to learners' previous exposure to technology during their university time (Zimmerman & Kulikowich, 2016), such as the Learning Management System (LMS) or other online classroom management tools.

Our research also reveals that engineering students had the lowest self-efficacy while doing tasks using English. Many previous studies have also mentioned the significant relationship between self-efficacy and English proficiency. For instance, Tan et al. (2018) stated that language barriers could lead to learners' low self-efficacy levels as they might struggle to understand the course content thoroughly. According to an early study on MOOC (Sanchez-Gordon & Luján-Mora, 2014), non-native speakers could encounter challenges such as slow reading speed, information overload, difficulties with cognition, and anxiety connected to the visibility of their written replies. These problems might cause participants to lose self-efficacy in joining an English MOOC. To help Vietnamese students to overcome the language barriers, simplifying the course content wherever possible and explaining any necessary complicated requirements,

words, or terms in the MOOC orientation could be suitable methods. Alternative solutions such as allowing learners to pause or control the video speed, adding subtitles or keywords to the video lectures, or providing professional teaching assistants should also be taken into consideration. Future research may focus on exploring the effectiveness of these suggestions in improving learners' self-efficacy in performing English-related tasks.

Self-efficacy with respect to demographic variables

This study showed a significant difference in Vietnamese engineering students' self-efficacy concerning educational levels. This finding was on the same track as the research by Phan and Chen (2022), which suggested that undergraduate learners were more confident than graduate learners in joining English MOOCs and their academic performance was also higher than the other group. The increase in courses, workload, academic culture, and these reasons' difficulty in higher educational levels could affect engineering students' self-efficacy in different years of study (Martin et al., 2021). In our research, the self-efficacy level of seniors was reported to be the highest. However, this finding should be interpreted with one limitation in mind. A small number of participants were seniors while the greatest number of participants in the study were freshmen. We suggest other researchers recruit a greater number of participants from different years of study to achieve more comprehensive findings. A longitudinal analysis of the changes in students' self-efficacy over years will likely be another good research direction for the topic under investigation.

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VIETNAM HIGHER EDUCATION EFL TEACHERS' PERCEPTION OF THE FACTORS AFFECTING THE USE OF DIGITAL TECHNOLOGIES IN ONLINE TEACHING

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Abstract. Digital technologies are an integral part of Higher Education (HE) (Pinto, 2012) and these digital tools have been chosen to support students' learning in formal learning contexts (Pinto & Leite, 2020) and other informal contexts beyond classrooms. While digital pedagogy is an emerging issue that has gained some concerns from researchers around the globe (Hays & Reinders, 2020; Nanjundaswamy et al., 2021; Howell, 2013), little is known about Vietnamese English-as-a-Foreign-Language (EFL) teachers' perceptions of the factors influencing the use of digital technologies in online teaching environment. Within that context, this research paper aims to look into EFL teachers' perception of the factors affecting the teachers' use of digital technologies to support student learning in their online teaching activities. By exploring ideas from 104 EFL teachers teaching in a number of universities in Ho Chi Minh, Vietnam, the data collected from the questionnaire and informal interviews revealed that the teachers' use of digital technologies in their online teaching activities was mainly influenced by *teachers' beliefs, teachers' knowledge and skills of technology, teachers' own interest in technology, teachers' time* and *university culture/ policies*. Results of the study suggested that for digital technologies to bring out the best benefits in teaching and learning processes, more trainings on digital pedagogy should be encompassed, and the principles of digital pedagogy should be formally included in the coming policies, regulations, curriculum and syllabus contents so that teachers gear more focus on the use of digital technologies to boost student learning in general and in English learning in particular. Digital technologies, if used effectively and critically, will promise the best outcomes for both teachers and learners.

Keywords. Digital technologies, digital pedagogy, online teaching, digitalization, Vietnam higher education, student learning

1. INTRODUCTION

Digital pedagogy for learning and sustainable learning is an emerging issue that has gained some concerns from researchers inside and outside Vietnam (Hays & Reinders, 2020; Nanjundaswamy et al., 2021; Howell, 2013; Nguyen et al., 2020; Tran et al., 2020).
We are now members of a global information society. The way we communicate and acquire information has become digital (Howell, 2013). The digitalization, globalization and the Covid-19 pandemic have driven big changes in education system and in teaching and learning processes. The application of digital technologies in our lives has been increasing in recent years, the understanding of how educators and teachers should teach with technology, and how students learn best has been evolving constantly. This allows us to believe that learning is possible within and outside the walls of a physical learning environment. "Technology" is an important term in many fields including education in the 21st century (Ghavifekr & Rosdy, 2015). As considered by research and teachers, the use of digital technology in education is also considered as the integration of information and communication technology (ICT) into teaching and learning. According to UNESCO (2007:1), ICT are "forms of technology that are used to transmit, process,

store, create, display, share or exchange information by electronic means". Research has shown that teachers' use of digital resources to plan and implement learning activities for students by preparing lessons via word documents, powerpoint presentations and channels to communicate with the students and parents an help empower student learning in general (UNESCO, 2011; OECD, 2014; EU, 2013; Wake and Whittingham, 2013). In Vietnam, online teaching has become a commonplace in higher education since the closure of educational institutions due to the Covid-19 crisis. The lockdown and closure of educational institutions during Covid-19 pandemic was a contextual factor (Crawford, 2021) that made HE teachers switch to online teaching and used digital technologies to organize teaching activities online. Regardless of the fact that, the covid 19 pandemic is going to be over, for sustainable learning and the sustainable development of educational institutions, online teaching and learning delivery methods will continue to have its place in the mixed, or blended, teaching and learning mode. Blended learning can support sustainable development, including the social, economic and environmental aspects of sustainability to meet the needs of the current and future generations (Caird & Roy, 2018). Within the scope of the study, this paper aimed to answer the research question, "From EFL teachers' perception, what are the factors that affect the teachers' use of digital technologies in online teaching?"

2. LITERATURE REVIEW

2.1. Definitions of key terms

Digital Technologies

"Digital technologies are electronic tools, systems, devices and resources that generate, store and process data" (Victoria State Government – Education and Training). "Social media, online games, multi media and mobile phones are typical examples of digital technologies."

"Digital technology can include, but not limited to, computers, tablets, smart phones, Facebook, Moodle, online library services, Google, Youtube, writing essays on Microsoft Word, etc. Digital technologies also enables people to access the internet not just from home but in any location through portable devices." (Selwyn et al (2016).

The 10 categories and examples of digital tools supporting learning in higher education listed by Pinto & Leite (2020) include:

- *Assessment and Feedback systems: Electronic marking, Clickers, Audio feedback, Computer note taking, etc.*
- *Collaborative systems: Google docs, Social Bookmarking, Mind Maps, Wikis, Blogs, etc.*
- *Content Aggregation: RSS feeds, NetVibes, Google Reader, etc.*
- *3D Virtual Worlds: Second Life, Habbo, Augmented reality, Games, Virtual labs, etc.*
- *Interpersonal Communication tools: Email, MSN, Skype, Forums, Video-conferencing, etc.*
- *Information and Communication Technologies (ICT): Software or Applications internet based.*
- *Learning Management System (LMS): Blackboard, Moodle, WebCT, Platforms supporting online courses. etc.*
- *Mobile tools: Mobile applications internet based.*
- *Publish and Share tools: Blogs, Wikis, Flickr, YouTube, Podcast, Social Bookmarking, e-porfolio, Digital storytelling, e-books, Video lectures, etc.*
- *Social networking: Facebook, Twitter, Hi5, LinkedIn, Ning, Academia.edu, etc.*

Digital technology in the classroom (DTC), as defined by Cambridge Assessment International Education, can be "digital prcessing systems that encourage students active learning, knowledge construction, inquiry and exploration on the part of the learners, and which allow for remote communication as well as data sharing to take place between teachers and/ or learners in diffrent physical classroom locations." (Cambridge Assessment International Education)

Digital tools

Digital tools are programs, websites or online resources that can make tasks easier to complete. A lot of these can be accessed in web browsers without needing to be downloaded, and they can be accessed both from home and at work (Gouri, 2020).

Online teaching

Online teaching (and learning) refers to education that takes place over the internet. Online teaching shares many things in common with traditional face-to-face teaching, but it also has some other skills and requirements. Both online and face-to-face teaching approaches are similar in content, but they are different in pace and delivery (Matthew et al, 2018).

The difference between ICT capacity and Digital technologies

"The ICT capacities are about using and working with technology, while the digital technologies is about understanding technology and developing a particular way of thinking" (Laura, 2017.)
The ICT Capacities are one of the seven General Capacities outlined by ACARA. They are considered to be the skill set and competences that students need to live and work successfully in the 21st century" (ACARA 2010)
As defined by Australian Curriculum (ACARA 2010), digital technologies build on and extent ICT, moving students from technology consumers to creators. Digital technologies focus on creating solutions, while ICT supports students to be effective users of technology.

Digital Tools and digital pedagogy – The critical use of digital technologies

Digital pedagogy, as defined, is not about using digital technologies for teaching, but rather, it is about approaching these technological tools with a critical pedagogical perspective. In other words, it is about the decision of when and how to use digital tools critically and thoughtfully in order to create an impact on learning.
Digital pedagogy looks critically at the use of digital tools in teaching and learning. It is not simply about using digital technologies for teaching and learning, but rather, it is about using those tools from a critical pedagogical perspective. As Croxall (2013) defined briefly in his introduction to MLA Digital Pedagogy Unconference, digital pedagogy is "the use of electronic elements to enhance or to change the experience of education." The examples that Croxall gave for 'electronic elements' vary from a powerpoint presentation, to flipped classrooms or to a MOOC.

2.2. Benefits of digital technologies in the classroom (DTC)

With a technology-based approach, teaching and learning not only happens in the school environment, but also can happen when both teachers and students are physically in distance (Ghavifekr & Rosdy, 2015). It also offers a variety of inspiring ways including educational videos, stimulation, storage of data, the use of mind-mapping, brainstorming, music and websites that make the students' learning process more fulfilling and meaningful (Finger & Trinidad, 2002).
Cambridge Assessment International Education listed the following benefits of DTC:

- Digital technologies can foster dialogic and emancipatory practice
  One of the biggest benefits that DTC brings about the dialogic practice in which students are active, motivated and engaged in a conversation from which learning occurs. Emancipatory practice is the second aspect that DTC brings to classrooms where each student's idea goes beyond the learning context set by the teachers since they build knowledge through the process of learning outside formal learning contexts.
- Different technologies can improve learning by giving augmenting and connecting activities
- Digital technology offers a 'potentially more engaging alternative' and 'immediate feedback' for both teachers and students.
- DTC can foster active learning and it in turn enables students to get higher grades thanks to their better understanding.

Tools for digital classrooms to enhance teaching and learning

When it comes to the term 'digitalization' in teaching learning process, it involves the use of digital technologies to engage students into the learning process (Gouri, 2020). The various types of tools are designed for classroom use include: Zoom, MS Team, Google Classroom, Quizlet/ Quizlet Live, Kahoot, Classkick, Nearpod, Padlet, etc. With a digital pedagogy, student learning is sustained for a longer period because students have 'higher sensory stimulation' as they watch, listen, explore the context and learn at the same time (Gouri, 2020)

"For learning to be sustained in the real changing world, learners occur through face-to-face interaction may not be affective for sustainable learning in education" (Adar, 2021:7)

Digital technologies are used to enhance sustainable learning in education

Digital technologies make life-long learning become possible**.** Life-long learning has been increasingly vital in educational documents, curriculums and syllabi of different study programs. Student learning outcomes are no longer limited to what students can acquire during formal education but throughout their lifetime. We now live in a "global information society or a highly interconnected world" (Howell, 2013). Digital teaching platforms empowers the teacher in classroom, and provide students *anytime and anywhere access to learning* (Christopher Dede & John Richards, 2012)

The educational benefits are the reasons for teachers to adopt a digital pedagogy. Digital technologies help create a more engaged and motivated class

2.3. Challenges of applying digital technologies in the classroom

Following is the challenges of using digital technologies in the classroom listed by Cambridge Assessment International Education:

- Some technologies and applications have not yet proven to be effective in comparison to more traditional classroom learning contexts.
- Digital divide is another challenge where some students have access to digital technology and internet while some other don't.
- Technology can be costly and become out of date very soon.
- Internet connections can be unstable or slow that cause traffic for loading
- Safety is also a very important key issue of DTC. How to prevent cyber-bullying, hacking of personal information, access to illegal documents
- Technologies, if used out of control, can cause some harmful effects to health.

Beside the challenges mentioned by the Cambridge Assessment Internation Education, other challenges have been documented by some researchers around the globe. Asha Kanwar (2021) indicated that only 37% of the surveyed students had access to online classes. The barriers included unreliable connectivity, high cost of data connection and 'unreliable power supply'. Data from OECD contries also revealed that only 60% of the surveyed teachers had some training in ICTs.

2.4. Factors affecting the integration of digital technologies into classroom environment

When it comes to the factors or the challenges affecting teachers' choice of using technological devices in classrooms, there are two key groups of factors that would influence their decision, according to Venkatesh and Davis (2000). The two groups of factors are external variables and teachers' beliefs of the usefullness of technologies and teachers' beliefs of the ease-of-use of technologies. The first group includes external variables which are the challenges that come from outside teachers' control when integrating a new technology in their teaching and learning process. The external variables might include limited accessibility and network connection, limited technical support, limited time, and teachers' competence in integrating technologies into pedagogical practice. The second group is that of teachers' perception and attitude towards the usefulness and ease-of-use of technologies.

Limited accessibility and network connection

Several research studies show that lack of access to digital resources prevent teachers from integrating new technologies into education (Ghavifekr et al, 2015). The challenges concerning the accessibility of new

technologies for teachers are worldwide and differ from country to country. For example, having no access to the Internet during schoolday and a lack of hardware hampered technology integration in Saudi schools (Al-Alwani, 2005). Insufficient unit of computers, peripherals, softwares, and access to internet were the top four main barriers found in a study with 26 countries (Pelgrum, 2001). The greatest challenge is the digital infrastructure – the lack of access to devices, connectivity, and electricity (Asha Kanwar, 2021).

Limited technical support

Lack of technical support was deemed to be one of the top barriers to technology use in education (Pelgrum, 2001). If there is no good technical support in the classroom, teachers cannot overcome the obstacles preventing them from applying technology into teaching (Lewis, 2003). According to Sicilia (2005), whether teachers have twenty years of experience or are novices to the profession, technical support are always of great value. Technical problems generate barriers to the smooth lesson delivery of teachers.

Limited time

A number of studies indicated that many teachers have competence and confidence in using computers and other technologies in the classroom, but they still make little use of technologies because they have limited time for that (Al-Alwanni, 2005; Beggs, 2000, Sicilia, 2005, Pelgrum, 2001). The most common challenge agreed upon by most of the teachers was the lack of time for lesson plans with technology use in or outside classroom (Sicilia, 2005), explore various web pages, practice using technology, prepare lessons integrated with technological tools and handle technical issues (Becta, 2004).

Lack of effective training

The lack of effective training has been most frequently refered to in the literature (Sicilia, 2005; Al-alwani, 2005; European Union, 2013; Ghavifekr et al 2015; Spiteri, 2018). As mentioned by Pelgrum (2001), there were not enough training opportunities for teachers in using technology in teaching. Simmilarly, Beggs (2000) believed that the lack of training was one of the top three barriers to teachers' use of technology in teaching.

Lack of teachers' competency

Beside the other factors mentioned above, the lack of teachers' competencey in integrating technology use into education has been indicated in the literature as a factors having influence over the teachers' use of technology in the classroom (Becta, 2004; Pelgrum, 2001; Al-Alwani, 2005; Albirini, 2006); however, the level of this challenge differs from country to country. In developing country, review shows that teachers' lack of technological competency is the main challenge encountered by teachers when adopting technology into teaching (Pelgrum, 2001; Al-Alwani, 2005). Teachers' lack of technological competence has been indicated as the main barrier in Syria (Albirini, 2006). Teachers were not prepared for the sudden transition to online learning (Asha Kanwar, 2021). In some developed countries like the Netherlands, however, teachers' knowledge and skills of technology use in teaching is not considered as the main obstacle to technology use in classroom any more. It may be one of the factors concerning 'resistance to change' if teachers want to find a reason now applying technological tools into teaching (Balanskat et al, 2006).

School Culture

The school culture has an effect on the attitudes of teachers towards the intergration of technology into teaching activities (Apeanti, 2016). Tondeur et al. (2016) found that if teachers were respected and valued for their efforst, they had motivation to use technology more often. Reasearch shows that a supportive environment of the educational institutions help and encourage teachers to integrate technology into teaching to enhance teaching job and student learning activities (Tezci, 2011; Omwenga & Nyabero, 2016).

Spiteri & Rundgren (2020) summarized the aspects contributing into the school culture and affecting teachers' use of digital technologies as indicated in Figure 1 below:
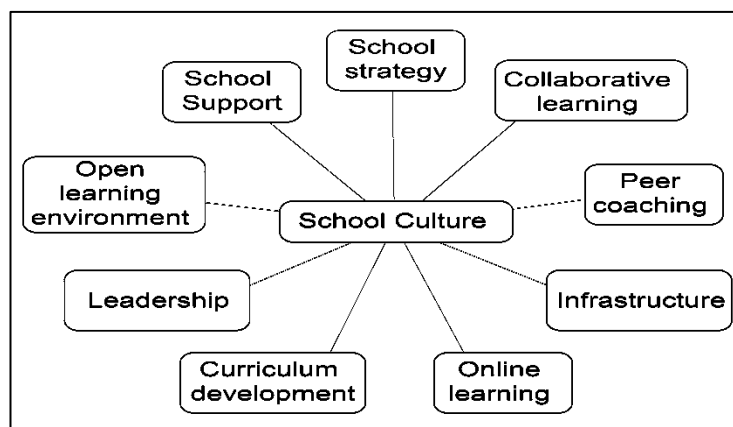

Figure 1: Aspects of School culture as one of the factors affecting teachers' use of digital technologies

Source: Spiteri & Rundgren, 2020

Teachers' beliefs

According to Venkatesh and Davis (2000), the second group of factors influencing how and when teachers decide to use technology in teaching is that of teachers' perception and attitude towards the usefulness and ease-of-use of technologies. The conceptual framework by Davis (2003) indicated the link between teachers' knowledge on technology use and teachers' perception of the usefulness and ease-of-use of technology. The framework starts with 'knowledge on technology use' as the key decision-making point that leads to the integration of technology into teaching process. The framework comprises of two main parts which are: perceived usefulness and perceived ease of use. These two aspects of perception will lead to the intention to use and it ends with the decision of 'confirmation and actual use'.
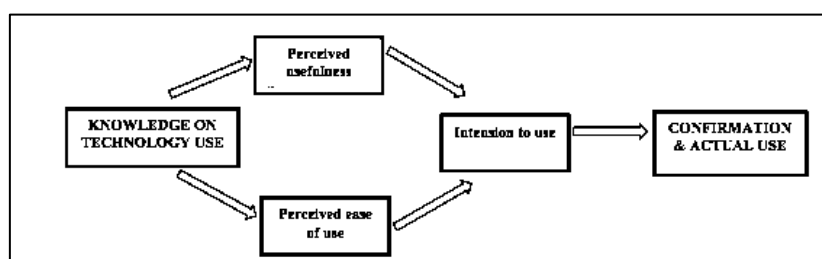
Figure 2: Conceptual framework of study

Source: Davis, 2003; Rogers, 2003

Venkatesh & Davis (2000) stated that perceived usefulness represents the degree to which teachers believe that the use of a particular kind of technology would help enhance job performance in general. It also makes work to be done more quickly, more effectively and more usefully. Teachers' belief also includes the perceived ease-of-use. This aspect represents the degree to which teachers believe that using a particular type of technology would be free from effort. The teachers' positive or negative feelings about technology use in classroom very much depend upon how easy they perceive using technological tools for teaching in the classroom (Ghavifekr, 2015).

3. METHODOLOGY

3.1. Research design

This research was carried out under the mixed approach of quantitative and qualitative. A quantitative investatigation was done by mean of questionnaires, with the participation of 104 respondents who were EFL teachers teaching in different higher education institutions in Ho Chi Minh City, Vietnam. The questionnaire was designed to identify the teachers' perceptions of the factors affecting their use of digital technologies in online teaching, the most common types of digital technologies they used and the reasons for their choice of using or not using some digital tools. The questions in the questionnaire were grouped into three parts and then distributed to the target population. Among 104 participants, ten teachers (convenient samples) were approached for interviews, but only eight of them agreed, two teachers said they were busy and couldn't be available for the time of the interview. The qualitative data was mainly from the open-ended questions in the questionnaire and from the interviews which attribute the descriptive comments and answers of the interviewed participants.

3.2. Participants

Within the context of the study, purposeful and convenient sampling was applied. The participants of the study included 104 EFL teachers who were teaching in different HEIs in Ho Chi Minh City, Vietnam. Among 104 EFL teachers, 8 teachers were approached for informal interviews. All of these participants were identified to have online teaching experiences. Table 1 below presents the participants' background information:

Table 1: The participants' background information

The participants' background information				
Experience of teaching online	**Gender**	**Percentage of those who had trainings in digital pedagogy (DP)**	**Age**	**The participants' self-evaluation of digital literacies in online teaching** *(1 very low- 5 very high)*
3 months – 6 years	Male: 30.8%	Had many trainings in DP: 20.2%	20-29: 19.2%	1 very low: 1%
	Female: 67.3%	Had 1-2 training courses in DP: 60.6%	30-39: 41.3%	2 low: 6.7%
	Other: 1.9%	Received no trainings in DP so far: 19.2%	40-49: 37.5%	3 medium: 45.2%
			50-55: 1.9%	4 high: 42.3%
			55+: 0%	5 very high: 4.8%

3.3 Data collection and analysis

A questionnaire with three parts was designed and converted into a google form. The link of the questionnaire was then sent to EFL teachers teaching in different HEIs in Ho Chi Minh City, Vietnam. All of the questionnaires were answered fully, which allowed the researchers to identify the teachers' perception of the factors that have impacts on the teachers' choice of using digital technologies in online teaching. The questionnaires consisted of 12 questions which were written in Vietnamese to allow no misunderstanding (only names of the digital tools were left untranslated). Informal interviews were also carried out with 8 EFL teachers who were convenient samples. Questions for interviews were extracted from the questions in the questionnaire. Data from the interviewed were then coded and transcribed according to appropriate themes.

4. FINDINGS

4.1 The types of digital tools that the HE EFL teachers used

The types of the digital tools that the EFL participant teachers used and the frequency of usage (in the scale *from 1 never, 2 rarely, 3 sometimes, 4 often, to 5 always*) are described in the following table:

Table 2: How often the EFL teachers used the digital tools in their online teaching

Types of digital tools/ platforms	Frequency mean value	Types of digital tools/ platforms	Frequency mean value
Google Drive	**4.3**	Electronic marking	2.4
Email	**4.2**	Forums	2.3
Google classroom	**4.1**	Google reader	2.2
Ms Teams	**4.0**	Drop Box	2.2
Facebook	**3.9**	Podcast	2.2
Zoom	**3.9**	Audio feedback	2.1
Google docs	**3.7**	Blogs	2.1
Google form	**3.7**	Kahoot!	2.1
Youtube	**3.6**	MSN	2.0
Zalo	**3.4**	Wikis	2.0
Google Meet	**3.4**	Social bookmarking	2.0
Nearpod	**3.2**	Ebooks	1.9
Flipgrid	3.0	E-porfolio	1.9
Padlet	2.9	Digital storytelling	1.9
Quizziz	2.8	Clickers	1.8
Video lectures	2.8	Quizlet	1.8
Mind maps	2.7	Classkick	1.7
Gimkit	2.7	Twitter	1.7
Computer note taking	2.7		

The table above presented how often the EFL teachers used the given tools in their online teaching setting. Among nearly forty tools listed, beside **Zoom** and **Ms Teams**, the two familiar platforms used for online teaching, the applications of Google (**Google docs, Google forms, Google Meet, Google Drive and Google classroom**) have been used quite regularly by the EFL teachers. **Facebook, Zalo, Email** and **Youtube** have also been used in online teaching. Among all of these applications mentioned, **Ms Teams, Emails** and **Google Classrooms** have been listed as the most common tools used by the EFL teachers. **Nearpod**, **Flipgrid, and Padlet** were sometimes used in the teachers' online classes.

4.2. Teachers' perception of the influencing factors

Teachers' perception of the factors affecting their use of using different digital technologies in online classes is illustrated by the chart below:
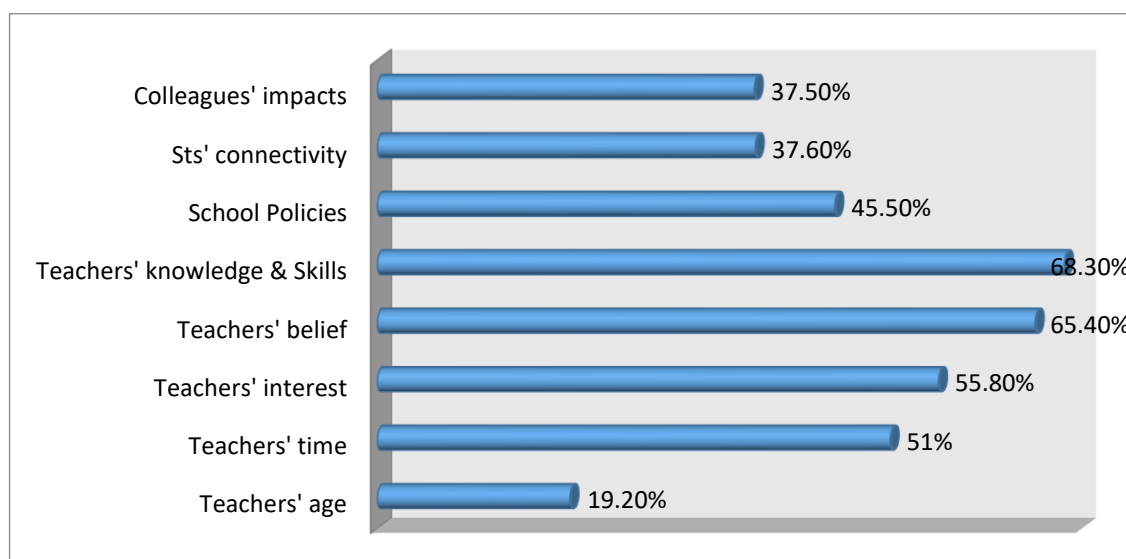
Figure 3: Factors affecting EFL teachers' use of digital technologies in online environment

The chart above indicates a number of external and internal variables contributing to the choice of using digital technologies into the classroom. The external ones consist of such factors outside the teachers' control as (1) teachers' knowledge and skills of technology –gained through training or self study, (2) school/ university policies, (3) students' connectivity, and (4) impacts from colleagues. The internal factors include such aspects originating from the teachers themselves as (1) the teachers' beliefs, (2) teachers' personal interests in technology, (3) teachers' time and (4) teachers' age. Although the distinction between the internal and external factors may overlap, and have not clear-cut, it helps bring about an overall picture of the factors contributing to the choice of using the digital tools in virtual teaching environment.

Teachers' knowledge and skills of technology

As indicated in the chart, teachers' technology literacy is the first key factor having impact on the EFL teachers' use of digital tools in their online classes. This factor can be supported by the teachers' self evaluation of their technology competency. According to the teachers' self evaluation, the teachers' literacies are presented in the following table:

Table 3: The teacher participants' self evaluation of their digital literacies

Teacher participants' self evaluation of their digital literacies									
Very low		Low		Average		High		Very high	
No	*%*	*No*	*%*	*No*	*%*	*No*	*%*	*No*	*%*
1	1	7	6.7	47	45.2	44	42.3	5	4.8

As presented on the table, 45.5% of the participants evaluated their technology literacies as average. 42.3% of them evaluated their literacy in technology as high, 5% as very high, 1% as very low and 6.7% as low. It can be seen that most of the participants self-evaluated themselves around average or a bit above average level of technology literacies. Maybe because of this, according to the EFL teachers' perception, technology literacy is considered as one of the biggest factors influencing teachers' choice of using different digital tools in online classes. Results from the survey revealed that 68.3% of the participants agreed that teachers' knowledge and skills are among the top factors having influence on the teachers' use of digital technologies in online learning environment. Some of the teachers affirmed that "*I don't know many digital tools, so I can't make use of them into my online teaching*". Some other teachers also added that the teachers' ability with technologies, the availability of facilities from teachers' side do affect the choice of technology use in

their online teaching. On the other hand, one teacher said that he used some digital tools in his online classes because he wanted to apply what he learnt from the previous training courses. Overall, it can be seen from all the ideas answered by the participants that teachers' digital literacies play a key role in the decision of making use of digital tools and integrating them into their online classes.

School/ university policies and impacts from colleagues

45.2% of the participants believed that policies from university is another factor having impact on the teachers' decision of the use of digital technologies, and 37.5% of them reported that they used digital technologies in their online teaching because their colleagues did. This contextual factor played a role in the teachers' use of digital technologies into online teaching. Some teacher participants wrote in the open questions that they used digital technologies in their online teaching since it was a requirement from their university. Some decided not to use any other tools (*except the two common online platforms: Zoom and Ms teams*) because there was "*no guidelines, no encouragement, no training, and no evaluation over the use of digital technologies in online teaching*".

Students' connectivity

Students' connectivity is the last factor in the external group having impacts on the EFL teachers' choice of didital technologies use in their online teaching. Nearly 38% of the surveyed teachers ticked this as a factor that made them consider when or how to apply digital technologies into online teaching. Some teachers explained further that the students' connectivity and access to internet as well as the availablibity of technological devices from students' side was what affected their decision of integrating digital technologies into online teaching and thus, via Zoom or some other virtual platforms, some teachers chose to do lecturing only. Stable/ unstable connection was also a factor that might encourage/ discourage them from applying different digital tools into online teaching.

Teachers' beliefs

From the teachers' side, teachers' belief was a big factor that explained the teachers' decision of technology use. More than 65% of the EFL teachers believed in the usefullness of technology which can motivate student learning and help increase interactions in online classes. One teacher answered further that she believed the use of digital technologies could make her students become more active in their learning, especially in online learning context. Another believed that the use of digital technologies in online classess supports student learning and *helps develop students' creativity*. Also, the use of digital technologies allowed her to do *both formative and summative assessment*. More noticeably, some teachers emphasized the importance and usefulness of technologies and digital technologies when it helped Vietnamese education *sustain through such risks as the covid-19 pandemic*. Teaching and learning could happen even when the pandemic was going through thanks to the use of technology. Digital technologies were believed to *help shorten the distance between teachers and students and make learning possible* during harsh situations like the pandemic. Some of the teachers said that beside Zoom/ Ms teams used as a platform for online teaching, they integrated other tools because they believed in the usefulness of digital technologies. But some decided not to use any other digital tools in the online classes since they believed that too many tools in the classroom wasn't any good. The comments and ideas provided by the surveyed teachers were summarized in the following table:

Table 4: Teachers' beliefs in the use of digital technologies in the classroom

The participants believed that digital	Participant 1	*Digital toos helped me to interact with my students faster and more effectively;*
	Participant 2,3,4,5,6	*Other tools enhance my students' motivation when learning online; They help diversify the activities in online classes and enhance students' understanding.*

technologies bring many benefits to student learning in online classes	Participant 7,8,9	*Zoom/ Ms Teams already gave a great number of tools in online teaching, but some other tools could be used to support online teaching;*
	Participant 10,11,12	*I find that some other digital tools allow me to interact better with students. Also, I can do formative and summative assessment better. I used Nearpod, Clsskick, Padlet, Quizlet, and Quizziz to involve my students in the lessons.*
	Participant 13, 14, 15, 16, 17	*I used other digital tools to make up for the shortcomings of Zoom. Some other applications help me create games to enhance my students' motivation in online classes;*
The participants believed that digital technologies might not bring any benefit to student learning in online classes	Participant 18, 19, 20	*I used Zoom and I see that this is enough for online teaching;*
	Participant 21, 22, 23, 24	*As teachers in online classes, I just want to master 1-2 tools rather than too many tools.*
	Participant 25, 26, 27	*Investment in lesson plans is more important than in the use of technology in the classroom;*

Teachers' personal interests in technology

Apart from teachers' beliefs, teachers' own interest in technology was another intrinsic factor that has some impacts on the teachers' choice of the use of digital technologies. Nearly 56% of the surveyed participants agreed that teachers' own interest in the use of digital technologies was a factor that made a teacher decide to use, or not use, digital technologies in online classes. In these online classes, the teachers mainly used Zoom, Ms Team, or Google Meet as a platform for online teaching. Some teachers explained that, "*There's no need to use something else. Zoom, Ms Team, or Google Meet are enough for online teaching.*" Another teacher added that, "the three mentioned platforms are too much for online learning. Too many digital technologies used would cause confusion for learners." On the contrary, one teacher wrote that, "*Using different digital tools in online learning would bring us new experience so that we can compare the good features between the tools, from which we teach better*". Some other teachers said they used different tools in online classes for the reason of "*diversifications*", "*enhancing students' motivation and interaction*", "*tracking student learning and student participation*", or "*creating forum and platform for students' discussion*". It seems that teachers' interests in technology might go hand in hand with teachers' competency of technology.

Limited time

Having limited time to conduct different activities with the use of different digital tools was considered to be a factor having influence upon the teachers' use of digital technologies by 51% of the surveyed participants. A number of ideas about limited time have been explained by the participants and they were transcribed as follows:

Table 5: The teachers' ideas about Time factor

Participant 28, 29	*"I have no time for any other tools. Zoom is enough."*
Participant 30	*"I have no time to learn about other technologies to use them in my online classes."*
Participant 31	*"I don't have much time."*
Participant 32, 33, 34	*"I undergo no training and no time to learn about other tools (besides Zoom/ Ms Team).*

Participant 35, 36	*"Time for each section is limited and the class size is big; I have no time to do anything else."*
Participant 37, 38, 39	*"I have limited time when teaching online, no time for me to set up and do other activties with other tools."*

Teachers' age

A small number of the EFL teachers (19.2%) agreed that age is also a factor that had some contribution into teachers' decision of making use of technology in online teaching environment. Some teachers who were in the fifties said that, "*As a middle-aged teacher, I just want to master one or two tools or platforms and use them effectively rather than know many tools but use them not regularly, or not effectively.*"

Trainings on digital technologies

Some other teachers believed that apart from the mentioned factors, principles, guidelines, and trainings in digital technologies have some influence on the use of digital technologies in online teaching, which leads to the confidence in using technology in the classroom. Some of the participants believed that seminars or workshops about the tools help not only online learning but also onsite, or hybrid learning which are extremely necessary for teachers to apply and integrate technology into teaching. These teachers said that "*online teaching so far has been of limited effectiveness due to the lack of interactions between teachers and students, which resulted from the lack of knowledge and skills in using technology in virtual settings*".

5 CONCLUSIONS

In Vietnam, online teaching has become a pathway for teaching and learning in higher education since the closure of educational institutions due to the Covid-19 pandemic. For sustainable learning and the sustainable development of educational institutions, online teaching and learning delivery methods should continue to have its place in the mixed, or blended, teaching and learning mode. Blended learning can support sustainable development, including the social, economic and environmental aspects of sustainability to meet the needs of the current and future generations (Caird & Roy, 2018). This study is therefore significant for educators, managers, educational policy makers and teachers.

As stated by Ghavifekr & Rosdy, 2015, technology-based teaching can make a great deal of changes in education and educational institutions that requires for proper planning and policy making. Digital technologies are an integral part of higher education contexts and these digital tools have been chosen to support students' learning in formal learning contexts (Pinto & Leite, 2020) as well as other informal contexts beyond classrooms. From the EFL teachers' perception, the teachers' use of digital technologies in their online teaching activities was influenced by the following factors: *teachers' beliefs, teachers' knowledge and skills of technology, teachers' own interest in technology, teachers' time, university culture/ policies, teachers' age, students' connectivity* and *trainings in the use of digital technologies for teachers.* Results of the study suggested that digital technologies will bring out the best outcomes in teaching and learning processes in a virtual setting – or hybrid one, more trainings, principles and guidelines on digital pedagogy should be encompassed, and the principles of digital pedagogy should be formally included in the policies, regulations, curriculum and syllabus contents so that teachers invest more time, motivation and energy on the use of digital technologies to boost student learning in general and in English learning in particupar. Digital technologies will promise the best outcomes for both teachers and learners in online learning as well as in blended learning mode contexts if they are used effectively and critically.

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APPLYING LITERARY CIRCLE TO INCREASE STUDENTS' INTEREST IN READING: A CASE STUDY AT INDUSTRIAL UNIVERSITY OF HO CHI MINH CITY

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Abstract. It is believed that reading for pleasure can make a great difference in enhancing the education performance of learners. Aspiring students to do extensive reading is challenging for lecturers since this receptive skill has often been neglected. Literary Circle, a reading activity which involves various designed tasks upon reading a story, has been employed at the Faculty of Foreign Languages of Industrial University of Ho Chi Minh City (IUH). This study aims to figure out the impact of Literary Circle activities on improving IUH English-majored sophomores' reading habits from their own perspectives. The qualitative approach, with 100 online interviews, was adopted to explore the students' reactions after Literary Circle activities had been carried out in course named Reading 3. The finding suggests that the majority of the participants felt interested to take part in the activities since there was an integration of the three other skills, i.e. listening, speaking, writing and the students' reading habit had been developed. On the other hand, after experiencing Literary Circle, the students also claimed that they had difficulties with the language materials and with some external factors, which lessens their enjoyment of the activity. The paper ends with some suggestions to help the students overcome their difficulties.

Keywords. reading, Literary Circle, students' interest, reaction

1. INTRODUCTION

Rationale

Among the 4 macro skills when learning a language, reading is a receptive skill which many students might not find very interesting in class because they do not have choices of what to read in their course books. They have to read what is available in the course book and do exercises given. In order to make reading activities more appealing, different techniques and strategies have been constantly employed. At the Faculty of Foreign Languages of Industrial University of Ho Chi Minh City (IUH), the application of Literary Circle, a reading activity which involves various designed tasks upon reading a story, has emerged as an attractive activity for both teachers and students in the course named Reading 3. This is an extensive reading activity that students would have the choice of what story (among available stories in the book) to read and have to complete some tasks given in groups. This technique is still a new teaching process in FFL and the introduction of this method is expected to improve the students' motivation in reading. This study aims to figure out the impact of Literary Circle activity on improving IUH English-majored sophomores' reading habit from their own perspectives.

Research questions

This study is going to answer the following research questions:
1. How is Literary Circle carried out in the course named Reading 3 for IUH English-majored sophomores?
2. What are the students' assumption when participating in Literary Circle?
3. What challenges could students face when participating in Literary Circle?

Significance of the study

This study will provide information regarding the students 'assumption on the application of Literary Circle in reading classes. Through the students' reflection based on their practical experience, the study will foster new ways of enhancing the process of organizing the activity. Having greater insight into this issue is important not only for teachers, but also for the students. Data gathered will help the teachers and the students to evaluate the success of Literary Circle in their classes and make some improvements for the near future.

Scope of the study

This study focuses on the impact of Literary Circle on improve reading habit in reading classes of the English-majored sophomores from their own perspectives. Then the data will be about the students' perspectives, not their performance or reading ability. Moreover, the study's results are applicable to these participants only and cannot be relevant to other types of students.

2. LITERATURE REVIEW

Literature Circle vs. Literary Circle

Literature Circle:

Literature circle is an activity which requires students to read, study, and have group discussion based around a piece of reading. The activity is different from traditional English instruction where students in classroom all read one "core" novel, listen to the teachers 'instructions and analyze the text through the teachers 'guidance. They allow students to have free choice, and collaboration, providing a way for students to engage in critical thinking and reflection. (Schlick Noe, 2004).

According to Anderson & Corbett, (2008), a Literary Circle is a classroom instructional strategy according to which students have a discussion in the classroom to talk about a certain story and **connects all aspects of literacy**. It involves the students in 6 roles upon completing reading stories. These roles are:

1. Discussion Leader: Asks basic warm up questions and keeps the conversation moving.
2. Summarizer: Summarizes stories in their own language.
3. Word Master: Chooses five words that are important to the story.
4. Passage Person: Finds important, interesting or difficult passages.
5. Culture Collector: Discusses and compares any examples of culture in the stories and draws parallels with the learners' own cultures).
6. Connector: Makes connections to the learners' real lives.
   (Furr, M., 2007)

For Cumming-Potwin (2007), students are encouraged to deepen their understanding of a chosen text while discussing the plots and connect the stories to their personal experiences. Literary Circle is a valuable learning experience for students when they are **fully student led** and provides them with some autonomy in the classroom. Students will **feel empowered and supported by their peers**, particularly when they are assigned a specific role to play in the Literary Circle. (Burns, 1998).

In this paper, Literature Circle and Literary Circle are used interchangeably since they both refer to the classroom technique in which students discuss about reading texts under different assigned roles.

Review of previous related research

This section presents a brief review of previous studies that are related to the application of Literary Circle in chronological order.

Cummin-Potwin (2007) did a case study on scaffolding, multiliteracies, and Literary Circles. In this qualitative study, which was conducted at a coeducational state school in Western Australia, he adopted a social constructivist perspective on learning (Rogoff, 1990; Vygotsky, 1986) to examine reading in a primary school classroom. The study focused on Nicholas, a 7th grade boy who had been identified as being challenged by the literacy curriculum. The analysis used a multiliteracy framework (The New London Group, 2000) and the four resource reading model (Luke & Freebody, 1999) to interpret Nicholas' progress

during Literary Circles. Findings suggested that multilateralism that weaved together scaffolding, diverse texts, and meaningful assignments could foster students' agency for learning.

Another study by Schoonmaker (2015) was about a blended learning approach to Literary Circles for English language learners. A website with several Web 2.0 technology resources was created for students at an intensive academic English language program in Hawaii. Over the course of two terms at this school, they carried out traditional Literary Circle activities at the same time with online Literary Circle activities. The qualitative data was analyzed based on the students' online Literary Circle activities and interactions reveal the beneficial growth of student agency. The findings showed that the students were able to use both synchronous and asynchronous multimodal communication, especially the co-annotation of digital reading texts in Google documents, to co-construct the meaning of Literary Circle articles and stories, thereby distributing the complex and burdensome cognitive processes involved in reading in a second language. It has been showed that a blended learning approach to Literary Circles for second language learners provided further augments the known benefits of these educational practices. Both blended learning and Literary Circles complement each other.

Irawati (2016) conducted a study about the effectiveness of Literature Circles on students' reading comprehension. The study reported an experimental study to see the effect of literary circles on improving the reading comprehension of students in the English faculty of the State Islamic Institute (IAIN) of Samarinda. A quasi-experimental research using a non-randomized control group pretest-posttest design was conducted to see the effectiveness of literature circles on student reading comprehension. A sample of 24 students was drawn from the first-semester students who took part in an intensive English course program in the 2011/2012 academic year. Using an independent t-test, post-test analysis meant that the result gave a t-value of 3.11. The t value (3.11) was higher than the critical table 1.678 at p=0.05 and df=44 (one-tailed). The result clearly showed that Literature Circles had a significant effect on improving the students' reading comprehension.

In 2017, Halit. did an action research to explore the effect of literature circles on text analysis and reading desire. This study used the strategy of literary circles to improve the text analysis skills, reading desires, and interests of prospective Turkish teachers. Literature circles were not chosen as the only strategy throughout the weekly lessons; Instead, it was used for just one lesson of each weekly four-hour lesson to complement and support other classroom activities. A total of 92 third-year students in two departments of the Department of Turkish Education voluntarily participated in the study. In order to improve students' reading skills and reading interests, literature circles were conducted for a period of 12 weeks for one lesson. At the end of the implementation of literature circles, when the students' reading comprehension results were compared before and after the test, a significant difference was observed. Based on the results, it could be concluded that literary circles were effective in developing students' ability to find the topic, main idea and keywords in a text. In addition, students indicated that implementing this strategy increased their interest and desire in communication, confidence, collaborative learning, critical thinking, objective reading without bias, and independent reading skills.

A recent study was carried out by Hefner, (2018) to find out the effectiveness of implementing Literary Circles along with a wiki in an undergraduate special education methods course as a way to improve understanding and retention of course content. The research was conducted in a special education class at a small public college in the southeastern United States and approved by the Institutional Review Board (IRB). This survey examined college students' perceptions of course reading and classroom discussions after the introduction of Literary Circles and wikis, and how Literary Circle communities affected overall student learning. The instruments used in this research included an anonymous pre- and post-survey prepared by the researcher. The preliminary survey consisted of 4 questions. The follow-up survey, which contained 22 questions was carried out at the end of the semester. The results showed that the students not only found the Literary Circles enjoyable, but that they felt the Literary Circles helped them understand the course content and made them responsible for the reading assignments in the classroom. Reading articles and discussing them with assigned roles helped create a collaborative community among students. The results of this study support the implementation of Literary Circles that use technology to deliver course content in preparatory educator courses.

In summary, a review of some studies in this area confirmed the effects of Literary Circle on the students' reading comprehension ability as well as their reading motivation. A number of benefits of Literary Circle

have been discussed within these studies such as fostering students' agency for learning, increasing their interest and desire in communication, confidence, collaborative learning, critical thinking, objective reading etc. Except the research by Schoonmaker (2015) which employed Literary Circle in the English classes, the other studies involved Literary Circle to promote the students reading habits in general. In Vietnam, there are very few published results about the utility of Literary Circle in English language classroom. This current study is different from to the above mentioned studies in the sense that we are going to investigate how Literary Circle is applied in the Reading 3 courses for English major students. In addition, we will explore how the students assume the use of applications (what their thoughts and challenges they have to face). The result of the study will help to improve the use of this technique in the ongoing classes in FFL.

3. RESEARCH DESIGN

Research methodology and methods

This research is done qualitatively to explore how literacy circle is carried out in the course named Reading 3 for IUH English-major sophomores. Data is collected via 10 open-questions in the questionnaire which was collected through Reading 3 class hours.
The questionnaire is designed as below:

> ➢ To answer the first research question, 5 questions ask the students to describe how this activity takes place in their classrooms.
> ➢ To answer the second research question, another 4 questions focus on the students' feelings when participating in this class.
> ➢ To answer the final research question, the final question asks for the challenges students could face in the literary circle.

Participants

The study's participants are 100 IUH English-majored sophomores from 21 - 23 years of age. These students are believed to experience the application of Literary Circle in their Reading 3 classes since this is a compulsory activity in the course. Names or other personal identifiers were not recorded anywhere in the researcher's data. Furthermore, there was no evidence of participants misunderstanding the question.

Procedure of data collection

After asking for the instructors permission, the questionnaire is distributed directly in class to collect the participants' opinions. The questionnaire is written, satisfying the criteria: easy-to-understand and non-misleading words about ideas. That is, the questions are not duplicated, the structure and number of logical questions are conducted to collect data. The use of open-ended question is believed to help the researcher look at the participants' basic attitudes/opinions.

Data Analysis

The data collected from the students responses are first categorized into groups. The categorization is be called "coding". The codes are then analyzed by their order, co-occurrence, and other meaning-based relations. After that, we try to establish the relationship between categories, which is the ultimate result of this qualitative analysis. Finally, a comparison between groups of answers is made to recognize the significance of the specific answers.

4. FINDING AND DISCUSSION

Research Questions 1: How is Literary Circle carried out in reading classes?

This section summarises the participants description of how the Literary Circle was carried out in the reading 3 classes. Based on available data, it can be proposed that the Literary Circle was applied in all reading 3 classes. The chosen material is the Bookworms club Gold (Furr,2007) which contained 7 stories from level B1-B2 of the CEFR. The stories were named as follow: The Black Cat, Sredni Vastar, The

Railway Crossing, The Daffodil, A Moment of Madness, The Secret, The Experiment. Prior to the literary circle, teachers spent one period in class to explain the activity to the students, gave some information about the bookworm club gold and made sure that the students understand the activity. The students were asked to work in groups of 6 and each of them was assigned one of the 6 roles (discussion leader, summarizer, connector, word master, passage person and culture collector). Each group could choose a story from Bookworm club Gold and took turn to discuss the story given in front of the class after reading stories and preparing their roles. After the discussion, the groups were also asked to present the plot of the story to other class members by using the following pyramid (Furr,2007)
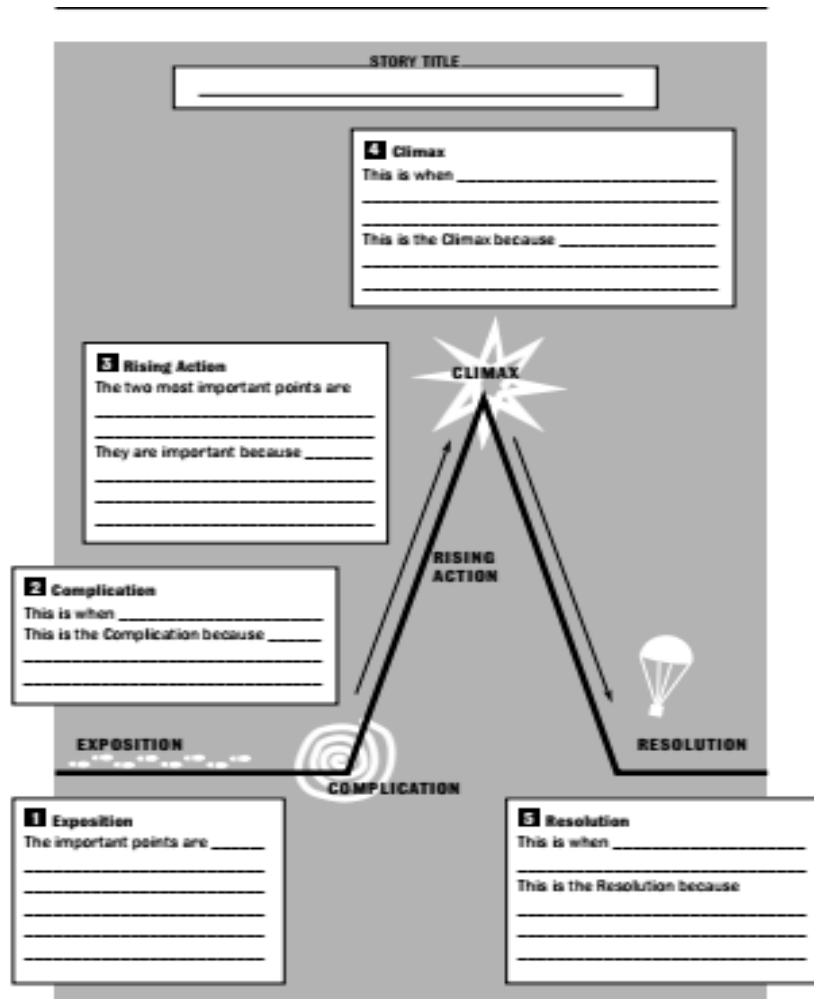
Research Questions 2: What are the students' assumption when participating in Literary Circle?
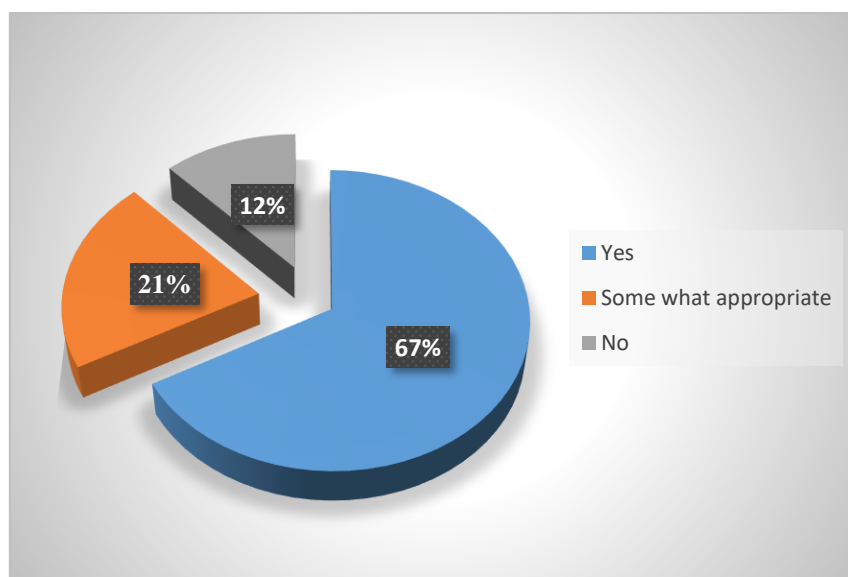

Figure 1: Students' opinions toward the level of story of Reading circle activity.

Firstly, the students were asked if the level of the stories that they had to read was suitable for them. According to figure 1, most students feel that the stories were at suitable level for them, accounting for 67%. Meanwhile, 21% think that the stories was somewhat appropriate because there was new language that they could not understand. And the remaining 12% thought that the stories given by the teacher were inappropriate. This finding is understandable since the level of students in reading 3 classes should be around B2 of CEFR. The stories are at B1-B2 level. Thus the level of difficulty was suitable to students' competency.

Participants were also asked about their satisfaction with the roles assigned in each group. It can be seen from figure 2 that up to 86% of students agreed that they had been assigned the right role according to their ability. On the other hand, 16% of students disagreed about the roles given in the classroom. For this problem, a better preparation and explanation for each role from the teacher might help to let the students feel more interested in the activity. Furthermore, students should learn to negotiate and compromise with each other so that all the group members could feel satisfied with their roles.
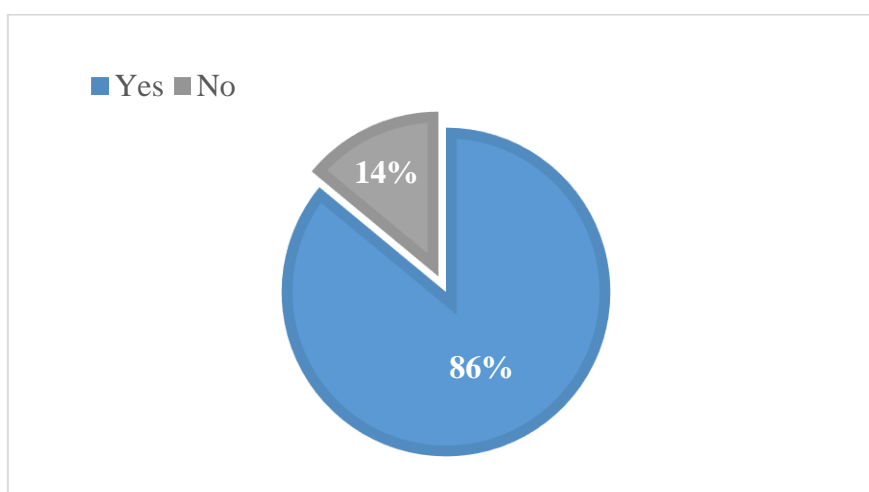

Figure 2: Students' satisfaction in performing the role in Literary Circle activity
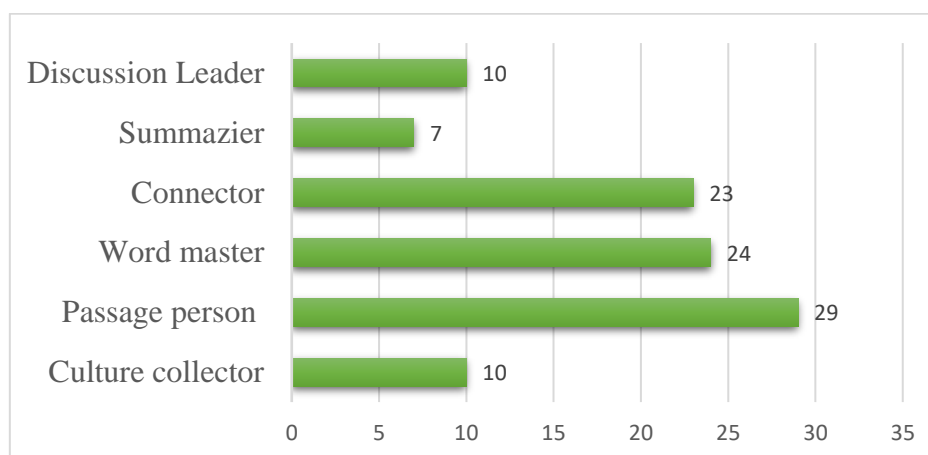
Figure 3: Students' attitude toward roles in Literary Circle activity

Figure 3 displays the students 'attitude toward the roles they had to perform in the literary circle. The data from the charts showed that the preference of the students for each roles were relatively even. The most preferred role in the Literary Circle was Passage person with 29 choices. The task of a passage person was to find important, interesting and difficult information, then record it and exchange it with the group. It is a very important task in reading a text as well as a story. It also allowed learners to express their viewpoint freely and not be controlled by giving right or wrong answers. That could be the reason why the students loved this role the most. On the other hand, the role of the summarizer seemed to be least preferable by the participants since this task was quite popular among any reading exercises. The students were used to it and found it was just like other tasks they had to do in the course book.

For the next questions, we asked the students about their feeling when participating the Literary Circle activity. The result showed that the majority (67%) of the participants had positive feeling toward this activity. Only 32% said it was an Ok activity for them and 1 student said he didn't like it. To make the students feel more interested in the activity, as mentioned before, better explanation from the teacher would help to motivate the students to participate more joyfully.
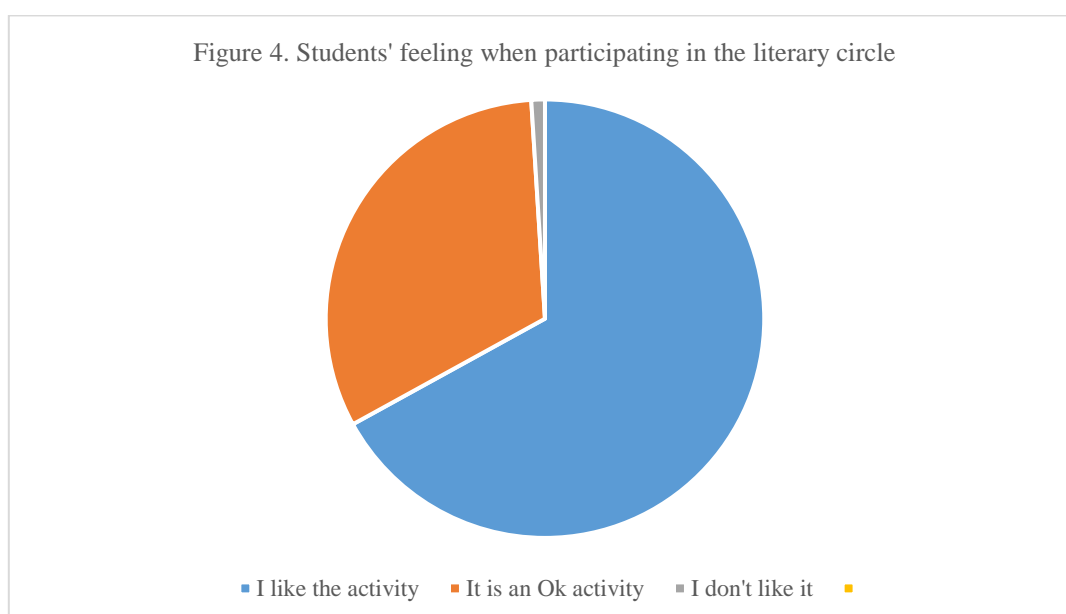

Figure 4: Students' feeling when participating in Literary Circle activity

To dive more deeply into the students 'feeling toward literary circle, the researcher also asked them about what benefits that they thought Literary Circle might give them. 44 students said that this activity helped them improve their self-study habit since they had to work on their own to fulfill the task given. 29 of them said that this activity was more interesting than reading alone because the 4 skills were integrated. Some other benefits were mentioned by the students were that students could try new ideas which were presented in the discussions and articles, could develop critical thinking skills, teamwork skills, and could make connection between the lesson and real life…After taking part in the literary circle, 57% of the participants felt that they loved reading more than before. The other felt neutral about this activity.

In short, the students' response in this part of the interview has shown that the application of Literary Circle has been a success since the majority of the students has positive attitude toward the activity. Many of them has recognized the benefits of the activity such as improving their self-study, developing critical thinking, developing their teamwork... More importantly, it could enhance the students' feeling toward reading. However, there were still some students who did not enjoy the activity as much as the others. To figure out the causes for this problem, we have to look at the challenges that the students faced when participating in literary circle.

Research Questions 3: What challenges could students face when participating in Literary Circle?

When being asked to list out the challenges faced when doing the task in literary circle, all the participants admitted that they had some difficulties with the new lexis. They all claimed that spending time looking up for new lexis might make them feel less enjoyable with the story. For this problem, it is recommended that the students be trained for guessing meaning of new words from context in order to save their time. About 43 students had difficulty choosing the right meaning for the new words since there were a lot of synonyms and definitions for new words available in the dictionary. That could show us the participants in this research seemed not to be trained about using dictionary to look for the right meaning. In addition, 40% of them said that they thought the story was quite long for them and they had to spend some days to complete the reading. Even though this is a problem for quite a lot students, the fact that the students had to spend some days reading the story is a good news since the more practice, the better the students would be. The other problems were mentioned such as they did not like to work in group, they were not confident in their reading comprehension etc. could be due to students' personality. In short, the major problem that the students faced in doing the literary was from the lexis because there were so many words that made it hard to understand the text. Again, a better preparation from the teacher could help improve this situation. It is suggested that the teachers should train the students with the dictionary use and the skill of inferring meaning of the words from context.
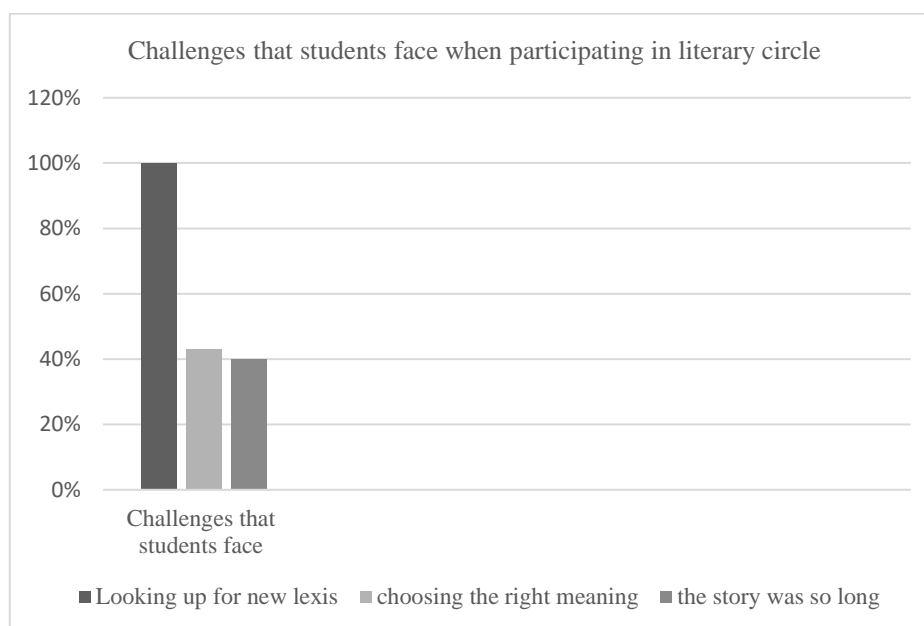
Figure 5. Challenges that students face when participating in literary circle

5. CONCLUSION

The current paper has described an overview of the current situation of applying the Literary Circle in reading classes, benefits, and challenges from the perspective of the students. An overview of the situation has shown that the process of carrying out the literary circle, following the framework suggested by Bookworms club Gold (Furr,2007), is suitable for the students. The general feedback from the students were positive since the majority of the students recognized and admitted that they got benefits from the activity. They could improve their reading skills and some other skills while participating in the activity and loved reading more than before. The challenges that students admitted has revealed some skills (inferring meaning from context, using dictionary to find the right meaning) which they seemed not to be trained in class. Therefore, it is suggested the reading course should include some lessons focusing on these skills in the future.

Understanding how the students receive what the teachers plan for them is useful so that the teachers can adjust the teaching procedure in class. Through the finding of this research, it can be seen that applying the Literary Circle has benefited the students in some ways. Further research should be done to test the students reading ability to see if it is improved after applying the literary circle. That will help to inform the teachers and the course makers at Faculty of Foreign Languages of feasible and workable practices with clearer perspectives on the situations.

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INFLUENCE OF INNOVATION ON VIETNAMESE HIGHER EDUCATION IN INDUSTRIAL REVOLUTION 4.0

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Abstract. The term "Innovation" has become one of the core guidelines of universities in Vietnam in recent years. All activities of higher education in Vietnam today are aimed at innovating methods of training, research, and entrepreneurship. The key factor for that change is science and technology which is a direct premise for innovation in Vietnamese higher education to transform in a positive direction. Quality human resources will increase when digital transformation is applied to innovative new-oriented higher education activities. The advanced progressive development of the industrial revolution 4.0 with modern technologies such as artificial intelligence (AI), big data, internet of things (IoT), Robotics, etc. applied in teaching and learning activities as well as innovating the method of making connections between university and businesses had created a great change in universities in Vietnam. This research points out the influencing factors of innovation in the industrial revolution 4.0 on higher education in Vietnam. Research results prove that, without innovation competency, universities lose the ability to capitalize on knowledge and add value for themselves, but also be abandoned by the industrial revolution 4.0. Thusly, the products of universities under the influence of innovation not only create scientists and researchers but also entrepreneurs, contributing to the development of high-quality human resources to respond to the requirements of the process of accelerating industrialization and modernization associated with the knowledge-based economy and the trend of globalization in Vietnam currently.

Keywords: Higher education, Innovation, industrial revolution 4.0, quality of human resources, science and technology

1. INTRODUCTION

Vietnam is a country with many potentials and favorable conditions to promote innovation, including innovation in higher education is one of the important tasks to develop high-quality human resources. It is considered one of Vietnam's three strategic breakthroughs in the period ahead, including institutions, infrastructure, and human resources. Higher education in Vietnam in the first two decades of the 21st century with the strong development of science and technology and the influence of the industrial revolution 4.0 has created a great change in education and training activities, from a knowledge-intensive education to an education that develops skills and promotes innovative thinking for learners. Many education experts believe that there are three major pillars to improving the quality of higher education: training, scientific research, and knowledge transfer. These three pillars will create a symbolic "university ecosystem" in which practical knowledge is brought into the university for creating an environment for innovation and creativity associated with life, and going to high-quality human resource. Universities in Vietnam today carry on their mission to discover knowledge, goods and commercialize knowledge, actively contribute to creating value for society by supporting entrepreneurs to meet their requirements of the industrial revolution 4.0. The study shows that many different factors affect innovation activities before the opportunities and challenges of the industrial revolution 4.0 to higher education in Vietnam today; the change towards innovation adapting to the fourth industrial revolution and recommendations to promote innovation at universities in Vietnam today. To complete the study, we used some methods such as analysis and synthesis, history, logic, etc.

2. INNOVATION

The World Intellectual Property Organization (WIPO), Vietnam ranks 44th in the innovation index out of 132 economies listed in the Global Innovation Index (GII) 2021.

Rankings for Viet Nam (2019–2021)

	GII	Innovation inputs	Innovation outputs
2021	44	60	38
2020	42	62	38
2019	42	63	37

Figure 1: GII ranks Vietnam's innovation index in 2019-2021

Source: https://www.globalinnovationindex.org/analysis-economy

According to GII, Vietnam has better innovation outputs than innovation inputs in 2021. This year, Vietnam is 60th in terms of innovation inputs, higher than 2020 and 2019. In terms of innovation results, Vietnam ranked 38th. This position is equal to last year but lower than 2019. It can be seen that Vietnam has been interested in innovation, but the application of ideas and initiatives is still difficult in the new context.

The term "Innovation "appeared in the first half of the twentieth century, but earlier research by Carl Mark (mid-nineteenth century) laid a solid foundation for the new science of research on innovation. Sáenz & Aramburu (2011, page 89) said:" There is no single and universally accepted definition of innovation, but most existing definitions agree that innovation means the conception and implementation of an innovation something new:" In Vietnam, Clause 16, Article 3 of the Law on Science and Technology 2013 defines: "Innovation is the creation and application of achievements, technical and technological solutions, and management solutions to improve efficiency." socio-economic development, improve productivity, quality and added value of products and goods.

In this study, we use the standard definition of innovation by the Organization for Economic Co-operation and Development (OECD, 2018): "An innovation is a new product or process (or a combination of the two) or is significantly different from the entity's previous product or process and has already been delivered to the users (product) or put into use within the entity"
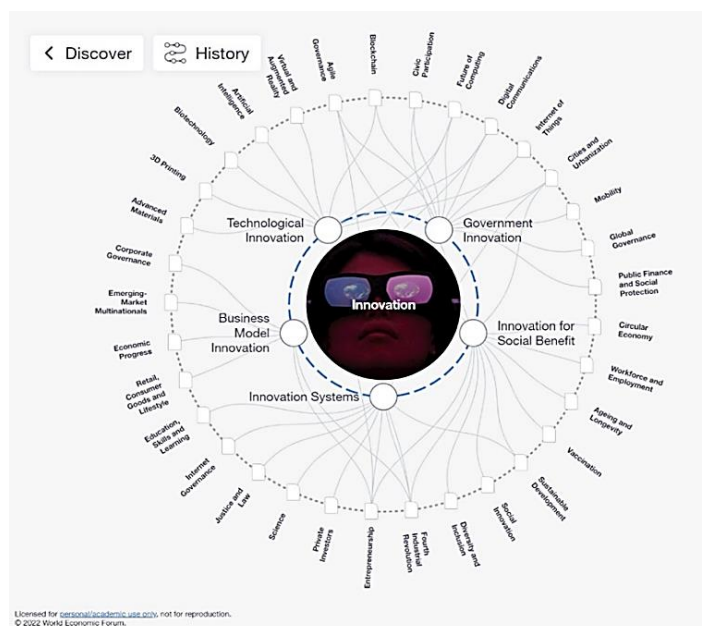
Figure 2: Diagram of innovation

Source: https://intelligence.weforum.org/topics/a1Gb0000000LrSOEA0

According to the experts of the World Economic Forum (2022), innovation is a very complex process and goes beyond mere creation and invention to include the practical steps necessary to facilitate favorable for application. New innovations tend to build on previous versions, driving much of the world's productivity and economic growth. It is now clear that truly innovative businesses can clearly outperform their peers if allowed to grow.

As such, innovation aims to create a new, better way to solve an existing problem or product that is widely appreciated and acknowledged for its usefulness.

3. THE INFLUENCE OF THE INDUSTRIAL REVOLUTION 4.0 ON THE UNIVERSITY MODEL IN VIETNAM

The 4th Industrial Revolution is a revolution based on digital technology and integrating all smart technologies to optimize production processes and methods with the development of technology. The industrial revolution 4.0 has a great influence on the development process of universities in Vietnam today, with more stringent requirements, forcing the school to become a smart university while ensuring the maintenance of core educational values. According to Prof. Dr. Nguyen, "in higher education, a smart university must create personalized learning, an educational mode completely different from mass education or the quintessence of today".

Under the impact of the Industrial Revolution 4.0, higher education in Vietnam has made strong transformations into a smart university based on data science and digital technology. At the moment, most people are connected to each other over the Internet, so higher education in this context has had innovations in line with reality. The interaction of the process of knowledge exchange, access to knowledge, or the widespread dissemination of new knowledge as well as the interaction between teachers and learners changed with the 4.0 technology trend. As professional knowledge is quickly outdated, and new knowledge and scientific information will be created regularly and continuously in a highly "digitized" environment, higher education needs to have a drastic change to develop high-quality human resources to meet the needs of national renewal and international integration. The industrial revolution 4.0 has created opportunities and challenges for universities in Vietnam today. In order to take advantage of this opportunity to improve their innovation, universities must redefine their innovation capacity framework, and the factors influencing

their own innovation. The trend of higher education in the digital era 4.0 is the process of transforming education to equip knowledge in order to develop the abilities and qualities of learners.

The current model of higher education in Vietnam is being developed in an open direction under a new training model such as online training via the internet, building virtual classrooms, virtual teachers, and computerized virtual device simulations. In addition, conferences are digitized and shared through social networks like Zoom, Teams, Facebook, etc. In order for the open education model to achieve high results, it is necessary to strengthen interdisciplinary, integrated education and systematically strengthen specialized basic skills so that learners have the ability to be creative and form the capacity to solve problems proactively. It is also essential to create conditions for students to effectively use online course materials (e-learning), continue to develop the electronic library model, and develop skills (presentation, problem-solving, time management, self-learning, self-research, etc) but especially, emphasis on entrepreneurial skills for learners. According to Pai, et al. [2018] the development of smartphones and tablets, is simple and common to apply, shortening the learning curve for new users or implementing new systems more quickly.

4. FACTORS INFLUENCING THE INNOVATIVE CAPACITY OF HIGHER EDUCATION IN VIETNAM DURING THE INDUSTRIAL REVOLUTION 4.0.

Research shows that many factors have an impact on the innovative capacity of the higher education system. Based on the practical conditions of higher education in Vietnam today, we believe that there are the following main influencing factors:

Firstly, *the Party's line, the State's mechanisms, and policies on innovation*

The Party's lines, mechanisms and policies of the State have changed markedly in recent years, which has had a very positive impact on the renovation activities in the field of education and training in general and higher education in particular. The 2018 revised Law on Higher Education has set out the task of universities to engage in strong innovation and quality improvement according to the criteria and standards of higher education in the world. Oriented to support start-up businesses, the Project on Supporting the National Innovation Startup Ecosystem to 2025, issued under the Prime Minister's Decision No. 844/QD - TTg dated May 18, 2016, promptly set innovation goals to meet the requirements of reality. Resolution 52/NQ - TW of the Politburo on "A number of guidelines and policies to actively participate in the Fourth Industrial Revolution" (NQ52, 2019), Directive No. 16/CT - TTg of the Prime Minister on "Strengthening the capacity to approach the 4th Industrial Revolution" (CT16, 2017), Decision No. 1982/QD - TTg of the Prime Minister on "Vietnam National Qualification Framework" QD1982, 2016). The efforts of the Vietnamese government over the years show that we are realizing our expectations and initially having positive results in terms of innovation. Thus, the state institution is a factor that positively affects innovation activities in higher education institutions in Vietnam.

Secondly, *the University Council's supports for innovation activities*

Senior management plays an important role in creating innovations by providing the right environment and making decisions to promote creativity and successful application of knowledge (Van de Ven, 1993; Storey, 2000; Aragón – Corea & et al., 2007). The era of the industrial revolution 4.0 poses an urgent need to change the training philosophy, towards digitization, innovation, and entrepreneurship, renovate the structure and requirements, and output standards of training programs in line with the national renewal process and international integration. The training program must be built on the interdisciplinary and cross-disciplinary linkages of the 4.0 industrial revolution, and at the same time, the training program can integrate deeply with the training program in the region and the world. New disciplines such as information security, artificial intelligence, automation, nanotechnology, and genetic decoding technology are taught and trained at many universities throughout the country. This proves that Vietnam's higher education is on the right track and catches up with the trend of the industrial revolution 4.0.

The most important determinant of innovation is the vision, perspective and mindset of managers to ensure that plans, policies, and measures are implemented in practice see off. It is also important to strengthen the application of information technology in educational management and administration in higher education institutions. However, higher education in Vietnam still lags behind other countries in the region and the world; development is not really commensurate with the people's learning needs as the document of the 13th National Congress (2021) of the Party stated: "Training high-quality human resources has not yet met the requirements for economic and social development". Thus, the spirit of innovation must be instilled in all stakeholders (leaders, lecturers, learners and employers) to become an indispensable factor to improve the quality of human resources force in universities in Vietnam today.

Thirdly, *strengthening the autonomy of universities.*

According to Anderson & Johnson (1998), the components of university autonomy include human resource autonomy. The university has the right to decide on issues related to recruitment conditions, salary, use of human resources, appointment and dismissal positions in the academic and administrative sectors, and so on. Besides, that is autonomy in matters related to enrollment and student management; autonomy in academic activities and educational programs such as teaching methods, testing and assessment of student learning outcomes, program content and course materials, etc; autonomy in learning activities academic standards, such as qualification standards, issues related to testing and accreditation; autonomy in research and publication, teaching and mentoring of graduate students, research priorities and freedom of publication; autonomy in matters related to administrative and financial management, management and use of budgets and financial resources of the school.

Research by Wong (2005); Cooper & Kleinschmidt (2007) shows that lack of innovation resources will limit the success of innovation. Indeed, financial resources have a great impact on the innovation process through the human factor according to Smith (2008). University autonomy will create a strong self-motivation for schools from the pressure to be self-reliant to survive, and the pressure to take responsibility for the final results of the school's activities before the state, society, and society through the assessment of the educational services market. It is necessary to build a synchronous legal system to create conditions for higher education institutions to rise up and increase revenue sources (from tuition fees, research, and other sources of income) to increase their strength. Thus, finance is one of the factors that show a positive impact on innovation. The promotion of autonomy in universities should be associated with accountability and the promotion of the roles and responsibilities of leaders in education and training institutions.

Fourthly, *the rapid development of science and technology*

Successful innovation must be based on the basic foundation of science and technology. Developing the national science and technology system has been oriented to make universities become strong research centers, according to the Prime Minister's Decision dated 11/05/2022 issued No.: 569/QD- TTg on science, technology, and innovation development strategy to 2030. It is vital to create opportunities to promote a national creative startup ecosystem with cohesion and cooperation between universities and research institutes, and research with the business sector to promote the commercialization of research results in practice. The human resource team in Vietnam has developed in both quantity and quality with more than 67,000 researchers, reaching the rate of 7 people/10,000 people, of which many scientists have been recognized worldwide. Investment in higher education will be an important foundation to support the development of science, technology, and innovation. In the current competitive and globalized environment, universities that do not promptly grasp technology to innovate and still follow the path of traditional education will be at risk of being abandoned by the 4.0 revolution fall. Teaching and learning methods are built on the basis of smart technology and digital infrastructure to train in the trend of "personalization" - this is a core educational philosophy in the era of the industrial revolution 4.0 approach effectively to awaken learners' potential. Thus, science and technology have a positive and strong impact

on innovation in universities in order to create a high-quality labor source to meet the needs of the market and the development of society.

Fifthly, *the qualifications of the teaching staff at universities*

The quality of teaching staff is considered a key resource for innovation activities and training of high-quality human resources in universities. Through strong research, groups seize the opportunities of the times to make breakthroughs to improve the operational efficiency of science and technology and improve the quality of Vietnam's human resources to international standards. Besides, potential research groups also need professional investment attention. The development of potential research groups is the driving force to improve the quality of training, research, and the quality of scientific research in higher education institutions. Besides the number of international publications, the promotion of registration for development. Inventions, inventions, and the influence of basic research on inventions are factors that influence knowledge transfer and innovation activities at universities in Vietnam.

Sixthly, *the university's own philosophy and cultural identity*

Culture is one of the decisive factors for innovation in universities, building a culture of schools towards creativity helps universities to develop sustainably. Currently, many universities have built their very own cultural identities, typically the Industrial University of Ho Chi Minh City which is developing under the motto "Innovation, raising new heights - Dynamic, global integration" to meet the requirements of national renewal and international integration. In addition, higher education institutions actively create a favorable environment for incubating and fostering the way innovative ideas are researched and put into practice.

A culture of innovation helps lecturers stay active, have more initiative in their work, and connect members to bring out the full potential of lecturers. Neely et al. (2001) considered innovative cultural factors with internal abilities and environmental understanding of positive impacts on innovation. Kowang & Long (2015) emphasized the role of organizational culture on the effectiveness of innovation for research universities in Malaysia. Thus, cultural identity really has a positive impact on innovation in universities in Vietnam today.

5. HIGHER EDUCATION CHANGES IN VIETNAM WHEN APPLYING 4.0 TECHNOLOGY ORIENTATION TO INNOVATE AND SOME RECOMMENDATIONS TO PROMOTE INNOVATION AT UNIVERSITIES IN VIETNAM

5.1 Higher education changes in Vietnam when applying 4.0 technology orientation to innovate

Increasing knowledge capitalization, scientific and technological research, technology development, and innovation to transfer knowledge and technology for socio-economic development.
Intellectual capital is the overall of all knowledge or a set of intangible elements used to achieve superior effectiveness (Subramaniam & Youndt, 2005). Knowledge capital is classified into three components: human capital, relational capital, and structural capital. Intellectual capital is expressed through people. To be able to capitalize on intellectual property, universities have increased their strength through the number of publications with ISI, Scopus accounting for more than 50% of the country's number. In the world innovation index rankings, the high ranking and impressive ranking ability of Vietnam's higher education institutions is also recognized. It is important to harmoniously develop between the goal of capitalizing on knowledge assets, and increasing the economic value of higher education institutions with the creation of resonance values for enterprises and the development of society. The creation of finished products aimed at direct users, and direct commercialization, as well as contribute to increasing the value of universities in Vietnam today.
Higher education institutions have conducted research demonstrating their responsibility to participate in solving immediate and long-term issues of service, community, and sustainable development in Vietnam. They develop the scientific and technological potential of higher education institutions to achieve the

criteria of research and innovation. Moreover, they have initially established research, innovation, and start-up ecosystem with the strong participation of institutional enterprises in several universities in the country. Under the impact of the industrial revolution 4.0, starting a business can initially be favorable for everyone, in all fields, in all countries, but universities need to promote innovation as first movers, whose ideas and quick application into practice take advantage of the fourth industrial revolution.

Adding the capacity for innovative thinking (entrepreneurial mindset) to the output standards for training programs, enhancing the international position of universities

Universities have made a necessary change when adding innovative thinking capacity to the output standards for training programs in order to further equip learners after graduation to become able to ask questions, think differently, do differently and especially dare to face difficulties to find solutions to overcome challenges. An innovative mindset is equipped with a 3C method of thinking (Curiosity, Connections, Creating Value) which emphasizes the importance of value creation.

It is realized that thinking along the same lines hinders the development of higher education, reduces labor productivity, limits the development of science and technology and so forth. Therefore, higher education institutions have gradually integrated and are ready to apply innovative thinking through lectures, creating a community of lecturers who solve problems in the direction of entrepreneurship development to inspire students to help learners succeed in new contexts.

Establishing a smart university management and organization model to meet international integration and improve university rankings. In 2019, the total number of Vietnamese scientific articles published in prestigious international publications was 12,475 articles, ranking 49th in the world, of which universities contributed more than 90% of the articles. The index quotes research findings from Vietnamese scientists on the rise. The qualifications of the lecturers are also the main human resource, the subject of operating the system, generating ideas and initiatives to help innovate teaching methods, and demonstrating multi-dimensional interaction (many lecturers - teachers) through the connection of things. In order for universities in Vietnam to have a promotion in international rankings, it is necessary to enhance the quality of the teaching staff. In 2018, candidates who are recognized for the title of professor, associate professor, and doctoral degree are required to have international publications recognized by prestigious journals such as ISI or Scopus. The percentage of lecturers with positions of professors and associate professors in the entire Vietnamese education system is 6%, and the doctorate is 22.7% according to the 2020 statistics.

In management activities, innovation in teaching, learning, and scientific research is all based on digital transformation and synchronization of digital data systems, digital information, and digital knowledge in universities today. At the same time, higher education and training institutions have established strong linkages with scientific partners, training partners, and employers in Vietnam and around the world.

Building a long-term vision of career goals, aspiration for innovation, and entrepreneurship for students

With innovative thinking, students are encouraged to define long-term career goals, not simply pursue a certain major, but help them to realize that their choice is meaningful in bringing self-study motivation, self-study, and entrepreneurial spirit. The mission of education, especially higher education, is how to train human resources capable of absorbing new technologies to adapt to the rapid transformation of society. To adapt to the era of industrial revolution 4.0, higher education must be a place that meets students' expectations such as learners meeting the requirements of the job market; not only do they have deep expertise, but they also have to transition to project-based learning. The industrial revolution 4.0 also brings many opportunities to improve and pay attention to the skills, creativity, aspiration, vision and to promote the unique abilities of each student in the current period. In 2021, Vietnam continues to score higher than the average of the "low-middle-income countries" group in all pillars and in both "output" pillars of innovation even higher. The average level of the group of "above middle-income countries". According to the report of the Global Innovation Index (GII) 2021, Vietnam continues to hold the top position in the group of 34 low-middle-income countries. Vietnam continues to maintain its ranking in the group of 45 leading countries globally.

Innovation performance at different income levels, 2021

	High-income group	Upper middle-income group	Lower middle-income group	Low-income group
Performance above expectations for level of development	Switzerland	China	Viet Nam	Rwanda
	Sweden	Bulgaria	India	Malawi
	United States of America	Thailand	Ukraine	Madagascar
	United Kingdom	Brazil	Philippines	Tajikistan
	Republic of Korea	Iran (Islamic Republic of)	Mongolia	Burkina Faso
	Netherlands	South Africa	Republic of Moldova	Uganda
	Finland	Peru	Tunisia	Mozambique
	Singapore	Malaysia	Morocco	Mali
	Denmark	Turkey	Kenya	Togo
	Germany	Russian Federation	United Republic of Tanzania	Niger
	France	Montenegro	Uzbekistan	Ethiopia
	Japan	Serbia	Cabo Verde	Guinea
	Hong Kong, China	Mexico	El Salvador	Yemen
	Israel	Costa Rica	Kyrgyzstan	
	Canada	North Macedonia	Pakistan	
	Iceland	Belarus	Bolivia (Plurinational State of)	
	Austria	Georgia	Senegal	
	Ireland	Colombia	Honduras	
	Norway	Armenia	Cambodia	
	Estonia	Jamaica	Nepal	
	Belgium	Bosnia and Herzegovina	Ghana	
	Luxembourg	Azerbaijan	Zimbabwe	
	Czech Republic	Jordan	Zambia	
	Australia	Albania	Egypt	

Figure 3: Global Innovation Index (GII) Rankings 2021

Source: https://www.wipo.int/edocs/pubdocs/en/wipopubgii2021exec.pdf

However, the government needs to have mechanisms and policies for timely support of start-up activities and replicate the 4-house linkage model: State - school - scientist - entrepreneur to promote all resources. For the development of higher education institutions in Vietnam, the government needs to support technology mastery and application, commercialization of research results, intellectual property, and technological innovation projects at enterprises that accept students from higher education institutions to work. In the opinion of many experts in the field of education and training, many institutional conditions have been established, but in certain aspects they are still confused and lack the ability to support innovation. Among them, there are the regulations relating to the enforcement of intellectual property rights. These limitations need to be overcome soon in order to create conditions for higher education to thrive and create a high-quality labor force for the country.

5.2 Some recommendations to promote innovation at universities in Vietnam

To be able to develop innovation activities, higher education institutions need to be proactive, adapt to the changes of the world, and seize opportunities to survive and thrive even more. In order to increase the ability to innovate, by this study, the authors propose some recommendations as follows:

For superior agencies

They should strengthen the creation of a favorable working environment and conditions to promote the role of staff and lecturers. Specifically, it is necessary to build separate specialized rooms for strong research groups and potential research groups, while continuing to prioritize investment in synchronous laboratories, practice simulation rooms and equipment for modern research to serve the training and scientific research for the purpose of meeting the requirements of international integration.

To adopt policies on training and retraining to improve professional qualifications and research capacity for staff and lecturers, they should remove barriers to technology and technology transfer, and support financial mechanisms for higher education institutions to carry out innovative activities. Instead, universities focus on exploiting institutional incentives from the state, higher education institutions need to develop long-term investment plans for research and development of science and technology, and innovation. They need to have policies to attract overseas Vietnamese science and technology teams to return home to transfer advanced knowledge and technologies, and have adequate policies for researchers

and scientists in Vietnamese higher education institutions in order to attract talent and minimize damage from brain drain.

It is necessary to develop mechanisms and policies to build an innovation ecosystem for start-ups and to create the best environment for the construction, protection, and exploitation of intellectual property at universities in Vietnam. Besides, it is also vital to build consulting and support centers for scientists and lecturers of universities to facilitate the submission of applications for registration of research results such as inventions, utility solutions, product designs and so on; and strengthen international cooperation on scientific research as well as transferring science and technology with universities and research centers around the world.

For universities

The rapid development of the Fourth Industrial Revolution forced universities in Vietnam to change to adapt and catch up with "education 4.0". First, universities must improve the quality of training, innovate school administration, and apply advanced teaching and learning methods. output standards according to business and social needs. Universities need to issue many policies to promote scientific research and innovation. They should apply Information Technology to the activities of universities such as scientific information declaration, financial estimation; speed up administrative procedures; shorten the payment time for scientific research topics and projects at universities; increase budget for science, technology, and innovation activities; build diverse forms of scientific research, and specific innovation: topics, projects, clubs, and business incubators; and build an innovative university ecosystem designed and measured by the 5C model (Connection - information connection, Conversion - information conversion, Cyber - analysis, Cognition – identification, and Configuration - configuration chemical).

Second, universities continue to strongly develop the "Project Based Learning" method; "Learning from real experience" (Learning Express); "Protecting the Capstone project" (students carry out projects, graduate theses with interdisciplinary topics, derived from business needs, and co-guided and evaluated by experts). In addition, higher education institutions need to organize the application of training methods specific to the tourism and information technology industries (combined with an enhanced English language with a large number of students); practice at enterprises; approach "CDIO" method (go from idea to design, implementation and operation of the project, Conceive- Design-Implement-Operate) and many other modern methods.

It is necessary to promote creative thinking and develop meta-skills (focusing on skills such as presentation, teamwork, critical thinking, self-mastery, communication, time management, etc.). Especially, universities inculcate the spirit of entrepreneurship in students not only on the university campus but also through many practical activities, clubs, business incubators, and academic playgrounds to improve high efficiency and quality training. They need to create a community of qualified and enthusiastic lecturers to solve problems according to innovative thinking, and entrepreneurship and be ready to apply them to lectures in the teaching process to provide the necessary knowledge for students to solve practical problems most actively. Finally, the standards of the training programs of the major groups of higher education institutions must be promulgated soon and put into practice. Based on that monitor, check, and transparently the training quality of universities in Vietnam today. In addition, the legal provisions on autonomy for higher education institutions need to be unified, consistent, and updated together in different management documents, so that universities can have the right to full autonomy and have a mechanism to support the exercise of that autonomy, avoiding the situation of "half-hearted" autonomy or giving autonomy while still being "bound" by the mechanism.

6. CONCLUSION

Thus, innovation associated with the achievements of the industrial revolution 4.0 has created significant changes to Vietnam's higher education for building a smart university; promoting the potential of the university, creativity, skills and vision, practical learning, real talent; improving human resources; fostering talents to meet the requirements of development and international integration in Vietnam today. Research has pointed out a number of factors that positively or negatively affect the innovation of universities in Vietnam. Consequently, we have proposed recommendations to promote innovation at universities in

Vietnam in order to seize the opportunities and overcome the challenges brought by the industrial revolution 4.0.

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IMPACT OF ARTIFICIAL INTELLIGENCE ON THE VALUATION OF THE VALUE SYSTEM TRADITION IN HUMAN DEVELOPMENT COMPREHENSIVE IN VIETNAM TODAY

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Abstract. Artificial intelligence or AI (Artificial Intelligence) technology is one of the results of the industrial revolution 4.0, which is currently the most interesting and developed technology. The applications of this technology are increasingly popular in all areas of life, causing significant impacts on the change of the nation's traditional value system and posing urgent problems for the goal of comprehensive human development in Vietnam today. Within the scope of the seminar topic, the article explores the impact of artificial intelligence on the transformation of the traditional value system in comprehensive human development in Vietnam today, then proposes some solutions to promote the positivity of artificial intelligence in comprehensive human development in Vietnam.

Keyword. Artificial intelligence, transformation, value system, human development comprehensive.

1. INTRODUCTION

Starting to appear and officially become a science in the 50s of the twentieth century, artificial intelligence is currently the most interesting technology today in many aspects from theory to practical application. It's in social life. The opportunities, challenges, and future of artificial intelligence have been researched and developed with many works published worldwide by scientists and researchers from different angles. In Vietnam, the process of renovation and national construction is now setting new requirements on science-technology, ecological environment, social issues, and human factors, in which the goal of building Comprehensive human development is identified by the Communist Party of Vietnam as the top goal to ensure sustainable development on the road to socialism. Within the scope of the seminar topic, the authors explore the impact of artificial intelligence on the transformation of the traditional value system in comprehensive human development in Vietnam today, from which some recommendations are made solutions to promote the positivity of artificial intelligence in comprehensive human development in Vietnam with the desire to contribute to clarifying issues arising from new technologies and sustainable development.

2. ARTIFICIAL INTELLIGENCE CONCEPT

The term Artificial Intelligence was first proposed by cognitive and computer scientist John McCarthy during a scientific conference he organized at Dartmouth College in the US in the summer of 1956 with the participation of many scientists around the world. This conference is considered the cradle for the birth of a new field of research in the history of world science: the science of developing machines that can simulate every aspect of intelligence. As the originator of the term "artificial intelligence", John McCarthy and his colleagues argue that the study of artificial intelligence aims to accurately describe aspects of intellectual

processing and learning (to acquire knowledge) and create systems, machines that simulate learning, and intellectual processing.

The development of artificial intelligence is more and more extensive than the original. The development in the practice of artificial intelligence leads to many interpretations and definitions of this term, which, S. Russell and P. Norvig (2016) generalize four types of definitions in two dimensions: thinking. – conduct, including:

- Think like a human: Efforts… make computers think… machines have minds, in the full and literal sense (Haugeland, 1985). Activities (automation) associated with human thinking, such as decision-making, problem-solving, and learning (Bellman, 1978).

- Rational thinking: studying neural capacity through computational models (Charniak and McDermott, 1985), studying computational models that help machines to perceive, reason, and act (Winston, 1992).

- Behave like humans: the art of making machines that perform intelligence-requiring functions like humans do (Kurzweil, 1990), studying how to make computers do intellectual things can be better than humans (Rich and Knight, 1991).

- Rational behavior: intelligent computing is the study of the design of intelligent agents (Poole et al., 1998), and artificial intelligence ... is interested in intelligent behavior in artifacts (Nilson, 1998).

These types of definitions show that artificial intelligence is an interdisciplinary field of Philosophy, Psychology, Neuroscience, Mathematics, Cybernetics, Computer Science, and Economics.

In the second decade of the twenty-first century, the fourth industrial revolution (Industry 4.0) appeared with the explosion of interdisciplinary, multidisciplinary, transdisciplinary technologies blurring the boundaries of research fields, traditional mono-disciplinary research, such as physics, digital and biology…" (UK, 2017) this author has facilitated the creation of smart factories and pushed artificial intelligence to continue to develop. a new step. As a major field of activity of the industrial revolution 4.0, artificial intelligence is a technology of leading interest and development, and its applications are becoming more and more popular in daily life. help people solve many problems of life. As intelligence was created by humans with the goal of helping computers to automate intelligent behaviors like humans, artificial intelligence technology in the industrial revolution 4.0 is the scientific field that helps computers in particular and machines in general have human intelligences such as knowing how to think and reason to solve problems, knowing how to communicate by understanding language, learning, and self-adaptation and so on.

Artificial intelligence (AI) is a digital technology capable of performing tasks that would normally require human intelligence. The characteristic of AI technology is the ability of computers to "self-learn", so they can judge and analyze new data in advance without human assistance, and at the same time have the ability to process data. The material is in very large quantities and at high speed. Currently, every day globally, about 2.2 billion Gb of new data (equivalent to 165,000 billion pages of documents) is created and received by companies, such as Google, Twitter, Facebook, Amazon, Baidu, Weibo, Tencent, and Alibaba as well as collected to form "big data". Artificial intelligence is a field related to computer science and information technology, the essence of artificial intelligence is still made by humans. In fact, they build algorithms and programs with tools, information technology software, and help computers to automatically handle intelligent behaviors like humans. Artificial intelligence is capable of self-adapting, self-learning, and self-development, making arguments to solve problems, and being able to communicate like humans. Because AI is installed with a large database, programmed on that database, and reprogrammed on the newly born database, the structure of AI is always changing and adapting under new conditions and circumstances.

According to the International Computing Analysis Scheme (ACM) classification system, there is a clear analytical framework suitable for synthesizing and representing the technology that is changing AI over time. This classification has been in use for over 50 years and the last update in 2012 added new technologies. Accordingly, AI technology is divided into 3 main directions:

-AI Techniques: they are advanced statistical and computational models such as machine learning, fuzzy logic, and knowledge base systems that allow computations and tasks performed by humans; Different artificial intelligence techniques are used to perform different functions.

- Functional applications of artificial intelligence (AI functions application): such as computer vision, which may contain one or more different intelligence techniques.

- Application of artificial intelligence by field (AI Application field): it is the use of functional artificial intelligence techniques or applications in specific fields and industries such as transportation, agriculture, life science, medical.

According to the Media standard, AI is divided into three categories including artificial narrow intelligence (ANI), artificial general intelligence (AGI), and artificial super intelligence (ASI).

In Vietnam, on January 26, 2021, the Prime Minister signed Decision No. 127/QĐ-TTg on promulgating the National Strategy on Research, Development, and Application of Artificial Intelligence to 2030, stating the importance Directing point: "Artificial intelligence is a fundamental technology field of the Fourth Industrial Revolution, making an important contribution to creating a breakthrough in production capacity and improving national competitiveness, promoting economic development and sustainable growth" (Prime Minister, 2021).

3. THE TRADITIONAL VALUE SYSTEM AND REQUIREMENTS FOR COMPREHENSIVE HUMAN DEVELOPMENT OF VIETNAM TODAY

A value system is a concept used in many different scientific disciplines. From a cultural perspective, Milton Rokeach focuses on the function of the value system to help choose preferences to resolve conflicts when arguing that: "A value system is a stable organization of related beliefs concerned with preferred moral patterns or basic states of being according to a continuum of relatively important things" (Rokeach, 1973, 5) or "a value system is a wise organization of principles" (Rokeach, 1973, 5) rules and regulations that help a person make choices, resolve conflicts, and make decisions" (Rokeach, 1973, 14). Meanwhile, researcher Pham Minh Hac of Vietnam defines: "value system is the values of a group of people such as nation, world, region, family, self..." (Hac, 2012), 30). According to author Tran Ngoc Them, "value system is all the values of an object in a defined space-time context along with a network of their relationships" (Add, 2016, 51). Author Ho Sy Quy said that it can be understood, and that the value system is not really an independent concept but a way to refer to a set of values of a certain community.

According to him, "in determining the value system of a nation-state like Vietnam, the concept of a value system can be understood in the sense that it includes values that both exist in reality and are sacred, theoretical, and practical. ideas to guide action'' (Quy, 2015).

Here, we can understand that the value system is the cultural value system, and the traditional value system of Vietnam is the Vietnamese national identity. The Resolution of the 5th Conference of the Central Committee of the 8th Central Committee of the Communist Party of Vietnam defines: "National identity includes sustainable values, the quintessence of the Vietnamese ethnic community is cultivated through the history of thousands of years of struggle to build and defend the country. That is passionate patriotism, the will to strengthen the nation, the spirit of solidarity, the sense of community that unites individuals - families - villages - the Fatherland; kindness, tolerance, respect for love, morality, industriousness, creativity in labor; subtlety in behavior, simplicity in lifestyle…" (Communist Party of Vietnam, 1998, 56)

The theory of socio-economic forms of Marxism has affirmed that the basis for the existence and development of society is a man in his material production activities. It is through the production of material wealth to maintain their existence and development that humans simultaneously create the entire material and spiritual life of society with all its richness and complexity. its. C. Marx said: "The production of direct material means of subsistence … creates a basis from which one develops state institutions, views of the rule of law, art and even the religious conceptions of people" (Marx and Engels, 1995, 500). This means that the history of society is also the development history of material production, and material production is a characteristic human activity. This activity only takes place when people use labor tools, impact on objects to create material wealth for society. Therefore, in every society, people are the central factor of development, and any society that wants to develop also attaches great importance to the issue of human development. Recognizing the important role of the human factor in the development process, the Communist Party of Vietnam determines that "building the Vietnamese people to develop comprehensively must become an objective of the development strategy" Communist Party of Vietnam, 2016, 126).

Therefore, what is a "comprehensive person"? From the point of view of Marxism, man is a natural entity with social characteristics, having a dialectical unity between the two aspects of nature and society. Therefore, a comprehensive human being must be a harmoniously developed human being both physically, intellectually, and spiritually with all the qualities of Body - Virtue - Mind - Beauty. In 1990, the United

Nations Human Development Program (UNDP) first released the Human Development Index (HDI) with the following aspects: health (expressed in life expectancy at birth), knowledge (expressed in the education index), and income (in terms of gross national income per capita) (United Nations, 1990). Creatively applying Marxism-Leninism, and harmoniously absorbing the views of the United Nations, the Communist Party of Vietnam from the 12th National Congress of Deputies upheld the goal of "building a beautiful Vietnamese human personality, moral soul; high in intelligence, capacity, and creative skills; physically healthy…"(Communist Party of Vietnam, 2016, 29) and considers it "an important endogenous force to ensure sustainable development and a firm defense of the Fatherland" (Communist Party of Vietnam, 2016, 126) on human innovation and development of the country.

From the orientation of the XII Congress of the Communist Party of Vietnam, it is possible to identify some specific criteria in comprehensive human development in Vietnam today including: 1) having good health, 2) have a good spirit of patriotism and international spirit, 3) have good character and morals, 4) have good intellect and skills, 5) have responsible citizenship. In the context of globalization and the strong development of industrial revolution 4.0. The requirement to build a comprehensive Vietnamese person is a central and key factor, in which emphasizes the issue of building core value systems as goals for the construction process, and must closely and harmoniously link traditional values and modern values.

4. THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE TRANSFORMATION OF THE TRADITIONAL VALUE SYSTEM IN COMPREHENSIVE HUMAN DEVELOPMENT IN VIETNAM TODAY

According to author Luong Dinh Hai, the fluctuations of the value system take place under many different manifestations: there is the disappearance and destruction of the old values; new values appear; there is a change in the rank and position of values; there is a "renovation", changing part of the content of values; acquisition and modification of some external contents and values; and even, there is a conflict between values (new and old, indigenous and imported, common and partial,...); there is assimilation, enriching the indigenous value system and expanding its influence beyond the ethnic-national scope. In the development process of society, the fluctuations of the value system are completely objective and inevitable. However, in that fluctuation, core values still promote their role in orientation, assessment, and standards (Hai, 2015).

In the fourth industrial revolution, artificial intelligence is the focus of the global technology world and is being invested in and developed by governments around the world. It is impossible not to realize the multifaceted effects of artificial intelligence on human life. With computers being able to use algorithms modeled on how neurons in the brain work to learn automatically from multiple data sets and perform tasks; even adapt themselves, make arguments to solve problems, and communicate like humans, artificial intelligence has a strong impact on the transformation of traditional value systems in the development of comprehensive people in Vietnam today.

Currently, artificial intelligence is present in all smartphones and social networks. In cybersecurity, AI can process large volumes of data, can learn over time, and can identify unknown threats. With the development of AI, cyber threats are constantly evolving, and cybercriminals also use AI. Meanwhile, the accuracy of information is still limited. In economics, all transactions are automated, businesses can easily access customers, and statistics are specific and accurate. AI applied to control machines instead of humans is a condition for increasing social productivity, in turn raising the average living standard of workers. In education, machine learning application software is applied in a variety of ways to make learning more interesting and livelier; AI technology also helps personalize the learning path for each student, reducing the work of teachers, and giving teachers more time to care about their students in other aspects of life. In medicine, AI is applied to automate disease diagnosis, research, and drug delivery; AI technology also helps to optimize the treatment of individual patients as well as helps to optimize genetic research. In transportation, driverless vehicles are no longer science fiction. AI technology applied in the field of traffic not only saves time to focus on work and relaxation, but also improves safety for people when participating in traffic. A lot of lives could be saved each year by driverless vehicles that are significantly safer than those driven by humans. AI also helps to better manage traffic, and reduce congestion as well as traffic violations.

The achievements of artificial intelligence have been creating many new values such as simultaneously adding and renovating the connotation of many traditional values in comprehensive human development in

Vietnam today. Besides, these achievements of artificial intelligence also increase the risk of standard deviations from traditional values in the process of effectuating the goal of building and developing a comprehensive human in Vietnam.

The values created from the impact of artificial intelligence in the Vietnamese people's value system today are honesty, bravery, responsibility, cooperation, science, and creativity.

Honesty is being honest with others and with yourself, always respecting the right, respecting the truth. Honesty helps people become truthful in all relationships, and communication. Honesty helps to overcome the disease of lying, speaking, and doing don't go hand in hand. Honesty is vital to develop and strengthen in an artificial intelligence-generated virtual environment where it's impossible to discern if what you see, hear, or read is authentic or was produced by AI and machine learning. Because once people no longer believe that "if we are honest, others will be honest with us", the "social capital", the "social glue" that helps people create trust and willingness to contribute to the community will no longer exist. Honesty requires each individual person to have bravery.

Courage is the courage in each individual to dare to think, dare to do, dare to face the truth, and confront difficulties with wisdom and confidence to solve problems. Courage helps to overcome the habit of relying on and following others, low self-esteem, a lack of personal sensibility, and following the crowd. Social networks, virtual contacts and exchanges, social ties, and global integration in the sectors of economics and culture all grow as a result of the applications of artificial. People are asked to have the courage to think independently, dare to express their opinions, distinguish and have a supportive attitude, and promote the right, the real, the good, and the beautiful. The expression of a brave human being is in dealing with social relationships, in which man is the synthesis itself, indispensable for a sense of responsibility.

Responsibility is an ethical concept; it entails voluntary rather than coercive self-discipline; it is a person's duty and obligation in the dialectical relationship between the individual and society; it means that individuals have obligations and responsibilities towards society, and society has obligations and responsibilities to uphold the rights of individuals. Responsibility is an ethical concept that entails voluntary self-discipline rather than coercive self-discipline. Technology based on artificial intelligence is crucial for creating moral standards for the creation and use of AI-based goods and services, and accountability is a value that must be upheld. Typical values in the Vietnamese human value system in the new era. Responsibility must be shown through actions, through doing with self-discipline, not from personal feelings, self-interest, and selfish thoughts, but from self-awareness that attitudes and actions themselves are for the common good of society.

Along with the sense of responsibility, cooperation is the next value created from the impact of artificial intelligence on comprehensive human development in Vietnam today. Cooperation is working together to manipulate, help, and support each other for a common goal. Cooperation helps to eliminate selfishness, factions, and confusion between the public and private. For the sake of the common good, equality, mutual benefit, and without regard for the interests of others, cooperation must be voluntary. The community is experiencing a great deal of unwarranted worry and misunderstanding due to the rapid expansion of AI. In addition to spurring innovation and investment in the business sector, the rapid advancement in computing power, memory, big data, and high-speed connectivity also has a tendency to greatly exaggerate AI, which has led to many people's misconceptions, resulting in an unduly positive attitude among many individuals about the potential advantages of AI. Without the spirit of collaboration in such circumstances, individuals would experience a number of societal and personal difficulties, such as sadness, loneliness, or conflict.

Artificial intelligence and artificial intelligence application projects have been attracting the top attention of large technology corporations and are a new playground for startups to try their hand at creativity. This is also the driving force for science and creativity to become core values in the current Vietnamese human value system. Creativity requires flexible thinking, breaking out of all ruts and boundaries, but not arbitrarily flexible. Human creativity is limitless. Artificial intelligence makes creativity develop to the maximum extent that it can. The achievements of artificial intelligence show that the self-learning ability of machines is even faster and many times better than humans, and the ability of machines to handle situations that occur in reality is almost as good as humans. It will not be far away as it is gradually being realized.

People are thus compelled to be innovative in a scientific approach in order to avoid the risk of worrying about the prospect of being reliant on their products. Science is the completeness, logic, rigor, and

systematized style of speaking, thinking, and doing that enables individuals to consistently think and know how to conduct and act in the most reasonable manner in any circumstance. Science aids in the elimination of the attitudes of harmony, compromise, half-heartedness, and even contradictions in thought and behavior, motion.

Under the impact of artificial intelligence, classic values, such as patriotism and kindness, are supplemented and renewed alongside newly developed values. Patriotism is a sustainable value, a leading factor in the tradition of nation-building and defending the country of the Vietnamese people. President Ho Chi Minh affirmed: "Our people have a passionate patriotism." It is our precious tradition. From the past to the present, every time the fatherland was invaded, that spirit became vibrant. It formed an extremely powerful and huge wave. It swept through all dangers and difficulties. It engulfed all of us." (Minh, 1995, 171). Patriotism is the red thread throughout the history of the Vietnamese nation, the spiritual symbol of the Vietnamese people. However, for a long time, patriotism has often been expressed only in the fight against foreign invaders, protecting the country's sovereignty. Artificial intelligence tends to blur all boundaries, not only between nations and peoples but also between machines and creatures. Therefore, it changes the content of patriotic values. It is not only patriotic when there is war but also in peace, not only in the style of self-sacrifice for the great cause, "death to the Fatherland to give life", but also in the patriotism in every small thing in life. To be patriotic is to have self-respect and pride in one's nation; to contribute to building a more and more beautiful image of the country and nation; to contribute efforts to development to enhance the position of the nation and country on the world stage.

Kindness is also a typical traditional value of the Vietnamese human value system. Benevolence is the love of people, tolerance, gratitude, empathy, compassion for the sufferings and misfortunes of others; knowing how to appreciate and uphold the good, noble, and honest values in every human being; and knowing how to hate the brutal forces that trample on the right to life and happiness of others.

Kindness and patriotism, which have been revered in the cultural traits of the hamlet since time immemorial, share a common root with the Vietnamese people. The love of family is the foundation of Vietnamese generosity, which is subsequently extended to friends and neighbors, as well as to the villages and communes where people coexist peacefully, provide a hand when needed, and respect one another. Vietnamese people's love is always built on "bones" and "compatriots" based on what is familiar and near, even when they are out in society. Artificial intelligence opens up a large space on the internet of things. AI products expand human communication activities and can assist people with disabilities or people with difficulties to increase their ability to receive information and integrate better into life. This requires compassion to be supplemented with a new connotation. Kindness is not only encapsulated in family, kinship, and neighbor relationships, but also in broader social relationships. It has a pure international spirit, love fellow human beings and live wholeheartedly for truth - goodness - beauty.

Artificial intelligence does not have a positive impact on social life in general and the change of Vietnam's human value system in particular. The negative influences also bring to the current Vietnamese human value system the risk of skewing towards value media. Artificial intelligence has the potential to interfere with people's free will, induce them to become complacent and reveal personal information, and put them in danger of insecurity due to the violation of their privacy rights. The growth and development of AI have the potential to increase loneliness and isolation in some people. AI also drastically changes the job market and can cause significant unemployment when not only simple, manual jobs but also complex jobs that require high intelligence can be done and made a total takeover bid by machines. Even the results of the application of artificial intelligence technology in all areas of social life make people ask a big question: can machines develop consciousness and emotions? In reality, some experts assert that machines can in principle have consciousness, at least as far as neurocomputers are concerned. By being able to set up automatic poetry writing software on a website or an application on smartphones or laptops to aid in the perception and creation of works of art, some experts propose that machines can in principle have consciousness, at least as far as neurocomputers are concerned. This possibility is particularly unsettling since it is feasible that AI may be developed with the intention of serving evil. The standard deviation of traditional values in comprehensive human development in Vietnam today manifests itself in many complex aspects of social life. Pragmatic thought appeared and thrived in a segment of the population, and the concept of becoming wealthy at any cost, viewing money as the ultimate goal of life, distorted the standards of attractiveness and beauty, a good, harmonious balance in human life. Benefits and disasters become

"traps" for humans. The mentality of materialistic and foreign cults is spreading in society, creating a gap between a beautiful life and a real life, and people can get rich off the pain of others in a nonchalant way. Individualism has the opportunity to develop in very diverse manifestations: deception for personal gain, self-interest, partiality, and corruption. Somewhere in life, there exists an attitude of avoiding the truth; close relatives and neighbors become looser, and people care less about each other. In society, there is a mentality of disregard for legal discipline, lack of respect for the law, and excessive freedom, leading to law violations such as tax evasion, law evasion, intentional wrongdoing, etc.; even people can defy everything and trample on each other to achieve their goals.

5. SOME SOLUTIONS TO PROMOTE THE POSITIVITY OF ARTIFICIAL INTELLIGENCE IN COMPREHENSIVE HUMAN DEVELOPMENT IN VIETNAM TODAY.

Currently, AI continues to develop rapidly and strongly affects all aspects of life in general as well as the transformation of the traditional value system in comprehensive human development in Vietnam in particular. In order to promote the positivity of artificial intelligence in comprehensive human development in Vietnam in the current conditions, synchronous and practical solutions are needed.

Many countries in the world, concerned about the potential risks from artificial intelligence, such as the US, Canada, India, and the European Union, have made moves to enact laws and legal statements on working in the field of artificial intelligence. Welcoming the development of the achievements of the industrial revolution 4.0, the 13th National Congress of the Communist Party of Vietnam has clearly stated its point of view: strongly arouse patriotism and the will to self-power the people. The nation impulses the strength of the great unity of the whole nation, and the aspiration to develop a prosperous and happy country; to advance socialist democracy, the coordination of the entire political system with Vietnamese culture and people; to strengthen the people; to enhance the standard of living for all; and to have a breakthrough mechanism for revenue collection. It is necessary to attract and utilize talent; vigorously apply science and technology, particularly Fourth Industrial Revolution achievements; foster innovation; and create new driving forces for rapid and sustainable country development (Communist Party of Vietnam, 2021). The National Strategy on Research, Development, and Application of Artificial Intelligence through 2030 was released by the Government of Vietnam in January 2021 and outlines specific tasks and solutions to the issue with ministries and branches. Since then, the authors contend that a suitable and functional legal framework for artificial intelligence should exist in terms of state administration. In order to promote and disseminate laws relating to artificial intelligence and its applications, state management levels must perfect legal documents, programs, and plans. At the same time, they must perfect institutional regulations and legal pathways for the application of artificial intelligence in order to help the Vietnamese people develop comprehensively.

Along with that, it is essential to improve education and raise awareness among Party cadres and members from all walks of life regarding the position and role of people, as well as the objective of universal human development, in the cause of national renewal and development, in terms of social management. Besides, it should be necessary to continue to research, affirm and strengthen new values emerging from social reality, and promote traditional values to perfect the Vietnamese human value system to meet the requirements of comprehensive human development in the new era. It is vital to renovate ideological work, moral education, and lifestyle in terms of both content and form; bolstering political and ideological education; and traditional education, particularly in terms of humanistic and ethical values, in order to foster the conditions necessary for these traditional values to keep claiming their place as central tenets of the human value system. Those who work to advance national development, inspire young people's aspirations and encourage positive self-education in all spheres of life in order to advance the importance of each individual and each subject in the application of artificial intelligence necessary to advance the country's overall human development.

On the individual side, it is necessary to diversify forms of building Vietnamese people for comprehensive development, placing individuals in a dialectical relationship with the collective and with society to build and implement programs and activities, specific, practical, and abundant activities, creating healthy playgrounds for all classes of people in order to improve aesthetic sensibility, foster the soul, humane feelings, and create bravery and resistance to help people to be proactive in using and developing artificial

intelligence and international integration as well as effectively preventing moral degradation, lifestyle, and social negativity and social evils; protecting the fine cultural traditions of the nation; attaching importance to the role of the family in promoting the positivity of artificial intelligence for comprehensive human development.

6. CONCLUSION

In conclusion, the setting of globalization and the fourth industrial revolution has resulted in the astonishing growth of artificial intelligence with an array of more advanced, sophisticated, and varied technologies and applications. In that context, it is said that the primary objective of the nation's construction and growth is to create the Vietnamese people for comprehensive development, with the traditional value system of the country serving as the fundamental direction. The development of artificial intelligence causes impacts on the transformation of the traditional value system of the nation. This is reflected in the creation of new values with the appearance of values such as honesty, bravery, responsibility, cooperation, creativity, science, and complementation, which renew the content of traditional values of patriotism and compassion in the current Vietnamese human value system; simultaneously, this raises the risk of standard deviation for traditional values in the process of achieving Vietnam's goal of building and developing a comprehensive human being. From the analysis of the impact of artificial intelligence on the transformation of the traditional value system in comprehensive human development in Vietnam today, within a limited range, a number of solutions to promote the proposed poles of artificial intelligence in comprehensive human development include a group of solutions on the side of state management; a group of solutions on the side of social management; and a group of solutions on the side of individuals.

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COMPENSATION FOR DAMAGE BY ENTERPRISE'S WATER ENVIRONMENTAL POLLUTION: LEGAL ASPECTS OF ENVIRONMENTAL PROTECTION OF SUSTAINABLE DEVELOPMENT

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Abstract. The compensation for damage caused by the enterprise's act of polluting the water environment according to the current legal framework is discussed: environmental protection fee; sanction administrative violations; civil lawsuits; Criminal prosecution. However, the reality shows that the compensation for damage caused by the act of polluting the water environment is currently financial in nature, the amount of compensation does not fully compensate the actual and future damage value. The question is whether the current legal regulations are strong enough to create a mechanism to protect the environment from the settlement of compensation for damage and to force businesses that pollute the environment to be responsible for removing them or not. This article will focus on clarifying the following contents: (i) an overview of the situation of water pollution and the impact of resource degradation and water pollution in Vietnam; (ii) an overview of current legal provisions on compensation for damage caused by the enterprise's act of polluting the water environment; (iii) the current status of settlement of claims for damage caused by acts of polluting the water environment of enterprises, thereby showing the impact of legal regulations on compensation for damage caused by acts of causing environmental pollution water of enterprises to the sustainable protection of water resources in particular, to the protection of the environment in general.

Keywords. compensation, water pollution, environmental protection, sustainable development

1. Overview of water pollution and impacts of water resource degradation and water pollution in Vietnam

The history of mankind shows that society does not pay attention to the requirements of sustainable development, there comes a time when development does not create enough value needed to compensate for the damage from development brings. The Law on Environmental Protection 2020 stipulates that "Environmental pollution is a change in physical, chemical, and biological properties of an environmental component that is not in accordance with environmental technical regulations and environmental standards, causing an adverse effect on the environment, adverse effects on human health, living organisms and nature".[2] Based on this regulation, it can be understood that causing environmental pollution is an act of an individual or organization that alters environmental components that are not in accordance with environmental standards, causing adverse effects on humans and the environment object. Environmental degradation is the behavior of individuals and organizations that degrade the quality and quantity of environmental components, causing adverse effects on human health, organisms, and nature.[3] Causing an environmental incident is the act of an individual or organization that causes accidents or risks occurring during human activities or erratic changes in nature, causing pollution, degradation, or serious environmental change.[4] Causing environmental pollution (by emitting substances harmful to the

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[1] This article is part of the thesis "Responsibility for compensation for damage to the enterprise's acts of polluting the water environment under Vietnamese law" that PhD student Dao Nguyen Huong Duyen is doing at the Vietnam Social Sciences Academy.
[2] Clause 12, Article 3 of Law on Environmental Protection 2020
[3] Clause 13, Article 3 of the Law on Environmental Protection 2020
[4] Clause 14, Article 3 of Law on Environmental Protection 2020

environment), degrading components of the environment, or causing environmental incidents are forms of violations of the law on environmental protection in Vietnam.

- The situation of water pollution in Vietnam

Currently, like many countries in the world and in the region, Vietnam is facing many challenges related to water resources. With a population of one hundred million people, it poses urgent issues to both improve people's lives, increase incomes, and protect the environment. Meanwhile, Vietnam's water resources are strongly dependent on international water sources and are facing challenges in water security because upstream countries are increasingly exploiting water resources.

Unsustainable and unsustainable exploitation and use of water resources lead to the decline of water resources while the efficiency of water use is still low. Demand for water is increasing while water sources are at risk of being polluted, degraded, scarce and exhausted. Surface water sources in many urban areas, industrial zones, and craft villages have shown signs of local pollution, in many places with serious pollution, such as the Nhue Day, Cau and Dong Nai - Saigon river basins. Many factories discharge industrial and daily-life wastes and toxic substances from the production process that are not treated seriously, but are put directly into the environment, causing ecological pollution and causing diseases to people.

According to statistics of the Ministry of Natural Resources and Environment,[1] as of December 2018, Vietnam has only 2,009 recognized traditional craft villages and villages. However, 95% of production activities pollute the environment, more than 50% cause serious pollution. According to statistics, Vietnam has 833 urban areas, the urbanization rate reaches 38.5%. Water pollution in rivers and canals in the inner city is still a widespread problem in urban areas, typically the two big cities of Hanoi and Ho Chi Minh City. By the end of 2019, nationwide, there were 244/274 operating industrial zones and export processing zones with a centralized wastewater treatment system meeting environmental technical regulations, reaching 89%.

The level of water pollution increases in the dry season (from October to December every year) because the river system is closed to store water for irrigation, causing stagnant water and no flow. In addition, saline intrusion continues to occur in the estuary areas of the Vu Gia-Thu Bon River basin, the basin of the Dong Nai River system, the Mekong River basin and tends to increase compared to the previous year.

Water pollution can be considered two sources: natural pollution and man-made pollution (artificial pollution). Pollution caused by natural factors is the source of pollution caused by rain, snow melt, flood, windstorm, erosion, volcano... or by products of living organisms, including their dead bodies. This source of pollution can cause profoundly serious, but infrequent, water pollution, and is not a major cause of global water quality deterioration. The source of man-made pollution is the human discharge into the environment: domestic wastewater and urban wastewater; industrial wastewater (depending on different industries, different wastewaters such as wastewater from food processing factories often contain enormous amounts of organic matter; wastewater from tanneries in addition to organic matter also contains heavy metals, sulfides...); wastewater from healthcare, agricultural production, fishery production...

- Harms of water resource degradation and water pollution

Damage to human health. Water pollution contains many factors that cause direct harm to human health. According to drinking water or food chain, pollutants easily penetrate the human body, causing illness or death such as cancer (due to the high content of heavy metals in water, very toxic Cr+ compounds can cause lung cancer ...), gastrointestinal disease, high blood pressure, heart attack, poisoning (high manganese content...), neuritis. This is one of the strongest and most abundant routes of pollution transmission to humans. Harmful bacteria in contaminated water come from human and animal waste such as cholera, typhoid, and polio. In addition, in natural and domestic water, there may be bacteria causing diarrhea in children such as Leptospira, Brucella, tularemia, polio virus, hepatitis, ECHO, and Cok Saki. Water contaminated with parasites is caused by poor management of feces and waste, polluting the surrounding environment, and increasing the incidence of diseases in the population such as amoeba, helminths of all kinds; skin diseases, eye inflammation caused by bacteria, viruses, molds, and other parasites...

Foreign environmental pollution affects and affects health, also causes other damages such as reducing production productivity, increasing water treatment costs, damage to tourism activities, etc. These damages

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[1] Ministry of Natural Resources and Environment (2020), Report No: 10/BC-BTNMT dated February 6, 2020, of the Ministry of Natural Resources and Environment) on the summary of 05 years of implementation of the Law on Environmental Protection in 2014.

are of different natures and are difficult to separate to determine the price to claim compensation from enterprises violating the environmental protection law.

Loss of productivity. Most economic development activities require the use of water resources. The lack of water due to water degradation will directly affect these activities, especially agriculture and fisheries. Polluted water also reduces the productivity of agricultural crops, affecting aquaculture in the polluted water source area. Aquaculture requires a lot of water and changes often, so if the water is contaminated, it will be difficult to find an alternative water source. An increasing number of incidents show how much aquaculture has been damaged due to poor water quality.

Vietnam is not only facing frequent water shortages, but also facing water quality deterioration. In 2000, a survey on rice yield of five different production areas (due to the influence of wastewater from Bai Bang paper company) showed that: rice yield was only 30.2 - 32.4 quintals /ha, a decrease of 9.58 - 11.85 quintals/ha (a decrease of 23 - 28%) compared to the yield of rice grown on land irrigated from clean water.[1]

Losses on the cost of treating polluted water and providing clean water for people. The polluted water makes many areas and people unable to use that water for daily life but needs to get clean water from other places. Water treatment is a difficult job, so it requires very advanced technologies, and the installation cost of water treatment and water purification systems is huge. Especially for certain types of industrial wastewater. Currently, there is no a general formula for determining the cost of industrial wastewater treatment for enterprises in Vietnam but based on the content of toxic substances in 1m3 of water to calculate the unit price.

The total monetary loss due to an oil spill (2001) is estimated at 250 billion VND (about 17 million USD) while the cost of cleaning up water and beaches is up to 60 billion VND (4 million US dollars).[2] A small example but shows that the treatment of contaminated water is a significant amount to overcome contaminated water sources treatment.

2. Environmental protection – from the perspective of the law on compensation for damage caused by the enterprise's act of polluting the water environment

Practice shows that sustainable development is a common trend of countries around the world, the content of sustainable development is a harmonious combination of three issues: economic development, society, and environment. Economic growth and environmental protection are two problems that must be solved simultaneously to ensure sustainable development. In the field of environment, law is a crucial tool to manage the environment, and promote sustainable socio-economic development not only for the present generation but also for future generations.

The environmental protection law has the basic function of ensuring the harmony of interests between people and nature and between people in the process of exploiting natural resources for production and business activities. business and human activities. To protect the legitimate rights and interests of people who suffer damage due to acts of causing environmental pollution, including a claim for damages - a form of civil liability. The compensation for damage is to ensure the principle of fairness in society, according to which, the person who causes damage must pay compensation.[3] The compensation for damage has both the meaning of "recovery of damage", and the effect of "deterrence and prevention" of violations of the law on environmental protection.

The claim for damages is a way to recover the damage of the victim because of the damage occurring. Damages from violations of environmental protection laws are required and it is necessary to determine who should bear the consequences (either the victim, the business causing the damage or a third party). When the claim for damages is considered, the consequences will be transferred to the person who has committed the act of causing environmental pollution. For deterrence and prevention, the legal provisions on compensation for damage, which contain warning information, are strong enough for subjects to try not to commit illegal acts.

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[1] Doctoral thesis in agriculture: the effect of paper industry waste on some properties of rice soil around Bai Bang paper industrial park, Phong Chau district - Phu Tho province, Nguyen Khac Thoi - Hanoi 2000

[2] Institute of Strategy and Policy on Natural Resources and Environment (2010), Research on theoretical and practical bases, propose a process model suitable to Vietnam's conditions on economic damage due to pollution and degradation. Environmentally induced, Scientific Review Report, pp.53-54.

[3] UN General Assembly, United Nations Conference on Environment and Development, Rio Declaration on Environment and Development, https://www.iau-hesd.net/sites/default/files/documents/rio_e.pdf, accessed 9 May/ 2022.

The compensation for damage caused by acts of causing environmental pollution will generally be made when satisfying the basis specified in Article 584 of the Civil Code 2015. Accordingly, the claim for compensation for damage caused by acts of polluting the water environment will be set when three conditions are met: (1) there is a violation of the law; (2) damage occurs; (3) there is a causal relationship between the act causing the damage and the damage. Error is not a mandatory condition to determine whether the subject of the violation that causes damage must pay compensation.[1] If there is an act of polluting the water environment, the violating enterprise must be responsible for compensating for the damage. From this regulation, we understand that: environmental protection is the right, obligation and responsibility of all agencies, organizations, communities, households, and individuals.[2] Moreover, due to the huge and dangerous consequences for the water environment of the act of polluting the environment on society, all entities (including businesses) that pollute the water environment will be degraded at fault and must take responsibility for their violations.

- Identify acts causing damage of the enterprise. The provisions of the Constitution and the law in general are set out to protect the legitimate rights and interests of the subjects, whereby all citizens have the obligation to respect the law, respect the rights and interests of all citizens. Therefore, when illegal acts infringe upon the legitimate rights and interests of the subjects, the subject performing the acts will be responsible for compensating for the damage. For cases causing water pollution, the illegality here is against the Law on Environmental Protection because according to the provisions of Article 172 of the Civil Code 2015, when exercising ownership or other to property rights, the subject must comply with the provisions of the law on environmental protection; If they pollute the environment, they must stop the polluting acts, take measures to remedy the consequences and pay compensation for damage.

- Determine the damage occurred. The Law on Environmental Protection in 2020 is defined in Clause 1, Article 130, according to which, damage caused by environmental pollution and degradation includes: (i) damage to the function and usefulness of the environment (including damages) damage to the environment, land, water, ecosystems, animals and plants – often referred to as direct damage or primary damage); (ii) loss of life, human health, property and legitimate interests of organizations and individuals as a result of the deterioration of the function and usefulness of the environment (often referred to as indirect damage or secondary damage). In the relationship between the two for this type of damage, damage to the function and usefulness of the environment occurs first, and damage to life, health, property, and legitimate interests of individuals and organizations occurs only after when there is a consequence of reducing the functionality and usefulness of the environment. Therefore, to determine whether there is damage to health, life, property, and legitimate interests due to environmental pollution, it is necessary to determine whether there is damage due to deterioration of the function and usefulness of the environment in that area.

From the type of damage, we determine that the subject has the right to claim compensation due to the enterprise's act of polluting the water environment, including: (i) the specific victim (an individual whose life, health, or property was damaged) infringing; organizations whose assets or economic interests are infringed); (ii) and the victim is the community at large (or the environment at large). There is no community in general, but the law in many countries often gives the right to sue for environmental damages in general to the competent authority representing that community. In Vietnam, the People's Committees at all levels are responsible for claiming compensation for the environment due to pollution and degradation.[3] National laws often recognize that the subject of damage from the violation of the law on environmental protection has the right to claim compensation for damage not only from fairness but also from real reasons. The reality is that those who suffer damage are often also the people most motivated and best positioned to make a claim (with sufficient information to prove the damage).

- Identify the entity that pollutes the water environment of the enterprise, this phrase can cause controversy about the responsibility of the legal entity/enterprise, or the person assigned to perform the polluting act. To ensure the interests of victims and the ability to claim compensation, the subject causing environmental pollution should be understood in the direction of including legal entities, owners of waste discharge facilities when referring to the regulation that legal entities must claim compensation in case that the

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[1] Article 602 of the Civil Code 2015
[2] Clause 1, Article 4 of Law on Environmental Protection 2020
[3] Article 131 of the Law on Environmental Protection 2020.

employee causes damage. This is the way to determine how to claim compensation to be resolved and to remedy the damage.

When there is a violation of the law on environmental protection that causes damage. A claim for damages is a right of the victim (victim) of this breach. Because the damage sufferer has the right to material and spiritual compensation and honor restoration according to the provisions of law.[1] Accordingly, all the damage is to be compensated[2] includes damage to property, health, honor, dignity, and reputation.[3] The compensation for material damage is the responsibility to compensate for all damage, which is calculated into money caused by the violating party, including: property loss; benefits associated with the use and exploitation of the lost or reduced property; reasonable costs to prevent, limit or remedy damage; other damage.

From a functional perspective, the exercise of the right to claim compensation for damage caused by violations of the law on environmental protection is also one of the methods of mobilizing the participation of the people and the community in the implementation process. environmental protection law. By claiming compensation for damage, environmental protection laws are better respected and complied with by entities. In other words, the claim for compensation for non-contractual damages is one of the methods/tools society uses to monitor the compliance of enterprises.

3. Actual situation of settlement of claims for damage caused by acts of enterprise causing water pollution

One of the requirements set forth in bringing the provisions on compensation for damage in the field of environmental protection into the law. These regulations are implemented so that organizations and individuals - potential polluters have reasonable and sustainable incentives in managing environmental risks.[4]

In Vietnam today, liability to compensate for damage caused by violations of the law on environmental protection is considered a form of non-contractual compensation liability.[5] Therefore, the legal basis to settle claims for compensation for damage caused by violations of the law on environmental protection must first comply with the provisions on compensation for non-contractual damage of the Civil Code 2015. In the statistics of the Supreme People's Court on the number of crimes in the group of environmental crimes brought for first-instance trial from 2005-2018, there was no case of the crime of causing environmental pollution (Article 182 of the Penal Code 1999).). In addition, from the practice of claiming compensation through typical environmental incidents from 2015 to 2020, it shows that the claim for compensation due to acts of causing environmental pollution is resolved through an agreement or lawsuit.

Although the law is gradually completing the shortcomings and obstacles from the regulations that are not feasible. But the regulations related to the settlement of claim claims still have limitations and difficulties in application, such as:

Firstly, specific victims (victims) of violations of the law on environmental protection and the subject of damage (perpetrators) often have asymmetrical access to law for protection.

Secondly, it is not easy to determine the actual damage that occurs, especially identifying hidden damage (especially health-related damage) takes a long time 5 - 10 years of new fortune. Meanwhile, the current statute of limitations for filing lawsuits is 3 years.[6] According to current statistics in Vietnam, only cases of health effects have been recorded in Vietnam due to the use of contaminated domestic water, there are no clear data on deaths due to the use of polluted water in daily life. By now, 85% of cases of diarrhea in Vietnam are caused using water and sanitation of inadequate quality.

Third, in many cases it is not possible to identify the polluter or to prove the cause-and-effect relationship between the "violation act" and the "actual damage" which is often not easy and often happens. must be

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[1] Khoản 2 Điều 30 Hiến pháp 2013
[2] Clause 2, Article 130 of the Law on Environmental Protection 2020.
[3] Article 589 of the 2015 Civil Code.
[4] Michael Faure (2009), *"Environmental Liability" in* Michael Faure (ed.), *Tort Law and Economics,* 2ⁿᵈ ed. (Cheltenham: Edward Elgar, 2009) at 247.
[5] Clause 2, Article 133 of the Law on Environmental Protection 2020
[6] Civil Code 2015, Article 588

based on statistical principles.[1] The laws of some countries provide that plaintiffs (victims) are not obliged to prove any violation of environmental standards or regulations.[2]

Before 2015, the lawsuits were related to the act of discharging wastewater causing environmental pollution by district enterprises. Because people submit applications to the local authorities at commune and district levels for settlement. When it is not satisfactory, they will file a lawsuit to the Court, but to file a lawsuit to the Court, the affected households have difficulty in gathering evidence to prove the damage and the relationship between the behavior and the damage.

For example, the case of 190 tons of dead fish in West Lake in 2016. Because it is not possible to identify the specific subject that discharges untreated wastewater into the lake, there is no basis for claiming compensation. Or the pollution in Cam Dan River (Bac Giang); Pollution case caused by broken lead sludge treatment tank at Gam River (Cao Bang) in 2016. There are cases where enterprises fell into bankruptcy, so people had difficulty in filing lawsuits to claim compensation, such as the case of Binh Dinh Sugar Factory in 2018, after being sanctioned for administrative violations on acts of causing environmental pollution, the enterprise then carried out bankruptcy proceedings in 2019.[3]

Fourth, in Vietnam, due to most of the natural resources such as land, forests, mountains, rivers and lakes, water sources, natural resources in the ground, resources in the sea, continental shelf and airspace. .. are prescribed by law as belonging to the State, are owned by the entire people, are represented by the State and uniformly managed by the State.[4] The identification of the victim is even more deadlocked when the violation of the law on environmental protection threatens to cause damage to wild animals, biodiversity... Who is the victim: (1) water will of course be the affected party (in case it is not possible to identify specifically the subject of management or legal user of environmental components); (2) The aggrieved party is all the people living around the contaminated area; (3) All people who have to bear the effects, the direct impacts due to their residence being polluted; (4) Only those who can prove to be involved in environmental damage and who are directly injured...

Fifth, the difficulty when using the right to claim compensation when there is damage is the decline in the function and usefulness of the environment. Although the law stipulates that there are two types of damage caused by environmental pollution and degradation,[5] (1) Decline in functionality and usefulness of the environment; (2) Damage to human life, health, property and legitimate interests of organizations and individuals. The first type of damage is usually associated with the owner, the State, or the residential community. But because there are no specific instructions for this lawsuit to claim compensation, even though it is proved that there is damage affecting the living environment of local people, there are very few cases where the People's Committee sues enterprises to request compensation.[6] Because it is very difficult for state agencies when calling for investment and licensing projects, but when enterprises commit violations, they initiate lawsuits?

In 2005, the People's Committee of Ho Chi Minh City authorized the Department of Natural Resources and Environment of Ho Chi Minh City to file a lawsuit against the owner of the Kasco Monrovia, a Liberian national, asking for compensation of 14.3 billion VND.[7] due to the oil spill of the ship affecting the semi-diurnal tidal regime, cages/rafts for raising fish and giant freshwater shrimp on Dong Nai River and coastal estuary in Ba Ria-Vung Tau province, affecting public health and resources domestic water supply of Ho Chi Minh City… But after more than 08 years since the filing of the lawsuit, in 2014, the People's Court of Ho Chi Minh City announced the opening of a first-instance trial. The delay in settlement affected the principle of timely compensation.

Sixth, the compensation is rarely successfully resolved through trial by the Court. Even if a lawsuit is brought to the Court, the cases will also be reconciled at the Court. As in the Vedan case in 2006, 4,700 households filed a lawsuit at the district-level People's Court in Dong Nai province, but it was later

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[1] Michael Faure, "Environmental Liability" in Michael Faure (ed.), Tort Law and Economics, 2nd ed. (Cheltenham: Edward Elgar, 2009) at 247.

[2] China's 1989 Environmental Protection Law

[3] Duy Thanh (2018), Binh Dinh fined sugar factory causing pollution 1.9 billion VND https://tuoitre.vn/binh-dinh-phat-nha-may-duong-gay-o-nhiem-1-9- ti-dong-20180619163306798.htm accessed 6/5/2021

[4] Article 53 of the 2013 Constitution

[5] Article 163 Law on Environmental Protection 2014

[6] Civil Procedure Code 2015 Clause 4 Article 187 (4)

[7] Tan Chau (2014), Ho Chi Minh City Department of Natural Resources and Environment sued Kasco ship owner to claim 14.3 billion VND compensation for the environment http://www.donre.hochiminhcity.gov.vn/tintuc/Lists/Posts/Post.aspx?List=f73cebc3%2D9669%2D400e%2Db5fd%2D9e63a89949f0&ID=439

reconciled at the Court. Or like the case of thirty-three households, when suing fourteen enterprises for causing environmental pollution, causing mass fish deaths in fish rafts in Cha Va river area, Ba Ria - Vung Tau province in 2016. Households have requested more than 13,255 compensations. billion, but when 9/14 enterprises appealed, at the Appellate Court session, the parties agreed and negotiated the level of compensation of 50% of the request (more than 5,470 billion).[1]

4. Recommendations and suggestions

Firstly, to ensure the people's right to claim damages (small damage) and to reduce the ignorance of a part of the people who fail to promptly protect their legitimate rights and interests from being infringed. The law needs to recognize the mechanism of collective action. This ensures that no victim is left behind due to insufficient resources or evidence to prove damage and a causal link between the act causing the damage and the damage.

In addition, it is necessary to research and allow social organizations operating in the field of environmental protection or social organizations whose members are victims of a particular case of environmental pollution that can represent them. The victim can initiate a lawsuit to claim compensation or may sue for compensation for damage in general to the environment. This is also an important solution to help victims of environmental violations to access justice more easily.

Second, it is necessary to change the regulations on the obligation to prove damage. People who suffer damage in water pollution cases are facing difficulties in the burden of proof, so they often must give up their right to compensation. Gathering evidence and determining damage is difficult. According to the provisions of Article 91 of the 2015 Civil Procedure Code, the involved parties are obliged to present evidence to prove that their claims have lawful grounds. However, to give evidence to prove that the damage is "grounded and lawful" is not easy for the victims (in fact, most of them are manual and unskilled workers).

Vietnamese law also needs to refer to the regulation on swapping the burden of proof of Chinese law when it stipulates that the polluter will be responsible for proving the accusations are groundless or giving the right to be exempted from liability.[2] Courts should be empowered to order polluting enterprises to suspend operations until they prove their activities cannot cause any damage to the environment.

Third, the law needs to provide specific guidance on how to initiate lawsuits to claim compensation because enterprises have acts that degrade the function and usefulness of the environment. The current law only provides a basis for determining the scope, limits and products of the environment being degraded.[3] This is also the reason why, through the Vedan or Formosa case, even though the damage caused by the enterprise's act of causing water pollution has a serious impact on a large scale, there are no state agencies in the localities to initiate the action. to sue. It seems that the provisions for lawsuits in Clause 4, Article 187 of the CPC 2015 are "on paper".

Fourth, research on prolonging the statute of limitations for initiating lawsuits in cases of damage caused by violations of the law on environmental protection. In addition, the time to calculate the statute of limitations for initiating a lawsuit should also be counted from the time when the victim can know or must know that the damage he or she has suffered is caused by a violation of the law on environmental protection, not from the time the violator commits an act of violation as prescribed by current law.

Fifth, there should be guidance on how state agencies can initiate lawsuits to claim compensation due to water resource degradation.

The current law seems to focus only on the issue of compensation for the life, health and property of individuals, agencies, and organizations, but there are no specific and detailed regulations on the protection of the natural environment. When enterprises commit violations, state agencies aim at administrative sanctions rather than requiring enterprises to claim compensation. However, the administrative sanction is not strong enough to deter and the revenue from administrative sanctions is also difficult to compensate and overcome the damage to the natural environment. Therefore, it is very necessary for state agencies to

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[1] People's Court of Ba Ria - Vung Tau Province (2017), Judgment No. 84/2017/DS-PT dated August 1, 2017 on "Compensation for damage caused by environmental pollution".

[2] Nguyen Minh Thu – Tran Thi Hai Ha (2020), Responsibility to compensate for damage caused by enterprises' environmental pollution – China's experience and lessons for Vietnam, People's Court Journal, https:/ /tapchitoaan.vn/bai-viet/phap-luat/trach-nhiem-boi-thuong-thiet-hai-do-gay-o-nhiem-moi-truong-cua-doanh-nghiep- Kinh-nghiem-cua-trung -quoc-va-bai-hoc-cho-viet-nam accessed on 11/6/2021

[3] Law on Environmental Protection 2014, Article 165

use the measure of initiating a lawsuit to claim compensation for damage to remedy the damage to the natural environment.

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FULL INVERSION IN ENGLISH DECLARATIVES AND THEIR EQUIVALENTS IN VIETNAMESE

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Abstract. The paper employs the interplay between the structural and functional approaches, together with the descriptive method first and then the comparative and contrasting methods, in order to expose six frames and their various discussions concerning English full inversion declaratives, with their equivalents in Vietnamese, for their differences and similarities, including some universals if any. For double check, the same frames used in Section 2 for English declaratives are re-used, if appropriate, in Section 3 to draw adequate attention to the fact that the given sentences are "pure" Vietnamese, but that they do fit in the frames of the above-mentioned English sentences. The paper's findings, which aim to serve Translation Studies in general, teaching Translation, English Syntax, English Semantics, Contrastive Linguistics, etc. in particular, prove that full inversion is applied more often in English than in Vietnamese, as clarified by the former's six frames and the latter's three frames. Quantitively speaking also, there are more cases of difference than similarity, and details of the difference even in the same or nearly the same cases are still found out. Qualitatively speaking, the Vietnamese post-verb *ADVERB* of manner and its so-called "optional" pre-verb adverb are much more complicated than their English equivalents. One of the prominent universals is that the lexical meaning of the main verb is of significance in forming full inversion in both English and Vietnamese; with its fronted circumstance or attribute and with or without the [+definite] property of its following NP. Vietnamese obeys the principle of end-weight more strictly than English; as for the structure of information in English and Vietnamese declaratives, further research is highly recommended.

Keywords. inversion, inverted sentences, declaratives, equivalent(s)

1. INTRODUCTION

Inversion "cấu trúc đảo"[1] is an observable phenomenon in the English *declaratives* 'câu trần thuật' — sentences that are neither interrogatives nor imperatives. The paper only considers one of the two main types of inversion: *subject-verb inversion* or *full inversion* 'đảo toàn phần', "where the subject is preceded by the entire verb phrase." Excluding from this paper is *subject-operator inversion* or *partial inversion* 'đảo bán phần', "where the subject is preceded by the operator rather than by the main verb or a full verb phrase" (Biber et al., 1999, p. 911).

Inversion 'cấu trúc đảo' is also found in the Vietnamese declaratives:

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[1] Conventions applied in this paper are:
  - Its translated version enclosed within single quotation marks ('') is placed right under the original example;
  - Its equivalent translation enclosed within single quotation marks is placed next to *the lexical item* in italic;
  - The lexical items in round brackets, like "(nữa)" in (7)f, may or may not be verbalized;
  - The main VERB is capitalized;
  - The symbols "/", "*", and "?", and "∅" respectively stand for "or", "unaccepted", "hardly accepted", and "the covert subject".

In Vietnamese, there is a type of sentences where the core part includes a predicate (verb or adjective, denoted by P) followed by a noun (denoted by N). (Ly, 1984, p. 1)

In *inverted sentences* 'câu đảo', the normal order — Subject first, Predicate after (in English), or N first, P after (in Vietnamese), is reversed. This paper focuses on the English inverted sentences and their equivalents in Vietnamese in order to (i) identify the similarities and differences between the two natural languages as far as full inversion is concerned, and (ii) look for *universals* 'các phổ niệm' (Bui, 2009, pp. 7−15), where the issue in question can be a reliable illustration.

The paper starts with the descriptive method according to which Section 2 describes in detail through a series of frames all the components of each of the four types of English full inversion sentences. These sentences are translated into Vietnamese for later consideration by the first researcher — a life-long learner of English who has been teaching English as a foreign language in general, English Linguistics in particular, for more than 40 years at tertiary education in Viet Nam as well as a native speaker of Vietnamese who has got a PhD. in Linguistics and Literature since 2006, promoted to Associate Professor in Linguistics since 2012, and awarded with the title of Meritorious Teacher by the President of Viet Nam since 2014. Somehow, the structural and functional approaches are combined so that one by one component of each frame is described, revealing not only the internal structure of each main component not also its *semantic roles* 'vai nghĩa' (Halliday, 1994; To, 2011) in the frame in question. For double check, the same frames are re-used, if appropriate, in Section 3 in which a number of "pure" Vietnamese expressions are fully described and translated into English. Since this occurs later in the paper, some comparison and contrast may be inserted to such a degree that adequate attention can be drawn to the fact that the sentences in questions are "pure" Vietnamese, but that they do fit in the frames of the above-mentioned English full inversion sentences. The comparative and contrasting methods are then employed in Section 3, resulting in points of findings and discussion. The whole process has been supported by the second researcher — an applicant of a PhD's degree in the future, hopefully.

Below are a number of related articles and A.M. theses recently announced in Viet Nam:

- In her M.A. thesis in TESOL entitled *English inverted declaratives analysis and suggested teaching implications*, Cao (2006) analyses English inversion constructions for pedagogical purposes. The thesis has been done only in the structural approach. Nothing concerning semantic roles in English and Vietnamese declaratives is mentioned.

- As clearly shown by its title — *Empowering English-majored freshmen with the ability to employ English subject-verb inversion in academic writing: a case study at Marketing University*, the M.A. thesis in TESOL by Chu (2011) aims at teaching the subjects how to use English inversion only in their writing. Nothing concerning translation is mentioned.

- Inversion in English, both full and partial, has been presented by To (2011, pp. 210−265) in the functional approach only according to which the grammar of the clause is set up with three components: the process itself, participants in the process, and circumstances associated with the process. The semantics roles of the participants in the process is the focus of this section. Such an approach fails to draw the attention of Vietnamese learners of English who have not been deeply influenced by functional grammar.

The above-mentioned studies have been done not in the interplay between the structural and functional approaches, together with the descriptive method first and then the comparative and contrasting methods, and of course do not aim to serve Translation Studies in general, teaching translation in particular. This is a research gap being pointed out for this paper to fill in. The translated equivalents enclosed within single quotation marks and placed next to *the lexical items* in italic in this paper are also useful in teaching English Syntax, English Semantics, Contrastive Linguistics, etc. to Vietnamese university students whose major is English Language Studies.

2. CASES OF FULL INVERSION IN THE ENGLISH DECLARATIVES

2.1. The first type of English full inverted sentences and their translated versions

Right at the beginning is the sentence's first focus of information — *the circumstance* 'chu cảnh' (Halliday, 1994, p. 107; To, 2011, pp. 49−59, 105−111). It is encoded by an *adverbial* 'trạng ngữ' (To, 2019, pp. 8−11), even in its minimal form which is only an *adverb* 'trạng từ' in English.

The sentence's second focus of information, which goes at the end, is the noun phrase (abbreviated to NP) encoding the Actor 'Hành thể' (To, 2011, pp. 103−104, 48), — "the one that does the deed" (Halliday, 1994, p. 109). The NP in Frame 1 is [+countable] and [±definite] in English.

Between the two components of the English *action sentences* 'câu hành động' (Cao et al., 2003, pp. 116−118), is an [+intransitive] VERB, expressing **movement in a specific manner** 'chuyển động có cách thức' (To, 2011, pp. 110−111, 211).

The first type of English inverted sentences is "most common in literary and descriptive writing" (Swan, 2016, p. 271); it marks the two foci in Frame 1: the new information at the end and the fronted adverbial of *Location* 'Địa điểm' in (1)a, *Path* 'Lối đi' in (1)b, *Direction* 'Hướng' in (1)c, *Direction* and *Terminus* 'Hướng và Đích' in (1)d, which belong to various subtypes of the English adverbials of *Space* 'Không gian':

> Frame 1: *The circumstance* + VERB of movement + an NP encoding the Actor
>
> 'Khung 1: *Chu cảnh* + VỊ TỪ chuyển động + danh ngữ mã hóa Hành thể

(1)a. *In the high heavens* RODE a veiled moon, magnified by the mist of an early spring day.

'*Trên trời cao* RONG *RUỔI* một chị Hằng có choàng voan trắng**,**

được phóng đại bởi cái làn sương mờ của một buổi sớm mùa xuân.'

(1)b. *Round the corner* IS now WALKING a large policeman.

'**Vòng theo góc phố* đang ĐI một viên cảnh sát to cao vạm võ.'

(1)c. *Towards the bar* STROLLED a snowy-haired old man.

'*Hướng về phía cái quán rượu* THẢ *BỘ* một ông lão râu tóc bạc phơ.'

(1)d. *Out to the open sea* SWAM the fully recovered whale.

'**Ra ngoài biển khơi* BƠI con cá voi đã hoàn toàn bình phục.'

'**Ra ngoài biển khơi* BƠI *ĐI* con cá voi đã hoàn toàn bình phục.'

Encoded by *first* 'đầu tiên', *next* 'kế tiếp', *now* 'bây giờ', *again* 'lại', *soon* 'chẳng bao lâu nữa' and especially *then* 'rồi, rồi thì', the adverbial of *Sequence* 'Sự nối tiếp/Chuỗi' — one subtype of the English adverbials of *Time* 'Thời gian', occurs right before the verb *come* 'đến, tới' and a [+definite] NP. This signals the full inversion in the sentences (1)e-i, which "introduce a new event" (Biber et al., 1999, p. 913):

(1)e. *First* CAME Albert, clever, graceful and quiet.

'*Đầu tiên* LÀ Albert, khéo léo, duyên dáng và trầm tư.'

(1)f. <u>*Next*</u> CAME the masked men on horseback.

'<u>*Kế tiếp/ Tiếp theo*</u> LÀ những người đàn ông đeo mặt nạ ngồi trên lưng ngựa.'

(1)g. <u>*Now*</u> COMES the business of sorting out the returned forms.

'<u>*Bây giờ*</u> ĐẾN việc phân loại những biểu mẫu được gửi trả lại.'

(1)h. <u>*Again*</u> CAME the sounds of cheerfulness and better heart.

'<u>*Lại*</u> XUẤT *HIỆN* những tiếng kêu mừng vui hồ hởi.'

(1)i. <u>*Then*</u> CAME the turning point of the match.

'<u>*Rồi*</u> ĐẾN bước ngoặc của trận đấu.'

2.2. **The second type** of English full inverted sentences and their translated versions

Between the two components of the English *relational sentences* 'câu quan hệ' (Cao et al., 2003, pp. 119–110), is the copula '*be*' — 'hệ từ '*là*'.

> Frame 2: <u>*The attribute*</u> + copula BE + a NP encoding the Carrier
>
> 'Khung 2: <u>*Thuộc tính*</u> + hệ từ 'LÀ' + danh ngữ mã hóa Đương thể'

2.2.1. With a [+definite] NP encoding the Carrier

In spite of the fact that it goes at the end of the sentence, an [+countable] and [+definite] NP that encodes the Carrier 'Đương thể' (To, 2011, pp. 80–85, 136–140) — an entity "with some quality ascribed or attributed to it" (Halliday, 1994, p. 120) — carries the given information. This breaks the common structure of information: the given information comes first; the new information tends to occur towards the end. The [+definite] NP encoding the Carrier can be in its minimal form of *a proper noun* '*một danh từ riêng*', as in (2)b-c.

Right at the beginning of the sentence is <u>*the attribute*</u> 'thuộc tính' (To, 2011, pp. 80–83, 136–140, 214–215). It is encoded by a [–definite] NP in (2)a-b, a prepositional phrase (abbreviated to PP) in (2)c-d, an adjective phrase in (2)e, or an adverb, like *here* [hɪə(r)] or *there* [ðeə(r)], in (3)a-c. <u>*The attribute*</u> is "in the front position to draw attention to something in the situation" (Eastwood, 1994, p. 57):

(2)a. <u>*A five-minute walk from the beach*</u> IS the hotel.

'<u>*ĐI BỘ năm phút từ bãi biển*</u> LÀ tới khách sạn.'

(2)b. <u>*A short motorboat trip from the harbor of Gaios*</u> IS AntiPaxo.

'<u>*ĐI XUỒNG MÁY một đoạn ngắn từ cảng Gaios*</u> LÀ đến AntiPaxo.'

(2)c. <u>*Unlike any other pupil in my class*</u> IS Johnson.

'<u>*Không GIỐNG bất kỳ học sinh nào trong lớp của tôi*</u> LÀ em Johnson.'

(2)d. <u>*Among those present*</u> ARE the Prime Minister and his wife.

'<u>*Trong số những người hiện diện*</u> LÀ Thủ tướng và phu nhân.'

(2)e. <u>*Bluer than velvet*</u> WAS the night.

'<u>*Xanh hơn nhung*</u> LÀ bầu trời đêm.'

(3)a. <u>*There*</u>'S the school bell — I must go now.

 '<u>*Đấy*</u> LÀ chuông trường — bây giờ tôi phải đi đây.'

(3)b. <u>*Here*</u> IS the announcement for passengers on flight TW997 to Boston.

'<u>*Đây*</u> LÀ thông báo dành cho hành khách trên chuyến bay TW513 đi Boston.'

(3)c. <u>*There*</u>'S my father.

'<u>*Kia*</u> LÀ cha tôi.'

At the beginning of the sentence, <u>*the attribute*</u>, which is usually called *fronted predicative* 'vị ngữ bị đảo ra trước' by non-functional linguists, is the cohesive link, especially with the existence of an element of comparison with the preceding context (Biber et al., 1999, pp. 902–903).

(4)a. They enjoyed *the holiday*. <u>*Best of all*</u> WAS the constant sunshine.

'Họ đã tận hưởng *kỳ nghỉ đó*. <u>*Tuyệt vời nhất*</u> LÀ những ngày liên tục nắng ráo ấy.'

(4)b. The scheme has *many good points*. <u>*An advantage*</u> IS the low cost.

'Kế hoạch này có *nhiều ưu điểm*. <u>*Một thuận lợi*</u> LÀ cái chi phí thấp.'

(4)c. Taking good notes is *much more important than* just listening to a lecture. <u>*Even more important*</u> IS your rearranging or reorganizing the notes after the lecture.

'Ghi chú cẩn thận thì *quan trọng hơn nhiều* so với việc chỉ nghe giảng bài. <u>*Quan trọng hơn nữa*</u> LÀ việc bạn sắp xếp hoặc tổ chức lại các ghi chú sau mỗi bài giảng.'

The second type of English full inverted sentences is highly appreciated with the Carrier being encoded by a long and complex NP at the end of the sentence. Obviously, if the structure of information is flouted then *the principle of end-weight* 'nguyên tắc trọng hậu'[1] (Biber et al., 1999, p. 898) should be obeyed:

(5)a. <u>*Best of all*</u> ARE the cattle, especially when they are fed on those oilcakes.

'<u>*Tốt nhất*</u> LÀ bầy gia súc đó, đặc biệt là khi chúng được nuôi bằng bánh dầu.'

(5)b. <u>*Present at the meeting*</u> WERE Dean Edith Shale and Vice Dean John Smith.

'<u>*Có mặt tại buổi họp*</u> LÀ Trưởng khoa Edith Shale và Phó khoa John Smith.'

2.2.2. With a [±definite] NP encoding the Carrier

As part of the verb phrase (abbreviated to VP) in (6)a-c, the participial phrase is fronted. The passive meaning in (6)a or the active meaning in (6)b-c is replaced by the relational meaning expressed by the copula '*be*' in (6)a-c. *Fronting*[2] 'chuyển ra phía trước' and full inversion seems to balance the weight and the length between <u>*the attribute*</u> and the Carrier. The Carrier NP of (6)a-b is [−definite] while that of (6)c is [+definite]:

(6)a. STUFFED <u>*under the desk*</u> IS a woven wastepaper basket.'

'<u>Bị</u> NHÉT <u>*dưới gầm bàn*</u> LÀ một cái giỏ rác đan bằng mây tre.'

---

[1] There exists a tendency to put a long and internally complex component towards the end of a sentence.

[2] *Fronting* '*chuyển ra phía trước*' aims at: ① establishing links, ② expressing contrast, ③ emphasizing an element. Except for *Wh- words* 'từ bắt đầu bằng *Wh-*', fronting is rather rare in English and almost restricted to *declarative main clauses* 'câu trần thuật' (Biber et al., 1999, p. 900): *Very good reason* we HAD yesterday. *Round the corner* WAS WALKING a woman in black. *Great party* that WAS!

(6)b. HANGING *from the rafters* WERE strings of onions.'

 'TREO *LỦNG LIỂNG từ các thanh rui dưới mái nhà* LÀ những dây hành.'

(6)c. WAITING FOR her *behind the Speaker's chair* WAS the leader of the opposition, who also shook her warmly by the hand.

'Đang ĐỢI bà ấy *sau cái ghế của Phát ngôn viên* LÀ lãnh tụ của phe đối lập, người cũng đã bắt tay bà một cách nồng nhiệt.'

2.3. The third type of English full inverted sentences and their translated versions

The dummy subject *there* [ðə(r)], which has no lexical meaning, conceals the third type of English full inverted sentences — the English *existential sentences* 'câu tồn tại' (Cao et al., 2003, pp. 115–116). The [−definite] NP encoding the Existent 'Hữu thể' (To, 2011, pp. 95–98, 155–158) in Frame 3a can be in its minimal form, which is a common noun like *snow* in (7)a or a pronoun like *nobody* in (7)b. In addition to '*be*', meaning 'exist', like in (7)a-c, the verb of the third type is [+intransitive] and semantically belongs to a small set of verbs of **existence** or **happening** (*exist*, *remain*, *arise*; *occur*, *come about*, *happen*, *take place*), or of **time** (*follow*, *ensue*), or of **space** (*sit*, *stand*, *lie*; *hang*, *rise*, *stretch*, *emerge*, *grow*), like in (7)d-f (Halliday, 1994, p. 142). The circumstance may be omitted, depending on whether the NP is long and internally complex enough to avoid flouting the principle of end-weight:

Frame 3a:

There + VERB of existence/ happening + a NP encoding the Existent (+ *the circumstance*)

'Khung 3a:

Chủ ngữ giả *there* +VI TỪ tồn tại/ xuất hiện + danh ngữ mã hóa Hữu thể (+ *chu cảnh*)'

---

(7)a. *There* IS snow *on high ground* *every winter*.

 'CÓ tuyết *trên vùng cao* *mỗi mùa đông*.'

(7)b. *There* WAS nobody *home*.

 '*Lúc ấy* không CÓ ai *ở nhà*.'

(7)c. *There* WILL BE plenty of room for everyone.

'Sẽ CÓ nhiều chỗ cho mọi người.'

(7)d. *There* RESULTS profit from reducing staff and increasing sales.

 'Hiện SINH lời/ CÓ lãi từ việc cắt giảm nhân viên và tăng doanh số bán ra.'

(7)e. There'S still some money left.

'Vẫn CÒN ít tiền.'

(7)f. *There* REMAINS nothing more to be done.

 'Không CÒN cái gì để làm (nữa).'

(7)g. *There* FOLLOWED an uncomfortable silence.

 '*Kế tiếp/ Tiếp theo* LÀ một sự im lặng không mấy dễ chịu.'

The circumstance in Frame 3a can be fronted, resulting in Frame 3b, with the dummy subject *there* and a [−definite] NP encoding the Existent:

> Frame 3b:
>
> *The circumstance* + *there* + VERB of existence/ happening + a NP encoding the Existent
>
> 'Khung 3b:
>
> *Chu cảnh* + chủ ngữ giả *there* + VI TỪ tồn tại/ xuất hiện + danh ngữ mã hóa Hữu thể'

(8)a. *Once upon a time there* WERE three bears: Mama bear, Papa bear, Baby bear.

'*Ngày xửa ngày xưa* CÓ ba con gấu: Gấu mẹ, Gấu cha và Gấu con.'

(8)b. *On top of the hill there* STANDS an ancient church.

'**Trên đỉnh đồi* ĐỨNG một ngôi nhà thờ cổ.'

'*Trên đỉnh đồi* ĐỨNG *CHƠ VƠ* một ngôi nhà thờ cổ.'

(8)c. *Out of the mist there* LOOMED a strange shape.

'*Từ trong làn sương mỏng* lờ mờ HIỆN *RA* một dáng hình kỳ lạ.'

(8)d. *Through all his work there* RUNS a strong vein of cynicism.

'**Trong toàn bộ các tác phẩm của ông* CHẠY một tâm trạng bất mãn.'

'*Trong toàn bộ các tác phẩm của ông* XUYÊN *SUỐT* một tâm trạng bất mãn.'

The third type in Frame 3b usually begins with the circumstance of time or space: quite often a thing existing or an event happening in a certain situation. Sometimes the circumstance of *Condition* 'Điều kiện', like in (9)a, or of *Cause* 'Nguyên nhân', like in (9)b, is real:

(9)a. If *the police hadn't reacted quickly*, *there* COULD HAVE BEEN a bad accident.

'Nếu *cảnh sát không phản ứng kịp thời* thì CÓ THỂ ĐÃ CÓ một tai nạn thảm khốc.'

(9)b. Because *natural gas is an environmentally clean fuel*, *there* IS great interest on the part of many scientists and policy makers to assess its availability.

'Do *khí thiên nhiên là một thứ nhiên liệu sạch xét từ góc độ môi trường* nên CÓ sự quan tâm lớn từ phía nhiều nhà khoa học và chuyên gia hoạch định chính sách nhằm đánh giá trữ lượng của nó.'

Generally speaking, the dummy subject *there* is used to introduce a piece of new information, resulting in a [−definite] NP encoding the Existent. However, to mark a sequence of events, with an adverbial expressing cohesion (like *first* 'đầu tiên') or addition (like *too* 'cũng') in a *conversation* '*đối thoại thông thường*, in a *conversational narrative* 'chuyện kể', or in *fiction* 'văn học' (Biber et al., 1999: 947), the Existent can be in form of a proper noun or a [+definite] NP, with a demonstrative determiner like *this* 'này, đây' or *these* 'này, đây (plural)'. In other words, with the dummy subject *there* the English NP encoding the Existent in Frame 3b can be either [−definite], like in 8(a-d) and 9(a-c), or [+definite], like in (10)a-c:

(10)a. *There*'S Tom and his wife and his wife's, I think, brother and his wife.

'CÓ Tom và vợ của ông và, tôi nghĩ là, người anh em trai của vợ ông và vợ của anh ta.'

(10)b. *There*'S the scandal of Jenny romping with Victor.

'CÓ tai tiếng là Jenny tằng tịu với Victor.'

(10)c. *There*'S your father <u>on the phone</u>.

'CÓ cha của bạn (đang chờ để nói chuyện) <u>trên điện thoại</u>.'

(10)d. *There* WAS this alien. He had enormous hands and silver eyes, and he was really ugly. 'CÓ người ngoài hành tinh này. Hắn có đôi tay to, mắt màu bạc và trông hắn thì thật là xấu xí.'

Without the dummy subject, the English NP encoding the Existent in Frame 3c can be either [+definite] or [−definite], and the VERB is not '*be*' but a lexical verb of existence/happening, of time, or of space:

> Frame 3c:
>
> *The circumstance* + VERB of existence/ happening + a NP encoding the Existent
>
> 'Khung 3c: <u>Chu cảnh</u> + VI TỪ tồn tại/ xuất hiện + danh ngữ mã hóa Hữu thể'

(11)a. <u>*Below the castle*</u> STRETCHES a vast plain.

'<u>Dưới chân tòa lâu đài</u> TRẢI RỘNG một cánh đồng mênh mông bát ngát.'

(11)b. <u>*Somewhere deep inside her*</u> AROSE a desperate hope that he would embrace her.

'<u>Ở đâu đó trong sâu thẳm lòng cô</u> <u>chợt</u> TRỖI DẬY một niềm hy vọng mong manh rằng anh ấy sẽ ôm ghì lấy *cô*.'

(11)c. <u>*During the enquiry*</u> EMERGED no new evidence.

'<u>Trong suốt quá trình điều tra</u> <u>không</u> TÌM RA chứng cứ mới nào.'

Fronted to link to whatever recently mentioned is the PP encoding the circumstance of space:

(12)a. The room contained ***a table*** and four chairs. <u>***On the table***</u> LAY a newspaper.

'Căn phòng có ***một cái bàn*** và bốn cái ghế.

<u>*Trên bàn*</u> CÓ một tờ báo.'

*<u>Trên bàn</u> NẰM một tờ báo.'

<u>*Trên bàn*</u> NẰM *CHỎNG CHƠ* một tờ báo.'

(12)b. ***The palace*** is heavily guarded because <u>*inside **its** walls*</u> SIT the European leaders.

'***Lâu đài*** được canh phòng cẩn mật bởi vì <u>*bên trong **các bức tường của nó***</u>

LÀ nơi họp bàn của các nhà lãnh đạo Châu Âu.'

*NGỒI các nhà lãnh đạo Châu Âu.'

NGỒI *XÚM XÍT VÒNG TRONG VÒNG NGOÀI* các nhà lãnh đạo Châu Âu.'

The Actor in Frame 1, like in (1)d, should be distinguished from the Existent in Frame 3c, like in (12)b, despite the fact that they are both encoded by a [+definite] NP. It is possible for the circumstance to be *abstract locatives* '*địa điểm trừu tượng*' (Biber et al., 1999, p. 914):

(13)a. _With incorporation and the increased size of the normal establishment_ CAME ABOUT changes which revolutionized office administration.

‘_Cùng với mạng lưới cộng tác và sự phát triển lớn mạnh của cơ sở_ XUẤT HIỆN những thay đổi mang tính chất cách mạng hóa việc quản lý văn phòng.’

(13)b. _In all such relations_ EXISTS a set of mutual obligations.

‘_Trong tất cả các mối quan hệ như vậy_ TỒN TẠI những trách nhiệm qua lại.’

Tag questions ‘câu hỏi đuôi’ make the English existential sentences explicit, with (in Frame 3b) or without (in Frame 3c) the dummy subject *there*:

(14)a. _On the wall_ (*there*) HANGS a mirror, doesn’t *there*?

‘_Trên tường_ (CÓ) TREO một cái gương, phải không?’

(14)b. _On the wall_ (*there*) WAS a Picasso painting, wasn’t *there*?

‘_Trên tường_ CÓ một bức tranh của Picasso, phải không?’

(14)c. _All around_ (*there*) GREW a thick hedge, didn’t *there*?

‘_Xung quanh_ MỌC LÊN một bụi cây rậm rạp, phải không?’

There is very little difference in the meaning of the following trio, with a [−definite] English NP as well as with (in Frame 3a and Frame 3b) or without (in Frame 3c) the dummy subject:

(15)a. *There* OCCURRED a strange incident _the next day_.

(15)b. _On the next day_ *there* OCCURRED a strange incident.

(15)c. _On the next day_ OCCURRED a strange incident.

‘_Ngày hôm sau_ đã XẢY RA một sự việc lạ lùng.’

And just try to distinguish (16)a in Frame 2 from (17)a in Frame 3c:

(16) _Under the desk_ (_the attribute_) IS the woven wastepaper basket (the Carrier).

‘_Dưới gầm bàn_ LÀ cái giỏ rác làm bằng mây tre đan ấy.’

(17)a. _Under the desk_ (_the circumstance_) IS a woven wastepaper basket (the Existent).

‘_Dưới gầm bàn_ CÓ một cái giỏ rác làm bằng mây tre đan.’

Respectively, (17)b-c are in Frame 3b and Frame 3a, both with the dummy subject. Failing to make any change like that, (16) is not an existential sentence but a relational sentence:

(17)b. _Under the desk_ (_the circumstance_) *there* IS a woven wastepaper basket.

‘_Dưới gầm bàn_ CÓ một cái giỏ rác làm bằng mây tre đan.’

(17)c. *There* IS a woven wastepaper basket _under the desk_.

‘CÓ một cái giỏ rác làm bằng mây tre đan _dưới gầm bàn_ (_the circumstance_).’

2.4. The fourth type of English full inverted sentences and their translated versions

The Verbiage ‘Ngôn thể’ — “what is said” (Halliday, 1994, p. 141; To, 2011, pp. 94–95, 153–154), which is encoded by a finite *projected clause* ‘tiểu cú được phóng chiếu’, is directly quoted by a VERB of saying:

say 'nói', *ask* 'hỏi', *answer* 'trả lời', *reply* 'trả lời', *rejoin* 'đáp lại', *shout* 'la hét', *suggest* 'đề nghị', *grunt* 'càu nhàu', etc. The VERB precedes the Sayer 'Phát ngôn thể' (To, 2011, pp. 145–153, 87) — "anything that puts out a signal" (Halliday, 1994, p. 140), which is encoded by a [+definite] NP. The fourth type of full inverted sentences is usually found in written English, as far as *verbal processes* 'quá trình phát ngôn' (Halliday, 1994, p. 140) are concerned:

> Frame 4: *The Verbiage* + VERB of saying + a NP encoding the Sayer
>
> 'Khung 4: *Ngôn thể* + VI TỪ phát ngôn + danh ngữ mã hóa Phát ngôn thể'

(18)a. **'***I've lost my daddy*,**'** SAID/ CRIED/ SOBBED/ WEPT/ WAILED the little boy, <u>shivering in the dark</u>.

'**'***Cháu mới mất cha*,**'** chú bé NÓI/ TỨC *TƯỞI*/ THỔN *THỨC*/ KHÓC *LÓC*/ RÊN *RỈ*, <u>run lẩy lẩy trong bóng tối</u>.'

(18)b. **'***Bill wants to go alone*,**'** SAID Ann, **'***but I'd rather he went with a group*.**'**

'**'***Bill muốn đi một mình*,**'** Ann NÓI, **'***nhưng tôi muốn nó đi với một đoàn tham quan hơn*.**'**'

(18)c. **'***Who's paying*?**'** SHOUTED the fat man in the corner.

'**'***Ai sẽ trả tiền*?**'** gã đàn ông béo tròn ở góc phòng HÉT *LÊN*.'

Full inversion may or may not occur if a NP encoding the Sayer is in form of a *proper noun*:

(19)a. **'***I'm in*,**'** SAID John/ John SAID.

'**'***Tôi tham gia*,**'** John NÓI.'

(19)b.**'***I will*, *sir*,**'** REPLIED Sam/ Sam REPLIED.

'**'***Tôi sẽ làm*, *thưa ngài*,**'** Sam ĐÁP.'

If the proper noun encoding the Sayer is long enough, like in (20)b, or if the Sayer precedes an adverbial post-verb modifier, like in (20)a, so that the principle of end-weight is not flouted, then full inversion occurs:

(20)a. **'***Oh, I'll find him if he's anywhere*,**'** REJOINED Sam <u>with great confidence</u>.

'**'***Ồ, tôi sẽ tìm ra hắn dù hắn ở bất cứ đâu*,**'** Sam ĐÁP LẠI <u>đầy tự tin</u>.'

(20)b. **'***Certainly, sir*,**'** ANSWERED Ms. Williams.

'**'***Chắc chắn rồi, thưa ngài*,**'** cô Williams TRẢ LỜI.'

3. CASES OF VIETNAMESE EQUIVALENTS OF FULL INVERSION IN THE ENGLISH DECLARATIVES

Considered as equivalents of the above-mentioned full inversion in the English declaratives are the following "pure" Vietnamese expressions.

3.1. Vietnamese expressions in Frame 1

> Frame 1: <u>*the circumstance*</u> + VERB of movement + an NP encoding the Actor
>
> 'Khung 1: <u>*chu cảnh*</u> + VI TỪ chuyển động + danh ngữ mã hóa Hành thể'

The Vietnamese "VERB of movement" in Frame 1 is in fact a combination of the main VERB plus another *VERB* of path, direction or terminus, or an *ADVERB* of *Manner* 'Cách thức'. At the end is the Actor encoded by a [+countable], [−definite] NP, with one or more modifiers. It is interesting to notice that the NP encoding the Actor in Frame 1 is [+countable] and [±definite] in English but [+countable] and always [−definite] in Vietnamese:

(21)a. <u>*Từ xa*</u> ĐI *LẠI* mấy cô thiếu nữ.

'<u>*From far away*</u> CAME a number of young girls'

(22)a. <u>*Trên thinh không*</u> BAY *NGANG QUA* từng bầy chim lớn.

'<u>*In the sky*</u> FLEW *THROUGH* each flock of big birds'

(23)a. <u>*Từ biển*</u> THỔI *VỀ* một làn gió ướt lạnh của buổi ban mai.

'<u>Unexpectedly</u> BLOWS *BACK* a cold wet breeze of the morning'

(24)a. <u>*Từ trong phòng*</u> BƯỚC *RA* một người đàn bà trẻ đẹp.

'<u>*From the room*</u> STEPPED *OUT* a beautiful young woman'

(25)a. <u>*Trong kẽ đá*</u> BƠI *LƯỢN LỜ* dăm ba chú cá bóng to bằng bắp chân.

'<u>*In the crevices of the rock*</u> <u>effortlessly</u> SWIM a few chubs as big as one's calf.'

'<u>*In the crevices of the rock*</u> SWIM <u>effortlessly</u> a few chubs as big as one's calf.'

(26)a. <u>*Gần đỉnh núi*</u> TRÔI *LÃNG ĐÃNG* những đám mây trắng như bông.

'<u>*Near the top of the mountain*</u> <u>sparsely</u> FLOATED some clouds as white as cotton.'

'<u>*Near the top of the mountain*</u> FLOATED <u>sparsely</u> some clouds as white as cotton.'

In addition, <u>the optional pre-verb adverb</u> like *bỗng* 'suddenly', *chậm rãi* 'slowly', *đột nhiên* 'unexpectedly', *đồng thời* 'simultaneously', etc. can be added before the Vietnamese main VERB in (21-24)b the post-verb *ADVERB* of which is not of manner, but of path, direction or terminus. This is not applied to (25-26)a because the two sentences already have their own post-verb *ADVERB* of manner:

(21)b. <u>*Từ xa*</u> <u>chậm rãi</u> ĐI *LẠI* mấy cô thiếu nữ.

'<u>*From far away*</u> <u>slowly</u> CAME a number of young girls'

(22)b. <u>*Trên thinh không*</u> <u>đồng thời</u> BAY *NGANG QUA* từng bầy chim lớn.

'<u>*In the sky*</u> <u>simultaneously</u> FLEW *THROUGH* each flock of big birds'

(23)b. <u>*Từ biển*</u> <u>đột nhiên</u> THỔI *VỀ* một làn gió ướt lạnh của buổi ban mai.

'<u>*From the sea*</u> <u>unexpectedly</u> BLOWS *BACK* a cold wet breeze of the morning'

(24)b. <u>*Từ trong phòng*</u> <u>bỗng</u> BƯỚC *RA* một người đàn bà trẻ đẹp.

'*From the room* suddenly STEPPED *OUT* a beautiful young woman'

3.2. Vietnamese expressions in Frame 2

> Frame 2: *The attribute* + copula BE + a NP encoding the Carrier
>
> 'Khung 2: *Thuộc tính* + hệ từ 'LÀ' + danh ngữ mã hóa *Đương thể*'

The main VERB in Frame 2 is consistently hệ từ '*là*' in Vietnamese. Its English equivalent — the copula '*be*', is in fact the auxiliary verb '*be*' in the English finite verb *is stuffed*, *were hanging*, or *was waiting for* the participle of which is fronted. The identical word form of the copula '*be*' and the auxiliary verb '*be*' in English is blurred by hệ từ '*là*' in Vietnamese during the process of translating. This is the only thing that needs to be noticed. The other components found in (6)a'-c' prove that as for full inversion, English and Vietnamese declaratives are almost alike in Frame 2:

(6)a'. Bị NHÉT *dưới gầm bàn* LÀ một cái giỏ rác đan bằng mây tre.

'STUFFED *under the desk* IS a woven wastepaper basket.'

(6)b'. TREO *LỦNG LIỂNG từ các thanh rui dưới mái nhà* LÀ những dây hành

'HANGING *from the rafters* WERE strings of onions.'

(6)c'. Đang ĐỢI bà ấy *sau cái ghế của Phát ngôn viên* LÀ lãnh tụ của phe đối lập, người cũng đã bắt tay bà một cách nồng nhiệt

'WAITING FOR her *behind the Speaker's chair* WAS the leader of the opposition, who also shook her warmly by the hand.'

3.3. Vietnamese expressions in Frame 3c

Similarly, the NP encoding the Existent in Frame 3c is [+countable] and [±definite] in English but [+countable] and [−definite] in Vietnamese. The two Vietnamese main VERBs of existence/ happening are CÒN and CÓ, which can occur without any post-modifier. Other [+monosyllabic] VERBs of existence/ happening are post-modified by either another *VERB* (as in BẮT *ĐẦU* 'start', KẾT *THÚC* 'end', VỌNG *LẠI* 'echo', XUẤT *HIỆN* 'appear', etc.) or an *ADVERB* of manner (as in ĐỨNG *TRƠ TRỌI* 'stand separately', NGỒI *CHỄM CHỆ* 'sit imposingly', NẰM *CÒNG QUEO* 'lie crookedly', ĐU *VẮT VẺO* 'perch and swing', etc.). At the beginning of the following sentences is the PP encoding the circumstance of space.

> Frame 3c: *The circumstance* + VERB of existence/ happening + a NP encoding the Existent
>
> 'Khung 3c: *Chu cảnh* + VI TỪ tồn tại/ xuất hiện + danh ngữ mã hóa Hữu thể'

(27) *Trên tường* CÓ vài bức tranh phong cảnh.

'*There* ARE some landscape paintings *on the wall*.'

(28) *Trong phòng thi* CÒN khá nhiều thí sinh.

'*There* ARE still a lot of candidates *in the exam room*.'

(29)a. *Từ nhà hát* VỌNG *LẠI* những tiếng vỗ tay nồng nhiệt.

'Warm applause ECHOED *from the theater*.'

(30)a. *Từ xa* XUẤT *HIỆN* một đám bụi mù mịt.

'A cloud of dust APPEARED *from afar*.'

(31)a. *Bên đường* ĐỨNG *TRƠ TRỌI* một cây si già.

'*On the side of the road* STANDS <u>separately</u> an old sycamore tree.'

'*On the side of the road* <u>separately</u> STANDS an old sycamore tree.'

(32)a. *Cạnh ông* NGỒI *CHỄM CHỆ* hai người đàn bà to béo đẫy đà.

'*Next to him* SAT <u>imposingly</u> two big fat women.'

'*Next to him* <u>imposingly</u> SAT two big fat women.'

(33)a. *Bên hông chợ* NẰM *CÒNG QUEO* mấy tên ăn mày rách rưới lang thang.

'*On the side of the market* LIED <u>crookedly</u> a few ragged wandering beggars.'

'*On the side of the market* <u>crookedly</u> LIED a few ragged wandering beggars.'

(34)a. *Trên ngọn cây* ĐU *VẮT VẺO* một bọn tiểu quỉ.

'*On top of a tree* PERCHED and SWANG a bunch of little devils.'

The NP encoding the circumstance of time at the beginning of (35-38)a occurs together with *đã* 'already', *đang* 'in progress' và *sẽ* 'will/be going to' — the pre-modifier of the main VERB. The circumstance of time in this case is not in form of a PP, but an NP, in both Vietnamese and English.

(35)a. *Sáng nay* đã XẢY *RA* một cuộc tranh cãi không khoan nhượng giữa hai chúng tôi.

'*This morning* *there* WAS an uncompromising argument between the two of us.'

(36)a. *Tuần tới* sẽ KẾT *THÚC* một năm học dài lê thê và có nhiều biến động lớn.

'A long and tumultuous school year WILL END *next week*.'

(37)a. *Tuần này* đang TIẾN *HÀNH* một đợt kiểm tra chất lượng đột xuất.

'A surprise quality check IS in progress *this week*.'

(38)a. *Ngày mai* sẽ BẮT *ĐẦU* hai khóa học bồi dưỡng dành cho giáo viên môn văn và toán của các trường phổ thông trung học trong toàn tỉnh.

'*Tomorrow* STARTS two refresher courses for teachers of literature and math of high schools in the province.'

4. FINDINGS AND DISCUSSION

4.1. Concerning Frame 4 — typical proof for difference

English inverted sentences in Frame 4 and their translated versions in Vietnamese have almost nothing in common. Of course, there are always appropriate ways to translate English declaratives in form of full inversion; however, their Vietnamese translated versions are not in full inversion at all.

4.2. Concerning Frame 2 — typical proof for similarity

As for full inversion, English and Vietnamese declaratives are almost alike in of Frame 2, with an [+countable] and [±definite] NP encoding the Carrier sentence-finally and respectively the copula '*be*' in English and its Vietnamese equivalent — hệ từ '*là*', playing the role of the main VERB. No other verbs can be found here. Detailed analysis, however, does indicate some difference, however small it is. Encoding

the attribute, the English NP in (2)a-b and the English PP in (2)c have as their equivalents a Vietnamese VP: ĐI *BỘ* 'walk'; ĐI *XUỒNG MÁY* 'go by motorboat'; (không) GIỐNG '(not) be identical'.

(2)a. <u>*A five-minute walk from the beach*</u> IS the hotel.

'ĐI <u>*BỘ năm phút từ bãi biển*</u> LÀ tới khách sạn.'

(2)b. <u>*A short motorboat trip from the harbor of Gatos*</u> IS Paxo.

'ĐI <u>*XUỒNG MÁY một đoạn ngắn từ cảng Gatos*</u> LÀ đến Paxo.'

(2)c. <u>*Unlike any other pupil in my class*</u> IS Johnson.

'<u>Không GIỐNG *bất kỳ học sinh nào trong lớp của tôi*</u> LÀ em Johnson.'

Considered as the two other Vietnamese equivalents of (2)a-b are the following (2)a'-b'. Right at the beginning of two translated versions is still the circumstance, but it is not in form of an NP but a clause. Specifically, the subject of this clause is covert, and its Range Topic of Space 'Khung đề không gian' is a PP: *từ bãi biển* 'from the beach'; *từ cảng Gatos* 'from the harbor of Gatos'. This seems to make known Vietnamese as a topic-prominent language, i.e. speakers have some freedom to choose anything be the initial section — the Topic 'Đề', of its Topic-Comment structure 'cấu trúc Đề-Thuyết'. Such freedom is not allowed in English as a subject-prominent language where there are strict rules concerning either what can encode the subject or what can be fronted in English declaratives:

(2)a'. '<u>*Từ bãi biển*</u> ∅[1] (chỉ) ĐI <u>*BỘ năm phút*</u> LÀ tới khách sạn.'
(2)b'. '<u>*Từ cảng Gatos*</u> ∅ (chỉ) ĐI <u>*XUỒNG MÁY một đoạn ngắn*</u> LÀ đến Paxo.

4.3. Concerning the lexical meaning of the main VERB in inverted sentences

Only the copula '*be*' in English and its Vietnamese equivalent — hệ từ '*là*', in Frame 2, together with verbs *movement in a specific manner*, in Frame 1, and a small set of verbs of *existence* or *happening*, or of *time*, or of *space*, in Frame 3a, Frame 3b or Frame 3c, are accepted in full inversion. Generally speaking, the lexical meaning of the main VERB is of significance in forming full inversion in English and Vietnamese declaratives. This reflects a certain universal in the way native speakers of English and Vietnamese perceive the world.

Being [+monosyllabic], the Vietnamese verbs in Frame 1, as in (25-26)c and those in Frame 3c, as in (31-34)c, can hardly be accepted as grammatically correct in full inversion, even with the well-formed initial circumstance. But this is quite accepted in English, convincingly proved by the syntactically perfect translated English versions of the following unnatural Vietnamese sentences:

(25)c. *<u>*Trong kẽ đá*</u> BƠI dăm ba chú cá bóng to bằng bắp chân.

'<u>*In the crevices of the rock*</u> SWIM a few chubs as big as one's calf.'

(26)c. *<u>*Gần đỉnh núi*</u> TRÔI những đám mây trắng như bông.

'<u>*Near the top of the mountain*</u> FLOATED some clouds as white as cotton.'

(31)c. *<u>*Bên đường*</u> ĐỨNG một cây si già.

'<u>*On the side of the road*</u> STANDS an old sycamore tree.'

(32)c. *<u>*Cạnh ông*</u> NGỒI hai người đàn bà to béo đẫy đà.

'<u>*Next to him*</u> SAT two big fat women.'

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[1] The symbol "∅" stands for "the covert subject". Please read "To, M. T. (2014). The English adverbial of time vs. the Vietnamese range topic of time. *International Journal of Language and Linguistics*, *2*(6), 348–355. http://doi.org/10.11648/j.ijll.20140206.12" for further information on the adverbials sentence-ininially.

(33)c. **Bên hông chợ* NẰM mấy tên ăn mày rách rưới lang thang.

'*On the side of the market* LIED a few ragged wandering beggars.'

(34)c. **Trên ngọn cây* ĐU một bọn tiểu quỉ.

'*On top of a tree* SWANG a bunch of little devils.'

That is why an *ADVERB* of manner, or even more than one, is automatically added without any fear for the distorted meaning of the Vietnamese sentences in question. Repeated right here for re-consideration are (12)a-b and their grammatically correct Vietnamese equivalents:

(12)a. The room contained ***a table*** and four chairs. *On **the table*** LAY a newspaper.

'Căn phòng có ***một cái bàn*** và bốn cái ghế.

Trên **bàn* NẰM một tờ báo.'

*Trên **bàn*** NẰM *CHỎNG CHƠ* một tờ báo.'

(12)b. ***The palace*** is heavily guarded because *inside **its walls*** SIT the European leaders.

'***Lâu đài*** được canh phòng cẩn mật bởi vì *bên trong **các bức tường của nó***

**NGỒI các nhà lãnh đạo Châu Âu.'

NGỒI *XÚM XÍT VÒNG TRONG VÒNG NGOÀI* các nhà lãnh đạo Châu Âu.'

Also repeated right here is the English inverted sentence named (1)b and its two well-formed Vietnamese equivalents in which another *VERB* is inserted just behind the main VERB, to lengthen the verb group:

(1)b. *Round the corner* IS now WALKING a large policeman.

'**Vòng theo góc phố* đang ĐI một viên cảnh sát to cao vạm vỡ.'

'*Vòng theo góc phố* đang ĐI *TUẦN* một viên cảnh sát to cao vạm vỡ.'

'*Vòng theo góc phố* đang TUẦN *HÀNH* một viên cảnh sát to cao vạm vỡ.'

The restriction of the above-mentioned [+monosyllabic] verbs does not apply to CÓ — the Vietnamese equivalent of '*be*' in (12)c in Frame 3c with the fronted circumstance of space. In other words, despite the fact that they are [+monosyllabic], CÓ and CÒN — the two Vietnamese main VERBs of existence/ happening, do not require any adverbial post-verb modifier, as found in the translated versions of the above-mentioned (7)e-f. Also repeated right here is (12)c for re-consideration:

(12)c. Alan walked along Elmdate Avenue and found ***number sixteen*** without difficulty.

*Outside **the house*** WAS a furniture van.

'Alan đi bộ dọc theo Đại lộ Elmdate và tìm ra ***căn nhà số 16*** không khó khăn gì.

*Bên ngoài **căn nhà ấy*** (*the circumstance*) CÓ một chiếc xe chở hàng nội thất.'

If '*be*' in (12)c is considered as the copula then another translated version emerges. Again, fronted to link to whatever recently mentioned, the PP encoding the attribute of (12)c in Frame 2 may have a different equivalent in Vietnamese, which is LÀ:

'Alan đi bộ dọc theo Đại lộ Elmdate và tìm ra ***căn nhà số 16*** không khó khăn gì.

*Bên ngoài **căn nhà ấy*** (*the attribute*) LÀ một chiếc xe chở hàng nội thất.'

4.4. Concerning the circumstance or the attribute in inverted sentences

Full inversion is not marked in Vietnamese — an *isolating* 'đơn lập', *non-inflecting* 'không biến hình' and *topic-prominent* 'thiên chủ đề' language. The sentence initial position is the privilege for either the circumstance, as in Frame 3b and 3c, or the attribute, as in Frame 2, of the above-mentioned Vietnamese equivalents. This is in fact the position of *the Range Topic* 'Khung đề' of time, space, condition or cause in the topic-comment structure of Vietnamese declaratives. Full inversion is marked in English — an *inflecting* 'biến hình' and *subject-prominent* 'thiên chủ ngữ' language. The sentence initial position is the privilege for the subject, even the dummy subject, in English declaratives. That is why full inversion in Frame 3a and Frame 3b is very common in this natural language. On the contrary, there is no dummy subject in Vietnamese, and that is why full inversion with the Existential only occurs in Frame 3c here. Accordingly, the change from a Vietnamese source declarative in Frame 3c to its English translated version either in Frame 3a or in Frame 3b is recommended; highly recommended is in Frame 3a.

4.5. Concerning the NP encoding the Actor, the Carrier, and the Existential

Respectively mentioned in **3.**1. and **3.**2., the NP encoding the Actor in Frame 1 and the Existent in Frame 3c is [+countable] and [±definite] in English but [+countable] and always [−definite] in Vietnamese. Unlike English, Vietnamese only allows the [−definite] NP "with a unit noun as its head noun" to encode the semantic role of the Actor in the sentences in Frame 1 (Cao, X. H. & Nguyen, V. T., 2000, p.167). Thus, just add *một* 'a(n)', *vài* 'some', *dăm ba* 'a few', or *mấy* 'a number of' before *con* — the Vietnamese *classifier* 'loại từ', to make the definite NP *con cá voi* 'the whale' indefinite. Then the translated version of (1)d is fine. Repeated right here is (1)d and its well-formed Vietnamese equivalent, which indicates the fact that the English definite article *the* has been translated as if it were the English indefinite article *a(n)*:

(1)d. <u>*Out*</u> <u>*to the open sea*</u> SWAM the fully recovered whale.

  '<u>*Ra ngoài biển khơi*</u> BƠI ĐI một con cá voi đã hoàn toàn bình phục.'

Generally speaking, a [−definite] NP conveys the new information and usually occurs towards the end of the sentence. With the exception of a [+countable] and [+definite] NP encoding the Carrier in Frame 2, Vietnamese more strictly obeys the structure of information: the given first; the new later. In the two natural languages in question, the [+definite] NP encoding the Carrier in Frame 2 can be in its minimal form of a proper noun, as in (2)b-c, but not in form of a *pronoun* 'đại từ'. In brief, a [−definite] NP is preferred, and a proper noun as the minimal head of a [+definite] NP is accepted in limited cases. A pronoun does not fit in full inversion, probably because it is too short to avoid flouting the principle of end-weight, especially when it is hard to obey the structure of information all the time. In brief, it is highly recommended to do further research on the interplay between full inversion and the structure of information in English and Vietnamese declaratives, not to mention the [±definite] NP in the two observable phenomena, which points out a research gap for this paper to fill in.

4.6. Concerning the post-verb *ADVERB* of manner in Vietnamese

The Vietnamese main VERB in both Frame 1 and Frame 3c can be omitted without changing the meaning of the following sentences. In other words, the Vietnamese post-verb *ADVERB* of manner definitely replaces the combination of the Vietnamese main VERB and its post-verb *ADVERB* of manner. This indicates that the presence of the *ADVERB* of manner is even more important than that of the main VERB, as far as full inversion in Vietnamese declaratives in Frame 1 and Frame 3c are concerned. Such a phenomenon does not happen in the English translated versions of these sentences where (i) the occurrence of the main VERB is a must, and (ii) the adverbial modifiers can be either post-verb or pre-verb:

(25)b. <u>*Trong kẽ đá*</u> LƯỢN LỜ dăm ba chú cá bóng to bằng bắp chân.

'<u>*In the crevices of the rock*</u> SWIM <u>effortlessly</u> a few chubs as big as one's calf.'

'<u>*In the crevices of the rock*</u> <u>effortlessly</u> SWIM a few chubs as big as one's calf.'

(26)b. *Gần đỉnh núi LÃNG ĐÃNG* những đám mây trắng như bông.

'*Near the top of the mountain* FLOATED <u>sparsely</u> some clouds as white as cotton.'

'*Near the top of the mountain* <u>sparsely</u> FLOATED some clouds as white as cotton.'

(31)b. *Bên đường TRƠ TRỌI* một cây si già.

'*On the side of the road* STANDS <u>separately</u> an old sycamore tree.'

'*On the side of the road* <u>separately</u> STANDS an old sycamore tree.'

(32)b. *Cạnh ông CHỄM CHỆ* hai người đàn bà to béo đẫy đà.

'*Next to him* SAT <u>imposingly</u> two big fat women.'

'*Next to him* <u>imposingly</u> SAT two big fat women.'

(33)b. *Bên hông chợ CÒNG QUEO* mấy tên ăn mày rách rưới lang thang.

'*On the side of the market* LIED <u>crookedly</u> a few ragged wandering beggars.'

'*On the side of the market* <u>crookedly</u> LIED a few ragged wandering beggars.'

(34)b. *Trên ngọn cây VẮT VẺO* một bọn tiểu quỉ.

'*On top of a tree* PERCHED a bunch of little devils.'

More examples are given below to support the fact that the main VERB in the Vietnamese declaratives in Frame 3c can be omitted. The Vietnamese *ADVERB* of manner is in fact an *onomatopoeia* 'từ tượng thanh' — a word that mimics sound, or a **phenomime** 'từ tượng hình' — a word that mimics physical form or motion. It seems that the Vietnamese *ADVERB* of manner successfully plays the role of the main VERB in this case:

(39)a. *Trên sân thượng LÁC ĐÁC* vài chậu kiểng.

'*On the terrace* SCATTERED a few potted plants.'

(40)a. *Trong gian nhà thờ tổ NGỘI NGẠT* mùi khói và trầm hương.

'*In the ancestral church room* SUFFOCATED the smell of smoke and incense.'

(41)a. *Trong phòng cưới THOANG THOẢNG* mùi nước hoa và phấn.

'*In the wedding room* <u>faintly</u> SCENTED with the odor of perfume and powder.'

(42)a. *Bên kia ngọn đồi ÙNG ỤC* một tràng tiểu liên.

'*On the other side of the hill* RUMBLED a series of submachine guns.'

(43)a. *Trên đường* <u>đã</u> *THƯA THỚT* bóng người.

'The road WAS <u>nearly</u> DESERTED.'

(44)a. *Ở Hàng Đào* <u>bỗng</u> *RẸT RẸT* mấy tiếng súng.

'*In Hang Dao* <u>suddenly</u> RATTLED a few gunshots.'

More interesting is that it is accepted even for <u>*the circumstance*</u> in Frame 3c to be omitted:

(39)b. *LÁC ĐÁC* vài chậu kiểng.

'SCATTERED a few potted plants'

(40)b. *NGỘI NGẠT* mùi khói và trầm hương.

'SUFFOCATED the smell of smoke and incense'

(41)b. *THOANG THOẢNG* mùi nước hoa và phấn.

'<u>Faintly</u> SCENTED with the odor of perfume and powder'

(42)b. *ÙNG ỤC* một tràng tiểu liên.

'RUMBLED a series of submachine guns.'

   4.7. Concerning the so-called "optional" pre-verb adverb in Vietnamese declaratives

Right before the main VERB of (21-24)c and (43-44)b is the so-called "optional" adverb. It is noticed that the pre-verb adverb may be or may not be [+manner] and/ or [+monosyllabic].

(21)c. <u>Chậm rãi</u> ĐI *LẠI* mấy cô thiếu nữ.

'<u>Slowly</u> CAME a number of young girls'

(22)c. <u>Đồng thời</u> BAY *NGANG QUA* từng bầy chim lớn.

'<u>Simultaneously</u> FLEW *THROUGH* each flock of big birds'

(23)c. <u>Đột nhiên</u> THỔI *VỀ* một làn gió ướt lạnh của buổi ban mai.

'<u>Unexpectedly</u> BLOWS *BACK* a cold wet breeze of the morning'

(24)c. <u>Bỗng</u> BƯỚC *RA* một người đàn bà trẻ đẹp.

'<u>Suddenly</u> STEPPED *OUT* a beautiful young woman'

(43)b. <u>Đã</u> *THƯA THỚT* bóng người.

'WAS <u>nearly</u> DESERTED'

(44)b. <u>Bỗng</u> *RẸT RẸT* mấy tiếng súng.

'<u>Suddenly</u> RATTLED a few gunshots.'

Interestingly, (21-24)c are Vietnamese well-formed sentences but (21-24)d are not. This makes us consider with care the fact that the Vietnamese pre-verb adverb may not be optional at all. Again, not accepted as well-formed sentences in Vietnamese are (21-24)d while (43-44)c are grammatically correct. Once more, only when the *ADVERB* of manner is in fact an *onomatopoeia* or a **phenomime** can it occur sentence-initially or at least quite near to the beginning of the sentence; this is proved by both (39-42)b and (43-44)c:

(21)d. *ĐI *LẠI* mấy cô thiếu nữ.

'CAME a number of young girls'

(22)d. *BAY *NGANG QUA* từng bầy chim lớn.

'FLEW *THROUGH* each flock of big birds'

(23)d. *THỔI *VỀ* một làn gió ướt lạnh của buổi ban mai.

'BLOWS *BACK* a cold wet breeze of the morning'

(24)d. *BƯỚC *RA* một người đàn bà trẻ đẹp.

'STEPPED *OUT* a beautiful young woman'

(43)c. *THƯA THỚT* bóng người.

'WAS <u>nearly</u> DESERTED'

(44)c. *RẸT RẸT* mấy tiếng súng.

'RATTLED a few gunshots'

4.8. Concerning the less flexible positions of Vietnamese adverbials in comparison to their English equivalents

It seems that the flexibility of the positions of English adverbs of manner has been confirmed without the researchers' intention, as clearly proved by (25-26)a, (31-34)b, and (31-34)c. As a [+monosyllabic] adverb, *bỗng* 'suddenly', as in (24)d, is not allowed to follow the verb group BƯỚC *RA* 'STEPPED *OUT*' because this tends to violate the principle of end-weight. The other post-verb adverbs of manner in (21-23)d are hardly accepted because, as asserted by Nguyen & Dao (1986, p. 250):
Native speakers of Vietnamese always consciously consider choosing … a necessary and most suitable variant for each specific situation in order to **ensure the harmony of the tone of speech** and thus can**not** be considered as **an arbitrary variable** at all.

(21)d. ?<u>*Từ xa*</u> ĐI *LẠI* <u>chậm rãi</u> mấy cô thiếu nữ.

'<u>*From far away*</u> CAME <u>slowly</u> a number of young girls.'

(22)d. ?<u>*Trên thinh không*</u> BAY *NGANG QUA* <u>đồng thời</u> từng bầy chim lớn.

'<u>*In the sky*</u> FLEW *THROUGH* <u>simultaneously</u> each flock of big birds.'

(23)d. ?<u>*Từ biển*</u> THỔI *VỀ* <u>đột nhiên</u> một làn gió ướt lạnh của buổi ban mai.

'<u>*From the sea*</u> BLOWS *BACK* <u>unexpectedly</u> a cold wet breeze of the morning.'

(24)d. *<u>*Từ trong phòng*</u> BƯỚC *RA* <u>bỗng</u> một người đàn bà trẻ đẹp.

'<u>*From the room*</u> STEPPED *OUT* <u>suddenly</u> a beautiful young woman.'

4.9. Concerning the English main VERB in full inversion and its Vietnamese equivalents

Adequate attention should be paid to the combination of a Vietnamese main VERB and its adverbials, either pre-verb or post-verb, as an appropriate equivalent of the English main VERB in full inversion. In the repeated 8(b), for example, the equivalent of STANDS 'ĐỨNG *CHƠ VƠ*' requires the automatic insertion of an *ADVERB* of manner. In 8(c), the equivalent of LOOMED 'lờ mờ HIỆN *RA*' consists of another *VERB* after and simultaneously <u>an adverb of manner</u> before HIỆN, which is the main VERB in this case. This is because word-formations in the two natural language are quite different. Thus, translating or interpreting word-by-word definitely fails, either from or to Vietnamese:
(8)b. <u>*On top of the hill*</u> *there* STANDS an ancient church.

*'<u>*Trên đỉnh đồi*</u> ĐỨNG một ngôi nhà thờ cổ.'

'<u>*Trên đỉnh đồi*</u> ĐỨNG *CHƠ VƠ* một ngôi nhà thờ cổ.'

(8)c. <u>*Out of the mist*</u> *there* LOOMED a strange shape.

'<u>*Từ trong làn sương mỏng*</u> lờ mờ HIỆN *RA* một dáng hình kỳ lạ.'

In the repeated 34(a), the Vietnamese *ADVERB* of manner *VẮT VẺO* is lexically equivalent to PERCHED — one of the two English main verbs. This raises the question of changing the *part of speech* 'từ loại' during the process of translating or interpreting.

(34)a. <u>*Trên ngọn cây*</u> ĐU *VẮT VẺO* một bọn tiểu quỉ.

'<u>*On top of a tree*</u> PERCHED and SWANG a bunch of little devils.'

    4.10. Concerning the shift from one frame to another during translating or interpreting

Below are some above-mentioned English inverted sentences their well-formed Vietnamese equivalents of which, either newly-born or just repeated, all prove frame shifting in common in full inversion translation:

- The source Frame 1 to the target Frame 2:

(1)a. <u>*In the high heavens*</u> RODE a veiled moon, magnified by the mist of an early spring day.

'RONG RUỔI <u>*trên trời cao*</u> LÀ một chị Hằng có choàng voan trắng,

được phóng đại bởi cái làn sương mờ của một buổi sớm mùa xuân.'

(1)b. <u>*Round the corner*</u> IS <u>now</u> WALKING a large policeman.

 'Đang ĐI <u>*vòng theo góc phố*</u> LÀ một viên cảnh sát to cao vạm vỡ.'

- The source Frame 3a to the target Frame 3c:

(7)b. *There* WAS nobody <u>*home*</u>.

 '<u>*Lúc ấy*</u> không CÓ ai <u>*ở nhà*</u>.'

- The source Frame 3a to the target Frame 2:

(7)g. *There* FOLLOWED an uncomfortable silence.

 '<u>*Kế tiếp*</u>/ <u>*Tiếp theo*</u> LÀ một sự im lặng không mấy dễ chịu.'

5. CONCLUSION

Full inversion is applied more often in English than in Vietnamese, as clarified by the former's six frames and the latter's three frames. English full inversion sentences and their Vietnamese equivalents are more different than similar. It is still possible to find out the details of the difference even in the same or nearly the same cases:

- The NP encoding the Actor in Frame 1 is [+countable] and [±definite] in English but [+countable] and always [−definite] in Vietnamese;

- Although they both occurs frequently in Frame 3c, the Vietnamese post-verb *ADVERB* of manner and the so-called "optional" pre-verb adverb are much more complicated than their English equivalents.

A number of universals may be identified, as far as full inversion is concerned:

- Both English and Vietnamese declaratives have their ways, similar or not, to express the meanings conveyed by full inversion;

- The lexical meaning of the main VERB is of significance in forming full inversion in English declaratives and their Vietnamese equivalents;

- The relationship between the main VERB and its adverbs, either pre-verb or post-verb, both in English full inversion sentences and in their Vietnamese equivalents, is really complicated;

- The two natural languages deal with the [±definite] NP not exactly the same, and this reflects some difference in the ways their native speakers perceive the world;

- Vietnamese obeys the principle of end-weight more strictly than English; as for the structure of information in English and Vietnamese declaratives, further research is highly recommended.

It is not easy to combine the structural and functional approaches in one and the same attempt to understand both the internal structure and the propositional meaning of a sentence verbalized in English or Vietnamese. For example, it is not quite clear whether (1)e-f are in Frame 1 or in Frame 3c, or they are right at the border of the two frames. And (1)g-i are not in Frame 1, with the Actor, but definitely in Frame 3c, with the Existent. This may sound crazy at the first glance, but at least to the researchers, trying to avoid separating semantics from syntax in some way while teaching and learning English is a short cut to accomplish something as quickly as possible in second language acquisition.

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PERCEPTION OF ENVIRONMENTAL LAW AND EWOW INTENTION IN RESIDENTIAL COMMUNITY GROUPS

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Abstract. Environmental protection laws are the rights, obligations, and responsibilities of all agencies, organizations, communities, households, and individuals in environmental protection activities. Environmental protection laws have been published for a long time but there are many issues related to the practical application and cognitive thinking of the community that still have gaps to approach to have a better understanding of people's awareness about environmental protection laws in daily life. This study surveyed the community's awareness of electronic word of mouth on environmental protection laws. Factors with measure environmental law knowledge, attitudes, cognitive behavior control, and electronic word-of-mouth intent are applied as research models. Survey contents in the form of questionnaires, and online survey design on the social networking platform of the community group in Ho Chi Minh City. This study uses correlation analysis to determine the association of measurement factors, and statistical tests to examine demographic characteristics, and group differences in electronic word-of-mouth intent. The results of the study show that there are gaps in electronic word of mouth, and correlations of statistical significance in promoting electronic word-of-mouth intent. These imply that policy managers should consider promoting people's awareness of protecting the environment through electronic word of mouth.

Keywords. Environmental law, eWOM, Perception, Behaviour, intention

1. INTRODUCTION

Environmental pollution is an environmental phenomenon in nature that is dirty. When the environment is polluted, the chemical, biological and physical properties of the environment change, causing dangerous consequences for the health of humans and other organisms (Landrigan et al., 2002). The main cause of this problem is due to the daily life activities of people, production, and business activities around their area (Tien et al., 2019). Stemming from many practical issues, the Law on Environmental Protection has been promulgated since 1993. This systematic law document formulates legal regulations to address the relationship arising between related subjects in the living environment or affect elements of the natural environment. The relationships arising in the process of state management of the environment include relationships arising from environmental impact assessment activities; from the inspection of the implementation of environmental laws and policies to the relationship arising in the handling of violations of environmental laws (Pope et al., 2004); Relationships arising between individuals and organizations on compensation for damages between the parties due to acts that cause environmental pollution, environmental degradation, environmental incidents; relationships arising in the process of cooperation to overcome the consequences caused by environmental pollution, environmental degradation, environmental incidents; relationships arising in the settlement of environmental disputes; the relationship arises in coordinating investment in environmental protection works (Child & Tsai, 2005).

The law on environmental protection has shown some positive games on the living environment. (Peng et al., 2020). First, regulate the codes of conduct that humans must implement when exploiting and using elements of the environment. The environment is both a living condition and an object of human daily impact. Human impact greatly transforms the status quo of the environment in a negative way. The law is a tool to regulate the behaviors of social members that have a great effect on directing the process of exploitation and use of the environment. People use and explore the environment according to certain standards to limit the pollution caused (Hammel et al., 2002). Secondly, the regulation of criminal,

economic, and administrative sanctions forces individuals and organizations to fully implement the requirements of the law on the exploitation and use of elements of the environment. The introduction of norms to guide the behavior of exploiting and using the environment effectively, directing benefits to people in life (Beyer, 2006).

However, not in all situations are the standards in this law voluntarily adhered to and observed by humans. There are many reports of violations occurring frequently for those habitat pollution in residential areas in which it is necessary to consider between environmental impact factors in life and environmental protection requirements that are increasingly concerned (Ijigah et al., 2013). In matters of enforcing environmental protection laws, managers have implemented many ways of propagating to the people but need a better understanding of electronic oral intent behavior on environmental protection laws. Electronic word of mouth is a social information transmission tool that strongly influences human cognitive behavior ((Chu & Kim, 2011); (Saleem & Ellahi, 2017)); in an internet-connected environment, social networks have evolved and have formed eWOM tools that market and share experiences of proven effective individuals (Vianna et al., 2016). This study focuses on measuring the elements of environmental protection law knowledge, environmental protection law awareness attitudes, cognitive behavior control and electronic oral intentions of environmental protection laws in residential areas.

2. LITERATURE REVIEW

This study focuses on measuring awareness of environmental protection laws to the intention of electronic word-of-mouth environmental protection laws in a positive way. The applied theories in this study information acceptance model (IAM) cells developed from the acceptance or rejection of information depending on the individual's intentions, beliefs, and behavior (Erkan & Evans, 2016). The research expanded IAM to describe intent to use and usefulness clearly in terms of explaining the apparent usefulness and theoretical intent to use and influential social processes that refer to the assessment of the recipient's concerns and the response to the information obtained (Venkatesh & Davis, 2000). People strongly believe in the usefulness of the information they decide to share, providing social community awareness information (Acquisti & Gross, 2006). Meanwhile, the theory of reason active (TRA) and IAM provide useful evidence of behavioral intent in receiving information but have limited scope of influence during the application process, as well as have stated that IAM handles information quality and source reliability that affects the reception of information (Erkan & Evans, 2016). The factors in IAM applied in this study are the quality of information, the reliability of the information, the usefulness of information, and the application of information.

Rational action theory holds that the intention of a prefix of behavior is influenced by subjective attitudes and norms. The subjective standard factor is a concept that involves individuals evaluating people around them when they perform the behavior. Factors applying TRA to research such as attitudes toward environmental protection law information, subjective standards for environmental protection law information and electronic word-of-mouth intentions on the online community (Fishbein & Ajzen, 1977). As such, this study applies integrated IAM and TRA theories to approach the characteristics of receiving knowledge of the law to protect the school and influence the behavioral intentions of social network users. This study looks at social relationships that focus on the perceptions of social network users, and eWOMs who are looking for information shared on online platforms that lead to a positive acceptance of information. The study measures factors affecting electronic oral intentions such as knowledge of environmental protection law, attitudes to environmental protection law awareness, cognitive behavior control and electronic oral intentions of environmental protection laws.

Perception of understanding the content of environmental protection law information

Awareness of the content of environmental protection law information helps the individual to have positive or negative absorption but useful stickiness is perceived as a core structure of IAM. Insights into the mutual causal relationship between behavioral beliefs i.e., perceived usefulness and ease of use are perceived, attitudes, and intentions formed, and given that human behavior can be explained by belief. Experimental studies on various technological applications demonstrate the predictive power of behavioral beliefs, and especially perceptions of usefulness (Blut et al., 2016). Research indicates that awareness of usefulness - also known as awareness of the effect brought to oneself refers to the extent to which a person believes that using specific technology will enhance their work performance (Ovčjak et al., 2015).

H1. Information content awareness positively affects the usefulness of information

Reliability of environmental protection law information

The reliability of the information determines the extent to which the recipient of this information learns and accepts the information received: if the information received is considered reliable, the recipient will have more confidence to use it for the decision to act (Sussman & Siegal, 2003). Considering that the exchange of information online occurs between people who may not have a pre-existing relationship, it is essential to consider how the reliability of the information affects consumer behavior. Several studies have looked at the relationship between eWOM beliefs and intentions (Zainal et al., 2017). The typical report, which surveyed 302 students from South Korea and found that eWOM's credibility had a significant positive impact on the intent to purchase commercial services (Koo, 2016)

H2. The reliability of environmental protection law information has a positive effect on eWOM intent

Attitude to information

Attitudes in general are a constant appreciation of people, objects and goods (Blackwell et al., 2006). Attitudes also allow individuals to repeatedly react well or badly to certain situations consistently through education (Best et al., 2007). This involves evaluating favorable or unfavorable, emotions, and behavioral trends (Kotler & Keller, 2008)

Furthermore, the theory of planning behavior (TPB) explains that attitudes toward behavior are the extent to which an individual has a positive or negative assessment of the behavior in question. Therefore, it can be said that when the attitude is more beneficial to the behavior, the intention to carry out one's behavior will be stronger (Ajzen, 1991) .

Some studies have also shown that eWom plays a partially dominant role in influencing and developing an individual's attitudes and behavioral intentions. eWOM the role of cognitive personalization in online consumer reviews (Cantallops & Salvi, 2014). For the exchange of information, the customer who obtains the information for the first time will develop a positive or negative attitude that can never be changed even if the individual receives the information afterward (Smith & Vogt, 1995). Another research group found that attitudes toward information significantly influenced the intentions of individuals. (Chih et al., 2013). In the study game of social influence on positive information, the results of the 104 surveys in Hong Kong found that positive attitudes toward positive information had a positive effect on the intention to buy the product. (Lee et al., 2011). Therefore, based on the discussion above, it is possible to hypothesize that:

H3a. The attitude of information about environmental protection laws has a positive impact on the usefulness of the information

H3 b. Information attitudes of environmental protection laws have a positive impact on eWOM Intention

Subjective norms

The subjective norm is the perception of social pressure to perform or not perform a certain behavior. There is also another component to subject norms which is normative belief. Standard belief is an individual's perception of the views associated with their actions toward behavior generated by a person that is thought to be important to that individual. A person's view of a given situation tends to be influenced by the cognitive opinions of other important people (Zhao et al., 2016).

Besides, there are published research results that subjective norms derived from social influences are important factors for determining a user's intent toward the adoption and use of technology (Chan, 2004). Several other studies have also shown that subjective norms influence intent. Subjective norms are also thought to have a significant effect on user engagement in the online community. eWOM intentions are influenced by ordinary colleagues, acquaintances, and generated relatives. On the other hand, external influences are generated by media, impersonation information and fake expert opinions (Zhou, 2011).

H4a. The subject norms of environmental protection laws have a positive impact on eWOM intention

eWOM intentions

eWOM intent refers to an individual's willingness to provide information in the form of eWOM (Ismagilova et al., 2017). Researchers have found that people who engage in eWOM interactions have the following motivations: Perceived self-improvement (Cramer et al., 2016), letting go of emotions (Syahid et al., 2020), It brings some social benefit (Pihlaja et al., 2017), several research have reported findings on the relationship between intention to engage in eWOM communication

eWOM also provides online searchers with broader and more diverse sources of positive and negative information than traditional WOM (Husnain & Toor, 2017). Moreover, consumers have a higher level of

interest in the specific topic if they collect information themselves through online discussion than internet sources unverified. In terms of influence, claims that eWOM has a greater influence on users' attitudes and views of a brand than other influential sources of information (Godes & Mayzlin, 2004).

From the results of the analysis theory of TRA, IAM and related studies on eWOM intent, the research model is proposed during the research process.
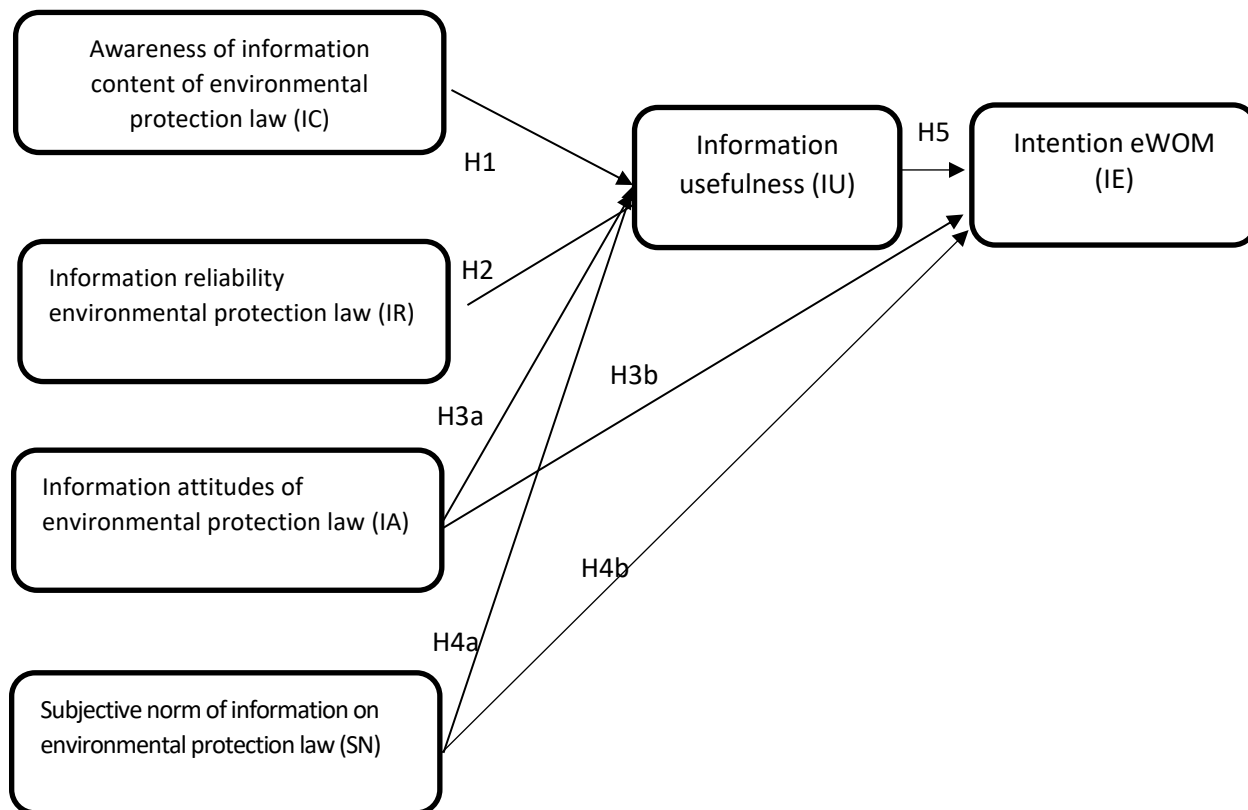

Figure 1. Conceptual framework

Source's author, 2022

3. METHODOLOGY

Sample size and data collection

This study collected information using online survey questionnaires with users of social networking groups facebook, zalo of residential areas in Ho Chi Minh City. HCM. The measurement used in the Likert 5-level survey (1: completely disagrees; 2: disagrees; 3: disagrees; 3: disagrees; 4: agrees; 5: fully agrees) to design the main questionnaire in the research model. In addition, the study has a few questions aimed at exploiting demographic information, using an identity scale.

The minimum sample size is proportional to the number of observations per analytical variable of 5:1 or 10:1, some researchers argue that this ratio should be 20:1 (Hair Jr et al., 2017). The "number of observations" is simply understood as the number of valid survey votes required; "measurement variables" is a measurement question in the survey. In the survey, there were 18 questions using a 5-degree Likert scale (corresponding to 18 observational variables of different factors). Applying a 5:1 ratio, the minimum sample size would be $18 \times 5 = 90$ minimum samples for a study, but the group study process collected 200 samples in the 6-factor analysis model, 18 observational variables. Sample population approach: The team will submit the survey through Facebook, Zalo conducts the survey and asks for answers via a Google drive link. The strategy of selecting samples according to the method of selecting non-probability sampling and convenience sampling.

4. DATA ANALYSIS

Test the reliability of the scale: Cronbach's alpha is the most common approach to reliability testing. Cronbach's alpha reflects the correlation level in the answers. Cronbach's Alpha coefficient is at least 0.7 and the number is largely calibrated at 0.5 (Hair Jr et al., 2017).

Determinant Factor Analysis (CFA) reviews a more accurate assessment of monodirectionality and directly provides quantitative evidence of external and internal consistency between a set of structural indicators (Anderson & Gerbing, 1982). The aforementioned internal consistency is reflected by the convergence value (average aggregate reliability and variance extraction); and external consistency is reflected by the distinguishing value. This study adopted Anderson's two-step approach to conducting affirmative factor analysis (CFA) and further confirming monodirectionality through convergent and differentiated validity test results.(Anderson & Gerbing, 1988). Rating indicators such as Chi-square/df; GFI; AGFI; CFI; RMSEA. The appropriate required level obtains the Chi-square/df value < 3; GFI, AGFI, CFI from 0.9 to 1: RMSEA < 0.08 is considered a good fit model with the survey dataset.

Linear structural model testing (SEM) is an approach to measuring the complex relationship between measurement variables. SEM emphasizes prediction in estimating structured statistical models designed to provide the information that underlies the development of implications in the governance process (Hair Jr et al., 2017).

5. RESEARCH RESULTS AND DISCUSSION

Demographic characteristics

Table 1. Results of frequency analysis of demographics

Character	Content	Frequency	Percent
Gender	Male	115	27.4
	Female	305	72.6
Age	18 - 25	10	2.4
	26 -30	43	10.2
	31 - 35	255	60.7
	36 -40	51	12.1
	41 - 45	34	8.1
	Trên 45	27	6.4
Education	Bachelor's degree	160	38.1
	Master's degree	102	24.3
	Doctor's degree	41	9.8
	Other	24	5.7
	College degree	93	22.1
Income	Less than 7 million VND	96	22.9
	Over 30 million VND	29	6.9
	From 10 - 30 million VND	193	46.0
	From 7 - less than 10 million	102	24.3

Table 1 showed that, for gender characteristics, the percentage of participants who responded as female accounted for 72.6%, and the proportion of men accounted for 27.4%. The age of the participants who answered the most was 31-35, accounting for 60.7%, the 26-30 age groups accounted for 10.2%, the ages of 36-45 accounted for 12.1%, the remaining ages were less than 8%. Respondents in this survey had Bachelor's degrees of 38.1%, master's degrees 24.3%, College degrees 22.1, doctoral degrees 9.8% and

other 5.7%. Characteristics of income level, respondents said that the income level from 10-30 million VND accounted for 46%, those earning less than 7 million accounted for 22.9%, the respondents had an income of 7-10 million 24.3% and those earning over 30 million VND accounted for 6.9%.

In general, the demographic characteristics of this study have a higher proportion of women than men, the age ranges from 26 to 45 years old, the majority of education levels are mainly colleges, universities and masters, the income level is in the range of 10-30 million VND.

CFA analysis and model conformity test

In this study, we use the method squares structural equation model (Hair Jr et al., 2017). The results of the analysis are presented in table 2 below

Table 2. Reliability and validity of measurement items

Symbol	Items	Mean	SD	Loadings	CR	AVE
IC	**Nhateful** information **about environmental protection law**	**3.51**	**1.17**		**0.89**	**0.75**
IC1	Information posted about environmental pollution in residential areas that affect human health	3.56	1.27	.766		
IC2	The information received by you for comments to protect the living environment	3.45	1.33	.795		
IC3	The images of pollution spreading online are different from the reality in your residential area	3.55	1.25	.848		
IR	**Level of information reliability**	**3.97**	**1.01**		**0.90**	**0.76**
IR1	Information about environmental protection laws shared in community groups is often positive.	3.82	1.19	.776		
IR2	Information about environmental protection laws shared in the community group reflects the living environment in the area	4.03	1.07	.815		
IR3	Information about environmental protection laws is shared in the community group for the purpose of wishing people to better protect the living environment	4.07	1.05	.856		
IA	**Attitude to information about environmental protection laws**	**3.64**	**0.98**		**0.78**	**0.55**
IA1	Sharing information about environmental protection laws is a positive thing to do.	3.69	1.06	.820		
IA2	Sharing information about environmental protection laws will help people understand and protect the environment better	3.58	1.07	.840		
IA3	Sharing information about environmental protection laws helps the online community spread well about environmental protection laws	3.67	1.06	.797		
SN	**Subjective norms of information on environmental protection law**	**4.22**	**0.74**		**0.77**	**0.53**
SN1	The level of interest in information about environmental protection laws often comes from family members.	4.30	.88	.573		
SN2	The level of interest in environmental protection laws often comes from someone who is important to you.	4.16	.90	.626		

SN3	The level of interest in information about environmental protection laws often has an impact on your perception.	4.23	.89	.657		
IU	**Informational usefulness**	**3.81**	**0.89**		**0.90**	**0.77**
IU1	Information about environmental protection laws helps you and others better understand environmental protection laws	3.88	1.14	.687		
IU2	Information about environmental protection laws shared on the internet community is more accessible and faster than other sources of information	3.92	1.10	.665		
IU3	Information about environmental protection laws shared on the online community makes it easy for you to connect and interact with people.	3.63	1.28	.531		
IE	**Intention eWOM**	**3.53**	**1.04**		**0.87**	**0.70**
IE1	You often learn to read and interact with people with positive information about environmental protection laws on the internet.	3.53	1.12	.774		
IE2	The positive information about environmental protection laws you read on interment is shared with relatives and friends on social networks	3.47	1.20	.776		
IE3	Positive information about environmental protection laws is often discussed with people on social networks.	3.61	1.17	.748		

Note: SD = standard deviation, CR = composite reliability, AVE = average variance extracted
Before testing the structural measurement model, all variables and loads of the related items were observed by conducting factor analysis. The evil item has a load value of less than 0. 40 were excluded from the analysis. Furthermore, the extracted average variance value (AVE) ensures that each structure must be greater than 0. 50, while the correlation between variables is also less than the limit value of 0. 85, as proposed by Kline (2005). This study examines the reliability of the measurement structure because the aggregate reliability value (CR) is higher than 0. 70 Hair (2017). According to Shook et al. (2004), CR and AVE values are required before sem is implemented.
From table 2, the values refer to the conformity with the analysis model (Kline, 2015), synthetic trust (CR) is greater than 0.7 and the average variance (AVE) is greater than 0.5. This indicates that the data obtained are consistent with the structure used in the research model to ensure reliability.(Raza et al., 2020).

Table 3. Fornell-Larcker criterion of discriminant validity

	IC	IR	IA	SN	IU	IE
IC	0.782					
IR	0.138	0.96				
IA	-0.085	0.174	0.558			
SN	0.003	0.215	0.242	0.654		
IU	0.025	-0.004	0.051	-0.069	0.817	
IE	0.004	0.002	0.086	-0.067	0.519	0.871

Note: IE = information eWOM, IU = information usefulness, IA = information Attiude, SN = Subject norm, IC = information content, IR = information reability
The analysis of the distinguishing value is consistent with the different structures of latent variables, applying the Fornell-Larcker criteria and the results described in Table 3. The Fornell-Larcker criteria are strictly followed in all cases. This ensures that the study determines the value that distinguishes between potential variables and how to measure them.

Assessment of structural model and hypothesis testing

In the research model, there are 7 potential variables such as Nhatred of the information content of environmental protection law, Level of information reliability, Attitude to information about environmental protection law, Subjective level of information law on environmental protection, Information usefulness, and the eWOM intentions. To find the link between the accepted latent variables that fit the linear structure model and checked the conformity with the data set obtained. The results are presented in table 4 below.

Table 4. Standardized coefficients for structural paths

Hypotheses	Estimate	Std.Err	P(>|z|)	Decision
IE ~IU	0.62	0.054	0.000	Accepted
IE ~IA	0.136	0.068	0.047	Accepted
IE ~ SN	-0.089	0.063	0.158	Not accepted
IU ~ IC	0.053	0.061	0.390	Not accepted
IU ~ IR	-0.005	0.054	0.921	Not accepted
IU ~ IA	0.174	0.081	0.032	Accepted
IU ~ SN	-0.168	0.074	0.022	Accepted

Note: IE = information eWOM, IU = information usefulness, IA = information Attiude, SN = Subject norm, IC = information content, IR = information reability

Table 4 shows that the eWOM intention model has two relationships in the same direction and is statistically significant with 95% reliability. The eWOM (IE) intention link with the usefulness of environmental protection law (IU) information has an impact factor of 0.62, and the eWOM intention (IE) association with the Environmental Protection Law Information Attitude (IA) has an impact factor of 0.13. This means that the usefulness of environmental protection law information promotes eWOM intentions higher than information on environmental protection laws in the intention of eWOM 4.7 times. As such, the H3b. t. hypothesis picks the information level of environmental protection law (IA), H5. The usefulness of environmental protection law information is accepted.

The results of the study also identified an indirect link, the usefulness of environmental protection law (IU) information is related in the same direction as the information of environmental protection law (IA), the beta influence factor 0.17. Meanwhile, the usefulness of environmental protection law (IU) information is inversely related to subjective information about environmental protection law (SN), impact factor - 0.16 (p-value less than 0.05). This can be seen as subjectively aware of information about environmental protection laws can reduce the usefulness of relevant information about environmental protection laws. environmental protection laws in the community. Therefore, the H3a, and H4a hypotheses are also accepted.

6. DISCUSSION, CONCLUSION, AND IMPLICATION

Environmental protection law awareness and eWOM intent is an issue that needs to be approached and explored to help oriented administrators promote awareness propaganda of people in their communities. This study, like many others, is placed in the context of consensual or non-consensual different results. In each community there are different levels of pollution, human activities need to have a positive awareness of the environment and environmental protection behaviors. Demographic characteristics are also to be considered in the study, which also often has the interest of some similar studies. (Chin et al., 2019).

This study looked at the structure of potential variables such as awareness of environmental protection law information content, Reliability of environmental protection law information, Attitude of environmental protection law information, Subjective level of information of environmental protection law, Information usefulness and eWOM intention of environmental protection law. Apply the linear structure analysis method to the process of analyzing data and determining the model structure. The study's findings indicate that factors that positively impact eWOM's intentions on environmental protection laws include the

usefulness of environmental protection law (IU) information, and environmental protection law (IA) information attitudes. At the same time, identifying the subjective standard factor of environmental protection law (SN) information that adversely affects the usefulness of the information and indirectly affects the intention of eWOM environmental protection law. The results are also in agreement with some of the reports found to be relevant to awareness of environmental protection behavior. (Su et al., 2021).

This study demonstrates the role of individuals in the sustainable development of the environment from the perspective of environmental protection law awareness and residents' responses to eWOM to environmental protection laws from behavioral awareness steps and eWOM intentions to protect the environment of residents. In addition, residents have different manifestations in the awareness of environmental protection laws, there is a subjective level between the acquisition of information about environmental protection laws and the awareness of useful information about environmental protection laws.

In summary, this study conducted a survey on awareness of the community group's intentions on electronic word of mouth on environmental protection laws. Factors that measure awareness of environmental protection law information, attitudes, cognitive behavior control, and electronic oral intent are applied as research models. The demographic characteristics of this study have a higher proportion of females than men, the age ranges from 26 to 45 years old, the majority of education levels are mainly colleges, universities and masters, the income level is in the range of 10-30 million VND. The results contribute to clarifying the perception of intent in the rational action theory model, the positive factors that impact eWOM's intentions on environmental protection laws include the usefulness of environmental protection law (IU) information, environmental protection law information attitudes (IA). The weak indirect impact of subjective standards of information law on environmental protection (SN) adversely affects the usefulness of the information and indirectly affects the intention of eWOM environmental protection law. The results obtained in the study imply that policy managers and administrators consider promoting people's awareness of environmental protection laws by electronic word of mouth.

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SUSTAINABLE DEVELOPMENT AND SOCIAL RESPONSIBILITIES OF BUSINESSES–VIETNAM'S PRACTICE IN THE CONTEXT OF INTERNATIONAL INTEGRATION

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Abstract. Sustainable development has become a top priority for countries all over the world, an unavoidable trend in which businesses play an important role in implementing social responsibility to perform the country's sustainable development goals. The article will concentrate on the theoretical interpretation of sustainable development, corporate social responsibility in the implementation of sustainable development goals, and the relationship between these two issues, as well as the requirements for applying these two theories to the specific situation of Vietnam. According to research, corporate social responsibility must be linked to sustainable development, which is a goal, urgent, and global requirement of current development. Business is an important partner in achieving the national goal of sustainable development, serving as ambassadors for social and economic change. Social responsibility assists businesses in achieving three goals: economic development, social development, and environmental protection, resulting in more sustainable development. Sustainable development quickly became an important strategic goal in Vietnam's industrialization, modernization, and international integration processes. As part of their long-term strategic development plans, many Vietnamese businesses have begun to incorporate sustainability into their operations. However, there are still flaws that show that the practice of social responsibility in enterprises is still hampered by barriers such as leaders' and employees' lack of or inadequate understanding of social responsibility association, a lack of funding, personnel, and a lack of a system for implementation.

Keywords. Corporate social responsibility, environment, business, sustainable development

1. RESEARCH METHODS

The results of the article mainly use secondary data collected through books, newspapers, magazines, websites, and related reports. In the research process, the synthetic method is used to synthesize the theoretical issues of sustainable development and CSR. Analytical, statistical, and comparative methods are used to clarify the practice of implementing CSR in Vietnam, thereby making recommendations to better implement CSR in Vietnam in the coming time.

2. RESEARCH RESULTS AND DISCUSSION

2.1. Some theoretical issues on sustainable development and corporate social responsibility

2.1.1. Sustainable Development

"Sustainable Development" is a trend that appeared in the environmental protection movement since the early 70s of the twentieth century. The most widely known definition of this concept was presented in 1987 in the report "Our Future" by the United Nations World Council on Environment and Development (WCED). Accordingly, sustainable development "is a development that meets the needs of the present, without impeding the ability of future generations to meet their own needs" (Brundtland, Gro Harlem, 1987), This definition is recognized by many organizations and countries around the world and is widely used in publications on sustainable development because it has a high generalization about the

intergenerational relationship in terms of satisfying needs. about material and spiritual life, thereby creating sustainable development. Because, in the end, the essence of sustainable development is the sustainable existence of human beings on earth regardless of nation, nationality, and economic and social level. Here the existence of humanity is always associated with the existence of the economic, social, and natural environment that humans need to have.

The Earth Summit on Environment and Development held in Rio de Janeiro (Brazil) in 1992 and the World Summit on Sustainable Development held in Johannesburg (Republic of South Africa) in 2002 identified "sustainable development" as a development process with a close, reasonable and harmonious combination of three aspects of development, including economic development (especially economic growth), social development (especially the implementation of social progress and justice; poverty alleviation and job creation) and environmental protection (especially pollution treatment and remediation, restoration and improvement of environmental quality); fighting fires and cutting down forests; rationally exploiting and using natural resources sparingly). The criterion to evaluate sustainable development is stable economic growth; making good progress and social justice; rational exploitation, economical use of natural resources, protection, and improvement of living environment quality.

Along with the development of awareness about the concept of sustainable development, typical models for sustainable development are introduced including (i) the three-pillar model of the environment, society, and economy with a balance between these 3 pillars; (ii) Alternative Prism Models focusing on four metrics: economic (man-made capital), environment (natural capital), social (source) human capital) and institutions (social capital) (Keiner, Marco, 2005); (iii) The Egg sustainability model with the concept of sustainable development = enhanced human benefits + benefits to the ecosystem (Levett, Roger, 1998), and (iv) Doll model The Russian Doll Model considers the environment as the most important element in the system and focuses on answering two questions: i) are we living within the limits of the environment? and ii) do we achieve a good quality of life? (Du Plessis, Chrisna, 2007, pp.67-76).

The application of the above models in practice leads to two orientations in sustainable development, called "Green Agenda" and "Brown Orientation" (Brown). Green Orientation focuses on addressing adverse ecological effects of development, such as deforestation, climate change, environmental pollution, and overconsumption of non-renewable resources. This orientation is more urgent for rich countries. The Brown Orientation focuses on addressing the issues of poverty and underdevelopment, emphasizing the reduction of environmental threats to human health caused by poor sanitation and population density high, water, and air pollution as well as solid waste. Therefore, this orientation is more suitable for areas with poor quality of life support services, including cities.

Table 1: Summarizes the basic differences between the two orientations.

Distinguishing Content	Brown Orientation	Green Orientation
Main concern	Human welfare	Welfare for the whole ecosystem
Time frame	Immediately	After
Range	Local	Local to Global
Objects of interest	Low-income groups	Future generations
View of nature	Exploit and use	Protect and live together
Services related to the environment	Offer more	Use less

Source: Du Plessis, Chrisna, 2007, pp. 67-76.

In September 2015, leaders of the 193 UN member states officially adopted the 2030 Agenda including 17 Sustainable Development Goals to address the challenges of global socio-economic development environmental sustainability, and good governance. Accordingly, 17 Sustainable Development Goals

include Hunger eradication; Poverty eradication; Healthy life; quality of education; gender equality; clean water and sanitation; clean and sustainable energy; decent jobs and economic growth; industrial innovation and infrastructure; reduce inequality; sustainable cities and communities; responsible consumption and production; action to respond to climate change; Water Resources; land resources; fair peace and strong institutions; working together to realize goals.

In summary, Sustainable development is the most important goal of the world economy today in the context of hot growing economies with many macro uncertainties, inequality, environmental degradation, and more serious conflicts. It is clear that developing the Sustainable Development Goals until 2030 is considered an important plan for a new phase of the United Nations to encourage countries around the world to join hands to create a dynamic world, harmonious and sustainable development in the long term. From the sustainable development goals of the United Nations, each country will rely on its characteristics to plan a sustainable development strategy accordingly.

2.1.2. Corporate social responsibility for sustainable development

The term corporate social responsibility officially appeared when H.R. Bowen (1953) published his book titled "Social Responsibilities of the Businessmen" for propaganda and called on property managers not to infringe on the rights and interests of others, calling on charity to compensate for the damage caused by businesses to society. Since then, many researchers have offered different views.

Table 2. Definitions of CSR commonly used in research

Authors	Definition
Elbing (1970)	Describes the CSR framework (business owners have social responsibility more important than profit maximization) as opposed to the economic paradigm (business owners have only one responsibility to maximize profits, which they own
Davis (1973)	CSR is the consideration and response of businesses to issues that go beyond economic, technical, and legal requirements.
Mears and Smith (1977)	Corporate social responsibility towards the public, employees, and customers as well as the responsibility of employees towards the business.
Crawford and Gram (1978)	CSR is the result of transactions between businesses and organizations with social benefits.
Zenisek (1979)	CSR is a model with four stages: 1. Owner-manager type, 2. Organizational-participant type, 3. Task type - Environment, 4. Social type.
McGee (1998)	Arguing that there is ambiguity in the concept of social responsibility, it is sometimes defined purely in terms of generating economic benefits or oriented in proactive social perspectives.
McWilliams and Siegel (2001)	Corporate social responsibility is the actions that appear to bring benefits to society, beyond the interests of the business and are required by law (CSR goes beyond compliance with the law).

Source: Ivan Montiel, 2008.

The World Business Council for Sustainable Development has given a definition of CSR, which is: "Corporate social responsibility is the commitment of business to contribute to the sustainable economic development, through compliance with standards on environmental protection, gender equality, occupational safety, labor rights, fair pay, employee training and development, community development contract, ensuring product quality… in a way that benefits both the business as well as the general development of society." Or A. Carroll's "pyramid" model (1999) on CSR is the most comprehensive and widely used.

Accordingly, CSR includes economic, legal, ethical, and philanthropic responsibilities. (i) Economic responsibility, expressed through efficiency and growth, is a prerequisite because businesses are founded

primarily from the profit-seeking motive of entrepreneurs. Moreover, businesses are the basic economic cells of society. Therefore, the business function must always come first. The remaining responsibilities must be based on the sense of economic responsibility of the enterprise.

(ii) The responsibility to comply with the law is part of the "contract" between enterprises and society. The State has the responsibility to "encode" social and ethical rules into legal documents so that businesses can pursue economic goals within that framework fairly and meet the basic standards and values that society expects of them. Economic and legal responsibility are two basic and indispensable parts of CSR.

(iii) Ethical responsibilities are rules and values that are accepted by society but have not been "encoded" in legal documents. Usually, the law can only come later to reflect changes in regulations. Social behavior rules are always new. Moreover, in social morality, there are always "gray" gaps, right and wrong are not clear; but when the debates in society are not settled, they cannot be concretized into the law. Therefore, compliance with the law is only considered as meeting the minimum requirements and standards set by society. Enterprises also need to make commitments outside the law. Ethical responsibility is voluntary but at the heart of CSR.

(iv) Charitable responsibilities are acts of businesses that exceed society's expectations, such as donating to support the disadvantaged, sponsoring scholarships, and contributing to community projects... Other points The distinction between philanthropic and ethical responsibilities is that business is entirely voluntary. If they do not implement CSR to this extent, they are still considered to meet the standards expected by society.

Keith Davis (1973) introduced a fairly broad concept "CSR is the concern and response of businesses to issues that go beyond satisfying legal, economic, and technological requirements". According to Matten and Moon (2004): "CSR is a cluster concept that includes many other concepts such as business ethics, corporate philanthropy, corporate citizenship, sustainability, and environmental responsibility. It is a dynamic concept and is always challenged in each specific economic, political and social context."

In Vietnam, in recent years, people have used the definition of the World Bank's Private Economic Development Group on corporate social responsibility. Accordingly, corporate social responsibility (CSR) is an enterprise's commitment to contribute to sustainable economic development, through activities to improve the quality of life of employees and their family members, for the community and society as a whole, in a way that benefits both the business and the overall development of society.

Thus, although the expression and form of wording are different, the reflected content of CSR has the same thing, in addition to the individual development benefits of each enterprise, by the law's current and must be associated with the common development interests of the social community. Specifically explaining all the above content about CSR in the context of current international economic integration, it can be understood as follows its required content: Responsibility to the market and consumers; responsibility for environmental protection; responsibility to employees, and general responsibility to the community.

Corporate social responsibility must be associated with sustainable development - an objective, urgent, global requirement of current development. Corporate social responsibility is becoming a mainstream trend in connecting sustainable development and core values in business activities, to create a common value for the business and all of society. Sustainable development is not only important for the community, and for the whole planet but also very important for the success of businesses. As the economy grows and competition between businesses becomes more and more complex and fierce, activities showing social responsibility will help businesses reduce risks, build reputation, and improve reputation, thereby bringing many business benefits to businesses. As the market competition is getting more and more fierce, the requirements and demands from customers are getting higher and higher, and therefore, society has an increasingly strict view of businesses about their obligations and responsibilities to the community. To achieve sustainable development in society, businesses that want to develop sustainably must always adhere to not only standards on ensuring production - business must be profitable, even super-profitable, but also standards on environmental protection nature, working environment, gender equality, occupational safety, labor rights, training and development benefits of employees, contributing to community development, including practical activities social security such as humanitarian, charity, etc.

At the corporate level, CSR can contribute to enhancing the corporate brand, helping the business to increase market share and generate more profits by helping the business to increase its competitiveness. Businesses need to create sustainable behaviors and lifestyles through their products and services in society.

Innovation and creativity in the process of adapting to the changing business environment will create abundant and sustainable resources for businesses.

At the national level, CSR can be directed toward sustainable development goals such as: contributing to poverty alleviation through charitable programs implemented by businesses such as contributions to the Fund for the Poor, the Fund for the Poor, and the Fund for the Poor disabled people, etc. CSR policies in the enterprises themselves such as equal treatment between men and women, with old and new workers, also bring about social justice in general. And another important contribution of CSR at the national level is environmental protection. This is considered a very important contribution because environmental pollution is now threatening human life more than ever and costs a lot of money to deal with this problem.

2.2. The situation of implementing social responsibility of enterprises in Vietnam and the problems raised

Like many other countries in the world, in Vietnam, sustainable development soon became an important strategic goal of the Communist Party and the State of Vietnam. At the Xth Congress, the Communist Party of Vietnam affirmed: "striving for economic growth with a faster pace, high quality and sustainability, associated with human development; implement social progress and justice right in each step and each development policy; economic growth goes hand in hand with the development of culture, health care, education..., well solve social problems for the sake of human development; protect and effectively use national resources, improve the natural environment; complete the law, strengthen the state management of protection and improvement of the natural environment" (Communist Party of Vietnam, 2006, p.76). Right from the late 80s and early 90s of the twentieth century, along with the implementation of industrialization and modernization to develop the country's socio-economic economy, Vietnam has actively cacarriut the comprehensive renovation of the country, exploring and applying many important measures to develop the economic, social and environmental protection fields. The document of the 12th National Congress (2016) of the Communist Party of Vietnam defines: "In the next 5 years, ensure rapid and sustainable development based on macroeconomic stability and constantly improving productivity, quality, efficiency, and competitiveness. Harmonious development between width and depth, focusing on developing depth; development of knowledge economy, green economy. Economic development must be closely linked with cultural and social development, environmental protection, and proactive response to climate change. Ensuring national defense and security and maintaining peace and stability for national construction" (Communist Party of Vietnam, 2016). This is the direction of rapid and sustainable development in line with the "United Nations Sustainable Development Agenda for the next 15 years" (2016 - 2030) held by the 70th session of the United Nations General Assembly (Date). September 25, 2015) passed. Implementing the Party's policy, on May 15, 2017, The Prime Minister issued the National Action Plan to implement the 2030 Agenda for Sustainable Development, including 17 goals. The strategy of rapid and sustainable development has focused on the quality of economic growth, the goals of growth towards comprehensive human development, and the realization of democracy, progress, and social justice to create more jobs, improve living standards, encourage legal enrichment, and go hand in hand with hunger eradication and poverty alleviation, with the emphasis on environmental protection and improvement in every step of development. The goal of such growth is to better and better solve the problem of people's livelihood, ensuring that everyone has a prosperous and happy life. The strategy of rapid and sustainable development is an effective way to ensure the country's development in the direction of socialism, with the goal of "rich people, strong country, fair and democratic society. , civilized". To achieve national goals, business is an important partner contributing to this process as ambassadors for social and economic change. The implementation of corporate social responsibility makes an important contribution to Vietnam's sustainable development strategy.

The formulation of sustainable development goals also brings practical benefits to businesses when directly contributing to business value, generating revenue, controlling costs, managing risks, and other activities, and other long-term values. However, the success in accelerating economic growth is posing many pressing environmental and social problems for the country. It is these problems that require economic actors, including businesses, to take responsibility to contribute to the solution, otherwise, the economic development itself will be unsustainable and will have to pay a high price too expensive for the environment

and social problems. Therefore, many domestic enterprises have begun to incorporate the sustainability element of CSR in their operations as part of their long-term strategic development plan.

From the secondary data, it is shown that CSR was introduced into Vietnam through the activities of multinational companies investing in Vietnam. These companies often build universal codes of conduct and business culture standards that can be applied in many different locations and markets. Therefore, the CSR contents are carried out methodically and effectively by foreign companies. These companies often offer behavioral recommendations on business culture to apply in investment areas. For example, "The program I love Vietnam" of Honda - Vietnam company; "Personal hygiene education program" for children of Unilever company; "Topic 64 informatics training program" of Microsoft, Qualcomm, and HP; "Program to support congenital heart defects" and "Program to support victims of Can Tho bridge collapse" by Vinacapitat, Samsung; Western Union's "Vision Restoration Program for Poor Children".

 In recent years, there have been many Vietnamese enterprises to create sustainable and bright brands, not only have they strived to grow larger and larger in terms of asset value, revenue, and profit after each year of business, but also make efforts to contribute more to the general development of the community and society. Because, they all understand that doing better and getting better and better, social responsibility for the social community is also one of the basic measures for the brands of businesses to become brighter and brighter. Thus, their business path is more convenient and more developed. Therefore, implementing CSR is increasingly recognized by Vietnamese businesses and entrepreneurs as an indispensable and objective requirement in the integration process. Since 2005, Vietnam has had the "CSR towards sustainable development" award organized by the Vietnam Chamber of Commerce and Industry (VCCI), the Ministry of Labor, War Invalids and Social Affairs, the Ministry of Industry and Trade, Leather, Footwear, and Textile associations organize to honor businesses that have performed well in CSR in the context of integration.

Regarding social responsibility, humanity, and charity, according to research conducted by the Asia Foundation (TAF) in collaboration with the Center for Research, Development and Community Support (CECODES) and the Vietnam Chamber of Commerce and Industry. Of about 500 enterprises (VCCI) on participation and contributions to social security and charity activities, out of 389 businesses that responded, 333 (85.6%) enterprises actively participate in social activities, in which 58% of enterprises identify doing charity for no business purposes and 56 (14.4%) enterprises have little or no understanding of the extent of their participation for social activities. Nearly 60% of Vietnamese enterprises do charity work for non-business purposes (Cam Anh, 2019). The form of social and charitable activities of enterprises is mainly donation of money, accounting for more than 70%, and in-kind accounts for about 40%, but the time that businesses spend on these activities is quite low when only 10%. This shows that businesses still do not appreciate the true meaning of charitable activities to the community (Tran Ngoc Tu, 2017).

According to Vietnam Report, when surveying BP500 businesses (February 2019), there are 5 most important social problems that businesses have contributed to solving: 89.3% of businesses participate in supporting local communities; 64.3% are interested in promoting transparency over the business; 60.7% protect the environment, reduce environmental impact, 46.4% reduce the unemployment rate and 42.9% care about health care. Besides, the survey results also show that the challenges often encountered when implementing social responsibility in our country, typically awareness of social responsibility only stops at sponsorship (52%), lack of budget (36%), lack of policies to encourage and support the Government (32%), and not spread in the media (24%) (Vietnam Growth and Prosperity Report, 2019). This also shows part of the interest and investment in social responsibility activities from the government enterprises still have many limitations, are not commensurate with the important role of social responsibility in improving social life, and have not exploited optimally the contribution potential of the business sector.

2.3. Some practical problems are being raised in Vietnam today

Besides the positive changes in the awareness and practice of CSR in Vietnamese enterprises. However, it must be acknowledged that, in recent times in Vietnam, many businesses have not seriously implemented their social responsibility. That is reflected in acts of fraud in business, financial reporting, failure to ensure labor safety, production and trading of poor quality goods, and intentional pollution of the environment. The problem now is, that it is necessary to find the causes of the phenomena and solutions to overcome that situation.

According to a recent study by the World Bank in Vietnam, barriers and challenges to CSR implementation include: 1) Limited awareness of the concept of CSR; 2) Productivity suffers when multiple COCs (Code of Conduct) have to be implemented concurrently; 3) Lack of financial and technical resources to implement CSR standards (especially for SMEs); 4) Confusion due to the difference between the provisions of CSR and the Labor Code; 5) Domestic regulations affecting the implementation of COCs. Some of these barriers and challenges are explained in more detail as follows:

- First of all, it is an incomplete understanding of CSR. Many businesses simply understand that doing charity, but do not understand that the implementation of CSR is to be reflected directly in all production and business activities of enterprises. Therefore, there are many businesses that, on the one hand, still actively participate in humanitarian and charitable activities, but on the other hand, still plunge into the unfair business profit cycle in the form of trading circling, grabbing, and taking advantage of loopholes in market mechanisms and policies issued by the State to make a profit. The situation of taking advantage of each other's brands to make fake goods, imitation goods, and poor-quality goods is still common in our country. That's not to mention the fact that many large enterprises, including some state-owned corporations, have not only taken advantage of the state brand name but also taken advantage of the state budget (in fact, appropriating state capital) to do business, trade around even goods that do not function properly, so that when they make a big profit, they will share them internally, and when they have a loss, the state budget has to bear...

- Second, a barrier that adversely affects the implementation of CSR is that many enterprises currently lack the financial and technical resources to implement CSR standards, especially small and medium enterprises. Most Vietnamese enterprises are now small and medium enterprises.

- Third, the legality of the assessment of CSR implementation in our country currently has many limitations and shortcomings. Although they have been specified according to the rules of the COC codes of conduct and other regulatory standards, such as SA8000, WRAP, ISO 14000, and GRI..., these standards are not must be an agreement between governments or the provisions of international which are often only binding between importers and exporters or set up by businesses themselves, so there is a lack of national legality and lack of legality and international practice. Since then, if there are violations, whether unintentional or unfortunate, leading to lawsuits against each other, it is very difficult to arbitrate.

3. CONCLUSION

Many countries around the world have made sustainable development a development goal. This goal necessitates a significant investment of resources, with the enterprise playing an important role. As a result, the issue of the relationship between sustainable development and corporate social responsibility is brought up, and it is a close one. Both theoretical and practical perspectives demonstrate the benefits of CSR programs for companies as well as stakeholders in mandarin. In other words, CSR plays an important role help the company develop and execute strategic business and make an important contribution to the national sustainable development goals. So implementing corporate social responsibility helps to reduce environmental risks while also creating jobs. In Vietnam, the implementation of corporate social responsibility toward sustainable development in the process of innovation and international integration, although certain achievements have been achieved, there are still many problems that need to be resolved, the State needs to take practical actions to encourage businesses to fulfill their social responsibilities well, as well as to introduce stricter sanctions against acts of intentionally violating the influence of society to the interests of society.

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A REVIEW ON QUALITY ASSURANCE FOR ENGLISH LANGUAGE EDUCATION PROGRAMS

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Abstract. This qualitative research paper aims at reviewing literature related to quality assurance (QA) approaches for English Language Education (ELE) programs in higher education in Vietnam and in the world. The writer has mainly analysed, synthesized, and systemized research papers to have an overview on the research issue. The systematic literature review showed four popular approaches namely (1) CEFR matrix as quality assurance framework, (2) accreditation as external quality assurance, (3) continuing professional development resulting from accreditation, and (4) learning outcomes as a drive for quality assurance.

Keywords. ELE program, higher education, quality assurance

3. INTRODUCTION

Articles from reputable online databases such as Google Scholar, Web of Science, Scopus were queried for studies addressing quality assurance in an English language education program. Search terms were the phrases "quality assurance in language education", and "English education quality". Then titles and abstracts were screened for the appropriateness to the study purpose. About 30 articles were found and divided into for quality approaches for quality assurance in English Language Education. Firstly, some key concepts are introduced concerning quality in education, quality assurance in education, quality assurance in language education and accreditation. Then a review on quality assurance approaches for the English language education program will be presented.

2.1 Rationale

Quality English language program has been in great need in this information age resulting from the knowledge revolution. In response to this need, higher education institutions all over the world have been offering English as the medium of instruction (EMI) (Dearden, 2014; Earls, 2016; Macaro, Curle, Pun, An, & Dearden, 2018). However, students' levels of proficiency in English have always been of great concern. A number of deficiencies were found in teaching English at tertiary level: one of them was a lack of skilled English language teachers, (British Council, 2015). At universal level, there is an absence of a quality assurance measures for the program. A greater focus was put on quality in English language education resulting in the specialized accreditation of English language programs. The most original accreditors include The Commission on English Language Program Accreditation (CEA), founded in the 1990s, which initially accredited only US-based institutions and programs. However, in 2004 in respond to high demand for QA and accreditation, CEA began to conduct accreditation activities outside the United States, primarily in the Middle East. Having said that, not all language schools or centers can afford or have access to accreditation schemes. Therefore, program directors or administrators look for quality assurance measures to develop their own internal quality assurance measures. Accordingly, this research paper is an effort to search for quality assurance measures to assist EMI programs directors in building up their own internal quality assurance system for their own premises.

2.2 Key terms

In education context, quality is defined as "fitness for purpose" (Harvey & Green, 1993; Woodhouse, 1999) as they see quality as meeting requirements, desires, or needs from learners. This is collectively accepted by many scholars as it allows institutions to communicate their performance-oriented, or outcomes-based approach in term of concrete indicators of respective missions and objectives. (Nicholson, 2011).

Quality Assurance in Higher Education is a major trend in most of the developed and the developing countries (Central European University, 2016; ENQA et al., 2015; Mavil, 2013). Countries develop their quality in higher education framework, depending on their standing positions from quality. Frameworks are shaped in each country to satisfy the future needs, overcome challenges, and integrate within the cultural and managerial framework. (The World Bank, 2010). Woodhouse (1999) stated that quality assurance refers to the policies, attitudes, actions, and procedures necessary to ensure that quality is being maintained and enhanced. In the meantime, Canadian Council on Learning (2009) and Harvey (1993) asserted that quality assurance is intended to ensure accountability and bring about improvement.

Approaches to quality assurance can be multiple: (1) external quality monitoring, (2) assessment-and - outcomes movement, (3) total quality management, and (4) accountability and performance indicator report. (Nicholson, 2011).

Popular English language education programs include English as Foreign Language (EFL) programs, which can be either a subject or a discipline. For the former, it is studied by students as a preparatory program, namely Intensive English Program, to study their discipline in English, where English is a medium of instruction (EMI). For the latter, being a discipline, EFL learners learn to be an English Language Teaching educator. In this paper, English language programs can be taken as either Intensive English Program (IEL) in countries offering academic programs to foreign students such as the United States, the United Kingdoms, Canada, France, and various European, Middle East, and Asian countries or EFL/ELT, or EMI.

2.3 Research questions

This paper is aimed at answering a research question:
What are quality assurance approaches for English language education programs?

4. QUALITY ASSURANCE APPROACHES FOR ENGLISH LANGUAGE EDUCATION PROGRAMS

After reviewing research papers on quality assurance for English education programs, the author identifies four popular approaches namely (1) CEFR matrix as quality assurance framework, (2) accreditation as external quality assurance, (3) continuing professional development resulting from accreditation, and (4) learning outcomes as a drive for quality assurance. Each of these approaches will be delineated in details and demonstrated how it is used in some contexts.

3.1 CEFR matrix as quality assurance framework

As defined by Cambridge Exam.org, the Common European Framework of Reference for Languages (CEFR) is an international standard for describing language ability. It describes language ability on a six-point scale, from A1 for beginners, up to C2 for those who have mastered a language. This makes it easy for anyone involved in language teaching and testing, such as teachers or learners, to see the level of different qualifications. It also means that employers and educational institutions can easily compare our qualifications to other exams in their country. This framework is applied popularly in countries where English is taught as second language (ESL) or foreign language (EFL). According to CEFR Qualimatrix, quality assurance ensures it goes right the first time. It roots in the merging of Japanese and Western management techniques in 1940s. Quality Assurance applies Deming cycle, which is quality through a transparent and cyclical process comprising a 4-stage process: Plan-do-check-act. (CEFR matrix)
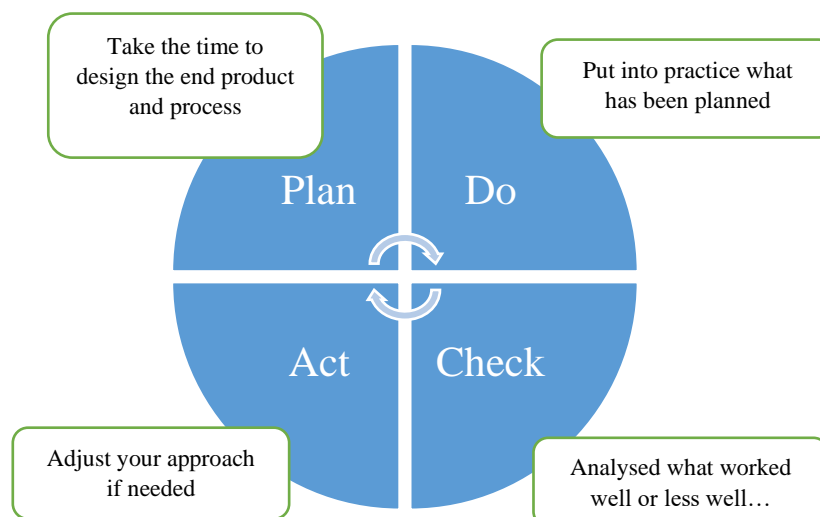
Figure 1: CEFR matrix

In language education, four stages in Demming cycle are interpreted as follows. Plan is designing curriculum mean defining the purpose, and the content of the language program you intend to provide, or materials you intend to produce. Do is teaching, implementing a curriculum, creating material. Check is to study of whether learners make progress, whether things are operating as intended, whether there are areas of improvement. Act is adjusting the program the basis of your insights. Demming (1950) insists on the need to involve everybody including teachers and learners in the quality approach. The Deming cycle only functions if works when there are genuine opportunities for feedback by all the different actors involved. In education, this means seriously involving teachers and any innovation rather than adopting a top-down approach. Another crucial aspect of quality assurance is taking care of the user experience. In language education, it is particularly important to keep in mind the learners' experience in the classroom is the key to successful learning. To have successful language learners requires involving learners in a transparent learning process feeding the learners as a partner how do we encourage learners to be involved.
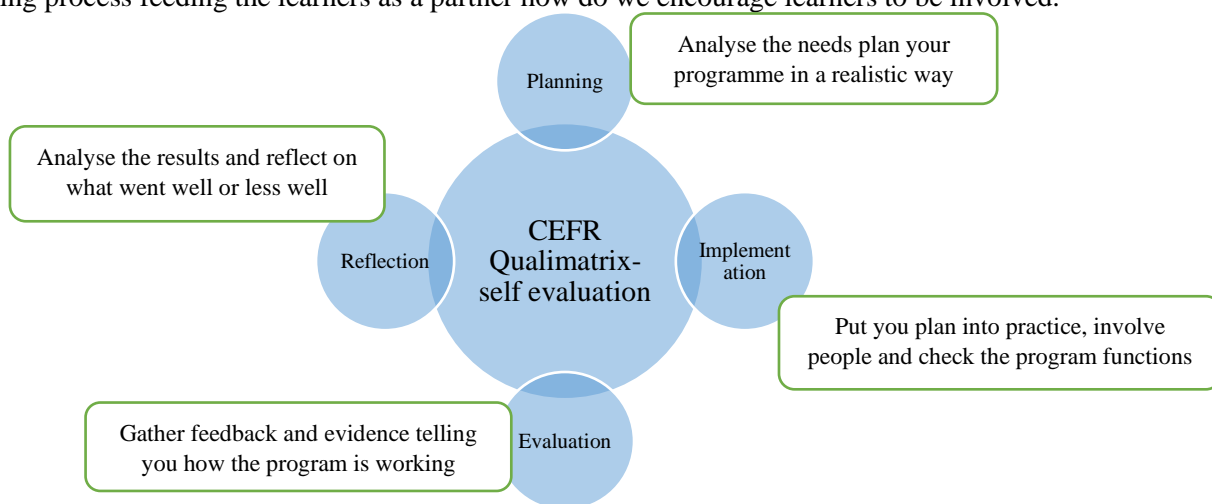

Figure 2: CEFR Qualimatrix for self evaluation

Quality principles in language education should include six qualities: relevance, validity, transparency, coherence, inclusiveness, sustainability. If the language program meets learners and organizational needs, it is relevant. The language program is valid when it includes real-life tasks and criteria for evaluation. A language program is considered transparent when its goals and achievement are made clear. If there is a balance between different methods and materials, then the program is coherent. The inclusiveness of a

program gets people involved and partners to collaborate. A language program gains sustainability quality when it helps people learn to learn (CEFRmatrix).

3.2 Accreditation as external quality assurance

Accreditation of language schools dated in Britain in 1930s when Department of Education and Science inspected language schools. The successive accreditors like British Council, ARELS (the Associations of Recognised English Language Schools, now 'English UK') have been major agent in inspecting various school operation aspects including teacher qualifications, the teaching itself, accommodation, supervision of minors, safety of premises, the accuracy of publicity materials (British Council 2012).

Countries like Australia, Canada, Malta, New Zealand, Ireland, South Africa, USA have schemes for accreditation. Kotarska (2019) pointed out core standards in quality assurance of language education after comparing 6 accreditation schemes namely (1) the UK-based schemes" Accreditation UK, BAC/IELP and BALEAP; (2) the US-based scheme: CEA; (3) languages Canada; (4) the Australian scheme: NEAS; (5) An international scheme: Eaquals; (6) the Finnish scheme for HEI: FINEEC. He concluded that although the number of the main standards or assessment areas ranges from five to twelve, all the schemes cover five generic standards:

- Management, Administration, Governance and Staff.
- Programme Design and Delivery.
- Assessment and Certification.
- Resources and Learning Environment.
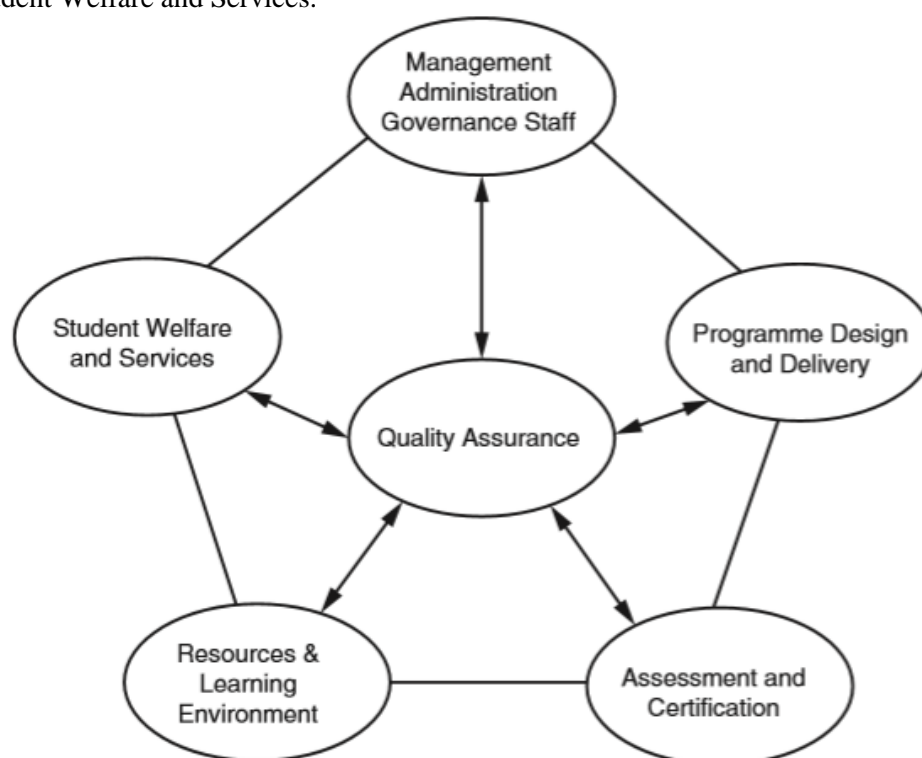- Student Welfare and Services.

Figure 3: Generic quality standard by Ludka Kotarska (2019)

It has helped the CoE and TEFL to identify areas of improvement. On the other hand, it equally brought to the forefront some related issues regarding the impact of the critical changes in accreditation and program recognition processes and expectations on the role of college administration and faculty members. Of particular importance are the concepts of (1) creating a climate for accreditation, (2) the need to focus on evidence and assessment across all areas of the college and programs, (3) and cognitive and organizational restructuring.

3.3 Continuing Professional Development (CPD) resulting from accreditation

Professional associations claim that CPD is: part of lifelong learning; a means of gaining career security; a means of personal development; a means of assuring the public that individual professionals are up-to-date; a method whereby professional associations can verify competence; and a way of providing employers with a competent and adaptable workforce. Megginson (2007) stated that CPD is a process by which individual take control of their own learning and development, by engaging in an on-going process of reflection and action. This process is empowering and exciting and can stimulate people to achieve their aspirations and move towards their dreams. This spirit is the same in education when teachers are believed to continue sharpen certain skills to remain effective. Measurements of teachers'effectiveness have shown great deviation among teachers of the same school (Rockoff, 2004, Hanushek, Kain, O'Brien, & Rivkin, 2005). English language teaching profession also proved the significance of CPD (Wyatt, 2016; Borg, 2015). As teaching is also a learning profession, teachers need to constantly train and develop to maintain long-term achievement.

Teachers play the key role in quality assurance of a program. Therefore, it is essential for an institution to invest in teachers' CPD to provide the best quality education. However, varied teachers' needs together with the lack of allocated budget for CPD have resulted in failing to build an effective CPD system. In this context, accreditation can provide framework for self-improvement by institutions. Accreditation has been an increasingly critical factor in quality assurance in higher education all over the world (Stensaker, 2011). Accrediting bodies always refer to quality in their mission and view CPD as an important part of an institution's alignment with their standards. The following table will briefly summarize CPD statements in English language accreditation schemes.

Table 1: CPD statements in accreditation schemes

CPD by accrediting bodies	Standards	Statement
CEA (2014)	Faculty Standard 2	Teachers are required to demonstrate an ongoing commitment to professional development CPD enhances and complements relevant teaching experiences and ensures faculty
	Administrative and Fiscal Capacity Standard 4	Program defines, encourages, and supports appropriate professional development activities for faculties, administrators, and staff
EAQUALS (www.equals.org)	Staff profile and development	There is a formal framework to assure appropriate continuous professional development for all staff.
DEDAK (DEDAK. n.d.)	Teaching staff	Language program plans and conducts in-service training and professional development activities.

To conclude, teachers of accredited programs cannot opt out of doing CPD, resulting building an institutional culture of teachers doing CPD. CPD is required in job description and faculty handbook. CPD is made part of terms and conditions of employment by the institution, a criterion for performance evaluation. Workshops from publishers, external CPD opportunities such as regional and international conferences have been increasingly utilized to make up for budget shortage for CPD. (Collin & Gun, 2019). It is widely accepted that identifying good teacher at either job interview or through performance evaluation system is a difficult task. That is why CPD should be in place and obligatory for teachers to recognize its beneficial significance. Furthermore, such process can foster the culture of CPD in an institution. (Rowan and Miller, 2007)

3.4 Learning outcomes as a drive for quality assurance

Hopbach (2010) stated that learning outcomes benefit for quality assurance as they increase transparency and comparability between qualification standards.

Learning outcomes are statements of what a student should know, understand and/or be able to demonstrate after completion of a process of learning. (Ryan, 2010).

Specifically, learning outcomes comprise of intended learning outcomes, actual learning outcomes, expected learning outcomes. **Intended learning outcomes** represent a program's educational goals. They describe the learning outcomes that the teacher intends that learners will attain as a result of teaching and learning activities. It is reasonable to insist that intended learning outcomes must always include specification of the minimum intended learning outcomes. **Actual learning outcomes (achieved learning outcomes)** represent the knowledge, skill and competence at the end of a programme. They are actually achieved by a learner and should, if the program is effective, include at least the minimum intended learning outcomes; they will typically include additional outcomes. **Expected learning outcomes** represent in a generalised way the level of learning expected before a particular type of qualification may be made – they are the concern of qualifications framework (and subject, discipline and professional standards). Expected learning outcomes maybe expressed to define the minimum, typical or range of standards for the level – whichever it is, it should be made explicit (Cullen, 2010).

In Bologna system, learning outcomes can be formulated on different levels. The top level is the European level, the Qualifications Framework for the European Higher Education Area (QFEHEA). The next level is the national level where some countries have level descriptors in their higher education legislation and some do not. The following three levels belong to institutions and individual teachers; the program level, the course/module level and the individual task level. This level structure constitutes one of the cornerstones in the model presented to the government, where level two (the national level) was used as frame of reference, against which level four (course/module level) of the programmes under evaluation was to be evaluated.
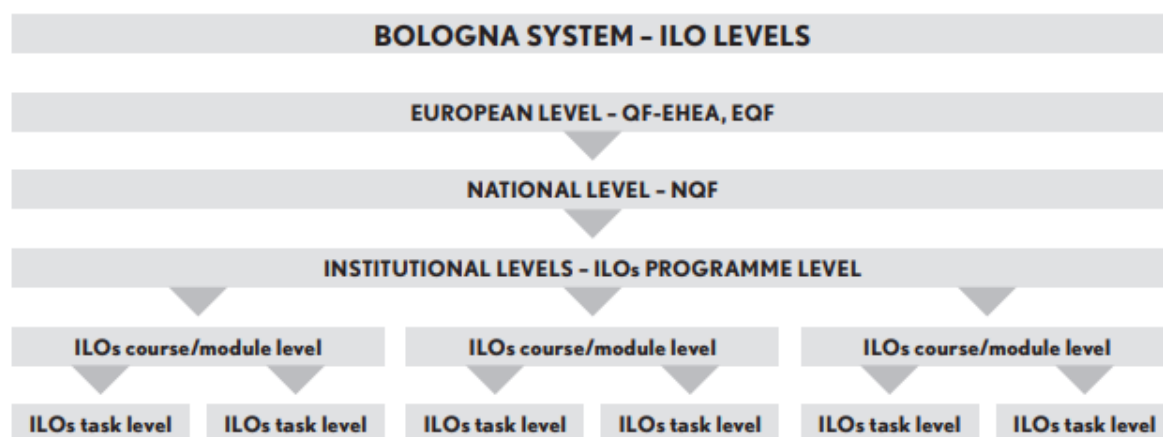
BOLOGNA SYSTEM – ILO LEVELS

EUROPEAN LEVEL – QF-EHEA, EQF

NATIONAL LEVEL – NQF

INSTITUTIONAL LEVELS – ILOs PROGRAMME LEVEL

ILOs course/module level	ILOs course/module level	ILOs course/module level
ILOs task level · ILOs task level	ILOs task level · ILOs task level	ILOs task level · ILOs task level

Figure 4. Levels of learning outcomes in Bologna system (cited in Adamson, 2010).

Notes:
ILO: intended learning outcomes
QF-EHEA: Qualifications Framework for the European Higher Education Area
EQF: European Qualifications Framework
NQF: National Qualification Framework

Learning outcomes have been the center of attention since Bologna Declaration of 1999 which sparkled the spirit of the paradigm shift from teaching to learning (Schmidt, 2019). Learning outcomes (1) help academic staff to focus on what they want students to achieve in terms of knowledge, skills, and attitudes; (2) provide a useful guide to inform potential candidates and employers about the general and subject-specific knowledge and understanding that a graduate will possess. It is important for the labor market, i.e. employability of graduates. That is why learnings outcome must be assessed.

Dublin Descriptors (Joint Quality Initiative, 2004), FIBAA (FIBAA, 2017) have delineated learning outcomes in their accreditation assessment reports, which sampled good practices for other programs.

To facilitate the context for effective learning outcomes, Schmidt (2019) suggested that higher education institutions need:

(1) The National Qualifications Framework as a reliable reference document
(2) National regulations supporting and facilitating the implementation
(3) Appropriate human resources who are: willing to accept the paradigm shift; pedagogically competent
(4) Appropriate assignments (focusing at intended and achieved learning outcomes)
(5) Appropriate types of assessment, meeting the requirement of accurately measuring the intended learning outcomes
(6) Consistency between the learning outcomes, the learning and teaching activities, and assessment procedures (i.e., constructive alignment)
(7) Current intended learning outcomes, in line with the further development of curriculum

5. CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Anyway, institutions cannot hand over the process of improving quality to an external inspector (Sallis, 2005). Quality frameworks or models are very useful discipline for institutions to follow. However, most of them tend to have more to do with accountability than with improving quality which only takes place through the creation of a culture of continuous enhancement and institutional self-assessment (Sallis, 2005). It is better for institution to build their own internal quality assurance system and quality culture to maintain, enhance and assure the quality of their own language program.

A further research direction can be identifying a feasible approach for Vietnamese EFL programs. English has now been widely accepted as the international lingua franca, and is playing an increasingly dominant role in people's lives, ranging from politics, economics, and health care to education and culture exchange. This makes the provision of English language teaching and learning an important issue in educational systems world-wide, including countries such as Vietnam where it is taught as a foreign language. In an attempt to attract foreign investment, English language education was introduced into Vietnamese official general education and higher education since 1986. Being widely used for international communication, especially in the 1900s, English and attitudes to it have changed greatly. English is now the preferred foreign language in Vietnam (Loc, 2005). Recent effort by the Vietnamese government included the National Foreign Language Framework which guides and enhances quality of English language teaching in Vietnam. However, there is an absence of quality assurance system for general English programs in Vietnam.

It is, therefore, possible that the four reviewed approaches namely CEFR matrix, accreditation, CPD, and learning outcomes should be further studied to be applied flexibly for EFL programs in Vietnam.

Firstly, CEFR Matrix can be enhanced in Vietnamese higher education context. In fact, CEFR has been introduced as an effective tool for program writers in measuring EFL learners' competence (Anh, 2006). Vietnam's National Foreign Language Framework is also closely based on CEFR to detail 6 levels for Vietnamese context. As a result of the 2020 project, university graduates in Vietnam are required to demonstrate pre-set levels of English proficiency in order to graduate. For non-English majors, this is set at B1 on the Common European Framework of Reference for Languages (CEFR), or the equivalent on Vietnam's six-level framework of foreign language proficiency, which was adapted from the CEFR (referred to as the CEFR-VN for short). Students can take suitable proficiency tests, or tests produced by their institutions, to demonstrate this requirement. This has led to wide variability in the quality of assessments, and the VSTEP was developed as an important step in helping to provide standardised, national measures of proficiency which could be used to raise standards. VSTEP stands for Vietnamese Standardised Test of English Proficiency. This is the first standardised English proficiency test in Vietnam. The test specifications and format were developed by language testing experts from the University of Languages and International Studies, Vietnam National University, Hanoi (ULIS). It was released nationally under the auspices of the Ministry of Education and Training (MOET) on 11 March 2015. VSTEP targets adult test takers for a range of general English proficiency purposes in Vietnam, 18 years or older. However, one of its primary uses is in the proof of English ability for university graduates, with

non-English majors required to demonstrate a B1 level of proficiency, as noted above. English majors are required to demonstrate higher levels of proficiency, and so the test targets levels B1 to C1 on the Common European Framework of Reference for Languages (CEFR). The test was developed with three main purposes in mind: (1) to build and conduct an English language proficiency test for Vietnamese learners, (2) to assess the English language proficiency of Vietnamese learners under CEFR-VN standards (the version of the CEFR adapted for use within the context of Vietnam) and (3) to establish and prove the national testing capability of Vietnam.

Higher education EFL programs have been oriented by VSTEP exam and National Foreign Language Framework in term of quality assurance via learning outcomes. Hiền & Việt (2017) suggested using CEFR to write learning outcomes for EFL program in Vietnamese higher education in order to (1) make higher education institutions responsible for their own EFL program, (2) let stakeholders and employers evaluate their EFL propram, (3) meet the implementation requirements of National Foreign Language Project 2020. Secondly, accreditation schemes for language schools haven't been popular in Vietnam. However, National English Language Teaching Accreditation Scheme (NEAS) has accredited VUS – a major language center in Vietnam. This scheme can be used as a guide for Vietnamese language centers at HEIs to build their internal quality assurance for their course. Accreditation has had good impacts on accredited program (Al'Abri, 2019). It has helped the program to identify areas of improvement. On the other hand, it equally brought to the forefront some related issues regarding the impact of the critical changes in accreditation and program recognition processes and expectations on the role of college administration and faculty members. Of particular importance are the concepts of (1) creating a climate for accreditation, (2) the need to focus on evidence and assessment across all areas of the college and programs, (3) and cognitive and organizational restructuring.

Thirdly, CPD can be taken into account to assure the quality for EFL program. Program managers can take Kenedy's models for CPD to develop CPD plan for teaching staff.

Table 2. Spectrum of CPD models

Model of CPD	Purpose of model	
The training model The award-bearing model The deficit model The cascade model	Transmission	Increasing capacity for professional autonomy
The standards-based model The coaching/mentoring model The community of practice model	Transitional	
The action research model The transformative model	Transformative	

Source: Kenedy, 2005

They can also benchmark their teaching staff competence to international English teacher standards to identify what teaching staff at their institutions lack to supplement in CPD programs. These standards include European Profile for Language Teacher Education (Kelly & Grenfell, 2005), the European Portfolio for Student Teachers of Languages (EPOSTL) (Newby at al. 2007), Professional Standards for Teachers – English as New Language (ACTFL 2005), EAQUALS Framework for Teacher Training and Development (EAQUALS 2012). Most of these frameworks emphasize the importance of self-assessment and reflective practice. Komorowska (2011: 33) points out that until very recently the training of foreign language teachers took little account of skills common to all teachers and those aspects such as facilitating negotiated interaction, contextualising input and ensuring social relevance were neglected. In future developments one would hope to see greater integration of the general educational descriptions with specifically language-based descriptors and, in particular, more attention paid to general learning theories.

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